

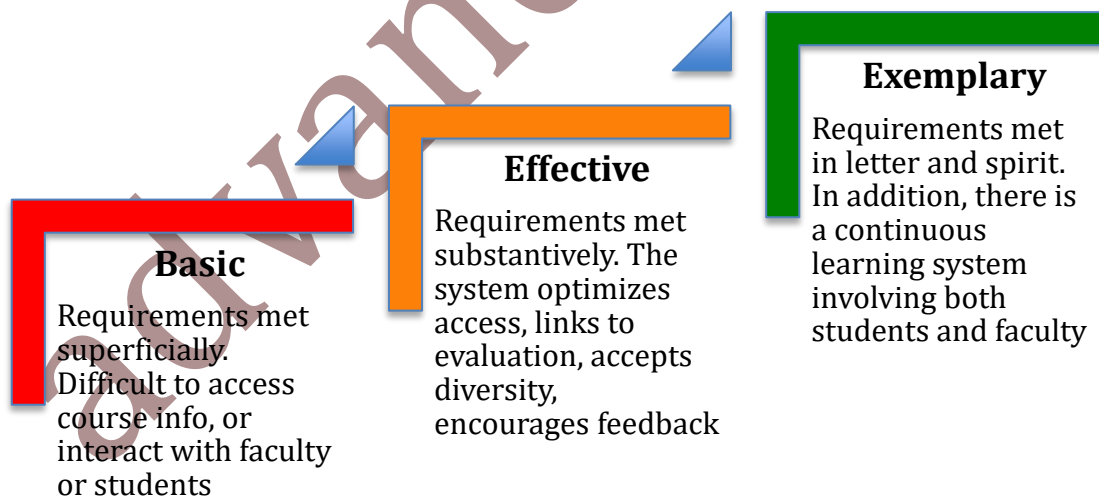
## HEC COVID-19 Policy Papers

### Policy Guidance Note 5: Online Readiness

1. HEC has allowed universities and degree awarding institutes to continue teaching and learning during the interrupted Spring Semester 2020 by using a variety of distance-learning approaches, e.g., the Internet; one-way or two-way transmissions through open broadcast, closed circuit, cable, broadband lines, fiber optics, satellite, or wireless communication devices; audio-conferencing; or sharing of CDs for students without internet access.
2. These options have become salient in the current crisis, since they can allow students and faculty to continue education without compromising their health and safety. However, critics have expressed growing concerns about the quality of online instruction, the preparedness of faculty members, the nature and delivery mechanisms of exams and means of evaluation, and connectivity challenges faced by students.
3. This Policy Guidance Note addresses quality related issues. It is based on a review of prevailing best practices on online, hybrid, and distance education.

#### Quality Levels

4. Given that universities are at various points along the path towards good quality online instruction, it is important to distinguish between the different levels or tiers of quality. A number of institutions have recognized such tiers. For example, a common rubric distinguishes between "Basic", "Effective", and "Exemplary" standards.



5. Many universities that have started online classes are at best at the Basic level described above. They might have a Learning Management System (LMS), but it is not properly functional. The systems for recording or disseminating lectures are rudimentary at best. Faculty members have no experience or training in teaching online classes. The libraries are not properly equipped to ensure access for all students to the required readings. Technological options are not optimized, nor shared properly with students or faculty. No systems are in place either to assess the quality of these elements, or to collect information about connectivity challenges faced by students. This is a major

reason for the enormous dissatisfaction expressed by students. The Basic level is simply not good enough.

6. Universities need to raise their game immediately, and ensure that they are at least at the "Effective" tier before any courses are authorized for online delivery. Equally importantly, the best universities will aim at reaching the "Exemplary" tier as rapidly as possible.
7. Looking at the international experience, there are slight variations in quality standards and requirements (of courses in general, and of online courses in particular), but some elements are common everywhere. These cover major areas of course design and organization, support and resources provided to students, instructional design and instructor quality, assessment and evaluation, innovative uses of technology, and learning outcomes and student feedback.

### Online Readiness

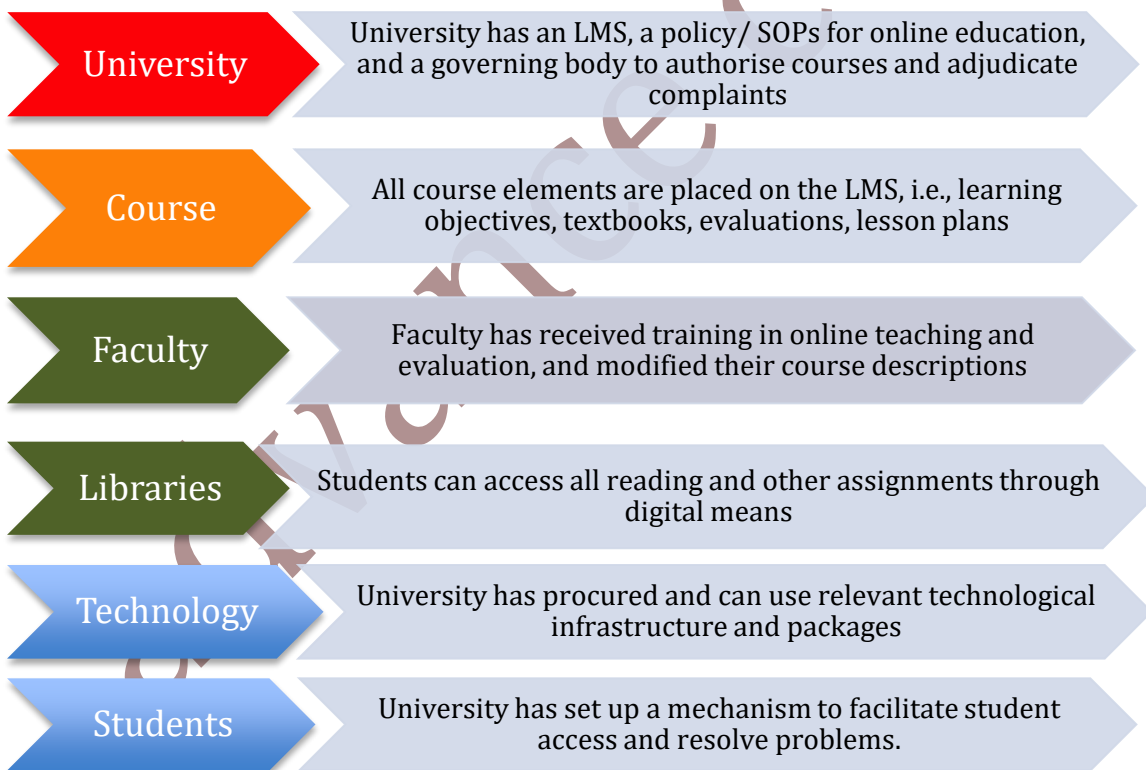
8. In order to create a simplified structure for online education, HEC will use the concept of "**online readiness**". While quality standards apply across the entire spectrum of courses, a set of targeted requirements has been devised solely to cover the particular challenges and opportunities of online education. These standards cover 8 major areas, namely the university, the course, the faculty, the library, the technology, the examination, the laboratory, and the student. These are discussed below.
9. *The University:* The management of educational materials and personnel has become increasingly professional. Three components are of particular importance, namely an explicit policy and SOPs for approval of courses, a Learning Management System (LMS) to provide information, track progress, and coordinate activities, and governance system for decision-making and adjudication of complaints. While these have become markers of quality in all modern universities, they are especially essential in case of online education. Universities need to adopt and announce a transparent policy and SOPs that reveal how it decides whether or not a course can be taught through online means. A functional, effective, and operational, LMS is needed to ensure that students are able to find all relevant information about their course. Finally, a governing system (e.g., an "Online Academic Council" or OAC) is needed to approve online courses and faculty and to rule upon disputes or complaints.
10. *Course:* Once again, the best practice for course organization is to provide all of the following information to the students ahead of time: the course introduction, the learning objectives, the evaluation/ grading policy, course prerequisites (if any), course requirement or rules (if any), the textbooks or other required readings, the key dates, the time and venue (physical or virtual) of class meetings, the lesson plan (together with the assigned readings for each lecture), the assignments, and if possible any PPTs or handouts. All this becomes essential in the case of online teaching. The OAC (or equivalent body) should ensure that all these conditions have been met before authorizing an online course.
11. *Faculty:* Online teaching has completely different characteristics and requirements from face to face teaching. While there may be a need to raise the

quality of teaching generally, special attention needs to be paid to the special attributes of online teaching, including its challenges, opportunities, techniques, and supportive resources. A simple step is to require all faculty members who wish to offer online instruction to take a training course (online of course) on this subject. As part of good practice, faculty members may be requested to do a dry run of the course to test the system for any unforeseen problems. The OAC (or equivalent body) should satisfy itself that a faculty member desirous of teaching an online course has passed such a training program.

12. *Library*: It is the responsibility of the university to enable students to access not only the course material (through the LMS), but also all required readings and associated materials (optional readings, audiovisual materials, or literature or data needed for course-related research) through a library or resource center. The libraries have to do so even if students are expected or required to purchase their own textbooks. In the case of online courses, student access needs to be assured electronically, either through HEC's digital library subscription or through stand-alone arrangements. Once again, the OAC (or equivalent body) should certify that the resource bank and library system is online ready.
13. *Technology*: Online instruction requires specialized technological packages and technological infrastructure, including the software for LMS, classroom meetings (e.g., Microsoft Teams, Zoom, Google Classroom, etc.), examination systems, and so on. Given the likely increase in importance of this aspect of the university's responsibilities, it may also be advisable to consider establishing a dedicated Office of Information Technology (OIT), as some leading universities have done already. The OAC (or equivalent body) should certify that the university has access to the relevant software and infrastructure, has made it available to all students and faculty members, and arranged tech support through the OIT or otherwise for trouble shooting as needed.
14. *Students*: The main issue here is connectivity. Some students have complained that they live in areas where Internet connectivity as well as electricity supplies are highly intermittent and unreliable, or do not have access because of affordability issues. The university is requested to set up a dedicated office in their directorates of student affairs to address such concerns. In order to do so, the university is advised to obtain full information on the obstacles faced by their students in accessing online materials, including their location, the service quality in their area of residence, and their access to devices and connections.
15. *Evaluations and Assessments*: The imperatives for evaluation and assessment for online education are different from those of normal educational processes. In general, universities need robust assessment systems that are communicated to the students at the outset so that they can manage their studies in a prudent manner. These include exams, assignments, in-class activities, self-assessments, evaluations built into the instructional design, and timely and constructive feedback. These are relevant to online education as well, but their structuring and monitoring creates additional challenges. A separate set of guidelines will be issued regarding best practices in this domain. The universities will be advised to adopt an explicit policy on online evaluations and exams and make it available to all stakeholders. At that time, the OACs will be required to

certify that the university has enacted transparent policies and SOPs on evaluation of online courses, and has all the structures in place to support such evaluations.

16. *Laboratory and Practical Instruction*: by definition, practical instruction, including laboratory work, research projects, or internships requires the physical presence of the student and direct supervision by or interaction with their instructors. Such interaction has to be ruled out during the lock down phase. Detailed guidelines will be issued in consultation with professional councils on permissible alternative modes of engagement in this regard. As on other issues, the OACs (or equivalent bodies) at universities will be asked to certify that the guidelines are being implemented.
17. To summarize, it is imperative that universities invest in the quality of online courses before they are offered. This is needed both to ensure that the students get their value for money, and that the resistance to productive (as opposed to purely recreational) use of modern technologies is overcome, and they become widespread in society. This will contribute not only to meeting the current crisis but also in preparing society for the post-corona world.



18. HEC has identified six factors that determine whether or not a particular course is ready for online delivery, namely the university's management system, the course itself, the faculty member, the library or resource bank, the technological infrastructure, and the readiness of the students. Detailed guidelines are being developed on two additional factors, namely the evaluation system and the laboratory system, which will be added to the list at a later stage.

19. In order to start the process, all Vice Chancellors are requested to certify online readiness in the first six of these areas.

### HEC Support

20. HEC has established or is in the process of establishing the following mechanisms to support universities engaged in the transition to online education:

	Mechanism	Responsibilities	Contact Person
a.	<i>Technology Support Committee (TSC)</i>	<ul style="list-style-type: none"> <li>Supporting installation and trouble shooting of LMS and other relevant technological software and hardware</li> <li>Support ensuring access of students</li> </ul>	Mr. Asif Shahid Khan, Project Coordinator, HEDP
b.	<i>National Academy of Higher Education (NAHE)</i>	<ul style="list-style-type: none"> <li>Identifying and certifying faculty training programs for online teaching</li> <li>Identifying and certifying training programs on online evaluations</li> </ul>	Dr. Shaheen Sardar Ali, Rector NAHE
c.	<i>Education Testing Council (ETC)</i>	<ul style="list-style-type: none"> <li>Provide guidelines on online evaluation</li> <li>Provide alternative evaluations</li> <li>Support servicing of online testing</li> </ul>	To be determined
d.	<i>Quality Assurance Agency (QAA)</i>	<ul style="list-style-type: none"> <li>Support and monitor OAC's in assessing the various types of online readiness</li> <li>Support QECs in assessing the quality of online courses</li> </ul>	Dr. Nadia Tahir, MD QAA
e.	<i>National Knowledge Bank (NKB)</i>	<ul style="list-style-type: none"> <li>Support libraries in transitioning to online readiness</li> <li>Identify and curate online materials appropriate for online courses</li> <li>Negotiate with Coursera, EdX, and other content providers to build Pakistan's resource bank</li> </ul>	Post-Secondary Education Reform Unit (PERU), Dr. Zulfiqar Gilani, Program Specialist

21. Each of the above support systems will develop and circulate guidelines in their area of responsibility.

### Initial Checklist and Actions for Universities

22. Here is an initial checklist for universities.

	Item	Deadline
a.	Install LMS	17.4.2020
b.	Adopt policy/ SOPs for approval of online courses	30.4.2020
c.	Establish Online Academic Council, chaired by VC	30.4.2020
d.	Certify that technology is online ready	30.4.2020

e.	Place courses on LMS, regardless of whether they will be offered online	Daily update, 25% by 30.4, 50% by 15.5, and 100% by 31.5.2020
f.	Certify courses as online ready, after ensuring that all requirements are complete	Daily update
g.	Register faculty on LMS, regardless of whether they will offer online courses	Daily update, complete by 30.4.2020
h.	Require faculty members to get training in online teaching	15.5.2020
i.	Certify selected faculty members as online ready	Daily update
j.	Register students on LMS	Daily update, complete by 30.4.2020
k.	Identify students who are online ready	17.4.2020
l.	Certify the library system as online ready	31.5.2020
m.	Adopt online evaluation policy	30.4.2020
n.	Adopt online lab instruction policy	30.4.2020

advance COPY