



ACCELERATION PLAN EDUCATIONAL INNOVATION WITH ICT

ASSOCIATION OF UNIVERSITIES, ASSOCIATION OF UNIVERSITIES OF APPLIED SCIENCES, SURF

MAY 2018



WHY AN ACCELERATION PLAN NOW?

The use of information technology is permeating society ever deeper. Apps are everywhere you look and the opportunities provided by ICT are many. This is also true for education. We do not yet know exactly what impact digitalisation will have on education, but it will most likely be significant. While institutions and teaching staff are all very busy with innovation in education with ICT, there is all the more reason to accelerate developments and use technology even better. To achieve this, SURF, the Association of Universities in the Netherlands (VSNU) and the Netherlands Association of Universities of Applied Sciences (VH) joined forces and drew up the Acceleration Agenda for Educational Innovation with ICT. The Acceleration Agenda has now been expanded into a four-year acceleration plan for educational innovation with ICT, which offers research universities and universities of applied sciences time and space to implement significant steps within their own institution and in collaboration with other institutions.



Thom de Graaf - President of the Netherlands Association of Universities of Applied Sciences

‘THERE IS A GROWING BELIEF WITHIN RESEARCH UNIVERSITIES AND UNIVERSITIES OF APPLIED SCIENCES THAT MORE DRIVE IS NEEDED AND THAT WE CAN TAKE A MORE SHARED APPROACH. NOTE THAT IT IS AN ACCELERATION AGENDA, NOT A DIGITALISATION AGENDA. IT IS NOT JUST AIMED AT ICT PEOPLE WITHIN THE INSTITUTIONS: IT IS AIMED AT STUDENTS, LECTURERS AND RESEARCHERS’.

WHAT DO WE WANT TO ACHIEVE WITH THE ACCELERATION PLAN?

Within the acceleration plan, research universities and universities of applied sciences will work on accelerating innovation in education with ICT in 8 areas. For all areas we outline the context and the future perspective below. This text forms a starting point for the institutions working in an area, but they clearly have room to formulate their own goals for the areas in which they wish to work and choose their own approach.

Area 1: Facilitating professional development for lecturers

Context

Lecturers are the spearhead for innovation in education. If lecturers have too little space and/or support, it will not be possible to achieve the ambitions in the acceleration agenda. Within the acceleration agenda, research universities and universities of applied sciences will provide lecturers with the space needed for professional growth. Digitalisation makes education more about teamwork, where lecturers are supported by specialists in areas such as online teaching methodologies, instructional design, video and social media. Do the current professional development options for lecturers (for example the University Teaching Qualification (BKO) and University Teaching Skills Qualification (BDB)) suffice with respect to educational innovation? In which ways can we best support lecturers? How can the Ministry of Education, Culture and Science (OCW), VSNU and VH help to create space for lecturers within the current structures, or are new structures required or necessary? How can we help institutions in the short term to improve the availability of lecturers and professional development for lecturers within the current situation as far as possible?

Objective

We encourage and support institutions in ensuring the general conditions for offering lecturers space to modernise their teaching methods. This concerns time, support and professionalisation. When it concerns sufficient time for lecturers, in particular, we carry out nationwide discussions on how we can offer the framework conditions to do so.

Members of the acceleration team help and inspire each other to create good general conditions for lecturers within their own institutions and to develop joint strategies which are useful and supportive for higher education as a whole.

Area 2: Better connection to the job market

Context

The digital skills of our graduates could be better. This involves basic ICT knowledge, information skills and computational skills, with the exact content varying per course. This can only be achieved by discussing with the job market, our lecturers, directors of education and deans which digital skills are relevant for each course, and how these can be added to the curriculum. As well as paying attention to digital skills, we also need to pay attention to the digital resilience of our students, and to ethical issues relating to digitalisation.

Do we already know enough about the current situation in this area? And is it therefore possible to take questions about digital skills into account in the National Students' Survey (NSE) or the National Alumni Survey (NAE) or higher professional education (HBO) monitor? What does participation in the international Student Digital Experience Tracker offer with regard to issues related to digital skills in the curriculum? A sector analysis of the role of digital skills in the curricula of research universities and universities of applied sciences may be helpful, as will dialogue with the societal stakeholders in order to get a good idea of the wishes and requirements of the (future) job market. In addition, we can use the results of Topteam ICT's research on the job market for ICT graduates. Finally, to achieve effective strategies for including digital skills in curricula, affiliation with existing programmes – such as [Digital Skills and Jobs](#) (run by the European Commission's DG Communications Networks, Content and Technology (Connect)) and the Digital Education Action Plan – is useful.

Objective

We encourage and help institutions to ensure that graduates with strong digital skills enter the job market.



Pieter Duisenberg - President of the Association of Universities in the Netherlands

‘DIGITALISATION IS PART OF OUR PRESENT AND FUTURE. IT IS IMPORTANT THAT OUR STUDENTS ARE DIGITALLY PROFICIENT AND THAT WE MAKE USE OF THE OPPORTUNITIES OFFERED BY DIGITALISATION IN OUR EDUCATION. THE OPPORTUNITIES ARE SO GREAT THAT WE CANNOT AFFORD TO IGNORE THEM.

Members of the acceleration team help and inspire each other to adapt the curricula within their own institutions and to develop joint strategies that are useful and supportive to achieve a better match between the educational programme and the future (digital) job market in several areas of expertise.

Area 3: Making education more flexible

Context

Institutions vary as to how they interpret and deliver on the concept of making education more flexible. Nevertheless, flexible education is a trend, both here and abroad: modularisation, micro-credentialing, online distance learning, hybrid forms with face-to-face and online teaching (also by other institutions) are becoming steadily more common. For institutions who want to be more flexible, there are specific issues to be addressed. One of the challenges here is the need to enable standardisation and flexibility.

Standardisation means of course having to invest first, before any profits can be made. So it is not self-evident. How can we manage the formulation of shared ambitions with regard to increasing flexibility and the necessary associated agreements and preconditions for offering flexible education? And what we can learn from successful initiatives by various institutions with regard to greater flexibility? Do shared preconditions for identity management and other technical and educational logistics requirements make it simpler for the institutions who want to make more flexible education possible? Which infrastructural and organisational points can higher education jointly establish, such as the unique identification of students, micro-credentials, offering a common educational catalogue or a student-centric portfolio? Alongside technical requirements, which legal and administrative arrangements are necessary for achieving things like this?

Objective

We provide (infrastructural) framework requirements and encourage and support institutions in offering their courses in a more flexible manner.

Members of the acceleration team help and inspire each other to organise flexible education. The acceleration team delivers a contribution to the (continued) development of facilities which may also be useful for other institutions.

Area 4: A transition to digital (open) teaching aids and materials

Context

The availability of digital teaching materials has a huge impact on being able to offer more flexible education. As students have access to their learning materials all the time and everywhere, it becomes easier to study at your own pace, in your own location. The availability of many different types of material offers students the option to select materials that match their own preferences. If lecturers develop teaching materials jointly, that helps to improve the quality of the materials available. Publishers are investing hugely in the development of digital teaching materials. The Netherlands not only wants to make all research data and results available

under an open licence, but also all teaching materials. Can we work with publishers to seek a form of collaboration that delivers the best possible outcome for all parties: students, lecturers, libraries, institutions and publishers?

Working with digital open teaching aids and materials encourages innovation. It makes it possible to adapt, share and reuse content. In his report *Open and Connected Higher Education*, written on behalf of the VSNU and VH, Rob Fastenau gave several pieces of advice on open teaching aids and materials which may prove inspirational for the acceleration team. A first step is lecturers offering their own work under an open licence. In addition, we also want to be able to offer the compulsory and recommended literature from publishers. SURF is in discussions with publishers to develop a subscription model which would offer students direct digital access to compulsory literature. In an ideal world, the learning material from publishers would be available under an open licence, although this does not necessarily mean that it would be free. It does mean that remixing and reuse would be possible. New forms of collaboration between the education sector and publishers are therefore necessary. We additionally aim to link up with the open access and open data movement, and we wish to learn from them.

An important step is lecturers publishing the learning material they develop under an open licence. How can we encourage lecturers to work together with experts from other institutions? Co-authoring and drawing on each other's work leads to an improvement in quality and economies of scale for higher education. As a result, high-quality digital study material can be offered to students in a flexible and payable manner. Does open content offer opportunities for making education more flexible? And how can we support lecturers in publishing their content?

In an ideal world, digital learning material would already be easy to find and browse through, whether it comes from publishers or lecturers. Innovative technologies, such as machine learning, as well as developing and applying industry standards will be a huge driving force behind achieving this for all. How can we implement steps to achieve this together with EdTech suppliers,

publishers and higher education institutions, while keeping security and privacy aspects high on the agenda?

Objective

We provide (infrastructural) framework requirements for making digital learning material available to students and lecturers, and encourage and help institutions to offer (open) learning material digitally and under an open licence.

Members of the acceleration team help and inspire each other to make their learning material available in a digital (and open) manner, and work together on the agreements and facilities necessary to offer students access to all learning materials in a single place.

Area 5: Secure and reliable use of learning data

Context

Because students are learning more online all the time, there are ever more data available. These data can deliver insight into the study process, and can be helpful for both students and lecturers. For example, suppliers who offer digital learning environments or publishers who offer learning methods can make use of the study data in their products. But students do not learn in a single environment. For the best insights into progress during study, you need to combine data from different sources. Currently that is often not possible. In addition, those who provide education want to have control of the data and the analyses that are performed. How do we ensure that care is taken with privacy when handling student data? Which agreements do we need to make in this regard? And how can we provide a secure and reliable infrastructure for study data in which students' privacy and data security are priorities?

By managing data themselves, higher education can have control over the data and the analyses that are performed. What is the added value of various scenarios: from fully centralised data storage (for example at SURF) to fully localised data storage (at individual institutions)? Easy linking of data from various systems is a precondition in all scenarios. Exchange standards and national agree-

ments on information security play a crucial role here. And can an experimental environment, which offers lecturers the opportunity to apply learning analytics in education in an approachable manner, help us gain insight into what we in higher education want from the use of study data?

Objective

We provide (infrastructural) framework requirements that allow institutions to manage the storage and analysis of study data with attention to privacy and security.

Members of the acceleration team help and inspire each other to use the study data to gain an insight into the quality of their education and students' study progress, and deliver a contribution to the (continued) development of facilities that may also be useful for other institutions. There is a clear link with the area of evidence-based educational innovation with ICT, in which research is carried out on the effectiveness of using study data.

Area 6: Evidence-based educational innovation with ICT

Context

The use of technology in education is a means, not an end in itself. The goal is to provide high quality education, that is provided as far as possible in a customised form and that prepares students for a technology intensive job market. The possibilities offered by technology to achieve this goal are very promising, but a lot of research is still needed in order to find out exactly how they can be used. Together with the Netherlands Initiative for Education Research (NRO), how can we stimulate research into educational innovation with ICT in higher education? Can we get more out of the efforts in research, for example by targeting the sharing of research results and networking of researchers? And how can incentive schemes, such as the Comenius grants, and projects financed and carried out by institutions play a role? The experiences from these projects can, where relevant, shape the subject of the research, possibly within the research lines of the NRO, for example. Together with the NRO, can we put in place a knowledge infrastructure which ensures that existing and new research results are available in a single place in an approachable manner?

In this area we make a connection with the Learning & Education research line from the VSNU's Digital Society and the practice-oriented ICT research agenda. We connect to these existing networks in order to jointly increase research into educational innovation with ICT.

By combining existing initiatives, we can take steps to position the Netherlands internationally in this research field. By way of example, we are organising an international conference on this subject.

Objective

We organise the combining of research capacity and areas of attention for the effectiveness of educational innovation with ICT and ensure research results are translated into and connected to education in practice. We encourage and help institutions to apply evidence-based educational innovation with ICT in their own programmes. In addition, we position ourselves internationally in the area of research into educational innovation with ICT.

Members of the acceleration team help and inspire each other to apply evidence-based educational innovation with ICT in education within their own institution, and help the Netherlands to position itself internationally in this field.

Area 7: Collaboration with EdTech

Context

Billions are being invested in EdTech companies. In the first six months of 2017, it was already 1.8 billion dollars. Suppliers and start-ups are offering impressive products, but far from all of them are offering what higher education actually needs. Suppliers and start-ups also often fail to make use of standards that enable interoperability. Can 'do tanks' help to make more use of the innovative drive of EdTech companies? How can we create optimal framework conditions and make facilities available for institutions and companies to experiment together? How can we ensure that by working together, we can influence new developments, manage the market and set requirements for applications? Through this collaboration, can we accelerate innovation in education and increase the adoption of these educational innovations within institutions? One point to bear in mind here are

the European tender regulations. These regulations often get in the way of innovation in higher education. How can we best work together, towards and with the market, within the framework of the European regulations?

What does joining together with existing (inter)national ecosystems for start-ups yield for Dutch higher education, and can we ensure specific attention for the EdTech sector? How can we bring supply and demand closer together, for example in greenhouses where we link requests from students and lecturers to solutions from suppliers and start-ups, such as in the form of challenges? What does a brokerage role for promising start-ups look like, in order to help them meet important criteria for higher education? And how can we offer space for experimenting with new technologies in education?

A flexible learning environment

With an ICT infrastructure that makes open standards mandatory and provides services that can be purchased flexibly, are interchangeable and easily integrated, it will be possible for an institution or even a lecturer to build a learning environment based on their own didactic choices. A modular learning environment, however, poses many challenges. One significant challenge is that suppliers will have to use standards that must be sufficiently mature to enable seamless integration of different products. Tools and applications are currently not (always) focused on integration and interchangeability. What do we need from (ongoing) development and application of the standards and application of the higher education framework of standards to be able to offer a secure and reliable learning environment for our students and lecturers? And by working with and managing the market, how can we make significant progress toward the goal of a flexible learning environment within four years?

In September 2018, SURF is organising a Challenge Day for suppliers. During the conference there will also be time for interaction with suppliers and start-ups to discuss further collaboration.

Objective

We provide (infrastructural) framework requirements for working with suppliers and start-ups so that institutions can better use the innovative drive of EdTech companies.

Members of the acceleration team help and inspire each other to work together (even more) with suppliers and start-ups, and make a contribution to the (continued) development of facilities which may be useful for other institutions to better collaborate with the EdTech sector.

Area 8: Heading towards acceleration together

Context

Accelerating innovation in education with ICT will stand or fall by having a clear vision of what innovation in education means. Each institution defines its own vision of innovation in education with ICT as well as its own strategy to get there. But much can be learned from the experiences and visions of others. Which building blocks for both visions and policies are inspiring and can be applied in practice for institutions who are developing or revising their own policies? How can we organise the administrative dialogue on the goals institutions are striving for with educational innovation with ICT?

The initiatives in the acceleration agenda contribute to the transition of higher education in the Netherlands to higher education that grasps the opportunities offered by digitalisation. This transition requires dialogue between directors, the Ministry of Education, Culture and Science (OCW), the Accreditation Organisation of the Netherlands and Flanders (NVAO), the Netherlands Organisation for Scientific Research (NWO), the Royal Netherlands Academy of Arts and Science (KNAW) and the Netherlands Initiative for Education Research (NRO), as well as other stakeholders in higher education, on the consequences for institutions, regulations and collaboration. The shared aim is for the Netherlands to benefit from the opportunities offered by educational innovation with ICT, and to take on a pioneering role at an international level.

Within this area the programme team facilitates administrative meetings on developments related to the topics on the acceleration agenda in order to organise the administrative capacity necessary to achieve the transition. We develop strategies to better take advantage of the opportunities offered by ICT in education and to position ourselves on an international level. We also organise administrative agreements on the acceleration agenda.

Objective

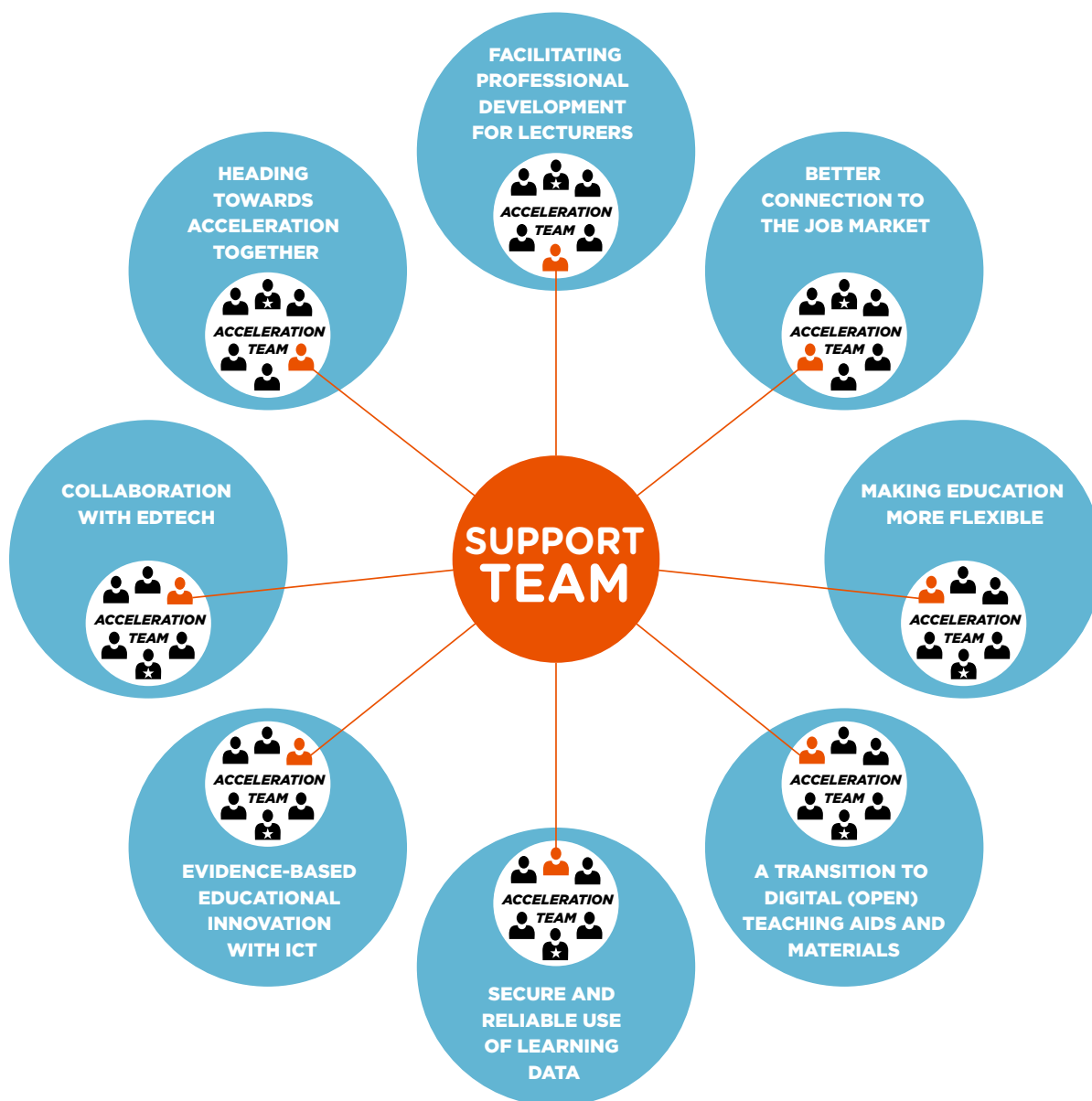
In higher education, together we remain committed to this topic and thereby to positioning the Netherlands as an international pioneer in the area of innovation in education with ICT.

The members of the acceleration team are board members of research universities and universities of applied sciences. They support and guide the transition of higher education, inspire colleagues, and ensure that Dutch higher education is positioned on an international level in the area of innovation in education with ICT.



Erwin Bleumink - SURF board member

‘ACCELERATION CAN HAVE TWO FACETS. FIRSTLY, IT ENSURES THAT YOU NEED NOT CONSTANTLY REINVENT THE WHEEL. SECONDLY, WITH INNOVATION YOU CAN BUILD ON COMMON AGREEMENTS, WHICH ACCELERATES FLEXIBLE EDUCATION. YOU THEN LAY A FOUNDATION ON WHICH YOU CAN INNOVATE FASTER. THAT IS ALSO THE CHALLENGE OF THIS AGENDA: WHERE DO YOU LAY THE FOUNDATION? WHEN DO YOU INNOVATE ON YOUR OWN? AND WHERE DO YOU SEEK INTERACTION?’



HOW WILL THE PLAN BE ACHIEVED?

Each acceleration area has one or several acceleration teams, as necessary. These acceleration teams form the heart of the acceleration plan. Each team consists of a leader and 5 to 8 team members, all of whom work at the research university or university of applied sciences they represent. Alongside their work in the acceleration team, they play an important role at their institutions by promoting the innovations from the acceleration area. Furthermore, the team members work on shared ambitions. Within the context of existing (national) developments, the acceleration teams themselves

determine which questions they wish to address, their planning and their approach in order to arrive at tangible, scalable results. The acceleration teams can also call on a support team in order to achieve their goals.

The support team has technical, policy and legal expertise, and uses this in a flexible manner on request to support the acceleration team. The support team helps to ensure the results and experiences of the acceleration team are passed onto all institutions. In addition, the support team makes connections between all the requests they receive in order to support the acceleration team as efficiently as possible.

WHO MANAGES THE EXECUTION OF THE PROGRAMME?

The team managing the Acceleration Plan for Innovation in Education over the next four years consists of a programme team and a steering group.

The programme team is made up of employees from the VSNU, VH and SURF. They facilitate the work of the acceleration teams, the support team and the steering group. The steering group is responsible for establishing the overall goal and making sure that this is achieved. The steering group members are as follows:

Hans Nederlof and Anka Mulder
from the Netherlands Association of Universities of Applied Sciences

Arthur Mol and Anja Oskamp
from the Association of Universities in the Netherlands

Erwin Bleumink
from SURF

Jakob van der Waarden
from the Ministry for Education, Culture and Science
is a non-voting member of the steering group



Ingrid van Engelshoven - Minister for Education, Culture and Science

'I AM DELIGHTED THAT ALL DUTCH INSTITUTES OF HIGHER EDUCATION ARE WORKING TO ACCELERATE INNOVATION IN EDUCATION. THE SUPPORT BASE TO TRULY MAKE A DIFFERENCE HAS NEVER BEEN GREATER. I THEREFORE EAGERLY LEND MY SUPPORT TO THIS ACCELERATION PLAN.'

HOW WILL THE ACCELERATION PLAN BE FINANCED?

The acceleration plan budget consists of investments from the institutions, the VSNU, VH and SURF as well as a contribution from the OCW.

Each institution taking part in the acceleration plan invests a significant amount every year in the topic of the acceleration area in which they are involved. For a large institution, this amounts to at least EUR 250,000 per year per area; for smaller institutions, other minimum amounts apply depending on the scope of the institution. This investment may take the form of programmes or projects currently running, while said funds stay within the relevant institution. If an institution would like to participate in different areas, the total investment would therefore be higher. In addition, institutions invest in the collaboration within the acceleration teams by releasing employees to work on the teams. There is no reporting or accountability regarding the funds invested in an institution as part of the acceleration plan; an annual summary of the minimum investment and substantive progress suffices.

The leaders of the acceleration teams, the support team and the programme management are financed through the programme budget created by SURF, VSNU, VH and OCW. The programme budget is also available for publishing the results of the eight acceleration areas to all research universities and universities of applied sciences.



Fotografhy

Pixabay (cover)

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Design

Studio Koelewijn Brüggewirth, The Hague

May 2018

Association of Universities

www.vsnunl/en_GB/digitalsociety

Association of Universities of Applied Sciences

www.verenighogescholen.nl/english

SURF

www.surf.nl/en/accelerationplan



2018

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