Quality Assurance of Blended and Online Learning
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The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources, and technologies.

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Quality Assurance of Blended and Online Learning

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# Quality Assurance of Blended and Online Learning

**UNIT 2: Methods and Tools of Quality Assurance**

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UNIT 3: Quality in Technology-mediated Education

Introduction

Learning Objectives

The Disruptive Nature of Technology in Education, and Implications for Quality

Strengthening the Quality of Technology-Enabled Learning

Quality in Online Programmes and Courses

Tony Bates’ Nine Steps to Quality Teaching in a Digital Age

Jisc’s Model of Effective Practice with E-learning

Badrul Khan’s Eight-Dimensional E-learning Framework

Quality Standards for Online Learning

National Standards for Quality Online Teaching (iNACOL)

ENQA Standards and Guidelines for Quality Assurance

Use of Quality Standards and Criteria

Summary

Check Your Progress
Quality Assurance of Blended and Online Learning
What's in It for Me

Upon completion of the course, you are expected to be able to:

• Explain the concepts of quality and quality assurance as applied in education.

• Present debates around the quality assurance of distance and online learning in the context of overall education and society.

• Identify factors that impact the quality of blended and online learning.

• Use different models and instruments of quality assurance to assure quality in a given context.

• Apply the knowledge and skills you have acquired to improve the practice of blended and online learning in your institution.
How Is the Course Organised?

The course comprises four units and a final assessment unit. Let’s find out more on what each main unit has in store for us.

Unit 1: Quality and Quality Assurance in Education

• This unit covers the key concepts of ‘quality’ and ‘quality assurance’ as applied in education.

• After completing the unit, you will appreciate the importance of having a shared understanding of these two concepts in an institution.

Unit 2: Methods and Tools of Quality Assurance

This unit deals with approaches and tools that are used to enhance the quality of blended and online learning. Here is what this unit does:

• It explains the importance of striking a balance between internal and external quality assurance in an institution.

• It underlines the significance of measuring quality systematically, using carefully designed instruments.

• It also gives an example of an instrument you can use to evaluate the quality of your blended learning course.
Unit 3: Quality in Technology-Mediated Education

This unit introduces different models and frameworks used for assuring the quality of technology-mediated learning, which is widely used in educational institutions across the globe. Here is what this unit does:

• It highlights key aspects of technology-enhanced learning that need attention in terms of quality assurance.

• It offers various quality assurance frameworks for technology-enabled learning, which provide useful guidelines for designing and facilitating blended and online courses.

• It familiarises you with existing quality standards that have been developed by experts and used to assure the quality of online and blended learning.

Unit 4: COL’s Quality Assurance Tools

This is the last unit, and it acquaints you with the various quality assurance tools that Commonwealth of Learning (COL) has developed over the years working with its international partners. These resources include:

• Tools for quality assuring massive open online courses (MOOCs), open educational resources (OER) and blended learning.

• A tool for benchmarking technology-enhanced learning generally.

Links to these tools are provided in the relevant sections, and you are encouraged to download and use them.

Note
UNIT 1

Quality and Quality Assurance in Education
Quality Assurance of Blended and Online Learning

The value of education lies in its quality. Although expansion in education is a global phenomenon, this trend has continued mainly due to international development efforts such as the Millennium Development Goals, initially, and now the Sustainable Development Goals.

Such expansion has been positive in terms of increasing participation rates in education and increasing literacy rates generally, but the challenge for mass education has been to provide enough resources to roll out high-quality teaching and learning.

The Result of Limited Resources

The ultimate consequence of such limited resources has been declining quality in educational provision, especially at higher levels of education. Linked to this challenge is the issue of whether the education provided by educational institutions is relevant for the demands of job markets and rapidly changing societies.

Quality and Quality Assurance in Education: What will We Learn In This Unit?

In this unit, we examine the concepts of quality and quality assurance as they apply in education. We also look at the different modes of educational delivery and identify factors that directly impinge on quality.
Quality Assurance of Blended and Online Learning

We examine strategies and methods that can be used to enhance the quality of education offered through different modes of delivery. In particular, we look at how quality should be enhanced in blended and online learning.

**Utilising Available Technologies for Blended and Online Learning**

Due to the availability of enabling technologies, as well as the challenges posed by natural disasters like COVID-19, education is generally going toward the blended and online routes. Since technology-enhanced methods of delivery are being mainstreamed in education, we need to ensure that robust quality assurance measures are implemented. This helps maintain the credibility of such offerings.
Quality and Quality Assurance in Education

Upon completion of this unit, you are expected to be able to:

• Define the terms *quality* and *quality assurance* as applied to education

• Describe the different modes of delivering education used to cope with increased demand and natural disasters like COVID-19

• Identify quality challenges posed by the different modes of provision

• Suggest ways of enhancing education quality, irrespective of the mode of provision
Pause and Reflect

Before you begin, take some time to reflect on your thoughts:

Think of some of the quality challenges faced in the educational provision at any level in your country. As you go through this unit, you may like to discuss with colleagues in your institution how these challenges can be addressed.
Quality in education is perceived differently by different people. As parents, we probably consider certain factors when we choose which school or college to send our child to.

**Watch Video: What Makes Quality Education?**

Video Attribution: “What makes quality education?” by Simpleshow Foundation is available under a CC BY licence.
Pause and Reflect

Pause for a while to reflect on your thoughts:

Having watched the video, what factors would you consider in your context when choosing a school?

Make a list of them and write why each is important for you.
Although there is no consensus on what constitutes quality education, and some people disagree about who should determine that quality, there are common factors many people generally agree on. While many may not be able to give a technical definition of quality, they nevertheless know what they want from educational institutions.

At the institutional level, it is always important for internal stakeholders to share a common understanding of what they mean by quality education. The way an institution perceives quality has a profound influence on the quality assurance (QA) policies developed and the quality enhancement strategies adopted.

**A Scholarly Opinion**

A renowned scholar in quality assurance contends:

Consequently, our methods of evaluating quality spring from more deep-seated beliefs as to what counts as quality. But, and more significantly, these beliefs over what counts as quality themselves derive from more fundamental assumptions as to the ideal nature of higher education. (Barnett, 1994, p. 171)

**Perception of Quality**

Quality is perceived differently by different people. The most traditional definition of quality is provided by Harvey and Green (1993, p. 11), who perceive quality as:
While these various perceptions of quality are treated separately in the literature, often several notions of the concept manifest themselves in the quality assurance (QA) policies and practices of any given institution. Let’s proceed to the next screen to view an example.

In South Africa, “the Higher Education Quality Committee’s understanding of quality encompasses fitness for purpose, value for money, and individual and social transformation, within an overarching fitness of purpose framework” (CHE, 2004, p. 5).

This all-encompassing national perception of quality obviously influences the approach institutions take to implementing their quality assurance (QA) arrangements.

**Quality as Standards that are Set**

In education, there is a sense in which quality can be understood as standards that an institution sets itself to achieve within given time frames. In setting such standards, the institution takes into account the quality expectations of its stakeholders, including parents, potential employers, and other institutions students aspire to access for further education.

*Click Annexure 1 to know the three quality standards* – the quality continuum, the relativist notion of quality, and the objectivist notion of quality. It also explains how an educational institution works towards achieving the goals that are set at the beginning of an academic year.
Now that you have a fair understanding about quality, we move on to discuss what quality assurance is. It refers to systems, plans, and processes that are put in place to ensure that desired goals are achieved. The process of quality assurance has various attributes as below:

- It is a process that involves a collection of policies, procedures and practices that are both internal and external to an institution, which are designed to achieve, maintain and enhance quality.

- Unlike quality control, which comes at the end of a process to establish the fitness of purpose of an end product, quality assurance takes place right from the beginning and is meant to ensure that no defects are produced in the system.

- It is a proactive process rather than a reactive one, assuring an institution’s internal and external stakeholders that explicitly stated goals/aims will be met.

**Note**

Quality assurance involves deliberately setting goals and putting in place mechanisms that ensure the institution achieves those goals.
We just learned that quality assurance differs from quality control. Watch the video to know how.

**Watch Video: Quality Assurance Versus Quality Control**

According to United Nations Educational, Scientific and Cultural Organisation (UNESCO), quality assurance is an all-embracing term that refers to an ongoing, continuous process of evaluating (assessing, monitoring, guaranteeing, maintaining and improving) the quality of education systems, institutions, or programmes. As a regulatory mechanism, quality assurance focuses on both accountability and improvement, providing information and judgements (but not rankings) through an agreed upon and consistent process and well-established criteria (Vlasceanu et al., 2007, p. 74).
In this section, we discuss the different modes of educational provision, such as distance education, blended learning and online learning.

You need to understand key aspects of these delivery modes in terms of teaching and learning so that you are able to maintain quality when using them.

These modes of delivery, especially blended and online learning, are also increasingly becoming more prevalent at all levels of educational provision. Unless we know how to quality assure educational processes associated with these delivery modes, the quality of education offered through these delivery modes remains compromised.

Let’s study each mode one by one.
The distance education delivery mode has been in existence for many decades, if not centuries.

The Commonwealth of Learning defines distance education as a process of teaching and learning that is characterised by the separation of teacher and learner in time and/or place for most of the educational transaction (COL, 2020a).

The teaching and learning processes are mediated by technology for the delivery of learning content, but with the possibility of face-to-face interaction between the learner and the teacher and amongst learners themselves. An essential element of distance education is that there is always provision for two-way didactic communication. Traditionally, this usually involved correspondence courses wherein the student corresponded with the school via mail.

Due to advancements in information and communication technologies, most distance education systems today are supported by technology. The main advantage of distance education is the flexibility the learner enjoys in terms of when to learn, where to learn and at what pace. This mode of provision has opened up access to education for millions of people who, for one reason or another, cannot participate in formal education institutions.
The African Context

In the African context, for instance, most of the higher education institutions now have a Distance Education Unit. This is in addition to the many open universities that are becoming popular in numerous African countries. On a global scale, mega-universities are predominantly open universities that use distance learning.

Let’s proceed to the next screen to learn more about mega-universities.

According to Sir John Daniel, a mega-university is one with an enrolment of more than 100,000 students, (Daniel, 1996, cited in Guri-Rosenblit, 2019).

Given their sizes, you can easily imagine the impact these open universities make in education. The importance of ensuring that the quality of distance education offered to the millions of students who go through these institutions cannot be over emphasised.

As Horn and Salisbury (2019) observe:

Today’s mega-universities, which serve a growing population of non-traditional students, should be leading the charge on quality assurance. They should be eager to prove — with clear and verified accounting — that they are a truly different model, not just the for-profit playbook remade under a non-profit brand.
Let’s now study what blended learning means. Bates (2015) identifies various ways in which technology is used to deploy higher education:

- **Online Learning**
- **Blended Learning**
- **Flipped Learning**
- **Hybrid Learning**
- **Flexible Learning**
- **Open Distance Learning (ODL)**

**Figure 2.** Intersection of Technologies used in higher education.

He notes that although these terminologies are used interchangeably, there are significant differences in their meanings. These forms of education, once considered somewhat esoteric and out of the mainstream of conventional education, are now assuming greater significance and in some cases becoming mainstream themselves. Educational institutions take advantage of available technologies to deliver education in various innovative ways.

**Blended Learning – Online and Face-to-Face Learning Experiences**

Blended learning involves a combination of online and face-to-face learning experiences. Examples include flipped classrooms, online interactions followed by face-to-face teaching, and online learning supplemented by a face-to-face practical. The balance between independent and face-to-face learning varies from context to context and is very difficult to prescribe. The key is to ensure that what learners do when they learn independently is complementary to what they learn during face-to-face encounters.
Garrison and Vaughan (2008) define blended learning as the “thoughtful fusion of Face-to-Face and online learning experiences.” This suggests a seamless integration of the learning that happens out of class and that which happens during class; for this to happen, the teacher needs to do a lot of planning. Although learning that happens out of class is independent, it must be structured.

**Integration of Learning Modes**

The figure illustrates how out-of-class and in-class learning should build on each other and be seamlessly integrated.

*Figure 3.* Three types of learning modes and how approaches overlap between them. Face-to-Face courses and blended courses can both integrate ICT in teaching and learning. Blended courses and distance/online courses both can use open and distance learning.

*Click Annexure 2 to view the advantages of blended learning.*
Lastly, we come to the topic of online learning. It refers to network-enabled teaching and learning that allows the learner to have increased interaction with content, teachers and other learners (COL, 2020b). It is the latest generation in the evolutionary growth of open, flexible and distance learning (Mishra, 2001). Online education is currently the most popular form of distance education. In recent years, it has become an integral part of many university offerings. Online learning includes massive open online courses (MOOC), which are popular with many institutions today. Again, it is a delivery mode that has been enabled by advancements in communication technologies, including the Internet.

**Before Class**

Students engage with content for the next lesson. Use resources provided online or offline. Note any questions or areas where more clarification is needed.

**During Class**

Students check their understanding of concepts through peer discussions and interactions with the teacher. New concepts to be covered are given.

**After Class**

Students consolidate what was learnt. They apply knowledge and skills gained. They move on to new concepts and content.

*Click Annexure 3 to view the advantages of online learning.*
The year 2020 was one of the most challenging in terms of running education systems smoothly. Because of the Covid-19 lockdown and social distancing measures, institutions were forced to close. As a result, both learners and teachers stayed at home. To avert an educational crisis, institutions had to be innovative to find ways of using technology to teach learners remotely. This was a unique time that called upon institutions to think out of the box and respond to the educational needs of the wide range of learners under their care. Emergency remote teaching emerged as the key to keeping the doors of learning open. Various types of software were also used to offer courses.

**Emergency Remote Teaching and Learning (ERTL)**

ERTL saw a sudden upsurge in the use of learning management systems (LMSs) such as Moodle. As Hodges and colleagues argued, the primary objective in these circumstances was not to recreate a robust educational ecosystem but rather to provide temporary access to instruction and instructional support in a manner that was quick to set up and reliably available during an emergency or crisis (Hodges et al., 2020).
The Unintended Consequences of ERTL

For many institutions that cater to learners from poor socio-economic backgrounds, this shift to online provision posed challenges and yielded a lot of unintended consequences. Even for some of the well-endowed institutions, a shift to online provision overnight resulted in compromises to the quality of education. Emergency remote teaching and learning (ERTL) is different from online learning, where the institution gives itself time to prepare adequately before implementing the mode of provision. In emergency remote teaching, there was no time to plan, no training of teachers on how to teach online, and no proper design for online learning. Lecturers and students learned how to use new tools overnight.

Tertiary institutions made structural changes, not only to physical infrastructure but also to their remote operations. There were also constraints related to online learning, mainly for disadvantaged learners, such as lack of reliable electricity supply, lack of stable connectivity and unequal access to resources. Even issues like homes that did not provide a conducive learning environment became huge constraints for some learners.

Result of the Constraints

As a result of the constraints, which played themselves out differently in varied contexts and affected different learners in a range of ways, inequalities in education were widened. Privileged learners who had ready access to technology continued making meaningful learning gains, while their disadvantaged counterparts were less privileged. A study in the Netherlands revealed a learning loss of about three percentile points or 0.08 standard deviations. Losses were up to 60% larger among students from less-educated homes (Engzell et al., 2020).
Quality Assurance of Blended and Online Learning

Quality Challenges When Using Different Modes of Provision

Different modes of provision can be successfully used to enhance access, equity and quality in educational provision. This is particularly possible these days because of the availability of enabling technologies. It is amazing how technology has transformed the world in the past few decades, including how education can be provided and how learners can easily access information.

As highlighted in the previous screens, the disruptive nature of technology was most pronounced at the beginning of 2020 due to the Covid-19 pandemic. A whole lot of innovative pedagogical approaches have been made possible due to technology.

Keep in mind the challenges to quality that might be posed due to varied modes of provision.

Learning Should Not Be Confined to Physical Attendance

Technology has also brought up concepts like flexible learning. Learning should not necessarily be confined to physical attendance at a school. Learners can learn from anywhere and at any time that suits them because of the affordances of technologies. Important quality considerations where such learning happens are listed below:

- The quality of reading materials learners will use
- Learning activities that are built into materials to encourage particular learning experiences
- The provision of instant feedback to learners on their responses to learning activities
Technology has introduced yet another mode of learning. When an institution makes a deliberate decision to use technology-mediated learning, it is important to ensure that all learners are catered for. Knowing what technology will be used and how it will be used in the teaching and learning process is an important aspect of the planning process. Deliberate measures should be put in place to ensure that the teacher has ways of knowing what learners do when they learn independently.

In blended learning in particular, the teacher has to establish how much of the learning time learners will spend online and how much they will spend in face-to-face encounters.Irrespective of the mode of delivery, it is always important to ensure that there is sufficient time-on-task for the learning outcomes to be achieved.

To enhance the quality of blended and online learning, a good institution should have well-planned mechanisms of monitoring key aspects of delivery, such as instruction, learner support, and learner achievement (Commonwealth of Learning, 2005).
In this unit, we learned about quality and quality assurance as applied in education.

Let’s review the key learning points we covered along the way.

- Quality in education has to do with setting standards to be achieved within a given period of time. In setting those standards, an institution takes into account the needs of its key stakeholders, who include students, potential employers, and society in general.

- We learned the concept of quality assurance, which refers to all the mechanisms (structures, systems and processes) put in place to ensure that desired performance goals will be achieved.

- Quality assurance is a proactive process; we do not wait until we get to the end of the process to identify system weaknesses. Rather, we identify anomalies as we implement educational services, and introduce corrective measures early enough. So, quality assurance involves regularly collecting data, analysing the data and using the results to make improvements.
• We briefly covered how the Covid-19 pandemic affected educational delivery across the entire world, leading to better acceptance of online learning. A key message is that it is very unlikely educational institutions will revert to pre-Covid approaches to teaching and learning.

• Emphasis should be placed on ensuring that sound quality assurance systems are implemented to maximise learning gains for every learner, irrespective of their socio-economic status.
1. A quick check on what you have learned so far.

<table>
<thead>
<tr>
<th></th>
<th>Quality Assurance</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevents defects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies defects in end products</td>
<td></td>
<td></td>
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<tr>
<td>Process-oriented</td>
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<td>Product-oriented</td>
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<td>Proactive</td>
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<tr>
<td>Reactive</td>
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</tr>
</tbody>
</table>
2. Quality in education is uniform across all institutions in a country.
   a) True
   b) False

3. In quality assurance, only the management must be actively involved.
   a) True
   b) False

4. Only at the national level can quality benchmarking take place.
   a) True
   b) False

5. Which of the following terms best explains the meaning of quality assurance?
   a) Effective quality assurance happens at the end of an educational process, to identify learners who do well and those who perform badly.
   b) You cannot implement quality assurance at the time students are admitted to an institution.
   c) Systems and structures put in place to ensure stated goals are achieved.
   d) Regular meetings with parents and other stakeholders to discuss support needed.
6. Which of the following technologies are commonly used to support remote learning? You can choose more than one answer.
   a) Learning management systems
   b) Radio broadcasts
   c) Television satellites
   d) Robotics

7. Teachers can quality assure learning that takes place through different delivery modes like distance, blended and online.
   a) True
   b) False

8. Which of the following statements is true about blended learning?
   a) Learners study independently from home.
   b) Learners always attend classes and learn face-to-face.
   c) Learners learn remotely without using any technology.
   d) There is a mixture of face-to-face and independent learning.

9. One of the best ways of increasing learner engagement in remote learning is by
   a) Calling them regularly and asking them about their progress.
   b) Getting learners to communicate with the teacher regularly through emails.
   c) Having frequent synchronous sessions.
   d) Providing learners with short exercises on which the teacher gives quick feedback remotely.
   e) Asking learners to meet on campus every week.
10. All of the following factors are associated with emergency remote teaching and learning (ERTL). Identify whether each factor is an advantage or disadvantage of ERTL.

<table>
<thead>
<tr>
<th></th>
<th>Advantages of ERTL</th>
<th>Disadvantages of ERTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequalities in educational access and success were widened.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was less time-on-task for most learners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners developed independent learning skills.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers had less time to interact with learners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only a few learners had good access to facilities such as electricity, technology hardware and the Internet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents played a greater role in the education of their children.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. All of the following aspects need to be quality assured, irrespective of the mode of provision, **except**
   a) Course design
   b) Learning materials
   c) Learner support systems
   d) Assessment processes
   e) Who interacts with learners at home

12. Which of the following factors does not pose quality challenges in online learning?
   a) Poor online learning design
   b) Lack of credibility in online assessment
   c) Use of digital resources such as e-books and OER
   d) Lack of time-management skills in learners
   e) Lack of enough physical space and privacy at home

13. In blended learning, the teacher should not be concerned about knowing what learners do when they learn out of class.
   a) True
   b) False

14. Massive Open Online Courses (MOOCs) are a form of online learning.
   a) True
   b) False
Quality Assurance of Blended and Online Learning

Check Your Progress

15. Which of the following is not a typical advantage of online learning?
   a) Learning takes place at one’s own pace.
   b) There is flexibility in terms of when and where to learn.
   c) The learner does not have to write examinations.
   d) During learning, the learner picks up basic technology skills useful in life.

16. When we use Learning Management Systems (LMSs) such as Moodle, learning analytics make it easier to track each learner’s education activities.
   a) True
   b) False

17. In designing face-to-face learning, you do not have to plan to use technology because you will be meeting learners physically.
   a) True
   b) False
18. Match the following activities with the right quality process in the table.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Quality Assurance</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying defects in products at the end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A reactive process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevents defects from arising at the start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A proactive process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides confidence that the product will meet the requisite quality</td>
<td></td>
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UNIT 2

Methods and Tools of Quality Assurance
In Unit 1, we learned that quality in education entails desired standards that are deliberately set to be achieved within a given period of time, and that quality assurance makes it possible to achieve those desired standards.

Unless there is constant collection and analysis of data around specific areas of provision, it is not possible to know where an institution stands in terms of its journey towards achieving its desired ends.

So, quality assurance is about using particular instruments to collect reliable data that help an institution understand how well it is performing.

A good quality assurance system uses specific methods, tools and processes to enhance quality.

In this unit, you will learn about the methods, approaches and tools you can use to enhance the quality of education in your context.
Methods and Tools of Quality Assurance

Upon completion of this unit, you are expected to be able to:

1. Describe some of the common methods/approaches used in quality assurance in education
2. Identify common tools used in quality assurance in education
3. Adapt existing quality assurance tools to suit your own context
4. Use quality assurance tools and instruments to enhance the quality of educational provision
Educational institutions use various approaches and tools to quality assure their processes. Some approaches to quality assurance (QA) work better than others. Examples are bureaucratic rather than collegial approaches or outward-looking (external) rather than inward-looking (internal) approaches.

**Bureaucratic Approach**

A bureaucratic approach operates from the top to the bottom, mainly driven by institutional management rather than by academics at the student–teacher interface. It is characterised more by compliance than the quest for self-improvement.

**Inward-looking Approach**

Inward-looking or internal approaches are QA practices that seek to inform stakeholders that are internal to an institution — they are self-enlightening. There is intrinsic motivation to implement such practices, and the prime aim is to identify where improvement is needed. Often, the approach used shows where emphasis is placed in the QA system.

*Click Annexure 4 to learn more about the QA Approach.*
Pause and Reflect

Before moving ahead, think of possible answers to the following question. You can also discuss with your friends or workmates.

Image description: A student thinking.

What are the strengths and weaknesses of the dominant approach to quality assurance in your institution?
Types of Quality Assurance

There are two types of quality assurance:

External Quality Assurance

Internal Quality Assurance

Let’s proceed to understand these two types.
An external quality assurance (EQA) system consists of regulations, policies and practices that take place at the national higher education system level to assure the quality of education programmes and institutions. EQA usually leads to a culture of compliance by institutions and brings about little institutional improvement. Often, institutions take it as a policing mechanism.

For a detailed understanding, watch this video clip that explains external quality assurance and some of its shortcomings.

**Watch Video: External Quality Assurance**

**Video Attribution:** “External Quality Assurance” by Commonwealth of Learning is available under a [CC BY licence](https://creativecommons.org/licenses/by/4.0/).
As highlighted at the end of the video you have just watched on external quality assurance, a sound quality assurance system should also have an internal quality assurance dimension. In internal quality assurance, the task of and responsibility for monitoring quality is placed in the hands of institutions.

Internal quality assurance refers to the integrated institutional system, policies and process that are used by an institution to manage the quality of its core functions of learning, teaching, research and community engagement, as determined by its mission.

Institutions use quality guidelines to conduct regular self-reviews, which lead to drawing up improvement plans. For example, in the European Higher Education Area, Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) were developed, which are used by institutions to enhance quality.

What Do ESG State?

Higher education institutions have a primary responsibility for the quality of their provision and its assurance.
Quality assurance responds to the diversity of higher education systems, institutions, programmes and students.

Quality assurance supports the development of a quality culture.

Quality assurance takes into account the needs and expectations of students, all other stakeholders, and society (European Association for Quality Assurance in Higher Education et al., 2015, p. 8).

The following video explains the value of internal quality assurance in promoting institutional quality.

Watch Video: Internal Quality Assurance

Video Attribution: “Internal Quality Assurance in Education” by Commonwealth of Learning is available under a CC BY-SA licence.
Pause and Reflect

Based on the video you just watched, respond to the questions below. Do the task on your own to check your understanding of internal quality assurance.

Image description: A student thinking.

If your institution has a unit responsible for quality assurance, what are some of the challenges it faces in implementing internal quality assurance? You may want to talk to the people in the unit to understand the challenges.

What solutions do you suggest to address some of these challenges?
It is important to note that external and internal quality assurance (QA) are complementary. While the former is primarily associated with accountability, it can be conducted in such a way that institutional stakeholders come to understand it as part of the system improvement process. Thus, the manner in which QA is handled in a given context determines how institutions will view and implement it.

The internal and external quality assurance in an institution needs to be balanced.
Quality Assurance System

The graphic below illustrates the desirable balance of internal and external quality assurance in an institution.

![Quality Assurance System Diagram](image)

Figure 4. A quality assurance system includes both external and internal quality assurance approaches that result in continuous self-improvement.

Although both external and internal QA are important, the latter stands a better chance of bringing about continuous improvement than the former. This is primarily because internal QA is conducted more regularly and is less accountability driven and more improvement oriented.
In the conclusion section of Unit 1, you learned that quality assurance involves regular collection of data on the various aspects of an institution’s delivery. Appropriate tools are used for this purpose. These may be standardised in the entire national system if the data to be collected involve external quality assurance processes. Usually, they are also standardised at the institutional level to make it easy to implement quality assurance and compile reports uniformly.

Here is where you can learn more about the Quality Assurance Rubric for Blended Learning [PDF]. This is just one example of a quality assurance tool; you will learn about more such tools in Unit 4 of this course.
By its nature, quality is an abstract term, which is why it is so contested. The only way we can objectify it is by making use of agreed tools to measure and thereby quantify it. Two types of tools are used in measuring quality: analytical and facilitation tools.

**Analytical Tools**

According to Ishikawa, (1982), there are seven tools that can be used to analyse and interpret data on quality assurance (Ishikawa, 1982, cited in Mishra, 2006): process flowcharts, graphs, Pareto analyses, fishbone diagrams, scatter diagrams, checklists, and control charts. In this unit, we are not going to discuss these different tools, but you can read about them in Chapter 6 of the following Commonwealth of Learning Resource: Quality Assurance in Higher Education: An Introduction.

Click Annexure 5 for detailed information and uses on analytical tools.
In addition to the analytical tools, there are also process tools in quality assurance.

These involve what people work with:

- To implement quality assurance activities
- To collect data on performance
- To compile reports
- To implement recommendations that come out of data analysis

Such process tools include quality assurance policies, quality assurance standards, reporting templates, and templates for drawing up improvement plans.
In this unit, we learned about methods and tools used in quality assurance in education.

Let’s review the key learning points we covered along the way.

• Some of the tools were initially confined to production processes in industry, where tangible items are produced for consumption by customers. In this context, the industry is concerned about generating products that meet customer expectations — as much as possible, without any defects.

• We have adopted these tools in education, a service industry, where our products are not easily visible and tangible. However, same as in an organisation, we have to meet the key requirement of customer satisfaction. In education, our customer base is very wide, so interests and expectations will vary, making quality education a challenging concept and area to work in.

• We learned about the two broad approaches to quality assurance in education — external and internal quality assurance. The external quality assurance mainly has to do with meeting the expectations of external quality assurance agencies. In this regard, it has limitations in terms of enhancing quality improvement in an institution.
• External quality assurance is still necessary. External quality assurance agencies ensure that some internal quality assurance systems are put in place in institutions. The latter approach has great potential to bring about a quality culture in an institution. A sound quality assurance system should have a balance between external and internal quality assurance.
1. Which of the following ensures that at the end of the process, defective products are not sent out to customers?
   a) Quality assurance
   b) Quality control

2. All of the following can be used as important sources of data for monitoring quality in an institution except:
   a) Learners’ assignment results
   b) Teachers’ records on learner performance
   c) Staff development workshops
   d) Number of female students in the student representative council
Check Your Progress

3. Which of the following best describes the aim of quality assurance?
   a) It makes sure the institution achieves its stated goals.
   b) It aims to keep fees low.
   c) It aims to provide enough computers and books to students and staff.
   d) It aims to offer students a wide range of subjects to choose from.

4. Which of these statements regarding student involvement in the quality assurance plan is false?
   a) Students should be given a survey asking about their expectations for online learning.
   b) Students should be given a course evaluation to see what their experience was like.
   c) Students should know how to contact the instructor or the IT department.
   d) Students should not be part of the quality assurance plan.

5. External quality assurance is not necessary in an educational institution.
   a) True
   b) False

6. A national quality assurance agency can be considered an external stakeholder by an institution.
   a) True
   b) False
Quality Assurance of Blended and Online Learning

Check Your Progress

7. Which one of the following is not true of external evaluation processes by a national quality assurance agency?
   
a) They are based on self-evaluation reports compiled by institutions to be evaluated.
   
b) They largely seek to establish compliance.
   
c) They do not involve people from other institutions.
   
d) They make use of official published quality criteria.

8. External quality assurance agencies usually encourage institutions to set up internal quality assurance systems.
   
a) True
   
b) False

9. Internal quality assurance can be implemented in the smallest academic unit in a university.
   
a) True
   
b) False

10. Professor Johnson developed an online course for his biology students. He asked his colleague at a sister university to review the course first before offering it to his students. This is an example of:
   
a) External evaluation, which leads to a compliance culture.
   
b) Internal review, leading to the compilation of a self-evaluation report.
   
c) Peer review for self-improvement.
   
d) None of the above.
11. Many institutions now use OER in their courses. It is a good idea to evaluate such OER before using them. Which one of the following methods cannot be used to evaluate OER?

a) A carefully designed set of criteria
b) A colleague’s feedback on the suitability and quality of the OER
c) Piloting the OER with potential students
d) Changing the type of open licence on materials

12. Which one of the following is not a relevant tool or instrument for use in quality assurance work in an institution?

a) A set of quality criteria
b) Reporting templates
c) An institutional learning management system (LMS)
d) A quality assurance policy

13. Reporting templates make it easy to standardise quality assurance reports in an institution.

a) True
b) False

14. An institution only needs to develop a quality assurance policy if there is none at the national level.

a) True
b) False
As a quality assurance unit in an educational institution, you need to start worrying about quality assuring the learning journey of your students only when they have started their studies.

a) True
b) False
Unit 3

Quality in Technology-mediated Education
Education is increasingly mediated by technology, despite the apparent resistance to embrace technology from many educational institutions and the wide differences in learners’ access to relevant technology. The Covid-19 pandemic and its associated restrictions on movement and physical contact resulted in the sudden and unplanned closure of educational institutions for the greater part of 2020. This development catalysed the adoption and use of technology to support new forms of teaching and learning.

However, it cannot be overemphasised that education institutions had started using technology for teaching and learning long before Covid-19. Virtually all institutions in all countries had already started tinkering with one form of technology or another to try and enhance the quality of teaching and learning. The advent of Covid-19 catalysed this practice. This development brought quality issues to the fore, as many people raised concerns about how learning was taking place using technology.
In this unit, we will learn about the different models and frameworks for quality assuring technology-mediated education. These models will show you important aspects of technology-mediated teaching and learning that should be quality assured.
Upon completion of this unit, you are expected to be able to:

1. Identify and explain the different types of technology-mediated delivery modes used in teaching and learning

2. Explain quality issues that are involved in technology-supported educational delivery

3. Describe the various models and frameworks for assuring the quality of blended and online learning

4. Apply some of the models and frameworks for the quality assurance of blended and online learning
Before going through this section, watch the following video that highlights the impact of technology on education.

Watch Video: Influence of Technology on Teaching and Learning

Video Attribution: “Influence of Technology on Teaching and Learning” by Commonwealth of Learning is available under a CC BY-SA licence.

The use of technology in education is fast gaining currency. However, this phenomenon is not new, as various forms of technology have been in use in education for several decades. For example, the use of television and radio broadcasts to support distance learning. These technologies were popular in education in the 1960s (Nwaerondu & Thompson, 1987). They were followed by Computer-assisted Instruction (CAI), also known as Computer-based Training (CBT), which refers to instruction presented through a computer.
Some of the positive features of Computer-assisted instruction CAI programmes are that they:

• Interact with learners and can illustrate a concept through attractive animation, sound and demonstration

• Allow students to progress at their own pace and work individually or solve problems in a group

• Provide immediate feedback, letting students know whether their answer is correct; if the answer is not correct, the programme shows students how to correctly answer the question

• Offer a different type of activity and a change of pace from teacher-led or group instruction (Wawasan Open University, n.d.)

Why are we discussing all these technologies from the past?

To answer this question, let’s learn about how to use old and new technologies for learning.
Quality Assurance of Blended and Online Learning

Using Old and New Technologies for Learning

In this unit, we will not focus on older educational technologies since they are no longer popular in teaching and learning. They have been replaced by new information and communication technologies that are Web based and that allow greater social interaction in the learning process.

The point of mentioning the old technologies is to capture earlier principles of learning that seem to have spanned different generations of technology. These principles include:

- Communicating content to the learner
- Learner-centred approaches that promote active learning
- The importance of timely feedback
- The individual pace of learning

These features have implications for the quality of learning and are still cherished where modern technologies are used in teaching and learning. Observing them in blended and online course design and delivery enhances the quality of technology-mediated learning.
Numerous frameworks for the quality assurance of technology-mediated teaching and learning are available. Many are already in use in many educational contexts. In fact, some of them developed out of practices in progressive institutions that showed concern about maintaining quality when using technology in teaching and learning.

In this section, we cover examples of frameworks for assuring the quality of blended and online learning. We hope these frameworks will show you how quality can be built into the design and delivery of blended and online teaching and learning.
Quality Assurance of Blended and Online Learning

Quality in Online Programmes and Courses

Although certain generic quality aspects apply to all modes of delivery, there are unique aspects peculiar to blended and online learning. Where learners learn for part or all of their study time away from the teacher and using technology, there are additional quality aspects that have to be considered to ensure that effective learning takes place.

Examples of Quality Aspects

Examples of these aspects are:

• The types of learning resources learners engage with
• Learning activities they do
• The motivation provided to learners
• The feedback they receive while learning independently

Such aspects need clear quality guidelines whenever technology-mediated learning is used.

Quality Assurance Guidelines and Criteria

Many quality assurance guidelines and criteria have been developed for online learning. Some of these quality criteria were developed through practice, others out of researching good practice. Based on their review of the quality assessment of distance and online delivery in a large number of institutions around the world, Jung and Latchem (2012) conceptualised the following points about the quality assurance of distance and online learning:
The common trend in most institutions is that more and more of the good-quality programmes traditionally offered face-to-face and formally accredited are being moved to blended and online delivery modes. This transition is not necessarily matched by corresponding quality assurance processes that ensure the quality of provisioning remains high. Either institutions are in too much of a hurry to pay particular attention to quality or there is a lack of capacity to quality assure such technology-mediated learning.

The result is a watering down of the quality of educational offerings, which, in turn, has a negative impact on public perceptions of these technology-enhanced delivery modes. In many countries, there is growing public concern about the quality of programmes that are offered fully online. In this unit, we emphasise the importance of implementing rigorous quality assurance measures for all aspects of blended and online delivery.

The Common Trend

- Focus on outcomes as the leading measure of quality
- Take a systemic approach to quality assurance
- See QA as a process of continuous improvement
- Move the institution from external controls to an internal culture of quality
- Poor quality has very high costs, so investment in quality is worthwhile (Jung & Latchem, 2012)
In Unit 1 of this course, we highlighted the contested nature of quality, especially in education. Our understanding of quality has implications for how we quality assure learning, even when we use technology. Bates (2019) argues that quality in learning means using teaching methods that successfully help learners develop the knowledge and skills they will require in a digital age. His view of quality is that it should be linked to learning outcomes, which, in turn, should be linked to the demands of the digital age.

The following five aspects form what he considers to be the foundations for quality teaching in an institution:

- Institutional and degree accreditation
- Internal (academic) quality assurance processes
- Differences in quality assurance between traditional classroom teaching and online and distance education
- The relationship between quality assurance processes and learning outcomes
- “Quality assurance fit for purpose” — meeting the goals of education in a digital age (Bates, 2015)

Click Annexure 6 to learn more about these aspects.
To enhance quality in technology-mediated learning, Bates proposes using a nine-step approach that helps improve the quality of the design of blended and online programmes:

Step 1: Decide how you want to teach.
Step 2: Decide on mode of delivery.
Step 3: Work in a team.
Step 4: Set appropriate learning goals.
Step 5: Master the technology.
Step 6: Build on existing resources.
Step 7: Design the course structure and learning activities.
Step 8: Communicate, communicate, communicate.
Step 9: Evaluate and innovate.

Although the nine steps are given in linear form, in practice, they actually operate in parallel. For in-depth discussion on the nine steps, we recommend you spend some time on Chapter 12 of Tony Bates’s book *Teaching in a Digital Age*.

Click Annexure 7 to learn more about these steps and the Quality message.
In their guide *Designing Learning and Assessment in a Digital Age*, Jisc gives a useful framework for how to achieve quality in blended and online learning. The organisation encourages designers to think of the following questions whenever they design online learning:

- What are your institution’s strategic aims for learning, teaching and assessment?
- What points for improvement have been identified in programme/module reviews or external inspection reports?
- What learning outcomes are you trying to achieve?
- In what context will the learning take place?
- What technologies are available to enhance learning?
- What support do you need?
- What do you already do well?
By answering the above questions, you clarify the approach you choose to use in your blended or online course. The model provides a four-stage process that a provider should go through in planning for online learning.

These stages are:

- Discover
- Dream
- Design
- Deliver

**Figure 5.** The four-stage process (Ferrell et al., 2018)

Click Annexure 8 to learn more about the four stages.

**Jisc’s Model – A Good Example**

The Jisc model is a good example of the importance of planning when an institution goes the blended or online route.

Such technology-enhanced learning should not be introduced overnight, without any pre-planning.

Quality online learning requires thorough planning and then constant review once programmes are rolled out.
Khan (2001) believes that when using technology in teaching and learning, one has to carefully analyse how to use the attributes of the Internet and digital technologies in conjunction with instructional design principles. The interplay of digital technologies and the instructional design principles used gives rise to a particular online environment that can be conducive to or a constrain to learning. Thus, knowledge of the affordances of available technologies and of appropriate learning design principles is important if one is to create an enabling online learning environment for a distributed class.

It is always useful to consider some of the issues that affect the design of an online learning environment. According to Khan, important factors that affect the quality of online courses include pedagogical, technological, interface design, evaluation, management, resource support, ethical and institutional factors (Khan, 2010). These factors constitute Khan’s Eight-Dimensional e-Learning Framework, which is illustrated in Figure 6.

Figure 6. “E-learning, blended learning framework and model” by Khan (2001) is licensed under a CC BY-SA 3.0 licence.

Click Annexure 9 to learn more about the eight dimensions.
To maximise learning gains and motivate learners to engage with content, learning should be designed in such a way that **social presence**, **teaching presence** and **cognitive presence** become essential elements that facilitate successful educational experiences in online distance learning environments. Technologies that are available today, like screencasts and voiceover recordings, have immense potential that introduces social and teacher presence.

For online learning to be effective, learners need to make adjustments with respect to these three presences.

*Click Annexure 10 to know what adjustments learners need to make.*

Drawing on available technologies will facilitate deep learning by bringing together these three presences in online learning experiences. We need to mention that technical skills to use these technologies appropriately are needed if the benefits are to be realised.

Figure 7 illustrates the interplay of the three presences in an online learning environment.
Quality Assurance of Blended and Online Learning

Of importance to note is that the three presences illustrated in Figure 7 are actually underpinned by learning theories that advocate for learning as:

- A social activity, an activity that at some point requires the support of a more knowledgeable other (Aminesh & Asl, 2015) and

- A cognitive process that involves organising knowledge, information processing and decision-making (Asubel et al., 1979).

In online learning, students direct and take responsibility for their own learning. They collaborate with their peers, their teacher and other relevant people in their environment, and in the process, they construct and confirm meaning.

The Community of Inquiry Framework clearly shows key learning components technology should facilitate in an online environment. The design of such learning is therefore critical if the technology is to leverage deep learning.
In addition to the quality frameworks, a lot of work has been done to develop quality standards and criteria that are used to assure the quality of technology-mediated teaching and learning.
One of the important quality standard frameworks for online teaching and learning, which has been widely used in the USA, is the National Standards for Quality Online Teaching. These standards are one of three sets within the National Standards for Quality Online Learning, which also include the National Standards for Quality Online Courses (2011) and the National Standards for Quality Online Programmes (2009).

The quality standards, which are illustrated in Figure 8, were developed by a group of American non-profit organisations with an interest in promoting the quality of online education. These organisations, which included Quality Matters (QM) and the Virtual Learning Leadership Alliance (VLLA), led a broad-based effort to revise and maintain the National Standards for Quality Online Learning, building upon the work started by the International Association for K-12 Online Learning (iNACOL, 2011).

Figure 8. National Standards for Quality Online Learning (Source: International Association for K-12 Online Learning, 2022).
The purpose of these standards is to help educational institutions evaluate and improve online courses, online teaching and online programmes. Although they were developed for the K-12 system in the USA, which is at the schooling level, the three sets of quality standards can also be used at the tertiary level. Each defined quality standard has a number of indicators under it, which guide the user in identifying the key ingredients of the quality standard. In this course, we focus on the National Standards for Quality Online Teaching (NSQOT). The NSQOT are organised into the following eight categories, each of which has a set of indicators.

- **Standard A: Professional Responsibilities**
- **Standard B: Digital Pedagogy**
- **Standard C: Community Building**
- **Standard D: Learner Engagement**
- **Standard E: Digital Citizenship**
- **Standard F: Diverse Instruction**
- **Standard G: Assessment and Measurement**
- **Standard H: Instructional Design**

To help you understand the NSQOT better, we give some more details about what is included under each of the eight categories listed above. The content in this section is paraphrased from the National Standards for Quality Online Teaching: Version 2 (2011).
Standard A: Professional Responsibilities

Under this standard, the online teacher is expected to demonstrate professional responsibilities in keeping with the best practices of online instruction (National Standards for Quality Online Teaching, 2019, p. 8). There are nine indicators under this standard, which guide users on what is expected under the standard. Examples of aspects included in some of the indicators are that the online teacher:

• Should be a reflective practitioner
• Pursues knowledge and skills related to online pedagogy
• Serves as an ambassador of knowledge to stakeholders
• Demonstrates knowledge of the role of online learning in preparing learners to Participate as global citizens
• Demonstrates an understanding of effective time management strategies (National Standards for Quality Online Teaching, 2019, p. 8)

Standard B: Digital Pedagogy

In this standard, the online teacher is expected to employ sound digital pedagogy to facilitate teacher presence, social presence and learner presence. There are five indicators under this standard, stating the online teacher should:

• Use digital pedagogical tools that promote effective communications and interaction
• Use appropriate technologies and resources that meet the needs of individual learners
• Use digital tools to motivate learners and monitor their engagement with the course
Quality Assurance of Blended and Online Learning

• Support learners by addressing basic technical challenges faced by learners in a timely way

• Create a safe digital learning environment for all learners, which entails knowledge of online learning etiquette

**Standard C: Community Building**

Good practice in this standard entails facilitating interactions and collaboration to build a supportive online community that fosters active learning. Under this quality standard are five indicators:

• Using learner-centred approaches in teaching

• Setting norms and expectations for online interactions

• Managing learners of diverse cultural backgrounds to create an online learning community

• Promoting the development of higher-order thinking skills among learners

• Meeting the learning needs of learners from different socio-economic and cultural backgrounds

**Standard D: Learner Engagement**

The essence of this standard is for the online teacher to promote learner success through interacting with learners and other stakeholders and facilitating meaningful learner engagement in learning activities. The learner engagement standard has seven indicators that show what the online teacher should consider when planning learner engagement:

• Using digital tools that help promote individual learner’s growth
• Promoting learner agency

• Enabling a learner-customised pace of learning and meeting learners’ needs

• Using various forms of communication to forge positive teacher–learner relationships

• Promoting learning by providing timely feedback

• Providing sufficient learning resources and ensuring that learners perform their tasks well and in time

• Regular communication with stakeholders on learner progress and on strategies for supporting learner engagement

**Standard E: Digital Citizenship**

This standard is about modelling, guiding and encouraging legal, ethical and safe behaviour related to technology use. The four indicators included under this quality standard are that the online teacher should:

• Facilitate learning experiences that model and promote digital citizenship

• Establish standards for learner behaviour that are designed to ensure academic integrity and appropriate use of the Internet and that adhere to programme-level policies

• Model and comply with intellectual property policies and fair-use standards, and reinforce their use by learners
Quality Assurance of Blended and Online Learning

• Implements policies, including federal, state and programme-level policies. This last indicator is particularly applicable to the American context, for which the guidelines were specifically developed, although it may also be relevant in some other contexts.

**Standard F: Diverse Instruction**

This standard states that the online teacher should personalise instruction based on the learners’ diverse academic, social and emotional needs. It is about customising instruction to suit the needs of a wide range of learners in a course. There are seven indicators under this standard:

• Monitoring learner progress with a view to providing timely support to those that need it, including learners with special needs

• Identifying and implementing any changes required to accommodate the needs of learners

• Making use of student data to identify the kind of support students need

• Providing learning materials in various formats to cater for different student needs

• Bringing in assistive technology to support learners with special needs

• Providing for learners’ growth and enrichment

• Providing a forum for sharing and promoting the varied skills learners bring to the online learning environment
Quality Assurance of Blended and Online Learning

Standard G: Assessment and Measurement

This standard addresses the systematic measuring of student performance. The online teacher creates and/or implements assessments in online learning environments in ways that ensure the validity and reliability of the assessment instruments and procedures. The teacher measures learner progress through assessments, projects and assignments that meet standards-based learning goals and evaluates learner understanding of how these assessments measure achievement of the learning objectives. The seven indicators defined under this standard are:

• Use of appropriate assessment tools that allow students to demonstrate mastery of content
• Validity and reliability of assessment
• Promotion of learner integrity and security of assessment
• Use of a variety of assessment strategies
• Use of both formative and summative assessment
• Alignment between assignments, assessments and course outcomes
• Using assessment data to inform personalised instruction

Standard H: Instructional Design

The last standard is on the design of instruction, and it states that the online teacher curates and creates instructional materials, tools, strategies and resources to engage all learners and ensure the achievement of their academic goals. It has the following six indicators:

• Learning experiences are designed in such a way that learners use technology to effectively engage with content.
Quality Assurance of Blended and Online Learning

- A formative approach is used to design the learning process.
- Multimedia is incorporated in designing learning.
- Subject-specific and developmentally appropriate digital learning resources are built into online learning modules.
- Online courses are reviewed regularly to ensure alignment with learning outcomes and course expectations.
- Course content is aligned with associated standards-based learning goals.

The National Standards for Quality Online Teaching are user-friendly that they are stated in an unambiguous style, they have easy-to-follow indicators, and examples are given for each indicator in order to make the application of the standards easy.
To support quality assurance agencies in evaluating online courses and help institutions design high-quality e-learning courses, the European Association for Quality Assurance in Higher Education (ENQA) working group on quality assurance and e-learning developed a set of quality guidelines. The working group started by systematically examining both the applicability and the relevance of existing standards as defined in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (European Association for Quality Assurance in Higher Education et al., 2015).

The result of the systematic review was two sets of related quality guidelines and standards, one for institutions (Considerations for Higher Education Institutions) and the other for external quality agencies (Considerations for QA Agencies). The former guidelines were mainly aimed at enhancing the internal quality assurance processes of institutions, and the latter were meant to be used for external quality assurance processes. For each standard, specific elements of e-learning that should be considered were identified, while indicators for fulfilling the standard in question were also given.

Click Annexure 11 to view elaborate explanations for each quality standard and its quality indicators.
It is one thing to have quality standards in place and another to use them in ways that make a difference in the quality of online or blended learning. Effective use of quality standards should always happen at the smallest academic level, on a regular basis and in a systematic way. Academics who design, develop and deliver courses should use quality standards to check the efficacy of their work. They can do this individually or as a small departmental team or even with a colleague.

Let’s recall what you learned about peer reviews in Unit 1.

**Peer-reviews**

As you learned in Unit 1, peer reviews are an important quality enhancement approach at an institution. Using quality standards and criteria in conducting such peer reviews will go a long way in improving the quality of blended and online learning, and of any delivery mode, for that matter. When such self-reviews take place from the lowest academic levels, quality assurance becomes an organic process in an institution, with academics assuming full ownership of the process. This enacts a quality culture in the institution where nothing passes through the cracks without undergoing quality scrutiny. Where there is a vibrant quality assurance academy, the quality standards become dynamic instruments that are constantly improved to keep them relevant.
For the quality assurance regime of an educational institution to be complete, as was highlighted in Unit 1, internal quality assurance needs to be supported by external quality assurance processes. The latter also makes use of agreed quality standards to review institutional processes and confirm that arrangements for acceptable quality assurance are implemented in an institution.

**Quality Assuring Technology-mediated Teaching and Learning**

To consolidate what you have learned in this unit, watch the following video to get hints on how to quality assure technology-mediated learning.

**Watch Video: Quality Assuring Technology-mediated Teaching and Learning**

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**Video Attribution:** “Quality Assuring Technology-mediated Teaching and Learning” by Commonwealth of Learning is available under a [CC BY-SA licence](https://creativecommons.org/licenses/by-sa/).
In this unit, we learned about the different quality frameworks and quality standards and criteria we can use to strengthen the quality of blended and online learning.

Let’s review the key learning points we covered along the way.

- **Tony Bates’ Nine-step Framework** gives the stages you should go through when you want to deliver technology-mediated learning.

- The **Jisc Model of Effective Practice with E-learning** gives seven guiding questions you should seek to answer when you design for online learning.

- **Badrul Khan’s Eight-dimensional E-learning Framework** gives you key quality dimensions to consider in order to enhance the quality of online learning.

- The **Community of Inquiry Framework in Online Learning** developed by Garrison, Anderson and Archer (2000) emphasises the role of social presence, teaching presence and cognitive presence in online teaching and learning.
You also learned about quality standards and guidelines for quality assuring blended and online learning. The National Standards for Quality Online Teaching (iNACOL) gave you valuable hints on quality guidelines and standards you can use to enhance the quality of your technology-enhanced offerings.

The ENQA Standards and Guidelines for Quality Assurance developed for the European higher education system also provided you with useful quality guidelines for blended and online learning.

The main message in this Unit is that there are various quality frameworks and quality standards and criteria for ensuring the quality of blended and online learning. You should draw on these resources to enhance the quality of your technology-mediated courses. Do not compromise the quality of provision, as this erodes the value of education.
Quality assurance standards for face-to-face delivery are always exactly the same as quality standards for online learning.

a) True  
b) False  

2. When you move a face-to-face course online, it is not necessary to change the way you assess students.

a) True  
b) False  

3. In blended learning, learners always have to be doing teacher-designed assignments during their off-campus learning activities.

a) True  
b) False
4. Online programmes do not necessarily need to be accredited if they were accredited as face-to-face programmes.
   a) True
   b) False

5. When you use Tony Bates’ Nine-Step Framework, you should strictly follow the sequence of the steps as given in framework.
   a) True
   b) False

6. The ENQA Standards and Guidelines for Quality Assurance can only be used for external and not internal quality assurance.
   a) True
   b) False

7. In which of the following quality frameworks are teaching presence, social presence and cognitive presence dominant?
   a) In the Badrul Khan Framework
   b) In the Jisc Framework
   c) In the Community of Practice Framework
   d) In the Nine-Step Framework by Tony Bates
8. Match the following quality dimensions with the correct quality framework by checking the respective buttons.

<table>
<thead>
<tr>
<th>Quality Frameworks</th>
<th>Tony Bates’s Nine Steps</th>
<th>Jisc</th>
<th>Badrul Khan</th>
<th>Community of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover who you are developing the course for</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in a team</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build on existing resources</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dream – what are you aiming to achieve?</td>
<td></td>
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<td></td>
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<tr>
<td>Set appropriate learning goals</td>
<td></td>
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<tr>
<td>Pedagogical aspects</td>
<td></td>
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<tr>
<td>Interface design</td>
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<tr>
<td>Resource support</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. The National Standards for Quality Online Learning were developed primarily for use at:
   a) Schooling level
   b) Community college level
   c) University level
   d) All levels of education

10. There is no need of thinking about class size when you teach online.
    a) True
    b) False

11. In their framework for online learning, Jisc does not include the technology aspect in the questions they encourage providers to think about.
    a) True
    b) False

12. According to Badrul Khan’s e-Learning Framework, which of the statements is true about creating an enabling online learning environment?
    a) Knowledge of the affordances of available technologies
    b) Knowledge of appropriate learning design principles
    c) A combination of knowledge of the affordances of available technologies and appropriate learning design principles
    d) None of the above
Check Your Progress

13. You cannot use guidelines that were developed in another country to assure the quality of your online course.
   a) True
   b) False

14. Whichever quality assurance framework you use, it is:
   a) Best to have external input into your work.
   b) Best to use the framework individually.
   c) Advised that the external agency should not use the same framework.
   d) Not necessary to check the licensing conditions of the published framework.

15. External quality assurance should be concerned with all of the following except:
   a) Strengthening the internal quality assurance systems of institutions
   b) Capacity building of institutions in implementing quality assurance
   c) Ensuring that quality standards developed in other countries are not used by local institutions
   d) Alignment of programmes of study with the national framework levels
Unit 4

COL’s Quality Assurance Tools
Over the years, Commonwealth of Learning (COL) has supported many institutions and governments across the Commonwealth countries in adopting quality assurance practices for distance and online learning. This is mainly because of the organisation’s commitment to not only support access to education but also ensure that the education provided is of good quality.

Through its quality-support work, COL has developed several tools that are meant to be used by institutions to enhance educational quality. These tools are openly licensed and therefore free for use by anyone to enhance the quality of education. Familiarisation with these tools will help you save time by avoiding reinventing the wheel, as you can simply adapt the existing tools for your purposes.

This unit has five sections that highlight some of COL’s quality assurance (QA) tools. The sections guide you on how to use these tools effectively in enhancing the quality of technology-mediated teaching and learning. For each tool covered in the unit, there is a video that explains the features of the tools and how you can use them.
Quality Assurance of Blended and Online Learning

Learning Objectives

Upon completion of this unit, you are expected to be able to:

1. Recognise the features of the quality assurance guidelines and tools offered by COL

2. Critically examine the process to adopt the guidelines for developing quality MOOCs, OER and blended learning

3. Use the tools to improve the quality of technology-enabled learning
Massive open online courses (MOOCs) have become very popular as educational innovations with great potential to increase access to and improve the quality of education. While there are some advantages of using MOOCs, there are certain limitations to their usage that you need to consider.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MOOCs are short courses that one can complete over a fairly short period of time.</td>
<td>• The opinion is divided on the quality of MOOCs, especially given that learning is entirely independent, with no support.</td>
</tr>
<tr>
<td>• They can be done at one's own pace, and they have a lot of flexibility in terms of the time one can take to complete them.</td>
<td>• One of the main concerns raised about MOOCs is the extremely low completion rate.</td>
</tr>
<tr>
<td>• Also, people choose which MOOCs to take depending on their needs.</td>
<td></td>
</tr>
</tbody>
</table>

It is in light of these concerns that COL has developed quality guidelines that can be used by various stakeholders with an interest in MOOCs – to improve the quality assurance of such innovations. Here is where you can download a copy of Guidelines for Quality Assurance and Accredation of MOOCs [PDF].
The Guidelines are explicit on the **purpose** and **perspective** of MOOCs as key variables determining how the quality of a MOOC is perceived. **Purpose** refers to the reason(s) the MOOC has been developed and facilitated, and **perspective** refers to who is measuring the quality (COL, 2016). Different stakeholders have different interests and expectations of these MOOCs.

It was, therefore, necessary to make the distinction between varied stakeholder interests in the development of the guide so as to have guidelines that speak to the different stakeholders such as governments, accreditation agencies, institutions and learners.
Quality Assurance of Blended and Online Learning

Quality Metrics

In developing the guidelines, a range of metrics that can be used to measure quality at different stages of the MOOC lifecycle is identified. These metrics are classified into three categories: **before taking the MOOC (presage metrics)**, **during the course of taking the MOOC (process metrics)** and **after taking the MOOC (product metrics)**. Measures for each of the stakeholders are therefore defined under each of the three metrics.

Presage Metrics

These are used to measure quality before learning. Typical metrics include instructional design quality and media quality.

Process Metrics

These metrics measure quality during learning. These metrics are not as well developed as presage metrics but offer real insight into whether the MOOC supports learning.

Product Metrics

These metrics measure quality after learning. Typical measures include completion rates or employment statistics. These metrics are commonly used in conventional, campus-based education, but they are less useful for MOOCs (COL, 2016).

*Click Annexure 12 to view the guidelines for different stakeholders.*
Quality Assurance and Accreditation of MOOCs

Before going through this section, watch the following video which highlights the impact of technology on education.

Watch Video: Quality Assurance and Accreditation of MOOCs

Video Attribution: “Quality Assurance and Accreditation of MOOCs” by Commonwealth of Learning is available under a CC BY-SA licence.
As the use of OER became more and more prominent in education, COL developed a framework for quality assuring OER. The framework provides criteria that end-users, who may also be creators of OER, can use in deciding on the quality of OER. The development of the quality guidelines started with an extensive review of more than 30 frameworks/lists of criteria for quality assurance in related fields.

**Standards in the COL Quality Assurance for OER Tool**

The COL Quality Assurance for OER Tool consists of 38 criteria grouped under four broad headings:

1. Teaching and learning
2. Information and content
3. Presentation

4. Technology

Click Annexure 13 to understand these criteria with the help of the TIPS Framework for OER Quality.

Here is where you can view a copy of OER TIPS version 2.0.

Quality Assurance for OER

The Toolkit has a four-point scale that can be used for reviewing OER:

1. Not visible
2. Shows little evidence
3. Fairly demonstrates this criterion
4. Very much demonstrates this criterion

Developers of OER can also use the same scale to assure quality when they develop OER. The following video summarises what you have just learned about the quality assurance of OER.
Watch Video: Quality Assurance for OER

Video Attribution: “Quality Assurance for OER” by Commonwealth of Learning is available under a CC BY-SA licence.
As highlighted in Unit 1, blended learning refers to a whole range of ways in which people mix conventional face-to-face and online learning in a complementary manner. This mode of delivery is widely used in education, so it is important that rigorous quality assurance processes be implemented to ensure that the quality of education remains comparable to traditional face-to-face education.

COL Plays a key role in enhancing the quality of blended learning.

The QA Rubrics

Education institutions need to convince the public that going the blended route does not amount to neglecting students and reducing the amount of learning.

To support institutions in upholding the quality of the design and delivery of blended learning, COL developed a quality assurance tool for this mode of delivery, the **Quality Assurance Rubric for Blended Learning**.

In this section, we highlight key features of the tool and how you can use it to enhance the quality of blended learning in your institution.
The Quality Assurance Rubric for Blended Learning was developed by the Commonwealth of Learning as part of a bigger project implemented in East Africa, the Partnership for Enhanced Blended Learning (PEBL) project. The PEBL project involved supporting a network of institutions located in East Africa to move toward utilising more blended learning (Perris & Mohee, 2020).

Here is where you can access the document Quality Assurance Rubric for Blended Learning.

Click Annexure 14 to know the purpose of the rubric.
Rubric Guidelines – Formative and Summative Assessments

The rubric is meant to be used for doing both formative and summative assessment of a blended learning course. According to the rubric guidelines, it can be used from planning to implementation for a given blended learning course.

Formative Assessment

At the formative stage, the rubric can be used to ensure that various quality elements are being carefully considered, embedded and refined in a course that is being developed.

For example, course developers are reminded to build into their courses such critical aspects as:

- Defining appropriate learning outcomes that promote higher-order thinking skills
- Aligning course content, assessment and learning outcomes in the early stages of course development

Summative Assessment

At the summative assessment stage, a fully developed blended course can be reviewed by peers using the rubric, and areas that require improvement can be identified.
Like in many quality assurance criteria used for programme accreditation, the rubric has four qualifiers that serve as checks to verify whether a certain quality element has been met. These qualifiers are listed below.

**Fully Met**

This is filled in when the quality element has been fully achieved.

**Partially Met**

This is filled in when the quality element is in progress. Testing is underway, and some updating has been carried out.

**Not Met**

This is filled in when no implementation has been carried out.

**Not Applicable**

This is filled in when the quality element is not applicable (or relevant).
An Important Note on Rubric

- It is important to note that when you use the rubric to assess a blended course, quite a lot of qualitative data are collected. For example, improvements that are needed per quality element should be specified where the quality element is not fully met.

- A summary report should also be given at the end of each quality standard with recommendations for the overall improvement of the standard. Useful feedback is thereby provided based on the assessment results, which are used to improve the course.

The following video consolidates what you have learned about assuring the quality of blended learning.

Watch Video: Quality Assurance Rubric for Blended Learning Courses

Video Attribution: “Quality Assurance Rubric for Blended Learning Courses” by Commonwealth of Learning is available under a CC BY-SA licence.
The implementation of technology-enabled learning (TEL) has become mission-critical in many institutions as a way of ensuring the delivery of quality programmes and courses. Substantial investment is being made in mainstreaming technology in the teaching and learning processes. However, this is a new development that many staff and students are not yet familiar with. Ensuring institutional readiness for TEL is critical if the benefits of using this mode of delivery are to be achieved.

To support institutions in achieving quality through benchmarking their TEL implementation, COL provides a TEL Benchmarking Toolkit. This toolkit is based on COL’s three pillars for the successful implementation of TEL in an institution – Preparation, Development and Maturation.

**Three Pillars of Technology-Enabled Learning (TEL)**

Each phase of the toolkit is associated with activities that need to happen as the institution implements TEL, and these activities inform benchmark domains in the toolkit.
Figure 9. COL’s three phases of TEL implementation (Source: Sankey & Mishra, 2019, p. 5).

Click Annexure 15 for detailed information about the benefits, benchmarks and usage of the toolkit.
Summary

In this Unit, we learned about the importance of improving the quality of your technology-enhanced teaching and learning through benchmarking.

Let’s review the key learning points we covered along the way.

• Benchmarking is a quality process used to evaluate performance by comparing institutional practices to sector good practices in other institutions.

• COL developed the **Benchmarking Toolkit for Technology-Enabled Learning**, which you can use for benchmarking the implementation of TEL in your institution. This toolkit is based on the three pillars of **Preparation, Development** and **Maturation**.

• The toolkit consists of ten quality benchmarks, each with four to six performance indicators that can be scored on a **five-point scale**. Qualitative data can also be collected on performance indicators. Once all the indicators under each benchmark are scored, an average score for the benchmark is calculated and recorded on a **Radar Chart**.
Quality Assurance of Blended and Online Learning

- The summary scores for the benchmarks recorded on the chart give a clear picture of where improvements are needed in your institution. This information is also augmented by qualitative comments that are given in the Summary Comments, Reflections and Future Actions section of the toolkit.

Watch the following short video clip, which summarises the importance of benchmarking TEL and how to use the COL benchmarking tool to enhance the quality of your blended and online learning.

**Watch Video: Benchmarking of Technology-enabled Learning**

[Video]

*Video Attribution:* “Benchmarking of Technology-enabled Learning” by Commonwealth of Learning is available under a [CC BY-SA licence](https://creativecommons.org/licenses/by-sa/).
1. In quality assuring MOOCs, which of the following aspects you must always consider?
   a) Purpose and perspective
   b) Duration and level of difficulty
   c) Developer and country of origin
   d) Quizzes and assessment tasks in the MOOC

2. All of the following are quality headings in the Quality Assuring OER Tool, except
   a) Teaching and learning processes
   b) Information and material content
   c) Assessment systems
   d) System technical and technology
3. The COL Quality Assurance for OER Tool provides guidelines to teachers on creating and publishing their own OER. All of the following are benefits of creating and publishing OER except that:
   a) Teachers who create OER empower themselves as authors.
   b) Teachers who create OER raise their self-esteem and social status.
   c) Teachers who create OER make a lot of money out of the resources.
   d) Teachers who create OER help raise the profile of their school.

4. The Toolkit recommends using the same type of licence as in the original OER whenever users create new versions of the OER.
   a) True
   b) False

5. There is a standard recommended balance of face-to-face and online learning in blended learning.
   a) True
   b) False
6. The Quality Assurance Rubric for Blended Learning Developed by the Commonwealth of Learning can be used as both a formative and a summative assessment tool. As a summative assessment tool, the rubric can only be used to evaluate a blended course by national quality regulators.
   a) True
   b) False

7. The COL Rubric discourages the use of open educational resources (OER) in the designing of blended learning courses.
   a) True
   b) False

8. For each category of the Toolkit, you must always include areas identified as needing improvement as well as recommendations in the review report.
   a) True
   b) False

9. The Rubric is silent on how students should be supported in blended learning.
   a) True
   b) False
10. Which one of the following statements about benchmarking TEL is not true?
   a) It is a method of quality assuring courses delivered through modes like blended and online learning.
   b) It is underpinned by the motivation to improve TEL implementation.
   c) It is a way of identifying weaknesses that need to be improved in an institution.
   d) It is an undertaking that takes place entirely within an institution, without involving outside people.

11. The COL Benchmarking Toolkit outlines the following steps that are followed when conducting external peer reviews for benchmarking technology-enabled learning. Arrange the steps in the correct order in which they are implemented during the peer-review process:
   a) Members of the peer-review team individually review the self-review benchmark report with evidence from the institution.
   b) The peer-review team compiles a report with recommendations and shares it with senior management of the reviewed institution.
   c) The peer-review team conducts a site visit.
   d) Comments from the peer-review team are sent to the institution for clarification/response, giving an opportunity to further substantiate the original ratings.
   e) The institution to be reviewed conduct a self-review and compiles a self-evaluation report.
Check Your Progress

12. For an institution to implement TEL effectively, the following three stages should be followed. Arrange the stages in the correct order in which they should be implemented:

   a) Development
   b) Maturation
   c) Preparation

13. Match the following activities with the correct phase of TEL implementation:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Phases of TEL Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline survey</td>
<td>Preparation</td>
</tr>
<tr>
<td>Policy development</td>
<td></td>
</tr>
<tr>
<td>Strengthening infrastructure</td>
<td></td>
</tr>
<tr>
<td>Blended course development</td>
<td></td>
</tr>
<tr>
<td>Evaluation of blended learning</td>
<td></td>
</tr>
<tr>
<td>Community of practice</td>
<td></td>
</tr>
</tbody>
</table>
14. You only report score data that you record on a Radar Chart when you benchmark using the COL Benchmarking Toolkit for TEL.
   a) True
   b) False

15. External peer-review team activities are always completed remotely using online technologies.
   a) True
   b) False
Quality Assurance of Blended and Online Learning

References


Quality Assurance of Blended and Online Learning

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References


References


References


Figure 1. A venn diagram showing overlaps between distance education, online learning, and blended learning.

Figure 2. Intersection of Technologies used in higher education.

Figure 3. Three types of learning modes and how approaches overlap between them. Face-to-Face courses and blended courses can both integrate ICT in teaching and learning. Blended courses and distance/online courses both can use open and distance learning.

Figure 4. A quality assurance system includes both external and internal quality assurance approaches that results in continuous self-improvement.

Figure 5. The four-stage process (Ferrell et al., 2018).

Figure 6: E-learning, blended learning framework and model" by Khan (2001) is licensed under a CC BY-SA 3.0 licence.

Figure 7: A Venn diagram depicting the three types of presences in an online learning environment. (Source: Garrison et al., 1999).
Figure 8: National Standards for Quality Online Learning (Source: International Association for K-12 Online Learning, 2022).

Figure 9: COL’s three phases of TEL implementation (Source: Sankey & Mishra, 2019, p. 5).
Annexure 1

Quality as Standards that Are Set

Educational institutions are often judged according to student success rates, as determined by pass rates in final year-end examinations. At the beginning of an academic year, an institution may set certain goals to achieve in terms of numbers of students who pass public examinations at the end of the year, or first-class passes in its examination class. With all other factors held constant, this becomes an important quality goal to work towards throughout the course of the year. The target to be achieved is the institution’s perception of quality in terms of student success. After examinations are written and results are out, the institution evaluates the extent to which it achieved its set goal. Both strengths and shortcomings are identified; the former are reinforced, and the latter are addressed to improve results for the next cohorts of students. Setting goals and investing sufficient human, financial and time resources to work towards the achievement of those goals are key quality processes that lead to better quality in an educational institution. All staff and other stakeholders in the institution need to understand the goals, buy into them and pull together to realise them.

The Quality Continuum

You will have noticed from the foregoing paragraph that unless you define it explicitly, and in measurable terms, quality remains quite an elusive concept to work with in an institution. It is, however, inconceivable to have zero quality in any educational institution.
We can illustrate quality on a continuum of low quality to high quality.

![Quality Continuum](image)

Good institutions seek excellence and want to feel proud of being exceptional. So, they strive to sit at the far-right end of the quality continuum. Even under distressful conditions, like the Covid-19 pandemic, they seek quick, innovative ways of ensuring that their quality does not slide to the far left, at least not for a prolonged period of time. They always keep their eye on the ball by constantly measuring how well the institution is carrying out its key mandates and how effectively learners are learning. They remain fit for purpose and continue to give their clients value for money.

It is important to note that in education, there will never be a time to sit on your laurels because you have achieved 100% quality. Once you achieve your set goals, you work to achieve even higher goals.

**The Relativist Notion of Quality**

Like beauty, quality is sometimes perceived differently by different people in an institution — it resides in the eyes of the beholder! This is called the relativist notion of quality. Obviously, you will appreciate from the above paragraphs the disadvantages of working with this notion at the institutional level, as operating with multiple perspectives of the quality notion has the potential to create tensions in implementing quality assurance measures and achieving set goals. Ideally, there needs to be consensus on what quality is in an institution.
The Objectivist Notion of Quality

One way of achieving consensus on what constitutes quality in an educational institution is to make quality more objective by defining its attributes. If you do this, quality becomes something that can easily be defined and measured using clearly demarcated standards and benchmarks. This is what we strive to do in education — to make quality objective and quantify it by measuring its multifarious attributes. This is called the objectivist notion of quality, and it is preferable in educational institutions.
Annexure 2

Advantages of Blended Learning

Blended learning is increasingly becoming a popular mode of educational delivery, especially since the advent of Covid-19. Educationists and students alike see a lot of advantages in using this mode of delivery. One of the key advantages is the flexibility it brings to the learning processes.

For Students:

Blended learning gives students time to digest a concept at home, spending as long as they need to develop the foundational knowledge necessary to go deeper into the learning. For students who have someone to assist them from home, they also get support in learning certain content within a socially accommodating environment.

For Parents:

Blended learning also gives parents quality time with their children, and an opportunity to understand how they are progressing with their learning and what challenges they face. It is a delivery mode that encourages parents to take responsibility of their children’s learning. In many instances where blended learning is used, learners do not necessarily have to physically go to school every day. This cuts on the costs of travel on the part of learners and parents.

For Teachers:

Blended learning gives more space for teachers to plan for more effective learning and mobilise teaching and learning resources.
Annexure 3

Advantages of Online Learning

There are many advantages of offering online courses in an age where knowledge is constantly changing and everyone should be continuously learning. The main advantage of this mode of delivery is that it offers learning opportunities to people who, for various reasons, cannot participate in traditional forms of education. This is mainly because as a form of distance education, it provides flexibility in terms of when and where to learn. For these reasons, online courses are generally appealing to non-traditional students. Another advantage of online learning is that both learners and teachers can access a wealth of resources that are available on the Internet. In many instances, using such e-resources, especially OER, reduces the cost of education. In addition to cutting on the cost of reading resources, online learning removes the cost of travel to campus on a daily basis and/or the cost of campus accommodation for students who would otherwise stay away from their homes. Thus, the idea of studying from the comfort of one’s home is seen by many as a key advantage of online learning.

Although learners are distributed in an online course, they have opportunities to interact online amongst themselves and with their teacher. Online learning provides opportunities for the teacher to interact with individual learners and provide targeted support. A key advantage of online learning is that it is easier to track students’ performance through learning analytics that are captured by the learning management systems (LMSs) used by institutions. This facilitates the planning of timely interventions for at-risk students.
In a world that has gone technological, education institutions are expected to equip learners with relevant technological skills that enable them to function in the world of work. In addition to communicating academic content, online learning also leads to mastery of basic technological skills and competencies that are of wider use in learners’ lives.
Annexure 4

**QA Approach**

A QA approach is a system of quality enhancement that consists of structures, tools and processes. Structures are QA bureaus or units put in place and supported by the necessary resources to enable them to coordinate, support and drive the QA agenda of an institution. Tools are instruments such as quality criteria, reviewing and reporting templates, and surveys for data collection — used in the institution to achieve some type of uniformity in QA implementation.

Common approaches to quality assurance include input from external stakeholders such as a ministry of education at the schooling level, and from a national quality assurance agency in higher education. This approach, where QA is mainly driven by a stakeholder external to the institution, is called external quality assurance — it is more externally than internally driven.

Institutions also use their own structures, systems and staff to quality assure their processes, often in line with the expectations of relevant external stakeholders. Good institutions strive to go well beyond the minimum expectations of such external stakeholders so as to achieve excellence. This approach, where QA is internally driven, is called **internal quality assurance**. Within this latter approach is what Enslin et al. (2003) have called the professional artistry of teachers or academics, where QA is premised on the individual’s high degree of devotion towards the client, and their professional expertise invokes a deep-seated sense of conscience for internal accountability. This assumption is based on the premise that professionals form “a company of equals or a republic of scholars who employ non-formal methods of regulation. Opinion, tradition, peer influence, and powers of professional associations have significant influence on the conduct of professionals” (Enslin et al., 2003, p. 83).
In their view, professional norms rather than bureaucratic rules govern the conduct of teachers and academics. Many educational institutions have moved away from the *professional artistry* approach to QA, shifting to more explicit and transparent approaches. Relying on the professional consciousness and expertise of individuals is risky — as not everyone behaves professionally — and is also a subjective way of implementing QA in an institution.
Annexure 5

Analytical Tools

According to Ishikawa, (1982), there are seven tools that can be used to analyse and interpret data on quality assurance (Ishikawa, 1982, cited in Mishra, 2006): process flowcharts, graphs, Pareto analyses, fishbone diagrams, scatter diagrams, checklists, and control charts. In this unit, we are not going to discuss these different tools, but you can read about them in Chapter 6 of the following Commonwealth of Learning resource: Quality Assurance in Higher Education: An Introduction. Here, we show images of some of these analytical tools.

Graphs

Line graph

A line graph, also called a line plot, is a line drawn on a plane and connecting points denoting different values over time. It helps the reader to see, at a glance, changes that happen over time. One or several lines can be plotted on the same plane.
For example, in the example above, one can show applicants who want to train as maths teachers by gender. So, one line can represent the number of female and the other the number of male applicants over time. This would enable the reader to see not only the pattern of overall applications but also the comparison between female and male applications.

**Histogram**

A histogram is a graphical representation that organises a group of data points into user-specified ranges (Chen, 2021). In a histogram, occurrences of a particular type are grouped into one category and represented in the form of a bar. In the example above, all learners pursuing a certain discipline online are grouped together and expressed as a percentage of all learners in that discipline. The percentage for each discipline is then plotted as a bar graph. This allows the reader to make intra- and interdisciplinary comparisons about online learning.
Pareto Analysis

This is a tool used to prioritize problems for solutions. It says 80% of problems stem from 20% of the causes; hence, it is also known as the 80–20 rule. What this means is that by focusing on the 20 causes of problems in your institution, you can improve 80% of the results.

Histogram

Also known as a cause-and-effect diagram, the fishbone diagram is a tool used for open thinking and analysis when solving a problem. In the diagram, the effect is placed on the right end of the broad orange arrow. Major causes are recorded on either side of the effect arrow. Minor causes are aligned to the respective major causes as clusters. To develop a fishbone diagram, you need to brainstorm first, ideally as a team. Through the brainstorming process, you identify the main problem (or desirable end goal) and link this to causal factors, asking, “What factors would lead to this desirable end?” You identify which of these factors would be major and which ones would be minor. Major causes are shown as blue lines branching from the main orange arrow. Minor causes are placed as sub-branches of the causal factor lines.
Quality Assurance of Blended and Online Learning

**Scatter Diagram**

A scatter diagram, also called a scatter plot, shows cause and effect in pictorial form.

![Final Exam Score Vs Age](chart)

**Checklists**

Checklists are used to ensure that tasks in a process are done and to measure how well they are done. Sometimes, checklists are used as quality control devices to weed out products that lack particular checkpoints, suggesting their quality may not have been checked in the processing line. Here is where you can download a copy of the [Blended Course Learnability Evaluation Checklist](#) [PDF].

**Use of These Analytical Tools in Quality Assessment**

The above-discussed analytical tools are immensely useful for analysing and presenting quality assurance data in an objective manner. They encourage careful thinking about and critical assessment of quality factors in an institution. The more you use them, the more you become familiar with them.
They are valuable instruments for showing patterns on quality aspects of an institution to stakeholders such as top management, funders and even potential employers of your students — people who do not have enough time to read lengthy narrative descriptions but can see trends at a glance when data are analysed and presented in pictorial form.

**Image Attributions**

[Scatter diagram](#) from “Precalculus” by Jay Abramson is licensed under a [CC BY 4.0 licence](#).
Annexure 6

Tony Bate’s Five Aspects as the Foundations for Quality Teaching in an Institution

Institutional and Degree Accreditation

Bates (2015) acknowledges the role of accreditation processes as a key aspect of quality enhancement in institutions. Although there are variations from country to country in terms of how such accreditation processes take place, their rationale is to ensure that the institutions offering programmes of learning, and the programmes they offer, are both credible. In some places educational providers are granted self-accreditation status, with government playing an arm’s-length role. In other countries, national quality assurance bodies, which often operate as statutory bodies, conduct regular institutional audits and accreditation of programmes offered. Where such external agencies operate, they insist on institutions conducting self-reviews first, as highlighted in Unit 2.

Internal Quality Assurance

As you will recall, Unit 2 of this course dealt with internal and external quality assurance. In his quality framework, Bates (2015) places due importance on the effectiveness of the teaching method used in any course. Both internal and external quality assurance should prioritise the teaching aspect. He emphasises good practice as teaching that promotes active learning, communications between student and teacher, timely feedback, and time on task.
Annexure 7

Tony Bates’s Nine Steps to Quality Teaching in a Digital Age

The first step in Bates’s framework entails thinking about the teaching strategy (pedagogical approach) you want to use in a course as an instructor. In doing so, you need to think about the way you currently teach and what weaknesses there are in that approach. You also need to think of the learners you want to teach. For example, what is their general background or the size of the class? What teaching approach would be ideal for a large class of more than 200 students? Consider whether the teaching approach you want to use will help you teach in new ways that better fit your philosophy of teaching (Bates, 2019).

As Bates emphasises in Step 2, when you use technology for teaching and learning, you need to make a careful decision on whether you want your course to be blended or to be fully online. This decision determines the extent to which your students will use technology in the learning process, whether or not there will also be face-to-face sessions to support learning, and, if so, how much time will be face-to-face and how much will be independent learning.

Blended and online learning are different from classroom teaching. They require a range of skills that most instructors, particularly those new to online teaching, are unlikely to have. Drawing on the expertise of other colleagues to make up for an individual’s inexperience goes a long way in strengthening a blended or online course. Working in teams has great potential to enhance the quality of such technology-mediated courses.

In his framework, Bates (2019) also places importance on using existing OER to leverage the quality of course content. Some of these OER are high-quality materials developed by experts in their fields, like the Open University (UK) course materials and the Massachusetts Institute of Technology lecture recordings. Drawing on them is likely to improve the quality of your course. It also takes less time to adapt such resources for your context than to start developing them from scratch.
Quality Message in Bates’s Nine-Step Quality Framework

The key quality message in this nine-step framework is that technology-mediated teaching and learning require thorough planning. One cannot decide overnight to convert a face-to-face course to an online or blended course. A lot of thinking goes into how technology will support learning experiences that lead to the achievement of desired learning goals. Sufficient and appropriate resources also need to be mobilised and made available to students. In blended and online learning, digital learning resources are easier and cheaper to mobilise and make available to a distributed group of learners. As an instructor, you need to be well versed with the technology you use on your course, not only for your purposes but also in order to provide basic support to students who face technical challenges as they go through your course. In face-to-face learning, you can easily gauge whether learners have mastered what you teach, through verbal interactions with them and through asking questions as the lesson progresses. In technology-mediated learning, it is equally important to have mechanisms of telling how your distributed class of learners is progressing, what challenges they are facing, who is facing those challenges, and what support they need. The technology must be used to enrich students’ learning experiences, through carefully designed learning activities that promote active learning.
Annexure 8

Jisc’s Model – The Four-stage Process

In the first stage, Discover, the institution establishes where it currently stands in terms of supporting learning. It also uses analytics to understand the type of target learners for the online course(s) to be designed. This is important in determining their needs. The institution also makes a rationale assessment of its digital capability and how it will ensure quality in the online course(s).

The Dream stage involves getting clarity on what the institution aims to achieve by rolling out the envisaged online course(s). It comes up with an institutional strategy for rolling out online courses, which enables it to achieve its aims. This is important as advancing learning digitally is a significant departure from traditional ways of learning, and unless an appropriate strategy is mooted, the shift might not happen smoothly enough in an institution.

At the Design stage, the institution makes decisions on what courses, modules and lessons need to be online. The institution also thinks seriously about assessment issues in the courses or modules.

Once the institution has established its current status, including its readiness for supporting digital learning and the strategy to be used, it then looks at what is required to achieve quality deployment of online learning. It develops staff to equip it with the necessary skills and orientation for supporting online learning. It engages students and other relevant stakeholders to make them aware of and encourage them to buy into the new mode of delivery. The benefits of shifting to this mode of delivery are made explicit.
The right infrastructure and appropriate administrative structures are put in place. Online learning works best where online learning communities are operative; a good institution encourages teachers to establish such spaces. This brings in the key element of support and collaboration many learners need to keep them motivated.
Annexure 9

Badrul Khan’s Eight-dimensional E-learning Framework

1. **Pedagogical**: The pedagogical dimension of the framework refers to teaching and learning. It addresses issues concerning content analysis, audience analysis, goal analysis, media analysis, design approach, organisation, and methods and strategies of e-learning environments.

2. **Technological**: This dimension examines technology infrastructure in e-learning environments, like infrastructure planning, hardware and software.

3. **Interface Design**: Interface design is about the overall look and feel of e-learning programmes, which include interface design, page and site design, content design, and navigation.

4. **Evaluation**: Evaluation for e-learning includes both assessment of learners and evaluation of the instruction and learning environment. It facilitates continuous improvement of the course and the teaching approach.
5. **Management**: The management of e-learning refers to maintenance of the learning environment and distribution of information.

6. **Resource Support**: The resource support dimension of the framework examines the online support and resources required to foster meaningful learning environments.

7. **Ethical Considerations**: Ethical considerations of e-learning relate to social and political influence, cultural diversity, bias, geographical diversity, learner diversity, information accessibility, etiquette, and legal issues.

8. **Institutional**: The institutional dimension is concerned with issues of administrative affairs, academic affairs and student services related to e-learning (Khan, 2001).

**Image Attributions**

"E-learning, blended learning framework and model" by Khan (2001) is licensed under a [CC BY-SA 3.0 licence](http://creativecommons.org/licenses/by-sa/3.0/).
Annexure 10

Community of Inquiry Framework in Online Learning

For online learning to be effective, learners need to make the following adjustments with respect to these three presences.

Social Presence

Novice online learners need time to communicate via text, and to adjust to expressing emotion and communicating openly where no visual or other non-textual cues are available. Others find connections with other learners in small group activities useful for sharing their ideas. The principle underlying social presence is that learning is a social activity, and in online learning, opportunities should be created for learners to interact with their peers and with the teacher.

Teaching Presence

Generally, online learners prefer to have more visible teacher presence at the beginning of the course, to enable them to easily and quickly adjust to the online environment, as the instructor is more of a facilitator than a purveyor of knowledge. As they become more familiar with the online environment, they feel more confident about doing most of the learning independently, with minimum guidance from the teacher.

Cognitive Presence

Online learners have to adjust to contributing to online content discussions that lack the visual cues available in face-to-face interaction. In the absence of the teacher, some online learners adjust to finding ways of confirming their understanding of study materials, usually by engaging with their peers (Cleveland-Innes & Wilton, 2018).
Annexure 11

ENQA Standards and Guidelines for Quality Assurance

Like in the other quality standards discussed earlier, elaborate explanations were given for each quality standard and its quality indicators. This makes the quality standards user-friendly. All in all, there were ten standards for institutions and seven for quality assurance agencies.

E-learning Standards for Institutions

These standards are used primarily for strengthening the internal quality assurance processes of an institution. Internal quality assurance work undertaken by institutions is directly relevant to any external quality assurance that they undergo (European Association for Quality Assurance in Higher Education et al., 2015, p. 9), which is implemented by an external quality agency.

Policy for Quality Assurance

Policy is important for guiding quality assurance processes and bringing about a quality culture in an institution. The policy should be well disseminated in an institution, and all stakeholders should buy into the policy.

In the Standards and Guidelines document, this standard states that institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders (European Association for Quality Assurance in Higher Education et al., 2015, p. 11).
Design and Approval of Programmes

Programmes of study are the most important component of a higher education system, as they impart the knowledge and skills that learners should master to operate effectively in the world of work in particular and in life in general. Designing sound programmes and taking them through an approval system makes them credible. This standard speaks to the importance of appropriately designing programmes and their approval processes. In addition to meeting the stated objectives and learning outcomes, the standard emphasises the need for programme designers to refer to the correct level of the national qualifications framework for higher education. This is an important quality aspect that national quality regulators are always concerned about.

Student-centred Learning, Teaching and Assessment

This standard emphasises that institutions should ensure that programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach (European Association for Quality Assurance in Higher Education et al., 2015, p. 12). Student-centred learning approaches motivate learners and often meet learners’ diverse needs. This necessitates the use of diverse modes of delivery and pedagogical approaches that are appealing to different learners.

Student Admission, Progression, Recognition and Certification

Institutions should have published regulations on the admission, progression and graduation of students and should apply these regulations consistently. The standard states that access policies, admission processes and criteria should be implemented consistently and transparently. This means applying published policies and criteria in all instances where students are admitted into programmes of study, irrespective of any individual’s economic status, race, gender or religion.
In this regard, the standard seeks to promote transparency in how the institution handles applicants and students. Induction to the institution and the programme is provided. Effective student induction is an important aspect of student support, as it familiarises the student with the learning environment in a timely way and helps them settle and focus on their academic work.

**Teaching Staff**

Teacher qualifications are an essential quality element in an education institution, hence the emphasis on the qualifications of teaching staff. In the ESG document, the standard reads: “Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff” (European Association for Quality Assurance in Higher Education et al., 2015, p. 13). Emphasis is not only on qualifications but also on continuous professional development to ensure that staff are kept up to date with developments in technology and in the disciplinary areas.

**Learning Resources and Student Support**

This standard is about resource provision to support effective learning. It underscores the importance of ensuring that sufficient funding is available to provide the necessary resources and to support students. These resources vary from physical resources such as libraries, study facilities and IT infrastructure to human support in the form of tutors, counsellors and other advisers.

**Information Management**

The standard reminds providers of the importance of collecting and analysing student data on a regular basis, and feeding back information to planning processes. Sound planning is based on reliable data.
Public Information

A good institution should publish accurate data about itself and its educational activities. The information should be relevant for prospective and current students, as well as for the relevant stakeholders. It should be up to date and accurate and should be published using different media to cater for a wide range of audiences.

Ongoing Monitoring and Periodic Review of Programmes

There should be regular monitoring of how the academic programmes are rolled out, and regular reviews should take place to ensure that programmes remain relevant. This also involves reviewing pedagogical approaches used, assessment strategies and the technologies employed.

Cyclical External Quality Assurance

External quality assurance should take place to verify the effectiveness of an institution’s internal quality assurance, act as a catalyst for improvement and offer the institution new perspectives. It will also provide information to assure the institution and the public of the quality of the institution’s activities (European Association for Quality Assurance in Higher Education et al., 2015, p. 15).

E-learning Standards for Quality Agencies

These standards are mainly used for external quality assurance. They seek to confirm that the quality assurance arrangements of an institution are good enough to facilitate quality educational delivery. External quality assurance recognises and supports institutional responsibility for quality assurance (European Association for Quality Assurance in Higher Education et al., 2015, p. 18). In many ways, these standards relate to and reinforce internal quality assurance standards that have been discussed above.
A key principle in quality assurance is that the responsibility of quality assurance lies with the educational provider. External quality assurance therefore seeks to empower institutions so they can undertake this role effectively enough. Thus, external quality standards are complementary to internal quality standards.

**Consideration of Internal Quality Assurance**

External quality assurance by quality regulators should address the internal quality assurance arrangements of an institution. The regulators should support institutions appreciate that the implementation of sound quality assurance systems is the responsibility of the provider. They should also support the latter to develop and implement good quality assurance systems.

**Designing Methodologies Fit for Purpose**

External quality assurance should be defined and designed specifically to ensure its fitness to achieve the aims and objectives set for it, while taking into account relevant regulations. Stakeholders should be involved in its design and continuous improvement.

**Implementing Processes**

External quality assurance processes should be published so that all institutions affected know about them. They should also be applied consistently, fairly and professionally across all institutions.

**Peer-review Experts**

The expertise of peers should be brought to bear on the external quality assurance processes of national quality regulators. Students should also be involved in external quality assurance processes.
Criteria for Outcomes

This standard states that any outcomes or judgements made as a result of external quality assurance should be based on explicit and published criteria that are applied consistently, irrespective of whether the process leads to a formal decision or simply to recommendations or judgements.

Reporting

The standard states that any decisions taken by the national quality regulator should be published and should be accessible to the academic community. The reporting should be clear to enable the institution to develop follow-up actions, which often entail implementing improvements on identified weaknesses.

Complaints and Appeals

Institutions should have room to raise any dissatisfactions they may have about the external quality assurance processes or the outcomes thereof. In such instances, evidence forms the basis for such complaints and appeals.
Annexure 12

Key Features of the Guidelines

Take a look at the guidelines for different stakeholders as described below.

Guidelines for Governments

• Support a strategic commitment to reforming quality control. This guideline entails encouraging governments to take a broad view of quality in open, online learning and to consider all the different dimensions involved (like massive scale, openness, online, and student learning).

• Encourage institutions to measure a broad range of MOOC quality metrics. These include presage, process and product variables.

• Develop new quality infrastructures that take different perspectives on learning into consideration. This involves operationalising quality as a mixture of different perspectives (like learners’ perspectives) and of quality variables (like instructional design, learner support, etc.).

• Develop new quality infrastructures that support a variety of organisations and learning opportunities.

MOOCs are different from conventional face-to-face learning in that they are open and learners do not make any commitments upon enrolment. This leads to different types of learner engagement and learner motivations. As the needs of learners and opportunities for learning evolve, there must be support for various stakeholders, such as private, public and professional bodies as well as civil society organisations, to increase their involvement in learning in a way that ensures and maintains quality learning opportunities for all learners (COL, 2016).
Guidelines for Institutions

Guidelines for institutions were developed out of the realisation that many institutions have no experience in developing quality MOOCs, and yet they bring so many advantages to institutions. For example, they can add to the revenue, they can boost institutional reputation and increase visibility, and they can enable an institution to increase access. Given that MOOCs are uniquely different from traditional learning, institutions need to revise their approaches to measuring quality.

Institutions should therefore do the following:

• Consider the purpose of the MOOC from various perspectives. From the institution’s point of view, the purposes can range from offering free education to positioning the university as a leader in a niche disciplinary area.

• Employ a range of measurements. These gauges should extend beyond the narrow concentration on quality measures focused on content, completion or media, to include measures of cognitive, affective and behavioural evaluations of student learning.

• Select relevant quality measures. Rather than applying “standard metrics,” practitioners should focus quality measures on the specific dimension of interest.

Quality Measures Learners May Use

The COL Toolkit notes that learners have many reasons for participating in MOOCs. These reasons range from career advancement to meeting new people, engaging in part-time or distance study, or satisfying personal interest and enjoyment. From the learners’ perspective, the quality of a MOOC is judged with reference to other learners who participate in the MOOC. Quality may also be judged in terms of achieving a certificate by doing the MOOC. The following are some of the measures learners may use to judge the quality of MOOCs:
Quality accreditation of MOOCs is different from programme accreditation normally done by accreditation agencies. Programme accreditation by agencies focuses on content validity, clear learning outcomes, defined workload and an agreed credit system. In accrediting MOOCs, it is not relevant to focus on whether the course provides information about the expected learning outcomes, nor is measurement of course outcomes necessary. What is important is to have a checklist to make sure all pertinent factors are included. MOOC accreditation agencies should therefore:

- Rethink existing quality metrics and frameworks
- Utilise a range of measures
- Contextualise MOOCs within the broader debate on the purposes of education and learning
- Position the learner at the centre of quality considerations
- Focus on both accountability and improvement (COL, 2016, p. 16)

**Guidelines for Accreditation Agencies**

Quality assurance of blended and online learning
### TIPS Framework for OER Quality (Kawachi, 2014)

<table>
<thead>
<tr>
<th>Quality Category</th>
<th>Quality Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning processes</td>
<td>• Consider giving a study guide for how to use your OER, with an advance organiser and navigational aids.</td>
</tr>
<tr>
<td></td>
<td>• Use a learner-centred approach.</td>
</tr>
<tr>
<td></td>
<td>• Use up-to-date, appropriate and authentic pedagogy</td>
</tr>
<tr>
<td></td>
<td>• You should clearly state the reason and purpose of the OER, its relevance and its importance.</td>
</tr>
<tr>
<td></td>
<td>• It should be aligned to local wants and needs, and anticipate the student’s current and future needs.</td>
</tr>
<tr>
<td></td>
<td>• Bear in mind your aim to support learner autonomy, independence, resilience and self-reliance</td>
</tr>
<tr>
<td></td>
<td>• Don’t use difficult or complex language, and do check the readability to ensure it is appropriate to age and level. Include learning activities that recycle new information and foster the skills of learning to learn.</td>
</tr>
<tr>
<td></td>
<td>• Say why any task work is needed and indicate its real-world relevance to the student, keeping in mind the work needed to achieve the intended benefit.</td>
</tr>
</tbody>
</table>
### Quality Assurance of Blended and Online Learning

<table>
<thead>
<tr>
<th>Quality Category</th>
<th>Quality Criteria</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• Stimulate the intrinsic motivation to learn — e.g., through arousing curiosity with surprising anecdotes.</td>
</tr>
<tr>
<td></td>
<td>• Monitor the completion rate, student satisfaction and whether the student recommends your OER to others.</td>
</tr>
<tr>
<td></td>
<td>• Include a variety of self-assessments, such as multiple choice, concept questions, and comprehension tests.</td>
</tr>
<tr>
<td></td>
<td>• Provide a way for the student and other teachers to give you feedback and suggestions on how to improve.</td>
</tr>
<tr>
<td></td>
<td>• Link formative self-assessment to help mechanisms.</td>
</tr>
<tr>
<td></td>
<td>• Try to offer learning support.</td>
</tr>
<tr>
<td>Information and material content</td>
<td>• Make sure that the knowledge and skills you want the student to learn are up-to-date, accurate and reliable. Consider asking a subject-matter expert for advice.</td>
</tr>
<tr>
<td></td>
<td>• Your perspective should support equality and equity, promote social harmony, and be socially inclusive, law abiding and non-discriminatory.</td>
</tr>
<tr>
<td></td>
<td>• All your content should be relevant and appropriate to purpose. Avoid superfluous material and distractions.</td>
</tr>
<tr>
<td></td>
<td>• Your content should be authentic, internally consistent and appropriately localised.</td>
</tr>
<tr>
<td>Quality Category</td>
<td>Quality Criteria</td>
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<td>----------------------------------</td>
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<tr>
<td></td>
<td>• Encourage student input to create localised content for situated learning; draw on their prior learning and experience, their empirical and indigenous knowledge.</td>
</tr>
<tr>
<td></td>
<td>• Try to keep your OER compact in size, while allowing it to stand alone as a unit for studying by itself. Consider whether it is small enough to reuse in other disciplines.</td>
</tr>
<tr>
<td></td>
<td>• Add links to other materials to enrich your content.</td>
</tr>
<tr>
<td>Presentation product and format</td>
<td>• Be sure the open licence is clearly visible.</td>
</tr>
<tr>
<td></td>
<td>• Ensure your OER is easy to access and engaging.</td>
</tr>
<tr>
<td></td>
<td>• Present your material in a clear, concise and coherent way, taking care with sound quality.</td>
</tr>
<tr>
<td></td>
<td>• Put yourself in your student’s position to design a pleasing, attractive design, using white space and colours effectively, to stimulate learning.</td>
</tr>
<tr>
<td></td>
<td>• Have some space for adding moderated feedback later on from your students.</td>
</tr>
<tr>
<td></td>
<td>• Consider whether your OER will be printed out, usable offline or suitable for mobile use.</td>
</tr>
<tr>
<td></td>
<td>• Use open formats for the delivery of OER, to enable maximum reuse and remix.</td>
</tr>
<tr>
<td></td>
<td>• Consider suggesting which OER could come first in a learning pathway and which OER could come last.</td>
</tr>
<tr>
<td>Quality Category</td>
<td>Quality Criteria</td>
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<tr>
<td>----------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>System technical details and technology</td>
<td>• Consider adding metadata tags about the content to help you and others later on to find your OER.</td>
</tr>
<tr>
<td></td>
<td>• Give metadata tags for expected study duration, expected level of difficulty, format and size.</td>
</tr>
<tr>
<td></td>
<td>• Try to use only free sourceware/software that is easily transmissible across platforms.</td>
</tr>
<tr>
<td></td>
<td>• Try to ensure your OER is easily adaptable — e.g., separate your computer code from your teaching content.</td>
</tr>
<tr>
<td></td>
<td>• Your OER should be easily portable and transmissible, and you should be able to keep an offline copy.</td>
</tr>
<tr>
<td></td>
<td>• Your OER and the student’s work should be easily transmitted to the student’s own e-portfolio.</td>
</tr>
<tr>
<td></td>
<td>• Include a date of production and a date of next revision.</td>
</tr>
</tbody>
</table>
Annexure 14

Key Features of the Quality Assurance Rubric for Blended Learning

Purpose of the Rubric

The Quality Assurance Rubric for Blended Learning was developed to guide institutions, faculty or individual lecturers in developing quality blended learning courses to enhance the learning experience. It was created mainly to provide a comprehensive approach to designing and assuring the quality of blended learning courses. It focuses on ascertaining quality measures at the course level rather than the institutional level. Its specific objectives were to:

• Prioritise quality in the development of blended learning courses
• Evaluate blended learning courses and identify their strengths and weaknesses for improvement

Blend of Online and Face-to-face

The guide echoes the idea of a continuum of the extent to which technology is used in a blended learning environment. The continuum of the intensity of technology use is an important notion to understand in blended learning, as it helps providers decide how much time learners should devote to online compared to face-to-face learning. It also explains the different ways in which blended learning is implemented in different contexts.

The Rubric for Blended Learning encourages institutions to make use of OER in the development of their blended learning courses and to release them as OER. For this reason, it also contains quality items on OER.
Quality Assurance of Blended and Online Learning

Quality Standards in the Rubric

The rubric has eight categories and 50 elements. The below table summarises the quality categories and the number of quality elements under each category.

Table: Quality Categories and Quality Elements in the Rubric

<table>
<thead>
<tr>
<th>Quality Category</th>
<th>Quality Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation</td>
<td>6 quality elements</td>
</tr>
<tr>
<td>Content</td>
<td>11 quality elements</td>
</tr>
<tr>
<td>Instructional design</td>
<td>8 quality elements</td>
</tr>
<tr>
<td>Course structure</td>
<td>6 quality elements</td>
</tr>
<tr>
<td>Student support</td>
<td>4 quality elements</td>
</tr>
<tr>
<td>Technology/media</td>
<td>6 quality elements</td>
</tr>
<tr>
<td>Assessment</td>
<td>6 quality elements</td>
</tr>
<tr>
<td>Quality assurance &amp; evaluation</td>
<td>3 quality elements</td>
</tr>
</tbody>
</table>

Across 8 categories, there is a total of 50 quality elements.

For details of the quality elements, download the Quality Assurance Rubric for Blended Learning [PDF].

Go Back
The benefits of undertaking institutional benchmarking include: the identification of strengths and weaknesses for planning and priority setting; an improved understanding of strategic and operational requirements; a recognition of areas of achievement; the generation of new ideas; and a reinvigoration of practice through the development of strategies for improvement in areas of need (Sankey & Mishra, 2019).

Download the TEL Benchmarking Toolkit [here](#).

**The Toolkit Benchmarks**

As highlighted in the foregoing paragraph, the toolkit has ten benchmarks, with varying numbers of performance indicators under each. These are the ten toolkit benchmarking domains: Consider the purpose of the MOOC from various perspectives. From the institution’s point of view, the purposes can range from offering free education to positioning the university as a leader in a niche disciplinary area.
Quality Assurance of Blended and Online Learning

- Policy
- Documentation
- Strategic Plan
- Organisational Culture
- IT Support
- Leadership
- Technology Applications
- Human Resource Training
- Content Development
- Technology-Enabled Learning Champions

**Structure and Use of the Toolkit**

The toolkit consists of two sections. Section 1 contains the ten benchmarks, each with a set of performance indicators (PIs) used to assess an institution’s capacity in TEL. Section 2 provides a simple template for use in consolidating the evaluation findings. It also provides a place for an institution to plan for future improvements.

For ease of use, each benchmark contains the following elements:

- A description of the benchmark
- Four to six PIs
- Self-review ratings for each PI, on a five-point scale
- A place to provide a rationale and evidence to support your assessment
- A place to consolidate and calculate your combined score (on the Radar Chart)
- An area to note an initial recommendation that may be useful for future improvement
The **Description** for each benchmark indicates what good, achievable practice would look like. The **Performance Indicators** seek to then quantify what is contained in the description. Importantly, rating the PIs provides an opportunity to reflect on areas where your institution could do better. There is a place to make note of this in the **Summary Comments, Reflections and Future Actions** section. **Sufficient Rationale and Evidence** should be provided so that others coming to this document can validate your ratings and easily understand why a particular rating was given.

Once you have scored all the items in the four to six indicators for each benchmark, you then calculate a score to plot in the Radar Chart found in Section 2 of the Toolkit. In the same section, there is also a place for you to write your overall summary and actions. An Excel file to record data and prepare the report can be downloaded [here](#).

**Use of the Benchmarks**

**Step 1: Institutional self-review**

In using the toolkit, you need to undertake an institutional self-review first. The toolkit provides elaborate explanations, with examples of how the self-review is conducted and how the scoring of indicators is done. The toolkit recommends that an institutional review should ideally be collectively established by having representatives from a range of departments undertaking the benchmarking activity in the following way:

- A nominated department representative will first undertake an individual self-assessment of the benchmark(s).
- The departments typically represented include: information technology; the central learning and teaching units; assessment, evaluation and/or support units; schools/faculties; library services; and possibly finance or planning.
- Those involved are generally the main stakeholders for each benchmark.
• The nominated individuals come together to share their self-assessments, then form a collective view or agreed stance.

• It may well be that different departments contribute to most or all of the benchmarks, while others are only involved in one or two.

• Once a consolidated stance is established, this is then used as the initial position (Sankey & Mishra, 2019).

**Step 2: External peer review (optional but recommended)**

After conducting an institutional self-review, the institution may want the results to be validated by peers from another institution that has experience in implementing TEL. The following process is followed in conducting the external peer review:

• The members of the peer team individually review the self-review benchmark report with evidence from the institution.

• Comments from the peer-review team are sent to the institution for clarification/response, giving an opportunity to further substantiate the original ratings.

• The external peer-review team activities may be completed remotely using online technologies. If required, a physical site visit by the team members may be organised.

• Based on the peer-review team discussion, the ratings for each of the indicators may be revised or validated.

• The peer-review process may highlight areas that need reconsideration or further information. Once provided, this information may be added to the report.

• After this process is complete, a consolidated version of the review can be finalised for senior management to use as they see fit.

• Senior management takes steps to share the way forward with all the stakeholders in the institution.
Quality Assurance of Blended and Online Learning

Answer to Check Your Progress

Unit 1

1

<table>
<thead>
<tr>
<th></th>
<th>Quality Assurance</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevents defects</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Identifies defects in end products</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Process-oriented</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Product-oriented</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Proactive</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Reactive</td>
<td></td>
<td>✓</td>
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</table>

2 (b), 3 (b), 4 (b), 5 (c), 6 (a, b), 7 (b), 8 (d), 9 (d), 10

<table>
<thead>
<tr>
<th></th>
<th>Advantages of ERTL</th>
<th>Disadvantages of ERTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequalities in educational access and success were widened.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>There was less time-on-task for most learners.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Learners developed independent learning skills.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teachers had less time to interact with learners.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Only a few learners had good access to facilities such as electricity, technology hardware and the Internet.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Parents played a greater role in the education of their children.</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
11 (e), 12 (c), 13 (b), 14 (a), 15 (c), 16 (a), 17 (b), 18

<table>
<thead>
<tr>
<th>Quality Assurance</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying defects in products at the end</td>
<td>✓</td>
</tr>
<tr>
<td>A reactive process</td>
<td>✓</td>
</tr>
<tr>
<td>Prevents defects from arising at the start</td>
<td>✓</td>
</tr>
<tr>
<td>A proactive process</td>
<td>✓</td>
</tr>
<tr>
<td>Provides confidence that the product will meet the requisite quality</td>
<td>✓</td>
</tr>
</tbody>
</table>

Unit 2

1 (b), 2 (d), 3 (a), 4 (d), 5 (b), 6 (a), 7 (c), 8 (a), 9 (a), 10 (c), 11 (d), 12 (c), 13 (a), 14 (b), 15 (b)
Quality Assurance of Blended and Online Learning

Answer to Check Your Progress

Unit 3

1 (b), 2 (b), 3 (b), 4 (b), 5 (b), 6 (b), 7 (c), 8

<table>
<thead>
<tr>
<th>Quality Frameworks</th>
<th>Tony Bates’s Nine Steps</th>
<th>Jisc</th>
<th>Badrul Khan</th>
<th>Community of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover who you are developing the course for</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in a team</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build on existing resources</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dream – what are you aiming to achieve?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set appropriate learning goals</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogical aspects</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface design</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource support</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social presence</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive presence</td>
<td></td>
<td>✓</td>
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<td></td>
</tr>
</tbody>
</table>

9 (a), 10 (b), 11 (b), 12 (c), 13 (b), 14 (a), 15 (c)

Unit 4

1 (a), 2 (c), 3 (c), 4 (a), 5 (b), 6 (b), 7 (b), 8 (a), 9 (b), 10 (d)
11

E. The institution to be reviewed conducts a self-review and compiles a self-evaluation report.

A. Members of the peer-review team individually review the self-review benchmark report with evidence from the institution

C. The peer-review team conducts a site visit.

D. Comments from the peer-review team are sent to the institution for clarification/response, giving an opportunity to further substantiate the original ratings.

B. The peer-review team compiles a report with recommendations and shares it with senior management of the reviewed institution.

12

C. Preparation

A. Development

B. Maturation
### Answer to Check Your Progress

13

<table>
<thead>
<tr>
<th>Phases of TEL Implementation</th>
<th>Preparation</th>
<th>Development</th>
<th>Maturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline survey</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy development</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Strengthening infrastructure</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Blended course development</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Evaluation of blended learning</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Community of practice</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

14 (b), 15 (b)