

HOW STRUCTURED ONLINE COURSE DESIGN CAN REINFORCE LIFE-LONG LEARNING SKILLS

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ABSTRACT

This article examines the intersection of online course design standards and lifelong learning. Specifically, this paper explores the alignment of the eight general online course design standards within the Quality Matters Higher Education Rubric, Seventh Edition, and how those standards align with the Key Competences for Lifelong Learning. This alignment is important to provide educators with an implementation method for the Key Competences for Lifelong Learning. Educators are often challenged with teaching the soft skill of lifelong learning. This article provides evidence of how the Quality Matters standards can support students in becoming lifelong learners.

Keywords: *QM, Quality Matters, lifelong learning, Key Competences for Lifelong Learning, instructional design*

INTRODUCTION

Institutions of higher learning are facing a growing demand for online courses (Garrett, Simunich, Legon, & Fredericksen, 2023; Seaman, Allen, & Seaman, 2018; Robinson & McFadden, 2018). As more students become online learners, it is more important than ever to ensure students are getting not only the theoretical knowledge provided by higher education but also soft skills such as critical thinking and life-long learning. The rate at which technology changes has increased the need for lifelong learners. For students, lifelong learning is vital for organizational change, career development, social inclusion, and more. For employers, lifelong learning is critical for upskilling and innovation (Balle, Morgan, Sobek II, 2016; Wei & Taecharunroj, 2022). Employees who can develop skills to assist organizations with technology adaptation, industry changes, and problem-solving are valuable (Gaymer, 2006; Bahceleril, 2018; Dubey, Paul & Tewari, 2021).

This paper aims to identify how online classes designed using a structured design approach can enhance life-long learning. While there are multiple structured design approaches, the paper uses the Quality Matters (QM) Higher Education Rubric, Seventh Edition, since it is considered the gold standard (Quality Matters, 2023). The Key Competences for Lifelong Learning – A European Reference Framework guides our research. The European Union defined these competences to support the citizens' rights as described in the European Pillar of Social Rights. The purpose of the Key Competences for Lifelong Learning (KCLL) is to provide a

foundation for growth, social cohesion, and democracy (Official Journal for the European Union, 2018).

THEORETICAL FRAMEWORK

The globalization of society dictates that global citizens must continuously develop skills and competences. The ability to develop skills and competences beyond higher education begins during higher education (Dubey et.al, 2021), more so regarding lifelong learning (Dinevski & Dinevski, 2004). Higher education professors rarely have professional teacher training (Austin, 2002); therefore, providing professors with a framework for teaching is important (Song, 2019). While professors may be experts in their respective fields, many may benefit from a guide on conveying their expertise, especially in an online or hybrid learning environment. Numerous research-based frameworks, such as the SUNY Online Course Quality Review (OSCQR), the Online Learning Consortium (OLC) Scorecard, and the Quality Matters Higher Education Rubric, assist higher education faculty in designing learner-centered and instructionally sound online courses. These frameworks emphasize quality while allowing flexibility to accommodate institutional needs and specific course contexts.

Using the course design principles from QM and the characteristics of quality teaching provided by the Key Competences for Lifelong Learning (KCLL) – A European Reference Framework may provide professors and other practitioners with a guide to increase quality in course design and lifelong learning skills. Bahçeleril (2018) stated that skills-based curriculum and training programs are key components education systems should provide for faculty. Using a skills-based curriculum (KCLL paired with professor expertise) and a training program (Quality Matters) directs our paper.

The KCLL has eight recommendations for quality teaching and learning. These recommendations are summarised here and will be discussed later in the paper.

1. Literacy
2. Multilingual
3. Mathematical competence and competence in science, technology, and engineering
4. Digital competence
5. Personal, social, and learning to learn competence
6. Citizenship competence
7. Entrepreneurship competence
8. Cultural awareness and expression competence

The identification of key competences needed was the first step. According to a survey by the European Commission (2018), the translation of the competences into assessable learning goals is crucial to a successful implementation. One study suggests that colleagues should collaborate together to understand how teaching modules contribute to the overall goals of the

program of study (Sutherland, Warwick, & Anderson, 2019). By working together, faculty could incorporate competences and learning outcomes for a curriculum or program.

QM'S BACKGROUND & RUBRIC

QM began in 2003 as MarylandOnline, Inc and has since grown into an internationally recognized online course quality certifying organization with over 1500 member institutions worldwide (Quality Matters, 2023). It is important to note that QM focuses strictly on course design and not on course content or instructor evaluation (Varonis, 2014; Robinson & McFadden, 2018). The commitment to course design gives faculty flexibility to incorporate their own teaching style while providing a consistent learning experience. The adoption of the QM process could facilitate the development of a course template that could then be passed to new faculty or adjuncts for their personalization while keeping navigation and structure similar in the same courses or disciplines, thus fostering student learning and outcomes (Robinson & McFadden, 2018).

All QM products and associations promote QM's underlying principles: continuous, centered, collegial, and collaborative. These principles aim to perpetuate continuous improvement in online course design by centering the rubrics on best practices, research literature, and instructional design principles. The QM Higher Education Rubric, Seventh Edition, was designed to promote collaboration in online course design and development practices. One of the main components of the QM Quality Assurance System is the Higher Education QM Rubric. The rubric has evolved since its inception, and this article refers to the seventh edition, which contains the following eight categories or general standards:

1. Course Overview and Introduction
2. Learning Objectives (Competences)
3. Assessment and Measurement
4. Instructional Materials
5. Learning Activities and Learner Interaction
6. Course Technology
7. Learner Support
8. Accessibility and Usability

Specific review standards are spread out across eight general standards in the QM Higher Education Rubric. Each specific review standard is worth varied points depending on the level of importance. For a course to be QM certified, it must score at least 86 out of the total 101 points on the rubric and meet all the 22 'essential', or three-point, specific review standards.

COURSE REVIEW PROCESS

The QM course review process was developed by higher education faculty for higher education faculty. Faculty often work with an instructional designer to complete an internal

course review to prepare for an official QM-managed review. Three QM-certified peer reviewers are given access to the course during the QM-managed review. The peer reviewers apply the QM rubric, decide if each of the specific review standards is “met” or “not met”, and provide feedback where they see opportunities for improvement. If the course does not meet enough or all 22 “essential” standards to be QM certified, the instructor can adjust the course based on the reviewers’ feedback and resubmit the course. The goal of the course review process is to make improvements to every course and have every course meet QM standards.

ACADEMIC RIGOR THROUGH ALIGNMENT

The QM Higher Education Rubric seeks to improve online learning experiences by improving online course design with 44 research-based specific review standards. KCLL seeks to achieve academic rigor through competence-oriented education. The KCLL focus on competence-oriented education emphasizes “interactive learning and teaching styles, combining formal with non-formal and informal learning, more collaboration with non-education stakeholders and local community...” (European Commission, 2018). While QM and KCLL may not appear to be in alignment on the surface since QM is about course design and KCLL focuses on competences, this paper will provide support on how the QM Higher Education Rubric supports the KCLL learning competences and may provide an implementation framework for interactive learning and teaching styles and how to combine formal with informal learning. In the next section, we provide evidence of how the eight general standards in the QM Rubric align with the eight Key Competences for Lifelong Learning.

QM’S GENERAL STANDARD 1: COURSE OVERVIEW & INTRODUCTION

General Standard 1 of the QM Higher Education Rubric is centered on the student's experience upon viewing the course. Course navigation is key to keeping students engaged and involved instead of confused and potentially dropping the class (Mucundanyi, 2021). Gronseth (2019) states that online course materials and activities need to be easy to locate, navigate, and operate in expected ways so students can focus on the class learning objectives instead of fighting with clunky technology. Introductions, course policies, and expectations for the learner should be explicitly stated, and there should be no confusion about what the student needs to do to get started in the course.

The ‘Literacy’ and ‘Digital’ competences are addressed by setting clear communication guidelines for learners, including their participation in online discussions, synchronous sessions, emails, and possibly other forms of interaction. By explaining best communication practices and outlining instructor response times, students can plan ahead when working on assignments (Mucundanyi, 2021). Students will develop their ability to ‘communicate and connect effectively with others’ in the digital learning environment. Furthermore, the ‘Digital’ competence is addressed in General Standard 1 by the explicit statements of expected digital information skills and minimum technology requirements to be successful in the course.

The ‘Personal, Social, and Learning to Learn’ competence is supported by General Standard 1 by requiring the course to give specific instructions to students on how to get started, an overview of how the course is set up and will run, and by asking the students to introduce themselves to others in the course. Students are expected to take this information and create a plan for success in the course. For example, the students will have to think about time management and how they will work towards completing each module in the course.

The ‘Citizenship’ and ‘Cultural Awareness and Expression’ competences are supported in General Standard 1 by requiring the explanation of communication expectations and course and institutional policies that learners must abide by. These expectations help to develop responsible citizens who participate appropriately “based on understanding of social, economic, legal and political concepts and structures” (Official Journal of the European Union, 2018). Furthermore, the outlined communication expectations assist students in “understanding the different ways of communicating ideas between creator, participant, and audience within written, printed and digital texts...as well as hybrid forms” (Official Journal of the European Union, 2018). General Standard 1 also supports ‘Cultural Awareness and Expression’ competence by encouraging the posting of diversity, equity, and inclusion policies or statements in the course.

QM’S GENERAL STANDARD 2: LEARNING OUTCOMES

General Standard 2 of QM’s Higher Education Rubric, Seventh Edition ensures well-written, measurable, and aligned course and module-level learning objectives. This rubric section lays the foundation for alignment to be achieved throughout the other course components.

The ‘Personal, Social, and Learning to Learn’ and ‘Entrepreneurship’ competences align with General Standard 2. By clearly stated, measurable objectives, learners are better equipped to monitor their learning and progress as they complete the coursework. Additionally, ensuring the objectives are adequately challenging by using a taxonomy such as Bloom’s helps challenge learners to build perseverance. It motivates them to think forward about how they will achieve their objectives.

QM’S GENERAL STANDARD 3: ASSESSMENT & MEASUREMENT

General Standard 3 of QM’s Higher Education Rubric, Seventh Edition, requires all assessment measures to align with the stated learning objectives to ensure the assessments are valid or measure what they are meant to measure. Additionally, the assessments require specific grading criteria, a well-thought-out grading policy, and plenty of opportunities for learners to track their progress and measure their achievement of the learning objectives.

Multiple KCLL competences align with General Standard 3 including: ‘Literacy’, ‘Personal, Social, and Learning to Learn’, ‘Citizenship’, ‘Entrepreneurship’, and ‘Cultural Awareness and Expression’.

The ‘Literacy’ competence states learners need “the skills to communicate...in a variety of situations and to monitor and adapt their own communication to the requirements of the situation” (Official Journal of the European Union, 2018). General Standard 3 supports this

competence by requiring sequenced, varied assessments for learners to demonstrate their achievement of learning objectives in a variety of ways. The ‘Personal, Social, and Learning to Learn’ competence is addressed by this standard because the intentional design of the assessments encourages learners to reflect on their learning and how the assessments promote the learning process.

The ‘Citizenship’ competence is supported in General Standard 3 because of the requirement to provide academic integrity guidance for assessments. By contextualizing the academic integrity statements and policies with the various assessment types in a course, learners will be able to apply integrity principles during assessments. This, in turn, strengthens their ability to act as responsible citizens and students.

The ‘Entrepreneurship’ KCLL competence aligns well with General Standard 3. Since the standard requires a clear grading policy and explicit grading expectations for all assessments, learners can better plan and manage their approach to preparing for the assessments. By clearly laying out the course details, students can allocate their time, resources, and other life responsibilities and create a workable schedule for themselves (Mucundanyi, 2021).

The ‘Cultural Awareness and Expression’ competence is also aligned with General Standard 3 because both call for learners to express themselves in various ways. General Standard 3 requires assessments to be “sequenced, varied, and suited” to the course level. The ‘Cultural Awareness and Expression’ competence requires learners to express their ideas in various ways and contexts.

QM’S GENERAL STANDARD 4: INSTRUCTIONAL MATERIALS

General Standard 4 of the QM Higher Education Rubric, Seventh Edition, requires instructional materials to support the stated learning objectives, be purposeful and relevant, and exemplify the ethical use of intellectual property. This standard supports the ‘Personal, Social, and Learning to Learn’, ‘Citizenship’ and “Digital’ competences.

‘Personal, Social, and Learning to Learn’ competence is achieved by the learner understanding their best learning strategy. In General Standard 4, instructional materials that support diverse learning methods and align with desired learning outcomes are required. This allows learners to focus on how they learn best. The instructor can support learning comprehension by writing course materials in clear, understandable language (Gronseth, 2019).

The ‘Citizenship’ and ‘Digital’ competence are addressed through academic integrity, the use of source references, and gaining permission to use instructional materials. Communicating policies and defining terms like netiquette and plagiarism help students develop their citizenship competence (Mucundanyi, 2021). ‘Digital’ competence is partially defined by the ability to manage and protect data and the ethical use of technology tools. General Standard 4 requires instructors to exemplify ethical use of property by referencing and giving credit to others where appropriate. Academic integrity requires learners to understand social and legal concepts to engage in the sustainable development of society. Thus, critical thinking and problem-solving skills are required.

QM'S GENERAL STANDARD 5: LEARNING ACTIVITIES & LEARNER INTERACTION

General Standard 5 of the QM Higher Education Rubric, Seventh Edition, requires active learning activities and learner interaction that aligns with the course learning objectives. This standard expects various forms of interaction (learner to learner, learner to instructor, and learner to course content) that align with various forms of learning activities, thus appealing to multiple learning and communication styles. 'Literacy', 'Mathematical', 'Digital', 'Personal, Social, and Learning to Learn', and 'Entrepreneurship' competences are supported by General Standard 5.

'Literacy' competence includes the ability to communicate in an effective and creative way. This includes the ability to adapt communication styles to the situation. The 'Mathematical' competence is supported through the learners' engagement by doing. Learning by doing may include the discovery or application of concepts. 'Digital' competence includes the skill of having a forward-looking attitude to the development of new technologies. In addition, 'Digital' competence includes the skills to use technology in collaboration with others. General Standard 5 supports 'Literacy' and 'Digital' competences through learning activities that guide learners to being responsible for their own learning through learner-content, learner-instructor, and learner-to-learner interactions.

'Personal, Social, and Learning to Learn' competence expects learners to be able to interact with others using generally accepted codes of conduct and communication rules. General Standard 5 assesses the clarity of required interactive learner-to-learner interactions and feedback from the instructor. An example of learner-to-learner interactions is peer reviews. A 2022 study by Cunningham, McCarthy, and Tilooby states that learners develop skills for interacting with others by giving and receiving feedback. This study discusses how students attempt to improve papers by giving and receiving feedback via blind peer reviews. Students in the course stated they became better writers and learned to give positive and negative feedback to classmates. General Standard 5 also seeks learner guidance to include cultural differences and to promote inclusion and equity.

'Entrepreneurship' competence includes working individually and in teams, effectively communicating, negotiating, and operating in an environment of ambiguity as part of informed decisions. General Standard 5 requires active learning by requiring learners to do something with the course content. This standard is guided by the quality of interactions, not the quantity of interactions. Furthermore, the standard emphasizes the importance of learner-to-learner interactions.

QM'S GENERAL STANDARD 6: COURSE TECHNOLOGY

General Standard 6 of the QM Higher Education Rubric, Seventh Edition, requires the use of technology that supports the course learning objectives, promotes active learning, and engages learners. This general standard also requires using different technology tools to ensure the course is not solely text-based. Furthermore, this standard seeks to protect student privacy

and enable students to protect themselves. ‘Digital’, ‘Literacy’, and ‘Personal Social, and Learning to Learn’ competences are supported by General Standard 6.

Digital course materials and activities are likely more comprehensible when they are easy to locate and function in ways students expect. This helps students locate course items and reduces extraneous cognitive load, enabling users to direct more of their focus, time, and attention toward engaging in course activities.

The ‘Literacy’ competence implies appropriate and creative communication methods. In addition, this competence states that learners should be able to adapt their communication styles to different situations with a positive attitude.

The ‘Digital’ competence KCLL is linked to course technology. This competence engages learners to develop the capacity to identify and use technology for the purposes of work, participation in society, and learning. Students should be encouraged to learn to use collaborative tools such as DropBox, OneNote, Google Docs, Zoom, and others to work together in teams (Mucundanyi, 2021). In addition, this competence encourages learners to think critically, problem solve, interact with each other, and use digital tools ethically.

‘Personal, Social, and Learning to Learn’ competence includes learners being able to ask for help if needed. In addition, this competence supports learners being able to function within ambiguity and make decisions regarding appropriate technology to accomplish a task. General Standard 6 assists with this competence by engaging learners in various technologies.

QM’S GENERAL STANDARD 7: LEARNER SUPPORT

General Standard 7 requires implementing learner support services in four areas: technical, accessibility, academic, and student support. Sanford (2017) stresses the importance of ensuring students know how to get technical support, tutoring, library resources, and other outside support when needed. Meeting General Standard 7 ensures learners have the tools to advocate for themselves and learn without direct instruction. Learning without direct instruction can happen via tutorial videos, online tutorials, and links to how-to guides.

Much like General Standard 6, General Standard 7 aligns with the ‘Digital’ KCLL competence by assisting the learner in thinking critically and identifying the appropriate technical tools. This standard also supports the KCLL ‘Entrepreneurship’ competence. General Standard 7 requires support services to be provided to the learner; the ‘Entrepreneurship’ competence requires learners to engage the support by being aware of their strengths and weaknesses.

QM’S GENERAL STANDARD 8: ACCESSIBILITY & USABILITY

General Standard 8 of the QM Higher Education Rubric, Seventh Edition, requires course design to be usable and accessible to all learners. This is accomplished by standard course navigation, an organization that provides readability, use of the Universal Design for Learning (UDL) guidelines, and multimedia use that supports diverse needs. General Standard 8 also ensures audio and visual content is accessible to learners of varying needs. Instructors should

anticipate learner obstacles and use appropriate technology to differentiate their materials and delivery methods, making their courses more accessible to all students (Mucundanyi, 2021). Instructors should provide statements from vendors of technology used in the course.

‘Personal, Social, and Learning to Learn’ competence is achieved in General Standard 8 by allowing all students to engage in self-expression and peer communication (Vue, Hall, Robinson, Ganley, Elizalde, & Graham, 2016). Building accessibility and usability for all learners by using technology and deliberate course design promotes an environment of inclusion. In addition, learners without specialized accessibility needs are exposed to effective engagement methods with learners who do need alternative ways to access content and learning activities.

Table 1: Key Competences for Lifelong Learning and Quality Matters Standards Alignment

Quality Matters Higher Education Rubric, Seventh Edition Standards	KCLL Literacy	KCLL Multilingual	KCLL Mathematical	KCLL Digital	KCLL Personal, social, and learning to learn	KCLL Citizenship	KCLL Entrepreneurship	KCLL Cultural Awareness and expression
General Standard 1: Course Overview and Introduction	X			X	X	X		X
General Standard 2: Learning Objectives					X		X	
General Standard 3: Assessment and Measurement	X				X	X	X	X
General Standard 4: Instructional Materials				X	X	X		
General Standard 5: Learning Activities and Learner Interaction	X		X	X	X		X	
General Standard 6: Course Technology	X			X	X			
General Standard 7: Learner Support				X			X	
General Standard 8: Accessibility and Usability					X			

LIMITATIONS, CONCLUSION, AND FUTURE DIRECTION

This research focuses on the eight General Standards of the QM Higher Education Rubric. Within those eight standards, a total of 44 Specific Review Standards are provided by QM. This paper provides a high-level overview of how the eight general standards of QM's rubric and the eight KCLL can support online learner success and the development of lifelong learning skills.

Table 1 provides an "at-a-glance" of the alignment between the QM rubric and the Key Competences for Lifelong Learning. While QM may not address every aspect of the KCLL, QM provides a framework for consistency, collaboration, and clarity for both the learner and the instructor. QM allows learners to focus on meaningful content that aligns with learning objectives. Six of the KCLL competences overlap well with QM, however two KCLL competences do not align as well. The KCLL Multilingual competence is designed for learners who utilize more than one language; QM does not have a standard focusing on using more than one language. The KCLL Mathematics competence is very science, technology, engineering, and math-focused. QM is meant to be used across all disciplines. Therefore, while it may not be possible for all disciplines to fully engage in all the KCLLs, courses strategically designed with QM standards and KCLL competences will make progress toward creating lifelong learners. Furthermore, the accessibility requirements of QM support the diversity, access, and inclusion of all learners.

A 2020 study of business schools found that 'students were more likely to enroll in certified courses' (Andrade, Miller, Kunz, & Ratliff, 2020), thus providing financial motivation for implementation. Future research may map the QM specific review standards to each of the KCLL competences.

While this study offers a high-level alignment, a detailed mapping of the 44 specific QM standards to the KCLL would uncover nuanced relationships and potential gaps. Such research could identify how certain competences—such as Digital Competence or Cultural Awareness and Expression—can be strengthened through targeted course design elements. Additionally, future investigations could focus on competences that currently exhibit limited alignment, such as Multilingual Competence and Mathematical Competence.

Another promising avenue for research involves evaluating the implementation of QM and KCLL across different academic disciplines. While the general alignment of competences and standards is evident, discipline-specific challenges may arise, particularly in STEM and humanities courses. Comparative studies examining how QM and KCLL can be effectively applied within these contexts could yield insights into tailoring course designs for maximum impact.

In terms of practical application, several initiatives could enhance the integration of QM and KCLL. One immediate step is the development of faculty training workshops that demonstrate how to embed KCLL competences into QM-aligned course designs. These workshops should include practical examples and case studies, enabling instructors to translate theoretical frameworks into actionable strategies. Additionally, fostering interdisciplinary

collaboration among faculty could ensure outcomes are aligned with KCLL, creating consistency across courses and enabling more engagement with the competences.

Dynamic and flexible assessment tools represent another critical area for practical implementation. Courses should incorporate diverse assessment methods, such as project-based learning and peer reviews, to reflect the multidimensional nature of KCLL competences. For instance, Entrepreneurship Competence could be developed through team-based projects requiring innovation and problem-solving, while Cultural Awareness and Expression could be addressed through assignments that encourage critical engagement with diverse perspectives. To support these initiatives, QM-certified course templates that integrate KCLL competences could be provided to instructors, offering a structured yet customizable foundation for course design.

Leveraging QM's Standard 8 on accessibility, instructors can integrate universal design principles that accommodate a wide range of learners. This effort would support students with specific needs and expose all learners to effective engagement methods that foster Personal, Social, and Learning to Learn competence. Incorporating feedback loops that capture students' perceptions of how courses develop their competences would provide additional data to refine course design.

Finally, partnerships and collaborative initiatives could significantly advance the integration of QM and KCLL. Institutions could establish community-based learning opportunities aligned with competences such as Citizenship and Entrepreneurship, offering students real-world contexts to apply their skills. Similarly, global peer networks for instructors could facilitate sharing best practices and successful examples of QM-aligned, KCLL-focused course designs. These collaborative efforts would enhance the adoption of these frameworks and promote a more interconnected and innovative approach to lifelong learning in higher education.

REFERENCES

- Andrade, M.S., Miller, R.M., Kunz, M.B., and Ratliff, J.M. (2020). Online learning in schools of business: The impact of quality assurance measures. *Journal of Education for Business*, 95(1), 37-44. doi:10.1080/08832323.2019.1596871
- Arbaugh, J.B., Desai, A., Rau, B., & Sridhar, B.S. (2010). A review of research on online and blended learning in management disciplines: 1994-2009. *Organizational Management Journal*, 7, 39-55.
- Austin, A.E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education*, 73(1), 94-122.
- Balle, M., Morgan, J., Sobek II, D.K. (2016). Why learning is central to sustained innovation. MIT Sloan Management Review: Special Collection "The Learning Organization". 5-13.
- Bahcelderli, N.M. (2018). Strategy for lifelong learning in vocational schools of tourism education. *Springer*. doi: 10.1007/s11135-017-0586-4
- Cunningham, K., McCarthy, V., & Tilooby, A. (2022). Business education and the development of feedback skills: The impact of student peer review assignments. *International Journal for Business Education*, 163(1), 3.
- Dinevski, D., Dinevski, I.V.: The concepts of university lifelong learning provision in Europe. *Trans. Stud. Rev.* 11(3), 227-335.
- Dubey, R.S., Paul, J., and Tewari, V. (2021). The soft skills gap: a bottleneck in the talent supply in emerging economies. *The International Journal of Human Resource Management*, 33(13), 2630-2661. doi:10.1080/09585192.2020.1871399
- European Commission. (2018). Commission staff working document proposal for a council recommendation on key competences for lifelong learning.

- Garrett, R., Simunich, B., Legon, R., & Fredericksen, E. E. (2023). CHLOE 8: Student demand moves higher ed toward a multi-modal future, The changing landscape of online education, 2023. Quality Matters and Encoura Eduventures Research.
- Gaymer, D.M. (2006). Continuing education and lifelong learning trends. In M.M., Helms (Ed.) *Encyclopedia of management (5th ed.)*, (pp.128-131). Farmington Hills, Michigan, USA: Thomson Gale Publishing.
- Gronseth, S. (2018). Inclusive design for online and blended courses: Connecting web content accessibility guidelines and universal design for learning. *Educational Renaissance*, 7, 14-22.
- Mucundanyi, G. (2021). Design Strategies for Developing an Engaging Online Course in Higher Education [Article]. *International Journal of Education & Development using Information & Communication Technology*, 17(3), 198-206.
- Quality Matters. (2023). About. Quality Matters. Retrieved from <https://www.qualitymatters.org/about>
- Robinson, D., & McFadden, C. (2018). Sexuality in a diverse society: Perspectives on the Quality Matters/Gold Review Process for online course transition. *International Journal of Technology in Teaching and Learning*, 14(2), 65-80.
- Seaman, J. E., Allen, I. E., & Seaman, J. (2018). Grade increase: Tracking distance education in the United States. Babson Survey Research Group. Retrieved from <http://www.onlinelearningsurvey.com/highered.html>
- Song, M. (2019). Learning online for teaching online: A formative program evaluation of a hybrid faculty training program (13901617) [Doctoral dissertation, University of Pittsburgh]. ProQuest Dissertations.
- Standards from the Quality Matters Higher Education Rubric, Seventh Edition, 2023. Quality Matters. Retrieved from [Specific Review Standards from the QM Higher Education Rubric, Seventh Edition.](#)
- Official Journal of the European Union, (2018). Council recommendation of 22 May 2018 on key competences for lifelong learning. *European Union Law*. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AAOJ.C_.2018.189.01.0001.01.ENG
- Varonis, M. (2014). Most courses are not born digital: An overview of the Quality Matters peer review process for online course design. *Campus-Wide Information Systems*, 31(4), 217-229. doi:10.1108/CWIS-09-2013-0053
- Vue, G., Hall, T., Robinson, K., Ganley, P., Elizalde, E. & Graham, S. (2016). Informing understanding of young students' writing challenges and opportunities: Insights from the development of a digital writing tool that supports students with learning disabilities. *Learning Disability Quarterly*, 39(2), 1-12.
- Sanford, D. (2017). Course format and learning: The moderating role of overall academic performance. *The International Journal of Management Education*, 15(3), 490-500. <https://doi.org/https://doi.org/10.1016/j.ijme.2017.08.003>
- Sutherland, D., Warwick, P., & Anderson, J. (2019). What factors influence student satisfaction with module quality? A comparative analysis in a UK business school context. *The International Journal of Management Education*, 17(3), 100312. <https://doi.org/https://doi.org/10.1016/j.ijme.2019.100312>
- Wei, X., & Taecharungroj, V. (2022). How to improve learning experience in MOOCs an analysis of online reviews of business courses on Coursera. *The International Journal of Management Education*, 20(3), 100675. <https://doi.org/https://doi.org/10.1016/j.ijme.2022.100675>