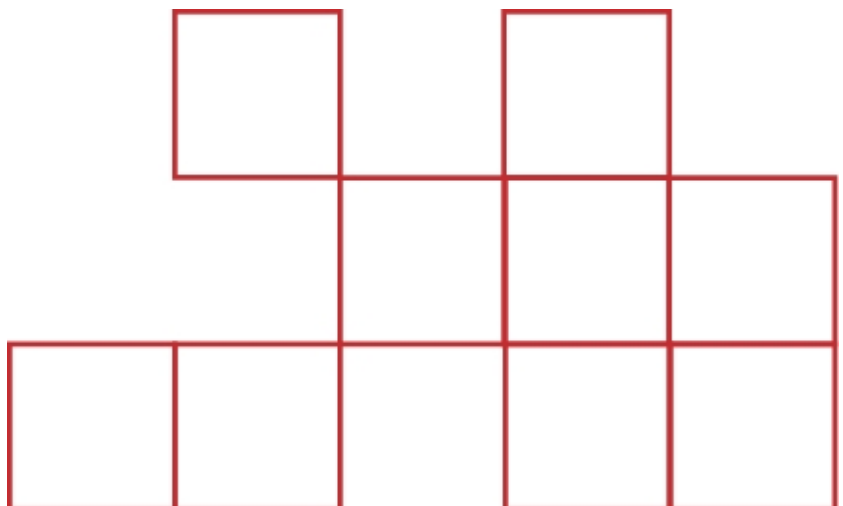




Vision on Digitalisation



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A vision on the digitisation of education

We live in a digital world in which technological developments are advancing at a rapid pace. Digitalisation in general, and within higher education in particular, has been underway for decades and has accelerated in recent years.

Digitalisation in education offers many opportunities for improving the quality and accessibility of education. It provides greater scope for interaction and personalisation, and allows students to take a more central role in their own learning process. However, there are also potential pitfalls, such as a reduction in personalisation and interaction resulting from simply ‘throwing’ knowledge over the digital fence without the need to get to know or support the student.

Digitalisation is primarily designed to run alongside traditional education, as a complement to it rather than as an alternative. Small-scale and classroom-based education must remain accessible to everyone and not become a more expensive alternative available only to those who can afford it, with digital education serving as the accessible alternative.

The LSVb’s position on the digitisation of education is set out in this document. We examine various aspects of the digitisation of education, first outlining our position and then the opportunities we see. We also raise some concerns: what are the potential risks that need to be guarded against?

Digitisation of lectures

The LSVb supports the digitisation of lectures and Open Access Education.¹ Firstly, educational flexibility is greatly enhanced when lectures can be viewed or re-watched digitally. Learning thus becomes independent of time and place. Secondly, students can learn more at their own pace: difficult topics can be revisited and easier ones can be covered more quickly. Thirdly, making lectures freely available improves access to education. Finally, a digital lecture can be used more widely than just by the specific group for which it was originally intended, for example in other degree programmes or different academic years, provided the content is not heavily dependent on a specific subject area and/or current events. For example, lecturers can focus more on interacting with individual students through ‘*flipping the classroom*’. This means that the lecturer spends less time explaining the material to the whole class – that is what the videos are for – and thus has more time to provide individual guidance. Furthermore, interaction also allows for a more in-depth exploration of the material.

However, the LSVb considers it important that students feel connected to their educational institution and fellow students. Interaction with students is also important; this can be ensured through an interactive digital learning environment.² Finally, when making education freely available through Open Access Education, it is important to develop effective assessment, quality assurance and certification. In this way, the quality of what is learnt can be guaranteed. For each degree programme, it must be assessed whether and how this can best be implemented.

Digitisation of course materials/readers/books

The LSVb is committed to open-access study materials, so that students have access to all necessary educational materials free of charge or, at the very least, at a significantly lower cost. Digitising teaching materials reduces costs for students and institutions. It is no longer necessary to reprint a syllabus every year

¹ See ‘The Value(s) of Knowledge: Strategic Agenda for Higher Education and Research 2015–2025’, p. 30. In this document, Minister Bussemaker sets the target of making all teaching materials openly available by 2025.

² As facilitated, for example, by FeedbackFruits.

. Furthermore, this aligns well with the need to organise education in a more sustainable way. Digitisation also increases the accessibility of academic publications and other sources. By digitising libraries, information becomes available worldwide. This is particularly valuable for documents that cannot be physically sold, hired out or distributed, such as old manuscripts. These sources can thus also be searched and analysed in a much more systematic way. Finally, a lower VAT rate for digital books and learning resources would help to stimulate further development of these resources.

However, research indicates that physical books and taking notes on paper facilitate better knowledge processing.³ Fine motor skills and hand-eye coordination play an important role in storing knowledge in the memory. Perhaps this will change in the coming years as digital technologies continue to develop. Furthermore, the creation of a 'Bring Your Own Device' (BYOD)⁴ environment, in which every student is expected to bring a laptop, tablet, etc., must not lead to a digital divide. Particularly when working with specific standards or brands, this may be unaffordable for some students or risk creating a digital divide. When developing ideas of this kind, the aim must always be to find the most cost-effective solution possible. It is also important to ensure that entering into certain agreements does not result in a non-open digital environment being imposed on students. One option for making this accessible is to set up an institutional fund. Students with insufficient means can use this fund to purchase the necessary digital devices. With the introduction of the student loan system, an increase in the number of students requiring this support is to be expected.

Digital learning environment

Better and more intensive use must be made of the digital learning environment in education in order to capitalise on its benefits. More training in the use of the digital learning environment must be made available, first and foremost for lecturers so that they can make greater use of it, but also for students so that they can find their way around more easily. The digital learning environment can serve as a platform to bring students into contact with one another and facilitate discussions. Particularly in larger degree programmes where students are divided into many different seminar groups, it is a way of increasing interaction amongst them. Furthermore, it is a way of bringing all course material together in one central location and keeping it up to date. It can also serve as a good starting point for in-depth study and broadening one's knowledge.

Care must be taken to ensure that discussions are not merely conducted for the sake of potentially earning extra marks in exams. The lecturer must have both the capacity and the time to facilitate and stimulate discussions.

Automating study support

When it comes to the automation of study support and student tracking systems, 'learning analytics' is currently the most widely used term. Learning analytics involves storing and analysing all available data on students. This can be done at both an individual and a group level. The use of learning analytics can take studying to a higher level. Institutions must invest in this whilst also working together. The value of these analyses increases as more data becomes available.

At the same time, the use of learning analytics places a great deal of responsibility on institutions to handle all this data with care. There is already a 'code of

³ Sidi, Y, Ophir, Y, & Ackerman, R. *Generalising Screen Inferiority – Does the Medium, Screen versus Paper, Affect Performance Even with Brief Tasks?* Metacognition and Learning 2015.

⁴ For disadvantages, see also <http://www.michigandaily.com/news/digital-divide-laptop-equity-university?cid=wc>

practice’⁵ regarding the use of learning analytics. Dutch institutions must work with students to develop something similar and enshrine it in their student charters. As long as it remains a ‘black box’ that functions as a service for the student, it is acceptable. Reporting must only be possible at group level, without the data being traceable back to an individual student’s performance. Only in this way can a student’s privacy be safeguarded. Furthermore, institutions and public authorities must handle the data with care and restraint. Students are individuals who have a right to privacy; we must prevent students from being fitted into a model whereby their chances of success are calculated in advance and used against them.

However, students must be able to access their personal learning analytics. This option is disabled by default and can be enabled at the student’s request. The results must then be emailed automatically to the student without any further intervention from lecturers or the institution.

MOOCs

The vast range of MOOCs available means that students now have a wealth of potential elective modules to choose from. This can increase educational flexibility; with clear agreements between MOOC providers and educational institutions, and with proper guidance, students can gain greater control over how they wish to structure their studies. In the field of MOOCs, the LSVb’s current priority is to establish a certification system that enables students to incorporate MOOCs into their existing study programmes. The quality of MOOCs can be assured through a fixed protocol within the accreditation process. It is also important to provide an overview of the current range of courses on offer so that students can more easily find courses that match their interests.

There are further opportunities for students in the development of MOOCs. MOOCs can also serve as preparation for courses; this can raise students’ entry-level, thereby improving the standard of education. Lecturers, too, can make use of them to keep abreast of the latest teaching methods and developments in their field.

There are three risks that the LSVb will be monitoring closely: namely, the potential dominance of American universities, which attract large numbers of students due to their brand recognition and prestige. This leads to a one-size-fits-all approach and a loss of the institution’s own educational culture. Furthermore, there is the risk of the commercialisation of education. MOOCs make education available in bite-sized chunks. Combined with a global market, this could lead to market forces taking hold in higher education. In this way, the promise of freely accessible education is at risk of being lost after all. It is important to continue to emphasise Open Education, by analogy with Open Access in academia and Open Source in software. And finally, the issues surrounding digital assessment: how can we ensure that students sit the exam themselves without the use of aids? Some solutions can be devised for this; separate physical examination centres could be set up, as is currently the case in distance learning. A final option would be digital surveillance. However, all these solutions come with their own set of problems that need to be investigated further in order to arrive at a secure method of assessment.

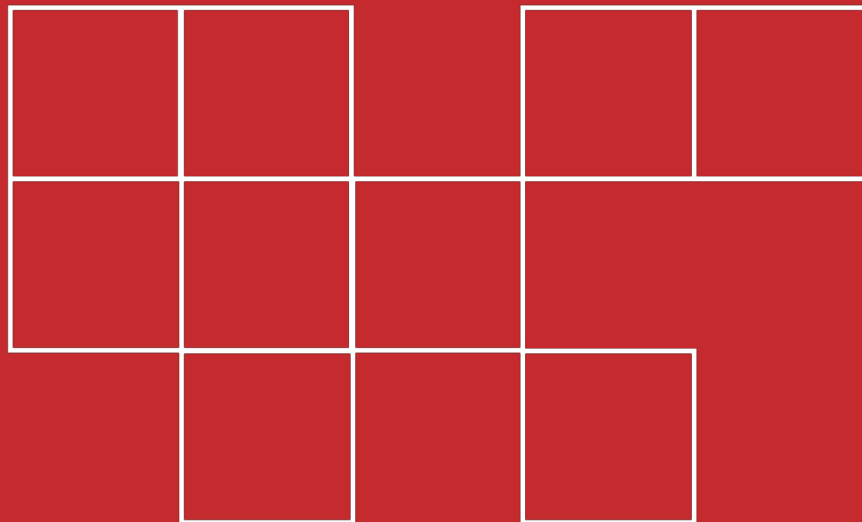
Getting started with digitalisation

We must prevent digitalisation from being used as a cost-cutting measure that leads to a decline in the quality of education. With every action taken by students being recorded, there is a risk that students’ privacy will be eroded. Education can become impersonal when contact between students themselves and between students and lecturers disappears. Traditional education risks becoming the preserve of an elite who pay extra for

⁵<http://www.jisc.ac.uk/guides/code-of-practice-for-learning-analytics>

face-to-face teaching; the average student may soon have to make do with a digital course.

That is why the following themes will be important for the LSVb in the coming period, to monitor and address: privacy and learning analytics, student and lecturer engagement, fears surrounding digitalisation, infrastructure and digital learning environments, quality assurance, and the purpose of digitalisation. When institutions embark on digitalisation, it is important that they do so for the right reasons. Not because of budget cuts or prestige, nor simply because everyone else is doing it. Digitalisation must always be underpinned by a desire to improve education. Furthermore, it can be used to make education more flexible and accessible. It is always important that the wishes of teachers and students remain the starting point. Work must be based on their enthusiasm.



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