



### Module 6: UNINTENDED CONSEQUENCES AND THE ETHICS OF DIGITALISATION

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#### **Content of this Module:**

Unit 1: Effects of transitioning to online/digital teaching and learning in the Higher Education context

**Unit 2: GDPR and ethical issues** 

Unit 3: Digital footprints, privacy and surveillance









# Unit 1 – Effects of transitioning to online/digital teaching and learning

Module 6: UNINTENDED CONSEQUENCES AND THE ETHICS OF DIGITALISATION



#### **Digitalisation in Learning and Teaching**

**Digitalisation** is the use of digital technology to transform and become a major component of social and institutional processes (Tilson et al., 2010; Autio, 2017)

**Digitisation:** uploading assignments on the Internet instead of handing them in paper form

**Automation:** using software to mark assignments or to check for plagiarism

**Artificial Intelligence (AI):** sophisticated software such as intelligent tutoring systems

**Learning Analytics:** collection and analysis of data such as library loans, records on students etc.

**Learning Management System (LMS) and Virtual Learning Environment (VLE):** digital platforms, where learning
material/assignments can be distributed, uploaded, and performed





#### Reflection

# What is your experience of digital university?

- What is the biggest advantage it offers?
- What is its biggest disadvantage?
- What is your experience of working and learning in HE over the past year during the Coronavirus pandemic?

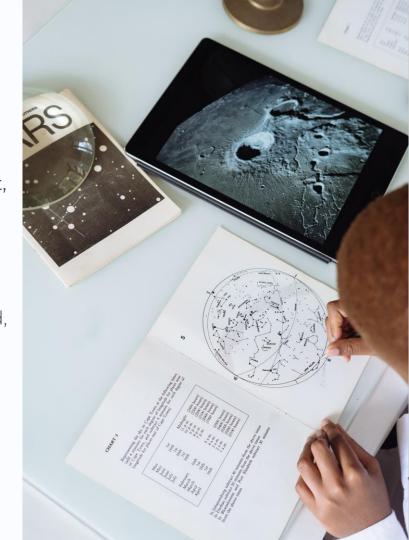




# Digitalisation in education: advantages

- Enables and facilities remote learning (e.g. more flexible, safer & more inclusive learning environment, tailored teaching & deeper engagement, support of virtual community)
- Technologically enabled efficiencies through application of AI tutors and Learning Analytics (improve student performance through personalised, automated feedback and individual face-to-face support, institutional productivity)
- But (counter argument):
- Reduced attendance and substantial engagement
- Digital divide (access & equality in learning and teaching)





# Digitalisation: in education disadvantages (problems)

- Marketisation of universities (change in culture: learning as product, students as consumers)
- Obsession with measurement and 'datification' (focus on student satisfaction & competitiveness rather than a challenging learning)
- Increasing workload and staff responsibilities (job enlargement, pressured of target-based working)
- Adapting to technology, endangered academic freedom and hindered critical debate (self-censorship due to potentially unlimited retrieval of learning materials)
- Long-term impact on socialisation and social capital





#### **Key takeaways**

- There are both benefits and issues from digitalisation and digital technologies becoming embedded in education
- Digital learning can provide a tailored, self-reflective, more engaging way for students to learn, in a way that suits them, as well as providing information on student progress for educators
- There is a concern regarding attendance, the amount of actual engagement from students, lack of social interaction, the outsourcing of tech, the constraining nature of online lecturing, as well as the workload increase for staff and the changing roles and responsibilities for staff and students
- The digital divide and the digital skills gap highlights the need for ensuring access provision in HEIs and maintain training in digital technologies





#### **Signposting detail of UNIT 1 content**



Introduction

Potential issues with technology-led (or influenced) rather than pedagogically-led education

The changing roles and responsibilities of teachers and students

Social interaction and effects on networks and face-to-face embodied socialisation

Digital divide, digital access and equality issues in learning and teaching



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#### **Unit 2 – GDPR and ethical issues**

A couple of questions

When you started using teaching related or work related software:

Can you remember consenting to the collection of data and did you understand fully what you consented to? Do you think it is the same for your students?

What ethical issues arise when increasing the digitalization of higher education?



# The objectives of this Unit are:

- To provide an overview of GDPR and data protection, and the principles that guide these legislation
- To provide an understanding of ethics and what it means to act ethically in online learning
- To illustrate the ethical and data protection issues involved in the use of online teaching and learning





### Unit 2 – GDPR and ethical issues Contents

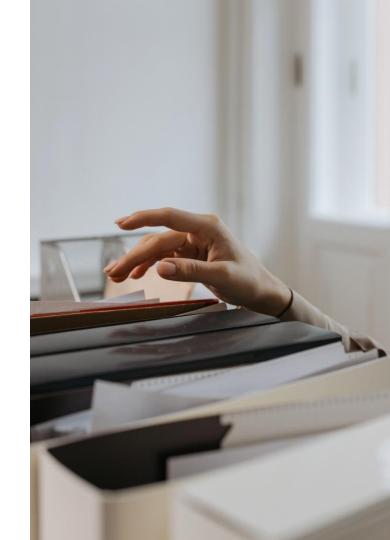
- 2.1 What is data protection and GDPR?
- 2.2 GDPR requirements in Higher Education
- 2.3 Emergent data protections issues in a digitized Higher Education environment
- **2.4** Learning online, plagiarism, open-source materials, uses of copyright materials
- 2.5 Ethical issues related to online teaching and learning
- **2.6** Examples and recommendations of good practice





# Some emerging data protections issues in digitized Higher Education

- Informed consent.
- Third parties and data oversight
- Commercial interests and the nature of data processing
- Transparency and security when processing using
   Al
- Issues are compounded by COVID-19





#### Some ethical issues related to online teaching and learning

- The use of AI can have issues of bias, and discrimination, such as not recognising the faces of those with darker skin (The Verge, 2020)
- The use of AI can also be incorrect think of the "mutant algorithm" that caused chaos for student grades in 2020 (BBC News, 2020)
- Monitoring practices during assessments can be invasive
- Commercial encroachment on traditional modes of learning
- · Moving teaching online can leave others behind
- · Lack of socialisation when learning online
- · Teachers having to adapt to digital technologies
- Issues of transparency and consent



Source: [13]

#### **Key takeaways**

- GDPR and the Data Protection Act 2018 are important aspects of ensuring people's personal data is processed in a lawful way
- The consequences for failing to uphold these principles can be severe, thus it is vital that everyone is trained and supported in the processing of personal data
- Rise of digital technologies have made these principles crucial
- Ethics includes dealing with how people conduct themselves in relation to others
- Two main strands of applied ethics are deontology (concerned with the action) and consequentialism (concerned with end results)
- Ethics are an important part of higher education; particularly in carrying out and using research
- The rise of digital technologies and the increasing amount of third party and commercial involvement in higher education potentially puts strain on ensuring data is handled ethically





#### **Content of this Module:**

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### **Unit 3 – Surveillance and privacy issues** *A couple of questions*

The digitization of HEI involves enhanced technologically mediated surveillance. What levels and types of surveillance are acceptable?

- Plagiarism detection software
- Lecture engagement tracking and analysis
- Email content analysis
- Check-in App for lectures/library attendance
- Internet use profiling
- Data sharing with third parties

Whose responsibility is it to ensure data protection principles are adhered to?





## The objectives of this Unit are:

- To illustrate the concepts and uses of digital footprints, cybersecurity, privacy, and surveillance in the HEI context
- To highlight possible issues you may have, and good practice to better inform the management of such issues



#### **Contents**

- **3.1** What are: digital footprints, privacy and surveillance?
- **3.2** Surveillance and the commercialisation of the surveillance logic
- **3.3** Pros and cons of surveillance of students, teachers and workers
- **3.4** Privacy and data protection issues for students, staff and organisations
- **3.5** Cyber security issues for educational institutions and individuals (staff and students)



# **Emergent surveillance and privacy** issues in a digitized Higher Education environment

- Digitised higher education generates new data about staff and students which can be used for a variety of purposes
- Digitisation by definition makes us more transparent
- We all need to be mindful of our 'digital footprints'
- Privacy a fundamental human need related to selfhood and self determinism
- Data processes intrinsically linked to privacy and data protection principles (GDPR)
- Surveillance is normal and embedded in new digital practices
- Surveillance is simultaneously 'care' and 'control'
- Surveillance can be opaque and subtle

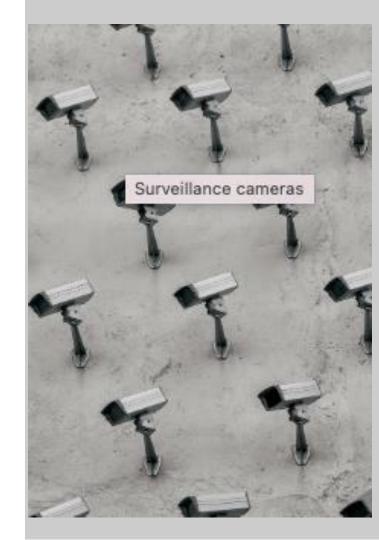


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# **Emergent surveillance and privacy** issues in a digitized Higher Education environment

- Surveillance embodies power and determines existing relations within institutions
- Surveillance is used to identify lack of engagement, poor performance, to provide feedback, measure attendance, measure efficiency, etc.
- Surveillance has privacy implications, it can deter involvement (the chilling effect), can creep into all aspects of teaching and learning, and can alter pedagogic relations, etc.
- Surveillance relations go beyond HEI and involve commercial interests (surveillance capitalism)
- Good practice is to use data protection principles as a minimum standard, to undertake PIAs, to be transparent with data processing and to ensure consent





#### **Key takeaways**

- The use of surveillance technologies is a complex issues in education, affecting both students and staff: the same technology can be used for both caring and controlling purposes.
- Digital footprints have an important impact on student and staff lives, with information generated online being used by employers and having an effect upon university recruitment. Higher education is an ideal environment for learning about digital footprint management, but the subject is often portrayed in a negative rather than a positive way.
- Cyber security is a major threat to universities. People both staff and students are the first line of defence against such attacks. Therefore, it is paramount people are well informed of security measures, and a positive culture surrounding cyber security exists.
- Privacy is a fundamental building block of selfhood and democracy, particularly in the context of education. Upholding data protection principles, and being transparent in the use of data is key.





#### **REVERSE PANEL SESSION**

#### - Questions for the audience

- Are there other surveillance or privacy consequences of the move to e-Learning that we have not covered that you wish to cover more?
- What areas do you not have sufficient knowledge of?
- What has been your experience of unintended consequences relating to surveillance and privacy and your own institution's responses to these issues?





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# UNIT 2 - REVERSE PANEL SESSION- Questions for the audience

- Are there other unintended consequences of the move to e-Learning that we have not covered or that you wish to cover more?
- What areas do you not have sufficient knowledge of?
- What has your experience of unintended consequences and your own institution's responses to these issues?"

