

Quality Assurance in the EHEA - adaptations needed in QA of digital education



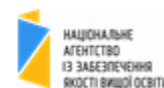
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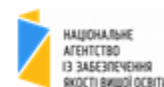
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- > Introduction
- > Quality assurance fit for purpose
- > Considerations for QA of e-learning provision
- > QA Framework for e-assessment
- > Wrap up

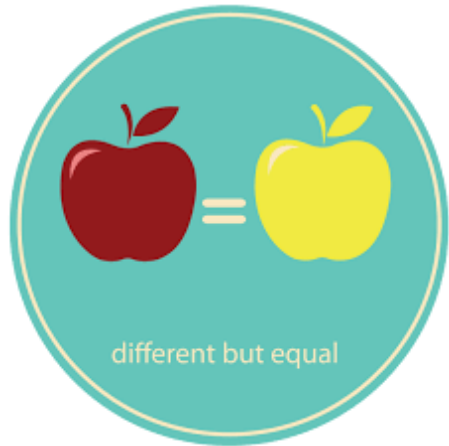


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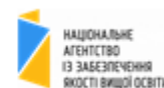


Can online education be equivalent to face-to-face?



- **Equivalent ≠ the same**
BUT: the learning outcomes should be equivalent.
- **Equivalent = same quality / "as good as" → equal "value"** and recognition of programme/degree is expected.
- **Good online education is not so different from good face-to-face education, but some criteria used to measure "good" may not be adapted.**

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2022-2024

- Mapping of the state of play of internal and external quality assurance in the EHEA;
- Critical look at the ESG and see how they have been adapted to different contexts;
- Explore how QA activities are addressing recent and emerging developments
- Future of QA in the EHEA.

<https://www.enqa.eu/projects/quality-assurance-fit-for-the-future-qa-fit/>

Figure 5: Areas covered by internal QA

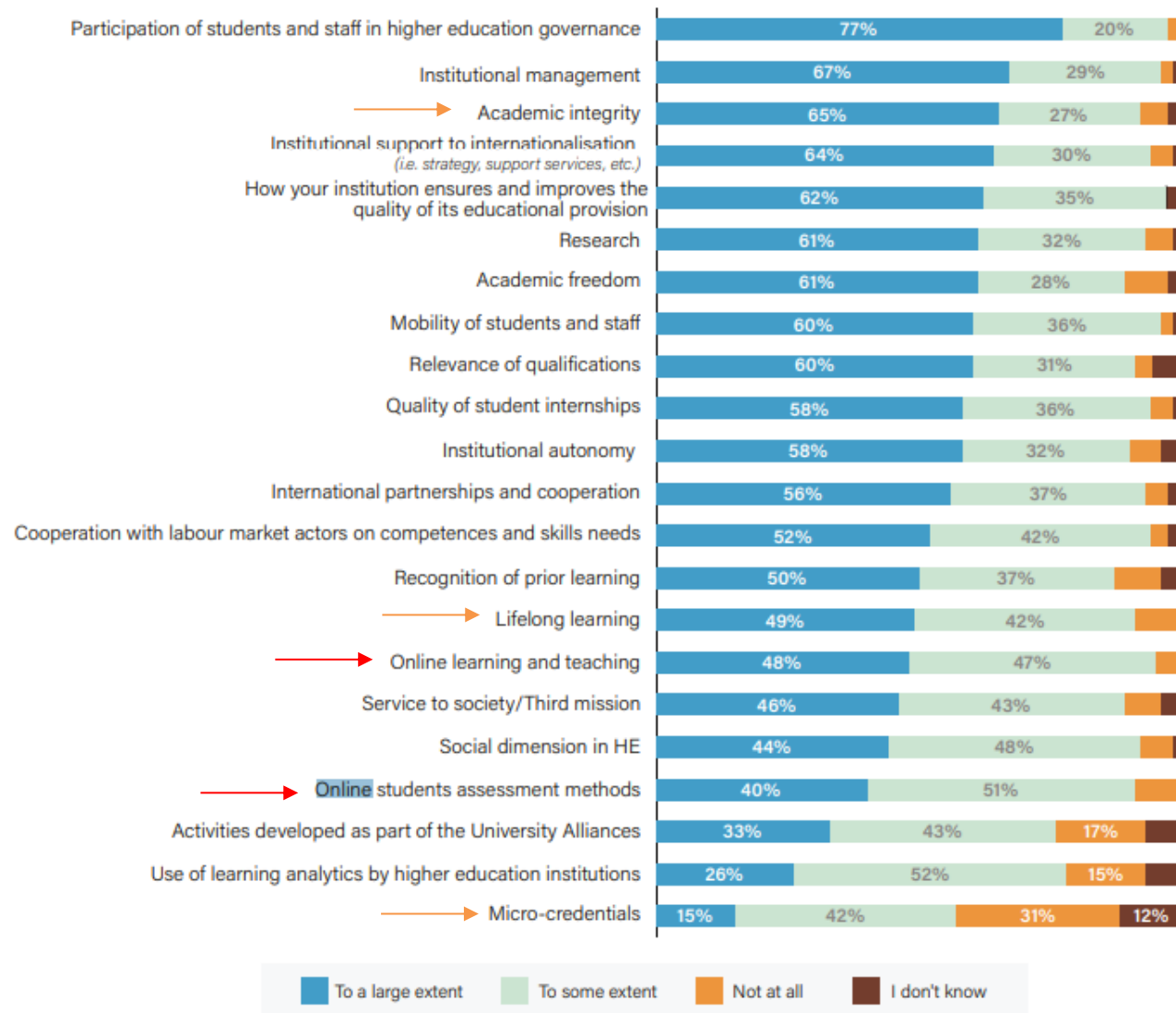


Figure 6: Impact levels

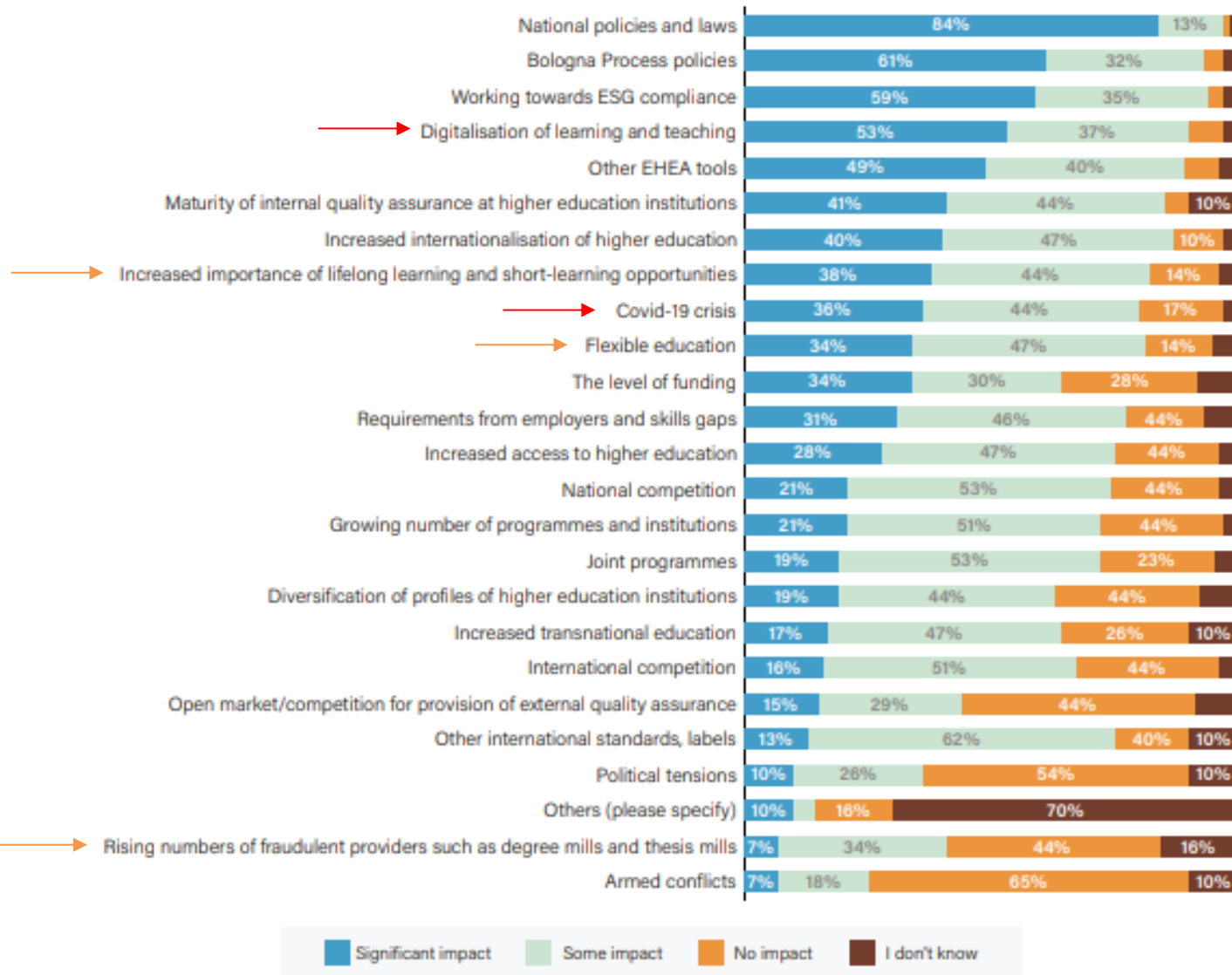
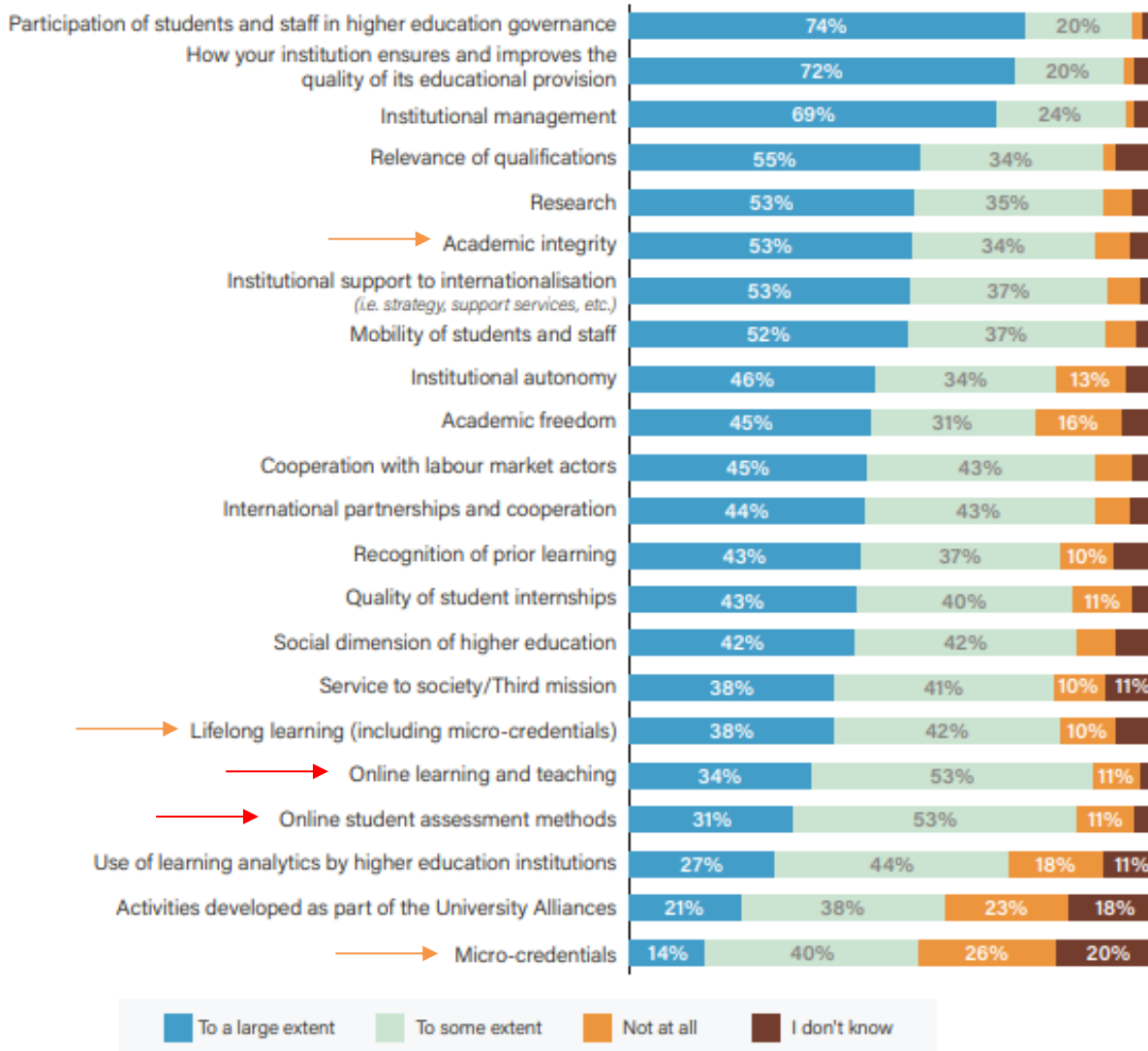


Figure 8: Areas covered by external QA



Opinions on Expanding the Scope of the ESG

- Varied stakeholder views on extending the ESG scope (General view):
 - Students and QA agencies favour a broader scope.
 - HEIs and ministries are less inclined towards significant changes.
- Different relevancy expressed by various groups:
 - Fundamental values and social dimension of higher education.
 - Institutional management and autonomy
 - Digitalization, lifelong learning, and research.
 - links between ESG and labour market relevance.

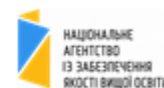


Key issues for ESG revision

- ▼ Evolution rather than revolution
- ▼ Primary focus on learning and teaching
- ▼ Maintain wide applicability in diverse institutions and agencies and explore areas where there has previously been lack of clarity
- ▼ Ensure relevance in international contexts for IQA and EQA
- ▼ Part 1: digitalisation, diversity of learners and academic staff, flexible learning pathways (...)
- ▼ Part 2: flexibility in QA methodologies while maintaining sufficient accountability (...)



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- Generic, not specific → provide **the framework and common basis** for national and institutional activities.
- Apply to **all higher education** offered in the EHEA regardless of the mode of study or place of delivery (TNE, e-learning, short courses...).
- **All types of e-learning** should be considered, as well as all phases included in a learning process (e-assessment).
- Apply to all types of QA activities and agencies (quality audits, programme accreditation, institutional assessment...).





Objectives

- Create an inventory of sources on QA and e-Learning.
- Agree on definition of e-learning.
- Agree on recommendations (QAA and HEIs).



Members

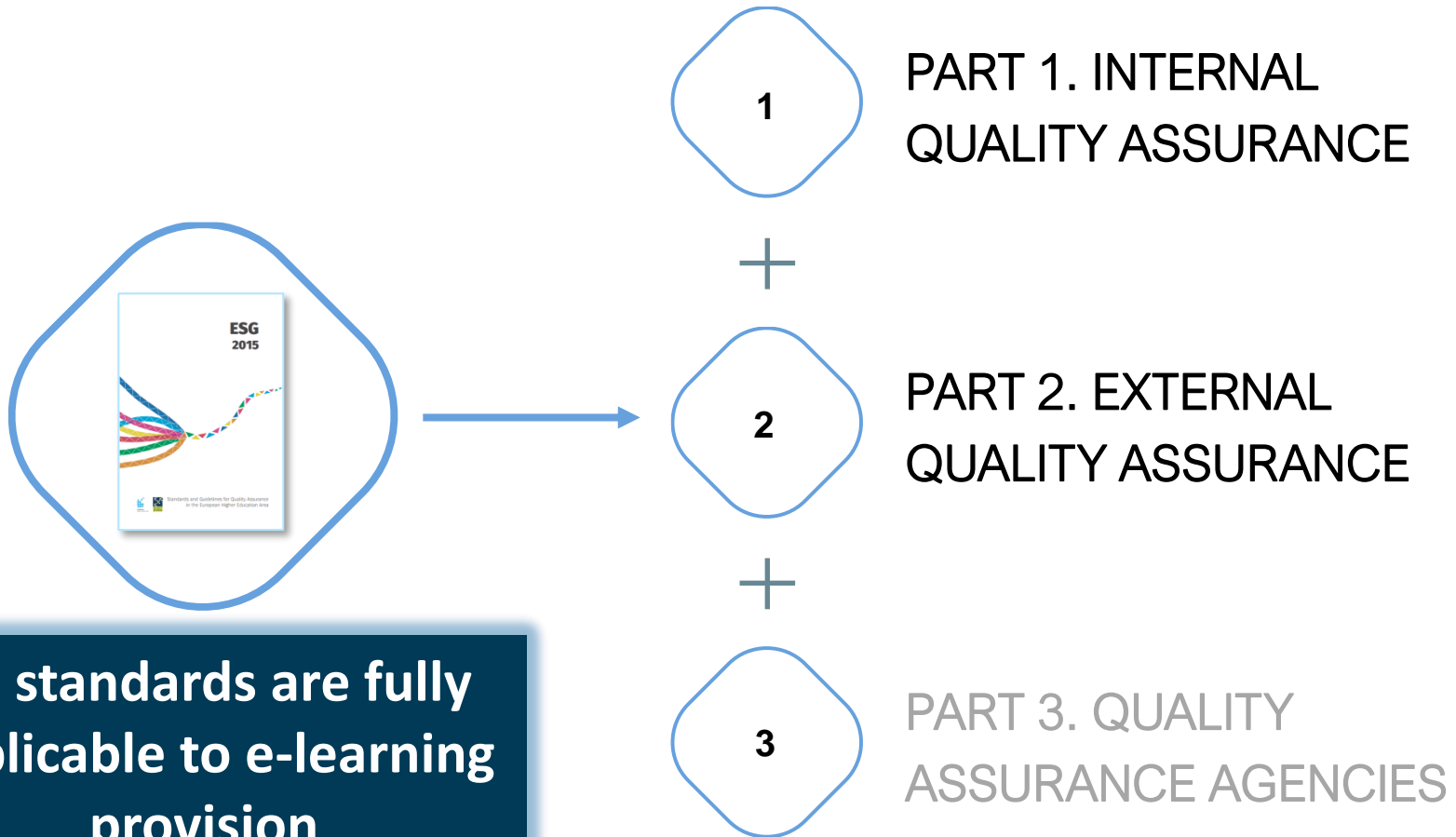
Esther Huertas (chair), Lindsey Kerber (secretary), Georg Seppmann, Sandra Marcos, Monika Risse, Ivan Biscan, Charlotte Ejsing, Liza Kozłowska, Liia Lauri, Kerstin Schoerg, Ana Capilla



Calendar

November 2016 – November 2018



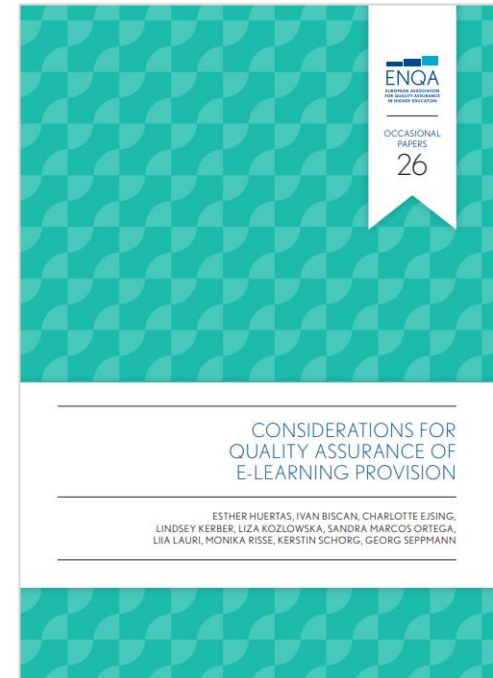


All standards are fully applicable to e-learning provision

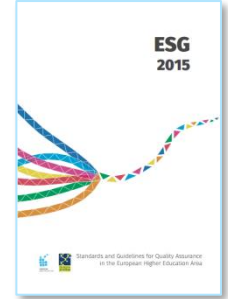
Recommendations to QAA and HEI



Which are the most challenging standards?



<https://enqa.eu/indirme/Considerations%20for%20QA%20of%20e-learning%20provision.pdf>



- Standard 1.1*** – Policy for quality assurance
- Standard 1.2** – Design and approval of programme
- Standard 1.3*** – Student-centred learning, teaching and assessment
- Standard 1.4*** – Student admission, progression, recognition and certification
- Standard 1.5*** – Teaching staff
- Standard 1.6*** – Learning resources and student support
- Standard 1.7*** – Information management
- Standard 1.8** – Public information
- Standard 1.9** – On-going monitoring and periodic review of programmes
- Standard 1.10** – Cyclical external quality assurance



Standard 1.1 – Policy for quality assurance

- E-learning strategy is embedded in the overall strategy of the institution (adapt QA strategies?).
- Ethical and legal considerations (protection of data privacy or intellectual property rights).
- Stakeholders involvement.



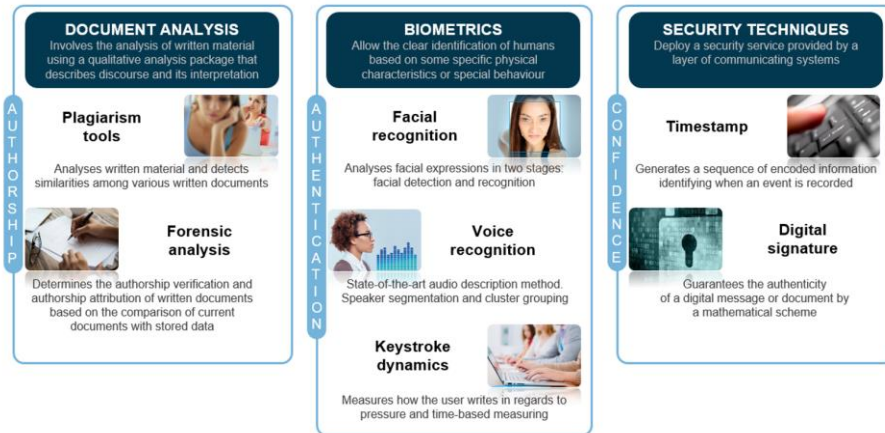
Standard 1.3 – Student-centred learning, teaching and assessment

- Educational model designed in order to guarantee students achievement of LO.
- Formation of online discussion groups (student-student contact & sharing experiences / teachers – students).
- Learning materials and appropriate updates.
- E-assessment (authentication and authorship).



Define and develop an **e-assessment system**, which ensures learners **authentication and authorship** in online and blended learning environments while avoiding the time and physical space limitations imposed by face-to-face examination.

Support any e-assessment model (formative, summative and continuous) covering **teaching and learning processes** as well as **QA aspects, privacy and ethical issues, and technological requirements**.



<http://tesla-project.eu/>

<https://enqa.eu/indirme/papers-and-reports/associated-reports/D4.7%20Framework%20screen%20TeSLA%202606.pdf>



Standard 1.4 – Student admission, progression, recognition and certification

- Academic recognition assured.
- Same level of recognition by professional bodies & employers as on-campus programmes.
- Fraud / Diploma mills.



Standard 1.5 – Teaching staff

- Definition of the structure, profile and role of teaching staff.
- Skilled & well supported (training / support services): pedagogical and technological requirements.
- Coordination of teaching activity is more complex.



1.6

Standard 1.6 – Learning resources and student support

Learning resources

- VLE
 - Interoperable & robust.
 - Ensure accessibility of learning materials & e-assessment.
- Library, virtual labs. (if appropriate).

Student support

- Tutoring, pedagogical, technological, administrative-related needs.
- Student support adapted to e-learning environment.
- Improve student retention rate and success & satisfaction of students.



1.7

Standard 1.7 – Information management

- Data & indicators derived from e-learning.

Standard 2.1 – Consideration of internal quality assurance

Standard 2.2* – Designing methodologies fit for purpose

Standard 2.3* – Implementing processes

Standard 2.4* – Peer-review experts

Standard 2.5 – Criteria for outcomes

Standard 2.6 – Reporting

Standard 2.7 – Complaints and appeals





2.1

Standard 2.2 – Designing methodologies fit for purpose

- Particularities of Part 1 (Internal QA).
- Flexible processes to include new modes of teaching and learning (innovation).
- Specific criteria, indicators, guidelines or frameworks.



2.3

Standard 2.3 – Implementing processes

SAR

- Pedagogical model & VLE explanation.
- Access and navigate the VLE (classrooms, debate forums, teaching materials, etc.).

Site visit

- Intense examination of technological infrastructure.
- Interview all stakeholders (different teaching staff profile).



Standard 2.4 – Peer-review experts

- Experts with experience in e-learning / blended learning.
- Training.

In order to ensure the value and consistency of the work of the experts, they

- *are carefully selected;*
- *have appropriate skills and are competent to perform their task;*
- *are supported by appropriate training and/or briefing.*

*The agency ensures the independence of the experts by implementing a **mechanism of no-conflict of-interest.***



HEI



IQAS

- Design teaching & learning process.
- Design teaching materials.
- Delivery process.
- Student support.
- Technology
- IQAS.



QAA



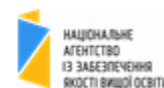
EQAS

- Design of methodologies.
- Enhancement vs. accreditation.
- Reviewers (programme / institutional processes).



- Teaching & learning model (pedagogy).
- Technology infrastructure.
- Innovation.

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<https://sites.marjon.ac.uk/handbook/plagiarism-academic-integrity/>



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1

Lack of technologies to support authorship and authentication

2

Lack of a European QA framework on e-assessment

TEACHER

- Did he/she copy from websites?
 - Now, I can check it with the plagiarism tool
- How can I enhance the assessment process using ICT?
 - Promoting continuous e-assessment by using TeSLA system
- Who has done the activity?
 - With facial and voice recognition, keystroke dynamics and forensic analysis I will be sure.
- Did he/she deliver the activity on time?
 - Time stamp and digital certificate will tell me.

STUDENTS

- When tough moments arise, copy-paste is the solution!
 - Forensic analysis, keystroke dynamics and plagiarism tool will detect it, I have to do the activity by myself.
 - I asked my colleague to do the essay!
 - I can not do that. Teacher will know that I'm not the author using TeSLA.
- I couldn't deliver the activity on time because my Internet connection failed during the file transfer!
 - Can I pass the subject through online assessment?
 - For sure, if you did it!
 - No worries, TeSLA will check that it was done on time.



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Support any e-assessment model (formative, summative and continuous) covering **teaching and learning processes as well as QA aspects, privacy and ethical issues, and technological requirements**.



<http://tesla-project.eu/>



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18 Partners

8 Universities

3 QA bodies

4 Research Centers

3 Enterprises





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European Association for Quality Assurance in Higher Education

European Quality Assurance Network for International Education

AUTHORSHIP

DOCUMENT ANALYSIS

Involves the analysis of written material using a qualitative analysis package that describes discourse and its interpretation

Plagiarism tools



Analyses written material and detects similarities among various written documents



Forensic analysis

Determines the authorship verification and authorship attribution of written documents based on the comparison of current documents with stored data

AUTHENTICATION

BIOMETRICS

Allow the clear identification of humans based on some specific physical characteristics or special behaviour

Facial recognition



Analyses facial expressions in two stages: facial detection and recognition



Voice recognition

State-of-the-art audio description method. Speaker segmentation and cluster grouping

Keystroke dynamics



Measures how the user writes in regards to pressure and time-based measuring

CONFIDENCE

SECURITY TECHNIQUES

Deploy a security service provided by a layer of communicating systems

Timestamp



Generates a sequence of encoded information identifying when an event is recorded



Digital signature

Guarantees the authenticity of a digital message or document by a mathematical scheme





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2016

Pilot 1

- Communication and implementation protocols and e-assessment activities selected



1 pilot

Teachers involved	Learning activities	Courses	Institutions	Students
29	26	26	7	637



Pilot 2

- Authorship, authentication instruments and learning activities refined



4 pilots

Teachers involved	Learning activities	Courses	Institutions	Students
35	251	105	7	4,931



Pilot 3a

- Scalable and reliable TeSLA system integrated



2 Large Scale Pilots

Teachers involved	Learning activities	Courses	Institutions	Students
162	274	144	7	7,539



Pilot 3b



Teachers involved	Learning activities	Courses	Institutions	Students
230	258	166	7	10,989



<https://tesla-project.eu/how-it-works/>

Total					Fields of knowledge
Teachers involved	Learning activities	Courses	Institutions	Students	
457	809	441	7	22,941	<ul style="list-style-type: none"> • Arts and Humanities • Engineering and Architecture • Health Sciences • Sciences • Social Sciences and Legal Sciences



<https://enqa.eu/indirme/papers-and-reports/associated-reports/D4.7%20Framework%20screen%20TeSLA%202606.pdf>



STANDARDS

1. Policies, structures, processes for QA of e-assessment
2. Assessment of learning
3. Authenticity and authorship
4. Infrastructure and resources
5. Learner support
6. Teaching staff
7. Learning analytics
8. Public information



INDICATORS



EVIDENCE



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1. POLICIES, STRUCTURES, PROCESSES AND RESOURCES FOR QA OF E-ASSESSMENT

The institution has appropriate policies, structures and processes to ensure that e-assessment conforms to ethical and legal standards and is embedded in the organisational culture and values. In addition, the e-assessment proposal is aligned with the institution's pedagogical model and academic and legal regulations and ensures its objectives are achieved on a constant basis.



1. Two different scenarios in regard to e-assessment policies:
 - ✓ e-assessment is permitted.
 - ✓ e-assessment is not permitted.
2. All HEIs have well defined policies and QA procedures.
3. Traditional universities that have recently included blended and online provisions should develop specific policies on e-learning and e-assessment.
4. New ethical and legal issues, national and European regulations, need to be revised and updated.



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2. LEARNING ASSESSMENT

E-assessment methods are varied, they facilitate pedagogical innovation and they rigorously determine the level of achievement of learning outcomes. They are designed to assure the timely and fair assessment of learning. As such, they are authentic, transparent and consistent with learning activities and resources. Digital assessment should also promote the participation of learners and adapt to the diversity of both learners and educational models.



1. Diversity of assessment methods is applied in all HEIs (SCL).
2. HEIs offer diversified methodology for assessing SEND learner (SCL).
3. Chosen assessment methods are aligned with learning outcomes.



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3. AUTHENTICITY, TRANSPARENCY AND

*The development and implementation of e-assessment include **protective measures that guarantee learner authentication and work authorship**. The e-assessment system is **secure and fit for purpose**.*



1. All HEIs address academic integrity issues (plagiarism). However, they need to define the threshold level of normal behaviour vs. suspicious behaviour.
2. Learners need to be provided with enough information to be confident enough to share personal data.
3. Implementation of a full register of external attacks and technical problems needs.

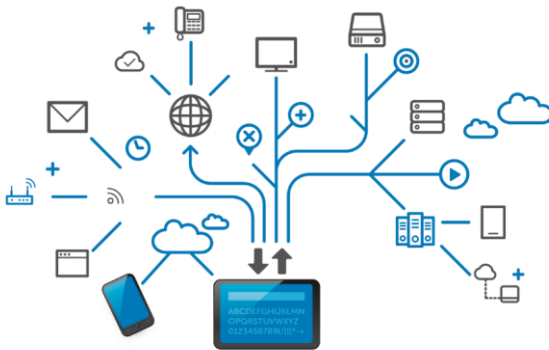


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4. INFRASTRUCTURE AND RESOURCES

*The institution utilises **appropriate technologies** that match intended learning outcomes and enhance and expand opportunities for learning.*



1. Different VLE are used by HEIs.
2. HEIs should have centralized technical support in place (ticketing system, guidance and procedures for technical staff...).
3. HEIs should collect feedback from all key stakeholders on the use of the VLE.



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5. LEARNER SUPPORT

Learners are *aware of, have access to and use effective and well-resourced support services for counselling, orientation, tutoring and facilitation in order to increase student retention and success.*

Learner support covers *pedagogical, technological and administrative related needs* and is part of established institutional policies and strategies.



1. All HEIs have well-established support mechanisms to meet all learners needs (administrative, technical and pedagogical).
2. SEND learner receive an appropriate and wider range of support.
3. Learners should be provided with technical guidance.
4. Learner's feedback need to be revised and redesigned (when necessary) in order to improve support services.



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6. TEACHING STAFF

Teaching staff are skilled and well-supported in relation to the development of the technological and pedagogical requirements and e-assessment methods.



1. Teaching staff should be trained on the innovation of the pedagogical practices (including e-assessment) and should receive technical training.
2. Teaching staff should be provided with updated information, guidelines and well-defined procedures to deal with the academic integrity and the implementation of a new assessment system.
3. Procedures for the evaluation of teaching staff feedback should be in place.



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7. LEARNING ANALYTICS

*The institution has an **information management system (IMS)** that enables agile, complete and representative collection of data and indicators derived from all aspects related to e-assessment methodology and authenticity and authorship technologies.*



1. All HEIs agree on the potentiality and value of having an IMS in place for the improvement of the learning process.
2. HEIs need to enhance an IMS for the systematic collection of data related to the QA of e-assessment.
3. HEIs should clearly define the process around the use and analysis of personal data (build trust).

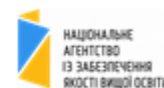
8. PUBLIC INFORMATION

The institution appropriately informs all stakeholders of e-assessment methods and resource requirements. Learners are informed of hardware requirements, learning resources technology and the provision of technical support provision.

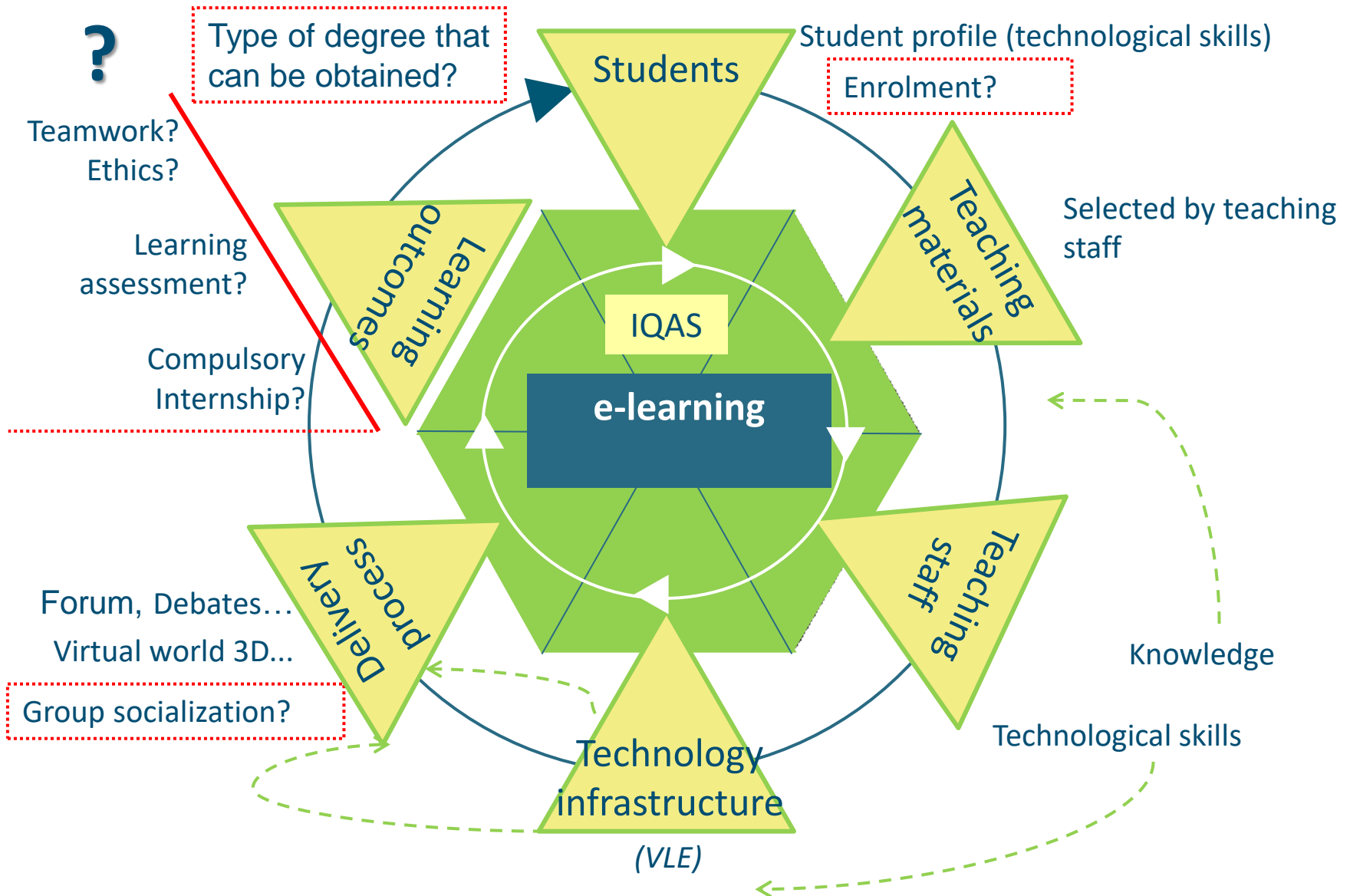


1. All HEIs have well-established systems and accurate information available.
2. HEI websites are:
 - student-oriented;**
 - easy to navigate;**
 - structured based on the needs and requirements of users.**and provide transparent information on:
 - how new technologies for assessment ensure fair and correct results;**
 - software and hardware requirements.**

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Characteristics of e-learning. Summary



To sum up...

- The ESG form the base-line (“core”) – can add but not deduct.
- Accept that not all existing (national) criteria are adequate measures of “equivalent quality” in e-learning (staff-student ration, m²/student, drop out rate...).
- Challenge of understanding what is a “good student experience” in e-learning (SCL, the learning environment, etc.) → need to experiment with measures and indicators.
- ENQA working group’s report can support institutional reflections on this.
- **What makes education of high quality (or low quality) is NOT the mode of delivery (e-learning is “value neutral”).**

The Universities of the future will be more **open, transparent and flexible** institutions. They will be better adapted to a **constantly changing landscape**.



(A. Teixeira, Barcelona – 2018)

“ Change is unavoidable for Europe’s academics. The world is indifferent to tradition and past reputations, unforgiving of frailty and ignorant of custom or practice. Success will go to those individuals and countries which are swift to adapt, slow to complain, and open to change ”

Andreas Schleicher, head of the OECD education directorate



ДУЖЕ ДЯКУЮ
THANK YOU!

Dr. Esther Huertas (ehuertashidalgo@aqu.cat)

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