



## Report of the Flemish 'needs analysis'

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## 0 Preface: About the Flemish needs analysis

## 0.1 Place in the project

The Erasmus+ KA3 project POWERHEAD (Empowering Higher Education in Adopting Digital Learning) aims to encourage and support digitalisation in higher education. The project is coordinated by the Flemish Department of Education and Training. The Flemish Education Council vouches for the implementation of the Flemish segment. The Ministry of Education and Science of Latvia is implementing the Latvian segment of the project.

As a first step of the project, a background paper was drawn up (see <a href="the-project website">the project website</a>). In the next step, the current needs of higher education concerning digitalisation are identified with the help of focus groups with various stakeholders. This step is performed simultaneously in Flanders and Latvia.

The input from the Flemish focus groups will be added to the input from Latvia and later to the input from other European countries. Eventually, this will lead to recommendations for higher education institutions and for the government.

#### 0.2 Process

Within the framework of the Flemish needs analysis, five focus groups were organised in the June-July 2021 period with the following homogeneous groups:

- Focus group (employers and) social partners: 5 participants
- o Focus group educators and educational support staff: 12 participants
- Focus groups heads and directors in the higher education institutions: 8 participants
- Focus group government/policy advisors: 3 participants
- Focus group students: 4 participants

In October 2021, one additional focus group was organised from the labour market perspective in particular, with 9 participants. Primarily staff from higher education institutions cooperating with the labour market participated in this focus group, as well as students (from a lifelong-learning perspective), and a representative from the field.

#### 0.3 Focus on the details

The way in which the homogeneous focus groups were formed was determined in consultation with the Flemish steering group. Content-wise, the Laurillard model (2015)¹ was used as a starting point for determining the themes on the one hand and the questions per theme on the other hand.

The focus groups were centred around the following themes:

- 1 'Students' theme<sup>2</sup>
- 2 'Course & Curriculum Design' theme
  - 2.1 'Curriculum Design & Assessment' subtheme
  - 2.2 'Support and Professionalisation' subtheme
- 3 'Vision, Policy, and Quality Assurance' theme
  - 3.1 'Vision and Policy' subtheme
  - 3.2 'Quality Assurance' subtheme
- 4 'Funding and Infrastructure' theme
  - 4.1 'Funding' subtheme
  - 4.2 'Infrastructure and Sources' subtheme
- 5 'Stakeholders' theme

In all focus groups in the Flemish needs analysis, the themes above were discussed in a more or less extensive form.

#### 0.4 Content of this document

The input from the various Flemish focus groups is brought together in this document in a summarized way. This document thus offers a concise overview of the input in the needs analysis conducted in Flanders in the framework of the POWERHEAD project. It is structured according to the aforementioned themes and subthemes. During the analysis, another layer of subthemes has been identified.

In other words, this document reflects the multifaceted input obtained throughout the various focus groups and does not necessarily represent the points of view of the Flemish Education Council, the Flemish project steering group, and the transnational steering group.

As this project moves ahead, the Flemish project steering group, the transnational steering group, and the digitalisation experts from other European countries will elaborate this input in Peer-Learning Activity (PLA) sessions. There will be room for comments and additions, and collective needs at the European level will be identified. In the end, guidelines for a national policy on digital learning in higher education and recommendations towards the higher education institutions will be formulated.

<sup>&</sup>lt;sup>1</sup> Laurillard, D. (2015) <u>Thinking about Blended Learning. A paper for the Thinkers in Residence programme.</u> In: Van der Perre, G and Campenhout, J. V., (Eds.) *Higher education for the digital era; A thinking exercise in Flanders* (pp. 7-33). KVAB: Brussels, Belgium.

<sup>&</sup>lt;sup>2</sup> Although the term 'students' is used, it is not necessarily only about first-year students taking regular programmes in higher education. Working students, returnee students, etc. are included in the needs analysis too.

## 1 Input concerning the 'Students' theme

## 1.1 High digital literacy

Students are generally believed to have many digital skills. However, several participants in the focus groups felt this is often overestimated. It is a myth that students are 'digital natives'. Students do have 'button skills', but they have not yet completely acquired some basic skills. Additionally, they need wider digital literacy, related to 21st-century skills, such as digital communication, making appointments online, critically dealing with information, etc. There are also individual differences between students.

In this respect, students need support (also from the government): a good digital infrastructure is a minimum requirement, but this is not sufficient. This support can take various forms, from awareness among educators of the students' digital skills, and a digital literacy course on the curriculum, to providing an accessible helpdesk to address technical issues.

Primary and secondary education should also prepare pupils for wide digital literacy in the best way possible. This focus must be reflected in the minimum objectives.

## 1.2 An inclusive digital transition

The Covid pandemic has revealed and widened the social gap between students even more.

With a further digital transition, it should be ensured that this transition is possible for every student and therefore takes place inclusively. For digital education to have a chance of success, the basic conditions need to be met. In the focus groups, the following aspects were addressed:

- Every student should have the necessary digital facilities, both at home (basic equipment, such as a computer, Internet connection, a quiet place for studying, etc.) and on campus. During the pandemic, the Flemish government provided 1,500 laptops for vulnerable students in higher education.
- From a democratisation perspective, enrolment costs for students should include that certain equipment for digital/blended education is necessary. There are also study allowances that students from vulnerable groups can apply for.
- Besides the necessary financial and infrastructural facilities, there is also a need for guidance, care for and connection with vulnerable groups from the higher education institution in the (full or partial) transition to digital education.

## 1.3 A flexible and adaptive system

Digitalisation can make higher education more inclusive. For example, for working students or returnee students in higher education, to whom the programme has become more accessible due to digitalisation, or for students with an impairment, who may benefit from the digital possibilities.

Students are a highly heterogeneous group. There is a need for an accessible, flexible, adaptive system that can be tailored to the student's profile (e.g., different duration of the

programme, different degree of digitalisation, different teaching methods/approaches, different trajectories, different degree of cooperation with actors from the labour market and the field, etc.), with minimum administrative obstacles (such as continuity requirements and aptitude requirements). Asking the students themselves (including working students or returnee students) to identify their needs is a powerful method.

## 1.4 Attention for well-being

Although the presence of students in online courses during the pandemic gradually decreased (see also 1.5), the focus group participants generally evaluated the digitalisation wave as reasonably positive for students. There was no improper resistance, on the contrary, there was much goodwill among students. However, it is too early to evaluate the students' attitude with respect to long-term digitalisation (which may take the form of blended learning instead of digital remote education provided during the pandemic).

The mental well-being of educators and students must also be monitored in a digitalisation context. There is a great need for social contact, human interaction, for feeling personally connected, also when (many) classes are digital. When flexible digital trajectories are organised, for working students for example, the connection with the campus and the educators also continues to be an important aspect.

During the pandemic, several valuable initiatives emerged to support students in various higher education institutions. Some examples discussed in the focus groups are:

- A specific working group on mental well-being was formed to support students with a need to talk to somebody.
- Study buddies were the point of contact to speak with students.
- Staff from the Student Facility Service did an additional training on mental well-being, and could refer students for psychotherapy, if this was necessary.
- The student council played a role in reflecting on which relaxing activities could be organised digitally for students.
- Educators contacted students on a one-on-one basis to check how each student was doing.
- An online corona student platform was created across institutions, where students could seek support.

Creating digital ties was not self-evident, certainly not among groups of students who hardly knew each other. It became clear that it is important that both the institutions and the government offer opportunities to achieve a sense of connection close to the students.

Finally, the question of how to deal with the digital setting and with the students' own health is important. Students must be educated on this (e.g., the right of disconnecting).

## 1.5 The importance of self-regulation (and time to grow in this)

With far-reaching digitalisation, the workload for students increases, and the extent to which studying the subjects is feasible diminishes. A lot of responsibility rests with the students; they need self-control. Students need time to grow in this role. This is not self-

evident, particularly for first-year students who are new to higher education. There is a wide gap between secondary and higher education with respect to the extent of self-regulation expected from students.

A good example of how students can grow in self-regulation is the way in which they handle 'knowledge clips'<sup>3</sup>. Initially, many students were rather ill at ease, but they gradually appreciated the benefit. The clips enabled them to study certain parts more quickly, to revisit some parts, have a break when they needed one, etc.

Also, when a transition takes place from online emergency teaching towards a more sustainable form of digitalisation in higher education, a 'blended design' with attention to the students' self-regulation capabilities is required.

## 1.6 Importance of involvement and clear communication

Although students already have some input with respect to decisions about higher education (for example via surveys on courses), it does not provide any guarantee. Students participating in the focus groups really want to be heard and want their views to be considered. It is not self-evident that these students' involvement is organised, partly because there is little continuity in the functioning of student associations across the academic years.

During the transition to more digital education, some participating students experienced the need for reachability and clear, immediate communication. In this respect, there are big differences between educators, degree programmes, and institutions. Choices need to be made at the level of degree programmes and institutions, and these choices must be monitored.

In digital or blended education, students should not be left alone. Guide them, keep in touch with them, communicate with them, involve them in consultations concerning further steps and points that require improvement.

## 2 Input concerning the 'Course & Curriculum Design' theme

## 2.1 Input concerning the 'Curriculum Design & Assessment' subtheme

## 2.1.1 'Emergency remote learning' versus well-considered blended education in the long term

During the early stages of the pandemic, there was little time to look ahead and think in the medium or long term. Urgent steps were required to switch to digital education fast. This was why the term 'practical didactical' was introduced. Now is the time to take a step back and think. It is time for reflection: what is still needed?

Some participants warn against moving too much towards purely digital education over time. Contact hours remain important. With the further extension of blended learning, careful steps must be taken to remove obstacles and aim for a suitable mix of face-to-

<sup>&</sup>lt;sup>3</sup> A knowledge clip is a short five-minute video in which one specific subject (an idea or a principle, for example) is explained.

face and digital education. In other words, it is a matter of doing both, both on campus and at home, via a combination of didactic methods like asking questions and lecturing, via multiple digital learning materials like discussion forums, knowledge clips, etc.

In some focus groups, the combination of didactic methods and digital learning materials was discussed. For instance, reference was made to the need for interactive teaching methods such as asking questions when knowledge clips were used, and to the possibility of collaborative learning under the supervision of an educator via discussion forums. In digital education, the interactivity and involvement of students remain points of special interest, also in the longer term.

Transferring the traditional manner of teaching to a digital channel does not work. Simply providing remote education is not the same as redesigning education by means of technology (in the 'flipped classroom' manner, for example). In the long term, more time and energy must be devoted to benefitting from technology, so that technology is not merely used to design education in the same way as without technology. This requires a huge effort.

#### 2.1.2 Digitalisation is not an aim in itself: the pedagogical-didactical aspect prevails

The higher education institutions do have a vision: providing good education to meet the learning objectives. Technology does not change this vision. They do not need to devise a new vision (at an institutional level).

Thus, digital learning or blended learning is not an aim in itself, but rather a means to be able to provide good education. Digitalisation must take place for educational reasons and not for purely technological reasons (because the technology is available).

The question is: 'What are the objectives?'. This question should form the basis for studying how digitalisation could provide added value. Decisions need to be made about the suitable mix of online teaching and offline teaching, for the purpose of educational quality. It is important that digitalisation is integrated as well. It must not merely be an additional element, but should be embedded.

#### 2.1.3 Towards a flexible, modular curriculum

As a result of the pandemic, a second educational system, online education, emerged, which was organised alongside purely on-campus education. Digitalisation makes it possible for these systems to further evolve into a single continuum.

In the earlier stages of the corona pandemic, digital education was strongly divided into separate sections, per course, per degree programme, etc. The design lacked the basis for transversal connections.

However, digitalisation can also contribute to evolving to a more modular curriculum, in which a system of standard curricula consisting of certain courses is increasingly abandoned. This is possible in different ways. The following were discussed in the focus groups:

 Via shorter programmes leading to a certificate (the so-called micro-credentials and micro-degrees).

- Via degree programmes that can be taken in parts and that can eventually be combined into a single certificate for the entire package.
- Via standard curricula of which 60-80% of the content is the same for all institutions and where institutions can distinguish themselves with content that is added to the standard curricula.

The student must be central in the curriculum design and have the possibility to choose between taking the curriculum in a digital form or in an on-campus form, because the aim of higher education is to prepare the students for the future. Students should also be informed that digital education is not without any obligations.

There is a need for a carefully thought-out curriculum design to organise this with the resources available. This requires vision development.

#### 2.1.4 Digital skills as part of the curriculum

Every educator and every student must have good basic digital skills (not merely 'button skills' but wider skills in digital communication, making appointments, etc.). Which skills exactly depends on the programme, so a tailor-made approach is needed.

In Flanders, as opposed to countries abroad, there is not usually a regular place for digital skills in the curriculum development. The Flemish teacher training programmes, where information technology is provided as a subject, are an exception to this. It is expected, however, that this subject will disappear from most teacher training programmes. This is not desirable because the role of digitalisation in (higher) education is gaining importance, and educators with technical skills are in great demand in the educational sector.

In addition to the supporting services on education and curriculum development in the higher education institutions, the teacher training programmes could provide more input with respect to the place of digital skills in curriculum development, taking the teaching and learning environment used by an educator into account.

## 2.1.5 A balance between physical assessment and digital assessment

During the pandemic, the institutions have dealt with digital assessment in various ways. Consequently, there are various visions on this subject. The following benefits and drawbacks of digital assessment were discussed in the focus groups:

- According to many participants, it would not be optimal if all education was digital. Digital evaluation feels strange, because the human component matters, especially in stressful situations like exams. Moreover, exams require quiet rooms, where students are not disturbed. However, an educator does not have control of situations in which digital exams are taken at home. With digital exams, safety is also a point of attention. Furthermore, not all exams can be taken digitally (such as exams where specific skills are tested).
- Exam digitalisation also has benefits. An example is the possibility of organising multiple-choice exams in a more accessible way. For students with special needs (who

use Sprint software,<sup>4</sup> for example) digital assessment provides benefits as well. Additionally, digitalisation allows for remote evaluation.

The general view in the focus groups can be summarised as follows: a mental switch is required to extend the digital revolution to the assessment field.

There is still a wide gap between assessment in the field, where feedback and adjustment play an important role, and the rather summative, written exam in higher education.

## 2.2 Input concerning the 'Support and Professionalisation' subtheme

## 2.2.1 Sharing/exchange between educators

In a more modular and flexible curriculum, not only the individual educator teaching his subject is important. Education is increasingly taking place in teams who think at the level of an educational programme about suitable blends.

Knowledge sharing between educators must be facilitated. This can be done in different ways. The following methods were discussed in the focus groups:

- Peer-to-peer review groups and working groups of educators.
- Coaching by experts.
- Design teams consisting of educators, educational support staff, and education technologists.
- Micro-support/support by agents in the field with educational support staff working with educators, looking at the design of the course level together.
- Academy/learning lab.
- Educational hub.
- Education days, both within the respective institution and at an association level.

In general, there is a need for a landscape where sharing between educators takes place, initially in their own team but also between departments and between institutions.

## 2.2.2 Time and recognition for educators

There is great enthusiasm, much drive, and a lot of goodwill among the educators. They have the right attitude: they want to provide quality, and they want to consider how digitalisation can help.

For the educators who initially viewed digitalisation with some trepidation, resistance to working with technology has also diminished. This makes it easier to focus on the didactic side from now on.

There is a great deal of intrinsic motivation amongst educators, but the switch to more digital education requires time and energy. The policy must valorise the efforts educators make with respect to digitalisation. This can be done, for example, in the ways below that were discussed in the focus groups:

<sup>&</sup>lt;sup>4</sup> The Sprint software package is used for children, youngsters and adults with reading, writing, and spelling problems. See <a href="https://www.sprintplus.be/nl">https://www.sprintplus.be/nl</a>

- The job competence profile is not aligned to digitalisation. Innovation must be part of the educator's task. The problem is also that educators are not really evaluated for such educational tasks, but are rather evaluated based on their research tasks.
- It is more efficient if an educator can work on digital skills based on self-regulation than via compulsory extra training, which may not be tailored to the educator's level.
  In this way, the responsibility remains with the knowledge workers themselves.
- Time is an important factor in achieving recognition. A smart system can be created, in which designing an online lesson is considered teaching time. Time should also be provided for professionalisation (for example, the organisation of professionalisation initiatives in daytime).

Other ways to valorise educators' efforts are: educators could take co-ownership when innovative teaching material is used externally; educators could be relieved of certain tasks via support (putting material online, for example); differences in pay scales, etc.

Finally, the educators' professional autonomy should not be restricted. Based on academic integrity, educators should be able to choose the form of digitalisation and the related didactics best suited to the students.

#### 2.2.3 Tailor-made professionalisation

Professionalisation is the basis for providing good (online) education. The basis of a high-quality culture is with an individual educator. This requires time and resources. An important condition is that educators are aware that they must professionalise.

In the short term, educators will need a lot of personal support and one-on-one guidance, because there are lots of differences in the types of professionalisation between individual educators. Some educators primarily need technical professionalisation (such as using polls, platforms like Zoom or Teams, etc.), while other educators need specific didactic professionalisation to be able to provide digital education in a wider sense. In other words, educator training should be differentiated. Ideally, this is embedded in a process of lifelong learning throughout an educator's career.

Digital resources, such as films, (online) tutoring, etc., can be used within professionalisation initiatives. These provide opportunities to facilitate professionalisation for various target groups.

There is also a need for vision development with respect to professionalisation. Besides professionalisation by external parties, it is important to use the potential of the available capacity in the institution (e.g., contacts in departments, expertise from projects).

## 2.2.4 Diverse content with professionalisation

The educator plays multiple roles: a technological role, a coaching role, etc., but this is currently not reflected in the professionalisation. Nevertheless, this is essential for professionalisation to succeed and to maintain high levels of enthusiasm.

During the pandemic, investment in educational support has increased. Although this boosted the professionalisation of the team as a whole, there was too much focus on the 'button tricks'. Besides the technological segment, the pedagogical-didactical segment is also highlighted. The key question is how to find the suitable blend of digital and physical

education, of synchronous and asynchronous education. This is experienced as a challenge. Being alert to the needs of vulnerable students can also be part of professionalisation.

The EU-DigComp 2.0 framework<sup>5</sup> can help to screen educators for digital competences and suggest customised courses for an educator.

# 3 Input concerning the 'Vision, Policy, and Quality Assurance' theme

## 3.1 Input concerning the 'Vision and Policy' subtheme

#### 3.1.1 A vision at institutional level and leadership

An ad hoc approach had already been used in response to the pandemic, but we need to look beyond the short term: a long-term vision is needed. It is important that institutions make choices in the medium and long term and elaborate a policy on digitalisation in higher education. Consistent agreements are in the interest of both educators and students. Cooperation with the labour market and the way in which digitalisation can be used to intensify this collaboration must be included in the vision development.

To elaborate this policy, policy support is needed at an institutional level, with respect for the autonomy of the institutions. The higher education institutions differ in the priorities they set, and the choices they make on vision and policy. On the other hand, higher education also conducts research into digitalisation and blended learning. The knowledge available in higher education should be used via a research-based policy.

Throughout the design and implementation of the policy, a major role is reserved for leadership in change management, in the framework of supporting and continuing to motivate educators. The focus should not only be on high-quality implementation of the vision, but also on purchasing digital tools, on infrastructure, etc.

## 3.1.2 Commitment and involvement staff

In the focus groups, it was also mentioned that the vision on digitalisation should be discussed with staff, because it is the staff who will be propagating this vision. 'Higher education institutions are not made by visions but by people.' The support for the central policy by the supporting services and by educators and didactic teams is crucial. Students, too, are a requesting party that wants to be involved.

Streamlining the policy at an institutional level and at the level of degree programmes is important (provided that the degree programmes are allowed some freedom and leeway in what they want to accentuate themselves).

In the context of the Higher Education Advancement Fund (Voorsprongfonds Hoger Onderwijs), projects concerning digitalisation projects have been submitted (and

<sup>&</sup>lt;sup>5</sup> For more information about the 'Digital Competence Framework 2.0', see <a href="https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework">https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework</a>

approved),<sup>6</sup> with strong commitment of staff in several higher education institutions. In other words, the Advancement Fund is very much on the minds of the institutions.

## 3.1.3 A coordinating framework at Flemish level

A vision is not developed in an organisation alone but also in the wider network (the field, external workers, Flemish policy, etc.).

It is needed that the government pushes digitalisation forward as a policy priority and develops a vision in that respect. In terms of sustainability of digitalisation, a Flanders-wide framework is needed in which the spearheads are clearly revealed, and around which (higher) education can be organised.

The government is only expected to provide support, because the institutions are autonomous. Support may take the form of providing frameworks, making templates available, offering a contact point, managing the flow of information, etc.

A central point of contact where information is collected is also needed to safeguard a good flow of information and expertise. The Dutch SURF,<sup>7</sup> in which digitalisation spearheads are recorded at a national level, was referred to in several focus groups. This kind of framework can give the institutions something to hold on to. It can provide support in research on digital assessment and the software used for this, and can also provide support with respect to creating communities and exchanging good practices via a central database. In the long term, a kind of knowledge exchange platform could be elaborated in Flanders for higher education too.

There is also a need for a regulatory framework of which the details are developed by the government to limit the monopoly position of certain commercial companies, to support institutions in their privacy policy, etc.

## 3.1.4 Internationalisation and profiling of Flemish higher education institutions

If the digitalisation policy is implemented in the right way, it will offer opportunities to put programmes on the global market that can be evaluated remotely and for which a diploma or a certificate can be issued.

Over the years, intake in Flemish higher education may decrease, but there is also a huge student potential across the borders. International profiling is currently stronger at universities than at universities of applied sciences, but there is still potential for growth. Due to digitalisation, internationalisation is possible without any overhead costs, which makes digitalisation highly cost effective too.

In some focus groups, there is a feeling that Flanders is lagging behind, and that some catching up is required when it comes to open education. This requires a detailed vision.

<sup>&</sup>lt;sup>6</sup> In Flanders, 60 million euros were invested in higher education via the Advancement Fund, in the framework of the revival after the corona crisis. One of the three spearheads is making digitalisation in higher education more sustainable. See: <a href="https://onderwijs.vlaanderen.be/nl/directies-en-administraties/hoger-onderwijs/oproep-projecttoelagen-voorsprongfonds-voor-hogescholen-en-universiteiten">https://onderwijs.vlaanderen.be/nl/directies-en-administraties/hoger-onderwijs/oproep-projecttoelagen-voorsprongfonds-voor-hogescholen-en-universiteiten</a>

<sup>&</sup>lt;sup>7</sup> SURF is a cooperative association of Dutch educational and research institutions that join forces to purchase or develop the best digital services possible and to encourage knowledge sharing by continuing to invest. See: <a href="https://www.surf.nl/over-surf">https://www.surf.nl/over-surf</a>

## 3.1.5 Culture of exchange and cooperation

In several focus groups, it was mentioned that there is a certain lack of openness at all levels: educators, degree programmes, and institutions. This may be caused by the Flemish culture, with a strong tendency of thinking in terms of competition between the institutions.

Accelerated digitalisation has already created more exchange. However, the policy must also encourage and facilitate systematically embedded exchange and cooperation across the boundaries of degree programmes and institutions. For example, it must be clear what rights educators have when material becomes 'creative commons' (i.e., anybody may use it so long as the source is cited). Another idea is the centralisation of good practices in a database at a Flemish level. Cooperation between institutions for setting up blended or hybrid trajectories that are flexible is another possible option.

Such exchange and cooperation can take place within the contours of the Advancement Fund, but impulses from the government to finance this structurally are also needed.

Cooperation between institutions, even across national borders, is mentioned in this context too. It is good to see the EU presenting an ambitious vision at a macro level.

## 3.2 Input concerning the 'Quality Assurance' subtheme

According to several focus group participants, there was sometimes not enough reflection on quality assurance in the digitalisation wave caused by the pandemic. The focus was on continuing education so that students could graduate.

Quality assurance is not an aim in itself, but a means of monitoring the quality of education. Digitalisation is included in the evaluation of courses in the quality assurance cycle, although quality assurance is actually extended to the entire teaching and learning environment.

Although it is logical to include digitalisation of education in quality assurance, it is not easy to achieve. Investing in this not only requires time, but also a certain attitude within institutions.

Quality assurance can also take place digitally. Many modern digital tools (e.g., apps) are used to shape digital quality assurance, there are audit committees that continue in a hybrid fashion, etc.

## 4 Input concerning the 'Funding and Infrastructure' theme

## 4.1 Input concerning the 'Funding' theme

## 4.1.1 Specific and specifically allocated funding

At the start of the pandemic, the Flemish government invested a considerable amount in the technical segment of digitalisation in higher education. In addition, 60 million euros were allocated via the Advancement Fund. There is also need for the government to push digitalisation forward as a policy priority and provide a separate budget for this ('specifically allocated resources').

In one of the focus groups, it was pointed out that separate funding is allocated to the lifelong learning programmes, and therefore to digitalising these programmes. Moreover, some employers pay the enrolment costs for staff to participate in higher education programmes (for example, micro-degrees or postgraduate courses), via in-company training for example. The low costs compared with the costs of private programmes are a strong incentive for the labour market to opt for lifelong learning in higher education (which is often digital or hybrid education).

## 4.1.2 Basic funding or long-term funding

Budget is needed to create space and time, and thus possibilities, to work on a vision on digitalisation in higher education. In other words, there is a need for impulses from the government to finance the sustainability of digitalisation in higher education. Part of the available resources are temporary. Furthermore, these extra resources are specifically allocated so that they cannot be used for certain other purposes.

Besides specifically allocating resources to digitalisation (see 4.1.1), decent basic funding is obviously also important. In one of the focus groups, it was also said that more money is not necessarily required. There is a need for more efficiency: how should we use the scarce resources? This is possible via common purchases, by sharing infrastructure, focusing on in-house development options, etc.

#### 4.1.3 Enough staff and digital well-being of staff

There is an acute shortage of staff in higher education. Nevertheless, the (further) rollout of digitalisation requires sufficient staff to design learning trajectories, interaction possibilities, etc. Furthermore, digitalisation requires educators to acquire additional skills (like coaching). The Advancement Fund will make it possible to recruit many more staff. Finding the right people and profiles will be the real challenge.

There is also a need to structurally involve the field in the programme committees, in didactic teams, in working groups on curriculum innovation, etc. This will make it possible to bring in a lot of practical experience.

Monitoring staff well-being is also crucial. In several focus groups, it was stated that the digitalisation wave triggered by the pandemic has increased the workload on staff. Adrenaline helped them get through the recent period. When adrenaline levels drop, many burn-outs and cases of extreme fatigue are expected. It is also questionable whether digitalisation does help improve efficiency in the sense of doing more with less resources.

This problem is particularly apparent at universities of applied sciences, because of the fragmentation of the job responsibilities and the need to provide students with more intensive coaching. At the universities, these tasks are demarcated better.

## 4.2 Input concerning the 'Infrastructure and Sources' subtheme

#### 4.2.1 Digital infrastructure

Educators need basic equipment, particularly at universities of applied sciences, where funding is different from that at universities: a laptop, hardware, software, a stable Internet connection, etc. Many participants say the technological segment is essential, because it determines the quality of education ('quality of service'). This should be undisrupted ('like water running from a tap'). Digital infrastructure (hardware and software) should be robust and scalable for large groups of students.

Higher education institutions often use different software than the labour market (for example, Toledo and Blackboard Collaborate vs. MS Teams). This is not optimal, because the skills students acquire must be transferable. Ideally, the packages used in higher education should be the same as those used on the labour market. With respect to internships, there is a need for common platforms for communication between students, those involved from the higher education institution, and the workplace.

On the other hand, numerous (advanced) technological applications are used via so-called 'labs'. These labs are digital environments in higher education, which are visited by industry representatives and social organisations. It is all about cooperation between expertise centres, degree programmes, and the field.

Besides the digital infrastructure currently used in higher education, other digital possibilities and developments could be introduced (e.g., artificial intelligence, virtual reality, augmented reality), in the framework of internships, for example. Future technology procurement in higher education can also be adjusted based on emerging trends in technology and what is going on in industry.

## 4.2.2 Infrastructure in a wide sense (buildings, spatial design, scheduling, etc.)

In digitalised education, the (class)rooms must be suitable for digital and hybrid teaching, with sufficient possibilities for interaction, and there should be sufficient uniformity among the rooms. When infrastructure is considered, it should not merely be about the rooms but about the larger whole, with a focus on possibilities for cooperation and flexible rearrangement to facilitate education that is provided alternately online and on campus. In the design of buildings and rooms, the pedagogical element must prevail. Scheduling should be based on the principle that rooms are available when needed.

For infrastructure, attention should not just focus on the campus but also on the home environment. It is important that vulnerable students continue to have a place to study. The campus can provide a solution for students who do not have a laptop or who do not have a quiet place to study at home. But even students without financial problems need support and want to come to campus to study.

These requirements are conveyed from the bottom up, so we really need to respond quickly. Building and installing infrastructure takes a long time, however.

## 5 Input concerning the 'Stakeholders' theme

## 5.1 Employers/field

The employers are partners in digitalisation, especially if dual learning and workplace learning are factors in higher education. Creating a network with employers and industry representatives requires time. Although there are frequent consultations with partners from the field (for example, with respect to internships), the requests and needs from the field are sometimes insufficiently considered. However, there are differences between institutions in this respect.

The field is looking for high-quality graduates. Soft skills are gaining importance as well as the demand for lifelong learning. In the field, however, it cannot be taken for granted that all students have all the necessary digital skills and that they are digitally equipped. In the ideal world, there is interaction between the knowledge and skills needed in the field and how these are integrated with the programmes in higher education.

Digitalisation in higher education can provide additional possibilities to improve the chances of co-creation. Many of the consultations with partners from the field are conducted in a hybrid fashion. Digital tools or platforms are used to make consultations or communication between all parties easier. Efforts are also made to ensure that digitalisation permeates the programmes in lifelong learning in higher education. For instance, guest lectures by people from the field are often digital, although this appears to be a search process. More consultation and co-creation with the field are necessary to put successful and flexible programmes (such as micro-degrees) on the market.

### 5.2 Developers of educational hardware/software

The educational game sector is increasingly becoming a key player, providing possibilities to optimise education by means of games to support learning processes, to motivate students, etc. We can also think more widely about other digitalisation possibilities, such as learning analytics, artificial intelligence in education, etc.

Higher education institutions are confined to the limits of their current funding to keep everything in house. They therefore become dependent on external firms that are very expensive (because of their monopoly position), which puts their budget under pressure. Cooperation between institutions or between institutions and developers is essential to achieve high-quality digitalisation.

## **5.3 Local governments**

It is important that vulnerable students continue to have a place to study. Institutions engage themselves to provide capacity for (vulnerable) students, but students should also take the initiative to request it. The Flemish government can provide support in this, but so can the local governments. Also, the SIHO<sup>8</sup> can provide support.

<sup>&</sup>lt;sup>8</sup> The Support Centre for Inclusive Higher Education (*Steunpunt Inclusief Hoger Onderwijs*, SIHO) supports Flemish universities of applied sciences, universities, and policymakers in achieving inclusive higher education. See <a href="https://siho.be/nl">https://siho.be/nl</a>