EIB – Advisory Services – JASPERS

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Success factors of universities' teaching courses

13 November 2025

AI-dentified Key Factors

1. Teaching Quality Frameworks, Pedagogy, and Faculty Development
2. Curriculum Design and Learning Outcomes Orientation
3. Student Engagement and Active Learning
4. Assessment and Feedback Quality
5. Institutional Culture, Recognition and Reward Systems
6. Learning Environment, Digital Tools, and Support Structures
7. Links to Employability and Societal Relevance
8. Quality Assurance and Continuous Improvement Systems

1. Teaching Quality Frameworks, Pedagogy, and Faculty Development

Determinant: The *pedagogical competence* and continuous development of academic staff determine the quality and effectiveness of teaching.

Evidence:

Darling-Hammond (2017) – *Review of Research in Education*
Shows that **teacher preparation and ongoing professional learning** are key predictors of instructional quality and student learning outcomes.

Gibbs, G. (2010) – *Dimensions of Quality (HEA, UK)*
Empirical analysis of UK universities demonstrating that **staff–student interaction, assessment design, and teaching workload** strongly affect learning gains.

Postareff, Lindblom-Ylänne & Nevgi (2007) – *Teaching and Teacher Education*
Found that **systematic pedagogical training** leads to measurable improvements in teaching conceptions and student evaluations.

Example:

The **University of Helsinki's Teachers' Academy** rewards teaching excellence institutionally; evaluations show sustained improvement in student engagement and learning design.

2. Curriculum Design and Learning Outcomes Orientation

Determinant: Success depends on the *coherence, relevance, and outcome orientation* of curricula — aligned with graduate attributes, labour-market needs, and societal goals.

Evidence:

Biggs, J. (1999) – *Teaching for Quality Learning at University*
Introduced the "constructive alignment" model — aligning intended learning outcomes, teaching activities, and assessment.

OECD (2019) – *Fostering Quality Teaching in Higher Education: Policies and Practices*
Identifies that **learning outcomes frameworks** and **competency-based curricula** improve quality assurance and employability.

European Commission (2023) – *Bologna Process Implementation Report*
Confirms widespread shift across European HE to **learning-outcome-based ECTS** design; essential to QA and recognition.

Example:

Aalto University's *Design Factory* integrates interdisciplinary, project-based learning to enhance employability and creativity outcomes.

3. Student Engagement and Active Learning

Determinant: Deep learning occurs through *active engagement, interaction, and participation*, not passive lectures.

Evidence:

Freeman et al. (2014) – *PNAS*
Meta-analysis of 225 studies: active learning significantly improves exam performance and reduces failure rates in STEM courses.

Kuh, G. D. (2008) – *High-Impact Educational Practices (AAC&U)*
Demonstrates that student engagement in research, collaborative projects, and community work increases retention and achievement.

Trowler (2010) – *Student Engagement Literature Review (HEA)*
Synthesises evidence that institutional culture and pedagogy fostering engagement are linked to better outcomes.

Example:

The **University of Twente's project-based learning** in engineering yields higher student satisfaction and innovation capabilities.

4. Assessment and Feedback Quality

Determinant: Effective, timely, and formative feedback drives learning improvement and student satisfaction.

Evidence:

Nicol & Macfarlane-Dick (2006) – *Studies in Higher Education*
Framework of good feedback practice: feedback should promote **self-regulation** and **reflection**.
Hattie & Timperley (2007) – *Review of Educational Research*
Meta-analysis identifies **feedback quality** as one of the most powerful influences on achievement.
HEFCE (2017) – *National Student Survey analysis*
Confirms **assessment** & **feedback** as top predictors of overall teaching satisfaction in UK universities.

Example:

The **University of Leeds** introduced electronic feedback dashboards; longitudinal data show improved NSS scores and learning outcomes.

5. Learning Environment, Digital Tools, and Support Structures

Determinant: Modern universities succeed when they combine *digital pedagogy, physical infrastructure, and student support* in coherent ecosystems.

Evidence:

EUA (2024) – *Trends Report on Digitally Enhanced Learning*
Highlights that **integrated digital learning** ecosystems (AI-supported feedback, hybrid classes) correlate with better teaching outcomes.

OECD (2021) – *Digital Education Outlook*
Shows that **digital infrastructure + staff training** determine success of technology-enhanced learning.

JISC (UK, 2023) – *Digital Experience Insights Survey*
Institutional **digital readiness** and **accessibility** correlate strongly with student learning satisfaction.

Example:

University of Edinburgh's "Edinburgh Model for Teaching Online" demonstrates that digital course-design frameworks improve both learning effectiveness and scalability.

6. Institutional Culture, Recognition and Reward Systems

Determinant: Universities that **value teaching excellence** alongside research perform better in long-term educational quality.

Evidence:

Gibbs & Coffey (2004) – *Active Learning in Higher Education*
Teaching-focused recognition and professional development programmes enhance student learning.
Ramsden et al. (2008) – *Higher Education Academy (UK)*
Institutions with **promotion criteria linked to teaching quality** show improved student satisfaction metrics.
Skelton (2005) – *Understanding Teaching Excellence in Higher Education*
Argues that institutional culture and leadership commitment to teaching excellence are foundational determinants.

Example:

University College London (UCL Arena) framework formally recognises teaching excellence in career progression.

7. Links to Employability and Societal Relevance

Determinant: Universities succeed in teaching when graduates demonstrate skills and employability aligned with market needs.

Evidence:

Yorke (2006) – *Learning and Employability Series (HEA)*
Found that employability improves when institutions integrate work-based learning, reflection, and transversal skills.

Tomlinson (2017) – *Studies in Higher Education*
Shows that institutional strategies embedding employability into curricula enhance graduate identity and reputation.

European Commission (2020) – *Graduate Tracking and Employability Framework*
Emphasises outcome measurement as a teaching-quality indicator.

Example:

Technical University of Munich (TUM) integrates entrepreneurship and internships into all programmes — reflected in high graduate employment and teaching rankings.

8. Quality Assurance and Continuous Improvement Systems

Determinant: Teaching success depends on robust, transparent QA mechanisms — involving peer review, student feedback, and data-driven monitoring.

Evidence:

Harvey & Newton (2004) – *Quality in Higher Education*
QA effectiveness depends not on control but on *enhancement-oriented* approaches.
ENQA (2020) – *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*
Institutional adherence to ESG standards correlates with teaching improvement and international trust.
Stensaker et al. (2022) – *Higher Education Quarterly*
Found that QA systems focusing on improvement (rather than compliance) yield higher teaching quality.

Example:

Finnish HEIs, under FINEEC accreditation, integrate QA as continuous enhancement; Finland ranks among Europe's best for teaching outcomes and satisfaction.

Conclusions

Teaching Quality

Curriculum Design

Student Engagement

Assessment and Feedback

Recognition and Reward

Learning Environment

Employability

Quality Assurance

Case Study: Transient Success of inter-departmental initiative; personal view

Initial Collaborative Success

Jagiellonian University and Medical Academy establish the **School of Public Health** in 1990; first in Poland and one of the first in CEE. Based on ***École Nationale de Santé Publique*** experience and support, ***Albany Medical College***, ***Maastricht University***, ***Harvard School of Public Health***.

After merging the two universities, in 1997 converted into the Institute of Public Health of JUMC.

It was playing a key role in health reform processes in Polish health care system; designing primary care model, costs accounting and payment methods, epidemiology and social studies, contemporary hospital management technics etc.

Emergence of Challenges and Relative Decline

After conversion into the Institute it lost its autonomy and was forced back into hierarchical university structure.

Conflicting administrative policies and limited funding became significant obstacles in further development and playing active role.

Number of candidates gradually declines, competitors prevail, role in the general system diminishes.


Thank you!
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