

# STANDARDS FOR DISTRIBUTED AND DISTANCE LEARNING IN MEDICAL EDUCATION

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www.wfme.org

admin@wfme.org

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#### **INTRODUCTION**

The standards presented here concern the method and management of education for students who are distributed across geographical locations. The standards can be used either in full or in part.

If an institution is considering a long-term conversion to distributed or distance learning, then the entire set of standards should be consulted.

However, if the institution, either undergraduate or postgraduate, chooses to present only part of its course as distributed or distance learning, then a relevant subset of these standards can be used to assist design, delivery, and quality assurance.

Where regulators have ultimate responsibility for the quality of basic or postgraduate provision that either wholly or partially uses distributed or distance learning, then the regulators can also choose to use all or a subset of these standards. The key questions could be used for inspection purposes.

The standards are presented to support these organisations in their own contexts.

The standards for distributed and distance learning focus on method, rather than on mission and values, or curriculum. These standards therefore can be used alongside the relevant WFME standards<sup>1</sup> for basic or postgraduate medical education, or for continuing professional development.

Medical schools have, for some time, included a variety of technology-based elements in their education. These may be, for example, as library and internet resources, as simulations, videos, learning packages, demonstrations of technique, self- assessments, virtual instruments, and laboratories.

This is, however, simply a change of teaching method within a largely unchanged curriculum, and within the same educational management structures and processes.

The standards presented here address the circumstance in which schools might want to implement a curriculum (that includes teaching and learning methods, management and support, and assessment) for students who are distributed across geographical distances, in a planned way. This is very different from running a curriculum that is onsite. It is not just about changing the mode of delivery.

If schools decide to change their provision in the long term, then a different planning, implementation, and quality assurance process is required from that present in a campusbased system. These standards address the longer-term view but are relevant to the immediate decisions that are made in a crisis.

<sup>&</sup>lt;sup>1</sup> See: <u>https://wfme.org/standards/</u>

Medical education is, in practice, a partially distributed system. Students may learn and train in local and remote hospitals and primary care or community centres. They may take electives away from the medical school campus and sometimes abroad. The support that these students should expect will be distributed to wherever they are.

Many principles of teaching and learning at a distance for students who are distributed across geographically separate locations are the same as the principles of traditional university<sup>2</sup> education. But for effective distributed and distance learning, those principles must be extended and modified, enacted, and applied differently.

These WFME standards set out the conditions for successful, long-term development, implementation, management, and quality assurance of the curriculum for students who are distributed across various geographical locations rather than being centred on the medical school and its immediate clinical and laboratory facilities.

#### Distributed and distance learning in exceptional circumstances

The standards set out in this document address distributed and distance learning as an approach to medical education and training, in general. A medical school might want to adopt this as part of their course, while students are attached to facilities in the community or in other locations. Or a school might adopt this approach as the basis of a community-based course. It might be a response to shortages of central teaching staff.

In recent times, distributed and distance learning has been adopted as a response to a global health emergency. These standards do not address this specifically. We assume that the local health and safety precautions associated with widespread infectious disease will be added to the development and use of distributed and distance learning, just as any other local conditions will inform the ways in which these standards are used.

Distributed and distance learning includes a planned variety of distance, virtual, individual, and face-to-face elements. Fundamental to the idea of a distributed institution is that teachers and managers are distributed to the locations where students find themselves. In medical education these might be, for example, in local healthcare facilities. There is therefore the opportunity for in-person education and training. In terms of learning clinical medicine, in-person work is essential. This can be built into distributed learning.

Therefore, institutions must consider how much in-person education and training will occur, and how student, patient, and staff safety are assured. In the end, a practical and applied discipline can only be learned practically. The conditions for safe practice must be replicated to be conditions for safe learning, both in normal times and during healthcare emergencies.

<sup>&</sup>lt;sup>2</sup> These standards often refer to 'the university', 'the school' or 'the institution.' We recognise that in some places, the university is the relevant body, whereas in others, the medical school itself is the highest decision-making authority. In other places, medical schools are called 'colleges' or 'faculties'. Please read these terms interchangeably to suit your context.

## Terminology

Six terms are commonly seen in the literature reporting on the conversion of courses:

- Distance learning
- Distributed learning
- Online learning
- e-learning
- Virtual learning
- Flexible learning

We regard online learning, e-learning, and virtual learning as a description of the mode of education: they simply say that a delivery technology is involved and convey nothing about the type, quality, management, or role of the materials. So, they are probably not very useful labels.

Any search of the literature in relation to 'distance learning' and 'distributed learning' will immediately reveal the usual social science problem of reaching a clear and universally accepted definition. Both terms have multiple and unstable definitions which have changed over time.

'Distance learning' and 'distributed learning<sup>3</sup>' are often used interchangeably, although some authors have tried to differentiate between the two. We are happy to use either term, but prefer 'distributed learning' because 'distance learning' implies that there is a central institution that the students are distant from, whereas 'distributed learning' implies that **both the students and the institution are distributed**. That means that in distributed learning, there are teachers, offices and sites near to the students that are part of the medical school. These might be associated with local study centres or clinical departments, for example<sup>4</sup>.

We believe that standards for distributed and distance learning are essentially the same. We will therefore use the term 'distributed and distance learning'.

#### The standards

In parallel with multiple definitions, there are many general quality standards and sets of guidance about distributed and distance learning and all its elements. WFME therefore offers a set of standards for distributed and distance learning specifically for medical education. But those standards are commensurate with standards in other disciplines and those that are set by regulators in this field.

<sup>&</sup>lt;sup>3</sup> Although 'distributed learning' is also used to describe practice that happens for a series of short periods over a longer time, as opposed to 'massed practice' where a skill is practised for a longer time on fewer occasions.

<sup>&</sup>lt;sup>4</sup> It is useful to map all the available clinical and study facilities that can be used to support students where they are. The central medical school will, in turn, support those units to offer excellent clinical work, education, training, and experience.

In preparing these standards, we have reviewed available relevant standards and publications and have distilled those that are relevant to our purpose.

The standards for distributed and distance learning will address the following areas:

- Distributed and distance learning: Scope and accountability
- Course design
- Course production
- Assessment
- Student support
- Academic and clinical teachers
- Course management and records (which includes educational resources)
- Quality assurance

#### Why are the standards so comprehensive?

In each of the eight areas, the standards address the details of the process. The standards are extensive, when compared with the WFME standards for basic medical education. There are three reasons for this. Firstly, it is likely that most people in medical education are new to distributed and distance learning as a managed system. Secondly, distributed and distance learning (DDL) provision must be carefully designed, developed, and supported simply because there must be confidence in its ability to guide learning effectively. Thirdly, DDL provision is relatively complex and expensive to produce and to alter, once produced. A poorly planned and presented course is likely to lose students or adversely affect their learning. If distributed students become lost, confused, or alienated from the course, it is difficult and costly to remedy that. Unusual effort must therefore be expended in relation to course planning, production, implementation, and quality assurance. Educational management plays a large part at every stage.

#### What are principles-based standards?

In line with the 2020 WFME Global Standards for Basic Medical Education, the standards for distributed and distance learning are principles-based rather than being prescriptive. This means that we will set out design areas, and issues within those areas that must be addressed, as well as key questions and guidance to enable medical schools to consider their own context, and regulators to define their own standards, when setting out their particular approach to the design, implementation, management, and quality assurance of their distributed and distance learning.

The principles-based standards presented here are not inflexible and detailed, but are stated at a broad level of generality to allow local contextualisation. They address the components and qualities of the design, implementation, management, and quality assurance of distributed and distance learning. These components should be considered when choosing, using, or evaluating any aspect of such educational provision. But the standards do not say what those decisions should be. Different choices will be made in different contexts and for different purposes. Neither do they say what methods should be adopted. Those are contextual decisions for local agencies and schools. Instead, the standards provide guidance to apply when choosing and using those methods. In this way, principles-based standards can meet the different needs of medical schools and regulators around the world, whatever their resources, contexts, purposes, and stages of development.

#### Using principles-based standards

This principles-based approach is designed to guide institutions in any and every context. They might be used for establishing new policy and practice in distributed and distance learning, or for reviewing established practice.

The standards offer flexibility for local decision-making about the specific qualities and characteristics of distributed and distance learning that are required and are culturally and contextually appropriate. The standards are detailed in the areas that they cover, but are straightforward. They require thought and discussion, but in that, they discourage a superficial or instrumental compliance response, and might trigger a deep analysis of the educational process.

These standards can be applied as they are, or subsets of the standards can be used, as the basis of more specific work concerning the design and use of different learning methods, that are developed for the context in question. Each standard offers associated guidance and key questions, to help local discussion and definition of the level of specificity that is fit for purpose.

WFME recognises that some agencies and institutions might feel in need of more guidance before they can set their own standards. WFME is therefore exploring various pathways whereby such guidance will be made available.

We hope that the standards will liberate productive analysis, thought, conversation, and decision-making, whether they are applied as presented here, or are supplemented with more specific requirements.

#### DEFINITIONS

Education, being a social science, has contested definitions. We therefore set out our definitions of the terms that we use in these standards:

Assessment	Measurement of learning progress, both to guide further learning and inform progress decisions.
Course	All the planned teaching and learning from commencement to graduation, which may be divided into different parts (for example, disciplines, topics, modules, stages, semesters, phases), depending on the structure of the curriculum.
Course elements	The resources, materials, methods, and opportunities selected to present the curriculum content and enable learning.
Course management office	The management team, led by a senior academic course manager, which has responsibility for managing all aspects of the design, production, presentation, and quality assurance processes of the course.
Curriculum	<ul> <li>A managerial, ideological, and planning document that should:</li> <li>tell the student exactly what to expect, including entry requirements, length, and organisation of the programme and its flexibilities, the assessment system, and methods of student support,</li> <li>advise the teacher what to do to deliver the content, and support the students in their task of personal and professional development,</li> <li>help the institution to set appropriate assessments of student learning and implement relevant evaluations of the educational provision,</li> <li>tell society how the school is executing its responsibility to produce the next generation of doctors appropriately.<sup>5</sup></li> <li>Medicine is learned in the context of practice and the curriculum will recognise the contextual features of health, disease, and the healthcare service. If these differ in the distributed locations where students are grouped, then curriculum modifications can reflect this.</li> </ul>

<sup>&</sup>lt;sup>5</sup> Based on: Grant, J. (2019) Principles of contextual curriculum design. Chapter 5, pp 71-88. In: Swanwick, T., Forrest, K. and O'Brien, B.C. (eds) *Understanding Medical Education. Evidence, Theory and Practice.* Third edition. Wiley Blackwell, Oxford.

Curriculum mapping	The analysis that leads to alignment of curriculum topics and outcomes with the planned educational elements.
Developmental testing	Piloting draft elements to gather comments from students and teachers.
Distributed and distance learning (DDL)	A varied and planned course of study, designed and developed to address the curriculum for students who are in different locations away from the central teaching institution, supported by teaching and supervisory staff who are also physically or virtually distributed across those locations. Distributed and distance learning is a whole-systems approach, including all teaching and learning, formative and summative assessments, feedback on learning, support for students and teachers, management, and quality assurance. Distributed and distance learning can encompass technology-based and non-technology-based educational methods and experiences.
	Distributed and distance learning might refer to an entire course, or a part of it.
Educational designer	Anyone who is involved in the preparation of course elements. This may be academics, clinicians, teachers, course managers, professional educational designers, and other technical specialists.
Evaluation	Review of the conduct and qualities of the course.
Flexible learning	Where students are given the freedom to select when and how they learn, and at what pace. In most medical school, this will be within very limited parameters, since students generally enter, progress and exit through the same learning pathway and at the same times. Although some definitions of flexible learning also allow choice of what is to be learned, in medical education flexible learning is more likely to occur against a specific set of mandatory, perhaps supplemented by optional, curriculum outcomes.
Learning pathway	A carefully constructed route through the course which presents logically related course elements that guide students towards course completion.
Medium for education	The conduit through which teaching or learning occurs. This might be by means of computers, video or audio channels, email, text messages, social media, print, models, kits and artefacts, simulations, face-to-face or other personal interaction.

Method of education	The educational process that occurs when using each medium. This might be a learning package, an instructional module, a lecture, a tutorial, seminar or discussion, supervised practice, or a project, for example.
Presentation	The point at which course elements become available to the students.
Production team members	These include the academic, teaching, and technical staff who are involved in producing the course elements. In most cases, these will be the same as the educational designers, supplemented by other specialised staff such as an academic manager, information scientists, editors, and technical support staff.

#### THE STANDARDS

#### 1. DISTRIBUTED AND DISTANCE LEARNING: SCOPE AND ACCOUNTABILITY

#### Importance of this area

Distributed and distance learning (DDL) involves an approach to whole course design that is more than simply converting existing on-campus learning into other media or methods that are accessible to students who are not on-campus. Students, teachers, and educational managers involved in DDL require special preparation, information, guidance, and support. DDL curricula should be specially designed to take account of the needs and circumstances of students, teachers, and managers. DDL should deliver the same quality of learning, teaching, and assessment as onsite education, including interaction between students, and between students and teachers. Provision of regular personal feedback on performance for students, and support for both students and teachers must be available. Effective DDL involves paying attention to the whole educational system. It is therefore important to understand the character of DDL.

#### 1.1 THE SCOPE OF DISTRIBUTED AND DISTANCE LEARNING

The school describes its purposes and reasons for the provision and design of distributed and distance learning in the curriculum.

#### Guidance:

Set out the reasons for and purposes of DDL in delivering the mission of the institution.

Consider the role of DDL in teaching, learning, and assessment and how DDL affects and facilitates these activities.

Ascertain that the DDL course delivers, at a minimum, the same curriculum coverage and outcomes as a non-DDL course.

Provide an outline description and definition of DDL for the institution.

Consider the effects of moving to DDL on the institution's stakeholders.

Consider both the benefits and possible disadvantages of DDL, as compared with campus-based learning.

#### Key questions:

Why was DDL selected as the full or partial method of curriculum delivery?

If it is a partial method, what parts of the curriculum are taught by DDL?

How is full curriculum coverage ensured, commensurate with curriculum coverage in a course that does not use DDL methods?

How does DDL fit with the regulatory standards of the accreditation agency and relevant governmental requirements?

How will the DDL course ensure equal recognition for the degree or other qualifications awarded? How are graduates of a DDL course assured of equal status with graduates of traditional courses?

How are any possible disadvantages of DDL identified and mitigated?

## 1.2 ACCOUNTABILITY FOR DISTRIBUTED AND DISTANCE LEARNING

The institution has a stated policy describing its full responsibility for distributed and distance learning provision, accessibility, content coverage, and effectiveness.

## Guidance:

Consider how responsibility and accountability are allocated for each aspect of DDL, including design, education and training methods, assessment, student support, academic and clinical staff roles, course management, quality assurance, and resource allocation.

Define the roles, communication, reporting and accountability processes of committees and key personnel, including stakeholders, with responsibility and accountability for DDL.

#### Key questions:

How are responsibility and accountability for each area of DDL development, implementation, and review defined?

How are responsibility and accountability for each area of DDL development, implementation, and review allocated?

What is the committee or organisational structure underpinning responsibility and accountability for each area of DDL development, implementation, and review?

What is the reporting process and structure between responsible and accountable units and individuals?

## 1.3 MAPPING THE DISTRIBUTED MEDICAL SCHOOL

The central institution maps the locations of distributed students and the connections between distributed students, central and distributed teachers, and educational managers.

The distributed educational provision and management is the responsibility of the central institution.

#### Guidance:

Where students are distributed across communities, consider how the institution can identify teachers, both clinical and non-clinical, and local facilities in health and social care near to students for teaching, experience, supervision, and support in relation to the learning process and learning outcomes.

Plan how those distributed teachers and facilities can be engaged and supported by the institution centrally to deliver or help with curriculum coverage and student progress.

Identify local managerial or administrative support for those teachers and facilities to ensure planned curriculum delivery and coverage, and to liaise with and be accountable to the institution centrally.

Consider establishing institutional regional study centres for meetings and to house resources.

Consider how to create a relationship between teachers and distributed students by providing, for example, links to teachers' advisory comments on the course, photographs, and access to teachers by means of designated 'open office hours'.

Ensure that the administrative procedures for recruiting local teachers comply with existing regulations.

#### Key questions:

What is the staffing structure in the locations where students are studying?

How are local staff recruited and what are their functions and job descriptions?

What are the organisational and managerial arrangements for distributed institutional representation?

How is a relationship between teachers and distributed students created and managed?

What administrative procedures are required to appoint local teachers?

What are the accountability and communication pathways between the distributed and central institution?

## 1.4 COMMUNICATION METHODS FOR DISTRIBUTED AND DISTANCE LEARNING

The institution identifies available methods of communication for distributed and distance learning, their cost, and reliability. This is done in relation to facilitating communication between students, between students and teachers, and between the central institution and students, teachers, and institutions in different localities.

## Guidance:

Where students are distributed across communities, methods of communication might include electronic, courier or postal delivery of study materials and information, landline and mobile individual and group telephone calls, radio and television, internet-based communication, and communications mediated from the central institution via a local person or institution.

Plan how different methods of communication might be used, on the basis of what is available to students in their localities.

Identify local and central communications monitoring and management.

## Key questions:

What methods of communication and resource delivery are available for students and staff?

How reliable is each method?

What would each method be best used for?

What are the organisational and managerial arrangements for monitoring communications?

What risk assessments and contingency plans are in place to mitigate the effects of unexpected events such as power cuts or flooding?

#### 2. COURSE DESIGN

#### Importance of this area

Distributed and distance learning is a carefully planned and well-controlled, managed process that uses a variety of educational methods and opportunities to provide a rich learning experience. The different elements of a DDL course might effectively comprise technology-based materials, specially prepared print-based materials, library resources and textbooks, information resources, face-to-face events between students, and between students and teachers or clinical supervisors, exercises, individual study, virtual or actual group working, attachments, and other experiences. DDL development involves planning and testing every detail of the course and leaving nothing to chance. This involves imagining the student learning experience through the pathway, ensuring full curriculum coverage and a rich learning experience. In a well-managed course, the institution can track student progress<sup>6</sup> and offer support when required. This increases the links between the institution and its students and enables institutional accountability and educational effectiveness.

## 2.1 A SYSTEMATIC APPROACH TO DDL COURSE DESIGN

The institution adopts a systematic, managed approach to distributed and distance learning course design that addresses the contexts and conditions for learning, teaching, curriculum, and course development, including the academic standards required by the university or relevant responsible body.

In considering contexts for learning, the institution addresses social, epidemiological, economic, and cultural realities.

#### Guidance:

Understand and define the conditions for effective learning in DDL (see Standard 2.3).

Review the academic standards required by the university or relevant responsible body, and how these will be assured in the DDL course.

Define, publicise, and follow the steps in course design and development.

Understand the physical, technological, and social contexts of students who will be learning at a distance.

Define available educational methods that will be used to ensure a planned variety of learning processes, methods, and resources.

Consider the skills and resources necessary for DDL design and development (see <u>Section 6</u> and <u>Standard 7.4</u>).

<sup>&</sup>lt;sup>6</sup> Perhaps using a bespoke or commercial learning management system.

How are relevant academic standards in DDL assured?

How has the institution researched and defined the optimal conditions for distributed and distance learning?

How has a situation and contextual analysis been conducted to ensure a fit between the DDL design and student opportunities, time, and resources (technological, spatial, and physical) for learning. What were the findings about places, conditions and times of study, and available technologies?

How has an institutional feasibility study been conducted to address funding, staffing, infrastructure, and opportunities for teaching and learning? What were the findings?

How has the match between course design and available technologies been analysed and established?

How and with whom have the steps in course design been agreed, publicised, and implemented?

How have the available course elements been identified and used to ensure a rich variety of learning processes?

With whom has the list of available course elements been shared?

What skills and resources necessary for DDL design and development have been identified?

#### 2.2 CURRICULUM MAPPING

The choice of educational methods, resources, and opportunities is defined based on a process of curriculum mapping.

## Guidance:

DDL is a whole system approach which organises a wide variety of educational elements (resources, methods, and opportunities) for systematic curriculum coverage. These can be presented as a timetable, flow diagram, modules, or tracks, so that students are clear about what is planned for them and how the elements relate to the curriculum.

How were educational methods, opportunities, and resources selected in relation to curriculum topics and outcomes?

How is curriculum coverage demonstrated and shared with students, teachers, and managers?

How is the selection of educational methods in relation to curriculum outcomes described?

How is the student's pathway through the various course elements described?

How are the logical and functional links between various course elements explained?

## 2.3 CONDITIONS FOR EFFECTIVE LEARNING AT A DISTANCE<sup>7</sup>

The institution, students, staff, and stakeholders are informed about the features that enhance the educational effectiveness of distributed and distance learning. These are set out in an institutional educational policy document for distributed and distance learning.

#### Guidance:

Features that tend to make distributed and distance learning effective include:

- a) a clear and logical learning pathway set out and signposted through the elements of the course,
- b) regular student-teacher interaction, live or virtual, synchronous, or asynchronous,
- c) access to a teacher who supports the learning process by providing, for example, further resources, explanation, and constructive feedback,
- d) learning materials that ask students to use the information they are learning, in exercises and activities, and to receive feedback on those,
- e) interaction between students to exchange ideas, discuss progress and problems, and find solutions,
- f) creation of social presence and group identity among students,
- g) constant effective feedback on learning, which can be built into the materials, and can be provided in response to submitted work, or interactive events.

 $<sup>^7</sup>$  Also see standards for student support, <u>Section 5</u>.

In what way is a course map provided that links topics, outcomes, and course elements?

How is an induction programme carried out prior to the start date?

How is regular student-teacher interaction built into the course?

How is access to a teacher provided when it is needed?

What is the balance and organisation of learning, and application of learning? How is learning encouraged and application of learning required, with feedback?

How is regular student-student interaction built into the course?

How is group identity forged among students?

What mechanisms<sup>8</sup> are used to provide constructive, systematic feedback during the course?

## 2.4 DESIGNING MATERIALS, RESOURCES, AND OPPORTUNITIES

Each course element is designed to ensure the best use of the educational medium or method.

#### Guidance:

Ensure that educational designers understand and build in:

- a) methods that ensure student engagement,
- b) opportunities to identify and address gaps in learning,
- c) organised presentation of content,
- d) an appropriate workload,
- e) integral opportunities to use acquired knowledge and skills to reinforce learning,
- f) provision of regular and frequent personalised feedback on learning<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> Examples of feedback methods might include in-text activities with integral feedback comments, tutor-marked assignments with personal feedback, virtual and face-to-face tutorials, clinical learning, virtual and face-to face student groups, on-line support, and formative and summative assessments.
<sup>9</sup> See <u>Standard 2.8</u>.

How are the skills of educational designers assured in using each educational medium?

How are the skills of educational designers assured in designing each educational method?

How do educational designers ensure student engagement?

How do educational designers enable students to use or apply their newly acquired knowledge and skill?

How do educational designers build in and provide regular personalised feedback on learning?

What opportunities do students have to identify gaps in learning, and to address those?

## 2.5 SEQUENCING THE COURSE ELEMENTS

Course elements are sequenced logically to enable mastery of intended learning outcomes, ensuring that:

- a) current learning builds on and relates to prior learning,
- b) there is a flow of rich, varied, and appropriate learning opportunities and methods.

#### Guidance:

Clarify the planned sequence of varied learning and feedback, including the links between course elements, with signposts inside each element to link content and pathways across elements.

Ensure that the sequence of elements develops learning from foundational knowledge to more complex content, to use and application of learning and skills.

Develop appropriate time distribution and milestones or deadlines across elements to form a coherent learning pathway, ensuring that all students progress in a managed way.

#### Key questions:

How is the planned sequence of learning, and the relationship between elements, described and communicated to students, teachers, and managers?

How was the sequence of elements planned in relation to student learning, including their use and application of knowledge and skills?

What is the rationale for distribution of available time across course elements?

What is the nature and distribution of feedback on learning for students within elements and across the course?

How does the planned sequence of course elements enable monitoring and achievement of student progress?

## 2.6 CONTEXTS AND PROCESSES OF LEARNING

The institution has mapped the availability of healthcare service settings to support distributed students, and has planned support and quality assurance for those settings and teachers.

#### Guidance:

A wide range of healthcare settings is a common feature of medical education and training. Where students are distributed, local clinical attachments and settings can become part of the managed provision for education and training. Those healthcare settings might include, for example, hospitals, primary care centres, and community services. Such settings for learning are then an organisational part of the distributed medical school, providing an essential partnership with practice. They can be developed as formal, supported teaching health facilities.

#### Key questions:

How have distributed clinical settings been mapped against curriculum requirements?

How are those settings supported and quality assured in terms of practice, teaching, and supervision?

How are students individually or in groups attached to those settings and supported there?

## 2.7 ENSURING CLINICAL EXPOSURE

The institution has addressed the intended clinical learning outcomes, and has identified opportunities for clinical contact, the development of clinical skills, exposure to clinical conditions and patients, and supervision of clinical experience and learning. This applies both to the provision of contextualising clinical experience during basic science courses, and learning topics in clinical medicine.

#### Guidance:

Ensure that appropriate permission to involve local centres is obtained from the local authorities.

Analyse the opportunities available for distributed students within their local healthcare service, the public health service and community medicine, to ensure clinical learning, either individually or in local groups. That analysis should address characteristics and quality of the service provided, range of cases, and caseload.

Consider what curriculum topics and outcomes will be addressed in these opportunities.

Ensure that local centres have the teaching staff, infrastructure, and adequate caseloads to offer appropriate clinical exposure.

Plan the process of learning from clinical experience, including individual, supervised, and group activities.

Provide guidance notes on teaching, and optional exercises for local clinical supervisors and teachers, to ensure equivalence of experience across distributed sites.

Develop appropriate portfolios, logbooks, and case records with guidelines for students and teachers.

Plan supervision and management support for local clinical teachers to ensure consistent quality of clinical experience and supervision.

Consider what resources, information, and exercises are required to prepare for and review clinical learning events. Consider these for teachers, supervisors, and students<sup>10</sup>.

Consider how to assure student, teacher, and patient safety in distributed clinical settings.

#### Key questions:

How was permission obtained to use local clinical and health service sites for learning and teaching?

How was the analysis of available opportunities for clinical training and experience conducted?

How were the characteristics and quality of the service provided, range of cases, and caseload addressed?

How did the school identify the curriculum topics and outcomes to be addressed by distributed clinical experience?

<sup>&</sup>lt;sup>10</sup> These might be such materials as preparatory study and exercises, portfolios, logbooks, and case records for review.

How is the quality of clinical settings determined, including an appropriate range of cases and sufficient caseload?

What supervision and management support are provided for local clinical teachers?

How are the processes of clinical supervision and clinical learning designed, prepared, and assured?

What guidance notes and optional exercises for local clinical supervisors and teachers are provided?

What learning resources, opportunities, and materials are provided for preparation to attend clinical events and to consolidate learning from that afterwards?

How is the safety of students, teachers, supervisors, and patients assured?

## 2.8 ENSURING FEEDBACK ON LEARNING

The institution has an overall policy on provision of personalised, specific, and timely feedback on learning, as well as a policy on the provision of feedback within each element of the course.

#### Guidance:

Develop an institutional policy document on provision of feedback on learning.

Develop institutional guidance on the provision of feedback for each educational method used.

Identify the range of opportunities and methods for integrated provision of personalised, specific, and timely feedback on learning to distributed students in each element of the course, including formative and summative assessments.

Consider the design of each element of the course in terms of how it can best provide feedback on learning.

#### Key questions:

How was institutional policy on provision of feedback to students developed?

How was guidance on each available educational method developed?

How does the institution ensure that educational designers are aware of and follow the guidance on integration of feedback to students in each course element?

#### 3. COURSE PRODUCTION

#### Importance of this area

Distributed and distance learning in a formal and time-limited institution, such as a medical school, involves guiding cohorts of students through the course with a designated start and completion time. Education therefore occurs according to a plan and timetable. That timetable requires provision of course elements at given times, to ensure that students follow a coherent and planned course of study. Timetabling also ensures that students understand what progress is required, and that the institution can monitor that progress and ensure that students are prepared for the time-dependent summative assessments. Timetabling is therefore an important element of distributed and distance learning, both for the student and for the institution.

Organised provision of the course elements is a part of the timetabling. Just as the course unfolds, course elements are provided at stated points in the timetable to enable associated production, review, implementation, organisation of group events, and avoidance of confusion and overload for students. The organised unrolling of course elements also communicates a clear pathway and signal to students about expected progress. It is an organiser for their learning.

Underpinning this, is a course production plan and schedule which sets out how and when elements will be designed and produced. This also enables rational planning of staffing and resources for course production. This can then be a stated part of the job description and work plan for anyone involved in course production. Planning course production is an institution-level responsibility, and part of the management process.

## 3.1 PLANNING COURSE PRODUCTION

The institution has a stated, co-ordinated plan for the production of each element of the course.

#### **Guidance:**

Develop an institutional course production document that addresses:

- a) the start, end and presentation dates for each course element, based on the curriculum and timetable,
- b) the course production process for each element,
- c) staffing and resources required for production of each element.

Include course production in the workplans of educational designers and production team members.

How was the course production timetable developed?

How was the production process for each course element defined?

How were the staffing and resources required for production of each element calculated? How is provision of those resources assured?

How does the institution include educational designers and production team members in planning the production timing and process for each course element?

## 3.2 STEPS IN THE PRODUCTION OF COURSE ELEMENTS

After meeting standards for course design (see <u>Section 2</u>) the necessary steps in the production of any element of the course are set out in an institutional document in relation to the deadlines set out in <u>Standard 3.1</u>.

#### Guidance:

The necessary steps in course design address:

- a) assuring resource requirements,
- b) assembling multidisciplinary technical, management, academic, and clinical teams,
- c) preparing and discussing element outlines: content organisation and learning process,
- d) preparing and piloting or discussing the first draft of each element (developmental testing),
- e) redrafting and final production,
- f) presentation (distribution) plan,
- g) quality assurance plan (see Section 8),
- h) future updating plan.

Identify and confirm the people, facilities, and finance needed to prepare the course element.

Assemble a multidisciplinary production team<sup>11</sup> and workplans, which might include skills in distance learning design, academic and clinical expertise, assessment expertise, and an academic course manager (see <u>Standard 7.1</u>).

Prepare and discuss an outline of the elements, which presents both the logical organisation of content, and describes the learning process in terms of knowledge or skills acquisition, application or use of new learning, and feedback on learning.

<sup>&</sup>lt;sup>11</sup> The team does not need to be large. Any one team can produce more than one element and may produce all the elements for a particular part of the curriculum.

Prepare a first draft of the element, for discussion and comment by the production team. Consider sharing the draft with students for their comments (developmental testing).

Revise the element taking comments into account and produce the final version.

Consider any guidance or advice that might be required for students, teachers, or managers to accompany presentation of the element.

Consider how the effectiveness of the element might be evaluated (see Section 8).

Prepare an updating plan for the element.

#### Key questions:

How were the people, facilities, and finance needed to prepare each course element identified and confirmed?

What skills and people make up the multidisciplinary production team? What is the workplan for each team member?

What principles were adopted in organising the content and learning process for each element to assure student engagement, understanding, and achievement?

How were comments on a first draft collected, processed, and used to develop the final version?

What guidance or advice was prepared for students, teachers, or managers to accompany presentation of the element?

What is the evaluation plan for the element?

What is the updating plan for the element?

#### 4. ASSESSMENT

#### Importance of this area

Assessment assures, encourages, guides, and optimises learning while providing feedback. These roles do not change in the context of distributed and distance learning (DDL) nor do the principles of good assessment. Consequently, a system for assessment must exist, which incorporates multiple assessment methods that achieve the purposes of the programme and its stakeholders. However, DDL poses challenges and provides opportunities that might not be as pronounced in other settings. These will be highlighted in the guidance below.<sup>12</sup>

## 4.1 ASSESSMENT POLICY AND SYSTEM

- a) The programme has a policy that describes its assessment practices.
- b) It has a centralised system for ensuring that the policy is realised through multiple, coordinated assessments that are aligned with its curriculum outcomes.
- c) The policy document is shared with all stakeholders.

#### Guidance:

An overarching policy needs to be in place, and made publicly available. It needs to drive a system that is composed of multiple methods of summative and formative assessment. It should be responsive to the mission of the programme, its specified educational outcomes, and the resources available.

In the context of DDL, the school needs to have a system of assessment that is appropriately adjusted to distributed and distance learning. A centralised system of assessment is critical in that it enhances comparability across sites of learning and offers the opportunity to create efficiencies that are unavailable in decentralised settings. Such a system should specify which assessments are common across sites and which can be locally adjusted.

In the case of technology-based DDL, the policy should encompass opportunities to constantly collect information that can be used to support learning and decision-making.

Further, adjustments in the relative balance of formative and summative assessment should be considered to reflect the greater administrative complexity of offering secure examinations at a distance.

<sup>&</sup>lt;sup>12</sup> More detailed principles of assessment are addressed in the 2020 revision 2020 WFME Global Standards for Basic Medical Education, available on the <u>WFME website</u>. They are not repeated here.

Which assessments does the school use for each of the specified educational outcomes?

How are assessment methods chosen and designed for each part of the course?

How are decisions made about the number of assessments, their timing, the relative balance of formative and summative assessments, and their method of delivery?

Is assessment information collected in an ongoing fashion?

How are assessments integrated and coordinated across the range of the curriculum, educational sites, educational activities, and educational outcomes?

How is responsibility for the assessment system assigned and managed?

In what ways are local teachers and supervisors involved in the development and implementation of assessments?

## 4.2 ASSESSMENT IN SUPPORT OF LEARNING

- a) The school has in place a system of assessment that consistently offers students actionable feedback that identifies their strengths and weaknesses and helps them to consolidate their learning.
- b) These formative assessments are tied to educational interventions that ensure that all students can achieve their potential.

#### Guidance:

Feedback is one of the most powerful drivers of educational achievement. Students need to be assessed early and regularly in courses and clinical placements for purposes of providing feedback that guides their learning. This includes early identification of underperforming students and the offer of remediation.

In the context of DDL, there is an enhanced need for formative assessment as the nature of the contact between teachers and students may differ. In the case of technology-based DDL, there is also an opportunity to more consistently collect information that can support learning and at the same time consolidate it. Simultaneously, additional effort is required to ensure that teachers become familiar with the strengths and weaknesses of individual students.

How are students assessed to support their learning and how often are they assessed?

How do teachers use formative assessments to become familiar with their students?

How do teachers provide feedback on formative assessments for their students?

How are students assessed to determine those who need additional help?

What systematic data are collected about student progress to identify those in need of support?

What systems of support are offered to those students with identified needs?

## 4.3 ASSESSMENT IN SUPPORT OF DECISION-MAKING

- a) The school has in place a system of assessment that informs decisions on progression and graduation.
- b) These summative assessments are appropriate to measuring course outcomes.
- c) Assessments are well-designed, producing reliable and valid scores.

#### Guidance:

Assessment for decision-making is essential to institutional accountability and it is also critical to the protection of patients. These assessments must be fair to students and, as a group, they must attest to all aspects of competence. To accomplish these ends, the assessments must meet standards of quality.

In the context of DDL, assessments used in decision-making become more difficult to administer given the challenge of maintaining security. However, it is possible to make good decisions with fewer assessments than are currently being used in practice. Consequently, it is advisable to ensure that assessments for decision-making in the setting of DDL be limited to only those which are essential. The resources that are freed when this is done can be used to ensure security in the remaining high stakes assessments and to enhance the use of assessment that supports learning.

There are several practical and technological solutions to the issue of test security, including the use of webcams or other technologies to ensure professional behaviour. Likewise, there are strategies such as synchronous or asynchronous administration with a local person or persons to oversee the process.

An emphasis on assessment methods that require the use of reasoning or an understanding of process might avoid some of the challenges posed by asking questions of fact.

Finally, test security can properly be framed as a matter of professionalism and it offers the opportunity to teach appropriate behaviour in this regard even before students engage with patients.

#### Key questions:

Are the number and nature of the assessments sufficient to make good decisions, but not excessive?

How are blueprints (plans for content) developed for examinations?

How are standards (pass marks) set on summative assessments?

What measures are taken to ensure test security of both distributed and centralised assessments?

What appeals mechanisms regarding assessment results are in place for students?

What information is provided to students and other stakeholders, concerning the content, style, and quality of assessments?

How are assessments used to guide and determine student progression between successive stages of the course?

## 4.4 QUALITY ASSURANCE OF ASSESSMENT

- a) The school has mechanisms in place to assure the quality of its assessment programme.
- b) Assessment data are used to improve the performance of academic staff, courses, and the institution.

#### Guidance:

It is important for the school to review its individual assessments regularly, as well as the whole assessment system. It is also important to use data from the assessments, as well as feedback from stakeholders, for continuous quality assurance and so improvement of the assessments, the assessment system, the course, and the institution. In the context of DDL, these same standards apply equally.

Who is responsible for planning and implementing a quality assurance system for assessment?

What quality assurance steps are planned and implemented?

How are comments and experiences about the assessments gathered from students, teachers, and other stakeholders?

How are individual assessments analysed to ensure their security, if relevant, and quality?

How are data from assessments used to evaluate teaching and the curriculum in practice?

How are the assessment system and individual assessments regularly reviewed and revised?

#### 5. STUDENT SUPPORT

#### Importance of this area

The key responsibility of a distributed and distance learning institution is to ensure that students navigate the course and succeed. In a campus-based institution, students can often turn to peers or teachers in an immediate, formal or informal manner. But where students are distributed, that opportunity is less available. Well-designed student support systems can limit student isolation, help them to follow an effective learning pathway, help to develop the skills of learning at a distance, and engender the feeling of academic and social community that underpins tertiary level education. In addition, an effective student support system will enable the institution to identify students who might be struggling and offer timely and sensitive help.

The course elements are themselves designed to support learning and are the foundational part of the support system:

"... the elements of ODL<sup>13</sup> which are commonly referred to as student support are made up of tutoring, whether face-to-face, by correspondence, telephone or electronically; counselling; the organisation of study centres<sup>14</sup>; interactive teaching through TV and radio, and other activities. These activities have as key conceptual components the notion of supporting the individual learning of the student whether alone or in groups, while in contrast the mass-produced elements are identical for all students."<sup>15</sup>

The principles of student support in DDL include:

- establishing clear, two-way communication between students and staff, the university and services,
- using accessible platforms,
- creating new pathways to student support which do not depend on campus based, face-to-face drop-in services.

The student support system in a distributed and distance learning institution is therefore a key part of the educational process and system.

 <sup>&</sup>lt;sup>13</sup> ODL indicates 'open and distance learning', referred to here as 'distributed and distance learning'.
 <sup>14</sup> See <u>Standard 1.3</u>.

<sup>&</sup>lt;sup>15</sup> Tait, A. (1995). Student support in open and distance learning. In: Lockwood. F. ed. *Open and distance learning today.* London, Routledge, pp. 232-241.

## 5.1 THE STUDENT SUPPORT SYSTEM

The institution has a student support system based on:

- a) analysis of student characteristics and circumstances, including students with disabilities and mental health issues<sup>16</sup>,
- b) determination of what support might be needed,
- c) how integrated support services will be designed and managed<sup>17</sup>.

#### Guidance:

Establish an institutional committee for student support services.

Consider how to include student representatives, academic and clinical staff, student counsellors, and other support providers on the committee.

Develop a clear idea of the academic and social characteristics of students, their living and studying circumstances, and their access to technology and other resources.

Identify the disabilities that students might have and consider making appropriate reasonable adjustments to the course.

Given the range of academic, personal, and social characteristic of students, identify what support services might be needed.

Set out the structure, range, and purposes of student support services.

Design a student support system that is integral to the course process.

Plan a programme of work for the committee to commission and review student support services in relation to a) to c) above. Consider a survey, conducted on a regular basis with students and staff to find out what issues they are facing, what support works well and where the challenges are to ensure that student support is fit for purpose.

#### **Key questions:**

What is the composition of the institution's student support committee?

To whom is the committee accountable?

What are the characteristics of students, including disabilities, and what consequent range of support services might be needed?

<sup>&</sup>lt;sup>16</sup> Disabilities might include aspects of visual acuity, sound acuity, mobility, and symbolic processing including dyslexia.

<sup>&</sup>lt;sup>17</sup> Student support that is integral to a programme is more robust (being complementary and built in) rather than viewing student support as reacting to emergent issues.

What student support services are planned?

What student support services are provided?

What is the committee's programme of work?

How are support services costed?

How is the effectiveness of support services evaluated?

## 5.2 ACADEMIC SUPPORT

The institution provides:

- a) induction information to prepare students for their distributed and distance learning course,
- b) ongoing information to avert and solve academic problems while the course is in progress,
- c) an assigned personal tutor or mentor.

#### Guidance:

Consider providing induction information that addresses:

- a) The DDL process:
- the nature of distributed and distance learning and its potential challenges for learning,
- how to access and use the course elements and resources,
- what feedback to expect, how and when this is provided,
- responsibilities of students including the commitment of time that students may expect to make,
- organisation of time,
- mechanisms for and rules governing communication with other students and teachers,
- online policies and data protection,
- an identified contact for provision of guidance on learning,
- institutional and staff roles and responsibilities.
- b) Available support:
- the types of support provided by the university to enable development and achievement,
- sources of support within the discipline, including a named personal tutor or mentor, locally, remotely and across the institution,
- advice on learning at a distance,

- opportunities for remedial work where learning gaps are identified,
- information on how to lodge complaints and appeals,
- a named academic tutor and contact details.
- c) The course:
- course structure and content, syllabus, curriculum, or course outline,
- full descriptions of all units and modules,
- timetables, including face-to-face and virtual meetings as an individual or a group,
- clear presentation schedule of the delivery of study materials and assessments for course elements,
- reading lists,
- assignment types and deadlines for submission,
- the assessment system,
- provide text messages, emails or other notifications about imminent deadlines,
- the university's policy on plagiarism and academic misconduct, a schedule of any timetabled academic support e.g. tutorials, or web-based conferences.

What induction information is provided for students (and for teachers and managers) about the DDL process, available support, and the course?

How is that information distributed and used?

How is the information updated?

What support is provided in terms of personal academic support, mentoring and tutoring, learning at a distance, opportunities for remedial work, ways to express concerns ad complaints?

What support and information are provided in relation to course structure and content, timetables, deadlines, virtual and face-to-face individual and group meetings, availability, and delivery of all course elements, reading lists, assignments, and assessments?

How is information supplied to the students both initially and for updating purposes throughout the course?

How is the university policy on plagiarism and academic misconduct communicated and applied?

How are supportive events timetabled?

## 5.3 TECHNICAL SUPPORT

The institution ensures that students have appropriate technology and access, and provides orientation to technology and ongoing technical support for students.

#### Guidance:

Ensure that all students have technical access to the course (computer, mobile telephone, and Wi-Fi). Where this is not so, the institution develops a policy and provides practical support.

Provide an introduction to using the technology and navigating technology-based course elements.

Provide guidance on access to library services.

Plan how students can record and track their study, and the resources they have accessed.

Map available platforms for characteristics such as: accessibility, cost, organisational requirements, one way communication, two-way communication, asynchronous, synchronous, one-to-one, and one-to-many communication.

Determine the reliability of connectivity and offer a back-up plan in the case of failure.

Provide a named contact or accessible helpdesk from whom technical advice can be obtained.

## Key questions:

How and why were the selected learning platforms chosen? Consider functionality, cost, ability to accommodate all course elements, and appropriateness to the student community.

How is technical access to all elements of the course, including availability of appropriate hardware and access to library services, assured for all students?

How are student technical skills assured and supported?

How do students create a record of their learning pathway?

What does a risk analysis of connectivity show in terms of availability, predictability, and adequacy of the connection? How are risks mitigated?

How does each student access technical advice from a helpdesk or named technical contact?

# 5.4 SOCIAL AND PERSONAL SUPPORT

## The institution offers social and personal support for students.

### Guidance:

Consider how the institution can facilitate the formation of a supportive student community.

Design regular opportunities for discussions between students.

Offer careers advice services.

Establish confidential personal counselling services.

Design support services which address equality issues, including:

- health and personal welfare services,
- disability services,
- occupational health,
- crisis support services,
- financial services.

To avoid the consequences of social and personal problems, plan:

- appointing a personal tutor for each student,
- ways of keeping aware of unsatisfactory attendance, poor student progression, and students at risk of failure<sup>18</sup>.

## Key questions:

How does the institution ensure the social and personal wellbeing of every student?

How does the institution encourage the development of student personal and social interaction and a collaborative environment?

How is regular interaction between students built into the course?

What confidential personal and social support services are provided for students and how are they publicised and accessed?

<sup>&</sup>lt;sup>18</sup> A close working relationship with the course management office (see <u>Section 7</u>) will enable this.

### 6. ACADEMIC AND CLINICAL TEACHERS

#### Importance of this area

Distributed and distance learning is a rich and varied process that uses different educational methods, planned, developed, and supported by teachers who are either local to the students or are separated by physical distance. Local or central DDL teachers are academics, clinicians, and researchers who also understand the process and principles of distributed and distance learning. They require skills of educational design, writing and producing course elements, assessment, teaching in small groups, large groups and individually both at a distance and face-to-face, providing feedback in a variety of ways, supporting students, problem-solving with students and colleagues, working in teams, and working with the course management office<sup>19</sup>. Without skilled and committed teachers, there can be no effective DDL.

# 6.1 ASSURING TEACHERS' SKILLS

## Teachers are prepared and supported to provide distributed and distance learning.

#### Guidance:

Teachers are trained and supported in:

- a) the process and principles of distributed and distance learning,
- b) educational design,
- c) writing and producing course elements,
- d) assessment,
- e) using information technology, media, and methods for DDL including social media,
- f) communication style at a distance, including conveying personal presence,
- g) teaching in small groups, large groups and individually both at a distance and faceto-face,
- h) providing feedback in a variety of ways, using different methods and media,
- i) supporting students,
- j) problem-solving with students and colleagues,
- k) working in teams for course production and implementation,
- I) identifying and helping students in difficulties,
- m) working with the course management office.

Ensure availability of resource people with the knowledge, skill, and experience to train and support teachers in the above aspects of DDL.

Plan the delivery of training, induction, and accessible support for teachers in all aspects of their DDL work.

Ensure that teachers' qualifications meet the requirements of relevant authorities.

<sup>&</sup>lt;sup>19</sup> See <u>Section 7</u>.

Decide whether a specialised DDL unit is required to support teachers and the system as a whole.

## Key questions:

Does the institution have skill and experience in DDL? If not, how will those be acquired?

Who has accountable responsibility for training and support for teachers?

What is the programme for training and accessible support for teachers? What helplines or resource people are available to teachers?

Do teachers' qualifications meet regulatory requirements?

## 6.2 ASSURING TEACHERS' TIME

Teachers have sufficient time in their job plans to undertake the development and presentation of distributed and distance learning without threatening their research and other academic and clinical duties.

## Guidance:

Undertake a study of the time required of teachers to develop and then implement DDL elements and processes. Time required will be different for each stage.

Organise each teacher's job plan to ensure that there is sufficient time for both DDL and other academic, research, and clinical duties during course development and course presentation.

## Key questions:

How was the time required for teachers to develop the skills and experience in DDL calculated?

How was the required time built into the workplans?

If there was insufficient time for the existing teachers' full range of duties, how was this problem addressed?

### 7. COURSE MANAGEMENT AND RECORDS

#### Importance of this area

Effective distributed and distance learning comprises a set of interrelated, interdependent components, arranged according to a production and presentation timetable. In addition, DDL is characterised by students who learn and keep in touch with the institution individually, and so have individual contexts, requirements, and problems, even though they are working through the course at the same speed and in the same way as all students. In DDL, there are essential tasks in managing students, managing teachers, managing resources, and managing the development and presentation of the course. Keeping records is an essential process. This may well be done through a comprehensive learning management system. An overarching task is the management of progress.

DDL, as a whole system, requires effective, predictable, and accessible academic management. We do not specify the style of management, but assume that this will be one of partnership with and inclusion of all parties.

## 7.1 ACADEMIC MANAGEMENT

The institution has created an academic management office with responsibility for oversight and records of all functional aspects of design, production, presentation and implementation of the course, its elements, students, and staff.

#### Guidance:

Develop a job description and person specification for the academic course manager, that requires academic qualifications or experience that enable the manager to understand the course content, its development, presentation, and quality assurance (see <u>Section 8</u>), and its academic and clinical teachers.

Include in the job description, managerial ability to ensure smooth running of the course, course development, timetables and deadlines, data collection and records, and deployment of resources, as well as technical skills to understand course elements, and interpersonal skills to communicate with and support all staff and students, and to solve problems creatively and efficiently.

Consider the roles and membership of an appropriately sized management team, reporting to the academic manager.

#### Key questions:

Does the job description for the academic manager encompass management of course development (including the multidisciplinary team), timetables and deadlines, data, resources, people, and processes?

How are the technical, communication, and interpersonal skills of the manager described?

How is the requirement for a management team defined and described?

# 7.2 MANAGING STUDENTS

The management process enables the institution to ensure that students are engaged and progressing, and are fully supported in their learning.<sup>20</sup>

## Guidance:

The course management process ensures that student progress and difficulties are monitored, so that supportive interventions can be made.

The course management office is available to students for advice about process, deadlines, technical challenges, and other concerns that are not appropriate to their academic or clinical teacher.

Define how the course management office may act as a conduit between students and teachers or counsellors.

Students have access to advice about course management issues at various times, including out-of-hours<sup>21</sup>, so that they can access help whenever they are likely to be studying and problems arise.

## **Key questions:**

How is student progress monitored?

What are the triggers for contact with students about progress?

How are members of the course management office made accessible to students? What information is given to students about when and how to contact the course management team?

How does the course management office liaise between students and others? What is the confidentiality agreement with students?

<sup>&</sup>lt;sup>20</sup> It is important that monitoring progress does not become surveillance.

<sup>&</sup>lt;sup>21</sup> Students studying at a distance may work at any time, and sometimes encounter issues that need immediate resolution.

# 7.3 MANAGING TEACHERS

#### The management process enables teachers to be supported in their work.

#### Guidance:

Consider how the course management office can provide induction and ongoing support to teachers in all aspects of their DDL work.

Consider how the course management office can enable teachers to meet their deadlines and commitments.

Define what support teachers might require from the course management office. Identify how that support can be provided in a timely manner.

Define how the course management office might act as a conduit between teachers and others in the institution.

Ensure that teachers who are located away from the central school obtain official permission from their local authorities or employers, to be involved in working with the medical school.

Ensure that teachers located away from the central medical school, have clear contracts of employment with the school.

#### Key questions:

What is the induction programme for teachers? Who conducts this? What topics are addressed?

What are the arrangements for ongoing support for teachers, including meeting deadlines?

What enquiries have been made about the management support that teachers require? What were the findings? What subsequent management plans were made?

How does the course management office liaise between teachers and others?

# 7.4 MANAGING RESOURCES AND COSTS

Adequate and appropriate human, financial, technical, and physical resources are defined, provided, and monitored for the course.

### Guidance:

Conduct a full analysis of all resources required to develop and implement the course.

Negotiate availability of those resources.

Calculate the capital, set-up, and ongoing costs of the course<sup>22</sup>.

Develop a financial plan and business case to ensure that costs are met.

## Key questions:

What required human, financial, technical, and physical resources are identified?

How are the capital and ongoing costs at each stage of the course calculated?

How is the business case developed and approved?

How are the required resources provided?

# 7.5 MANAGING COURSE DEVELOPMENT, PRESENTATION AND REVIEW

The processes of course design, development, production, presentation, and review are planned and managed.

#### Guidance:

Develop a managerial timetable, staffing and action plan for course development, presentation, and review.

Undertake a risk assessment and develop contingency plans in the event of:

- technical failure,
- inequality in access.

<sup>&</sup>lt;sup>22</sup> Financial calculations will include information technologies, staff and teachers in central and distributed sites, infrastructure, hardware, software, materials, security, consumables, legal and technical advice, subscriptions to data repositories, funding for curriculum development, maintenance, and quality assurance. Unitary costs per student can be calculated, as well as savings when compared with on-campus learning.

Assign responsibility for oversight of the plan to the academic course manager.

## Key questions:

How is the management plan for course development, presentation and review planned?

Who has responsibility for implementation or oversight of that plan?

## 7.6 MANAGING COMPLIANCE

Course compliance with all regulatory, academic, and legal requirements is assured.

## Guidance:

Review the course and develop appropriate policy and practice in the light of:

- a) regulatory requirements,
- b) academic requirements, including plagiarism,
- c) intellectual property rules,
- d) general data protection regulations,
- e) confidentiality requirements, including firewalls and external communications,
- f) student and staff safety.

Consider how student identity can be assured and verified.

Develop a risk register to identify possible challenges to compliance.

## Key questions:

How is compliance managed and assured for the course?

How is student identity verified?

How is a risk register designed and filled in?

How are risks identified and mitigated?

# 7.7 MANAGING DATA AND RECORDS

The institution has a policy on the collection and use of course data including a list of records kept and their rules for access.

## Guidance:

Design databases for course management which may include:

- a) student records,
- b) student activity records,
- c) course activity log,
- d) achievement of course deadlines,
- e) student assessment results,
- f) assessment marker records,
- g) course evaluation records,
- h) staff contact details,
- i) financial records.

Develop a plan for access to records, specifying who has access to each type of record, and for what purposes, to ensure confidentiality and protection of identity.

#### Key questions:

What records and databases are kept?

How are records and databases compiled?

Who has access to records and databases, for what purposes? How is use of records monitored?

For how long are records kept?

## 8. QUALITY ASSURANCE

Regular review of the activities of the course, in the light of standards for distributed and distance learning, will ensure that students, teachers, and managers are involved in effective education and training, and that the institution demonstrates a course that has the expected characteristics.

## 8.1 THE QUALITY ASSURANCE SYSTEM

The institution has a quality assurance team to implement a transparent quality assurance system, consistent with relevant regulatory requirements, which addresses all stages and aspects of planning and implementation of the course, and triggers action where problems are found.

## Guidance:

Ensure that the quality assurance system addresses:

- a) implementation of appropriate standards for distributed and distance learning,
- b) consistency with regulatory requirements,
- c) students' experiences and achievements,
- d) academics' and clinical teachers' experiences of implementing distributed and distance learning,
- e) effects on students' transition to the next stage of training or practice,
- f) action plans where problems are found.

Consider the purposes, role, design, and management of the school's quality assurance system, in relation to the standards for distributed and distance learning.

Decide on the membership and roles of the quality assurance team, perhaps to include a member with skills in programme evaluation.

Design and apply a decision-making and change management structure and process, as part of quality assurance to ensure appropriate action in the event of adverse findings.

Prepare a written document that sets out the quality assurance system.

## Key questions:

What aspects of the educational programme are addressed by the quality assurance system?

How are the purposes and methods of quality assurance and subsequent action in the school defined and described, and made publicly available?

How is the quality assurance team appointed and responsibility for implementation of the quality assurance system allocated?

How are resources allocated to quality assurance?

How is the quality assurance system used to update the school's educational design and activities and hence ensure appropriate development?