Abstract
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COVID-19 is a strong disruptive force that has not only influenced our global health and economy but also has changed the way we teach, learn and communicate with our students. It has disturbed the regular education pattern and the standard practices that we adapted over many years. The challenge is beyond changing the mode of delivering instructions from face to face to online. The real challenge is in creating a culture that supports the adoption of innovative practices, which require different skills and competences from the teacher, student, mentor and administrator, and at the same time maintaining the quality of the products. In other words, changing what was exceptional to be the norm over a short period of time. This article describes our approach "Open Learning" in managing such change. Our over-riding philosophy is about ensuring that students have high quality resources, and the enthusiasm and learning skills to benefit from them. At the same time we want to optimise the use of the available online applications and learning management system so that their use is within the capability of our faculty. This paper describes the evolution of our approach and the principles upon which it has been based. Our experiences over the past few months will transform the educational experience of our students over the years to come.

Keywords
COVID-19, open learning, distance learning, e-learning, transformation
**Introduction**

This paper is in response to the dramatic international changes in the educational landscape that have occurred since the detection of COVID-19. This strain of coronavirus has, over the course of a few months, provided us with a pandemic, and caused most nation states to adopt draconian measures to stem its progress.

In response to the threat of infection, the United Arab Emirates Ministry of Education, like many other countries (Wikipedia contributors, 2020), closed all institutions of higher education to students for an initial period of one month from 9th March 2020. The Gulf Medical University, like many others, is responsible for training the health professionals who will be essential for the health and safety of the population now and in the years to come. It is therefore not an option to stop all forms of educational and clinical activity.

In philosophical terms, the Corona virus is an “Event”, which according to Alain Badiou “has the power to rupture standard practices and approved knowledge, disclosing a heightened ability to think and act.” (Badiou, 2007).

We recognised that we needed to use the disruption provided by COVID-19 to develop and enhance the teaching we have normally provided, to be relevant to situations where students can no longer be together, physically on campus. It is not the first time that distance learning has been suggested as a response to such challenges (Grant, 2001). We agree with Goh and Sandars (2020) that meeting the current challenges could, ultimately, lead to a better learning environment in the future.

At GMU, like many institutions, we opted to accept the challenge presented by the response to coronavirus and accelerate our transformation to open learning in all of our programmes. Our approach to accelerating open learning within a distance learning framework, can be seen as an Agile approach (Beck et al., 2001). The Agile framework has its history in software development where changes are delivered on a very short timescale. Working processes are favoured over comprehensive documentation and responding to change is favoured over following a plan.

Distance learning can be defined as:

Individual study of specially prepared learning materials, usually print and sometimes e-learning, supplemented by integrated learning resources, other learning experiences, including face-to-face teaching and practical experience, feedback on learning and student support. (Grant, 2008)

Fortunately, distance learning bears a close relationship to well-organised campus-based learning:

Distance learning is itself a form of blended learning, using a variety of co-ordinated and planned modalities and methods to deliver the curriculum and enable students to learn effectively. (Grant, 2015)

The identities of distance learning and on-campus learning are becoming blurred:

On-campus learning increasingly involves less face-to-face interaction with a teacher, while distance learning designers do their very best to ensure that distributed students have both direct and technology-mediated contact with both teachers and other students. Distance learning designers take the idea of a learning community very seriously. (Lea and Nicoll, 2002)

In terms of reimagining course delivery and student learning in times of crises that close university campuses, the main challenges are to ensuring that faculty are competent to:

- adapt to the new delivery method.
- redesign and reuse the available instructional materials to be delivered fully online.
- integrate both synchronous and asynchronous modes of online delivery in a way that enhances students’ higher cognitive skills.
- transfer all the students’ support and mentorship activities from fully face to face to a fully online platform.

The extant use of technology to support on-campus courses, enables this conversion (Hamadan Bin Mohammed Smart University, 2020; Lau, Yang and Dasgupta, 2020; Open University, 2020; Ross, 2020; Sanger, 2020). The methods and resources that are chosen, will be a function of the local context.
Our approach is near to that which Derek Rowntree (Rowntree, 1977) originally called ‘materials-based learning’ and others have called ‘resource-based learning’. Based on the blended use of a variety of learning strategies, resource-based learning ‘should be based on the application of a range of instructional design principles to the development of learning materials’. In a world of abundance, the emphasis is less on the development of specific learning materials than on the selection, aggregation and interpretation of existing materials (Ryan et al., 2000).

Here we describe and explain the principles and path we have taken at Gulf Medical University.

**Principles guiding our approach**

In general terms, the same cognitive theories of learning will apply regardless of delivery method or learning modality. But there are differences in:

- The techniques that are required at a distance to ensure that students fully understand how to navigate between the synchronous and asynchronous modes of online delivery
- The methods used to ensure that students are engaged in learning and are doing so effectively
- The type of management that is required of the delivery of resources and the students’ experience.

Successful distance learning requires dedicated management, a close knowledge of each student’s problems and progress, and available advice to address those.

There is a large body of literature, some of it evidence-based, to guide implementation of learning at a distance.

- In terms of the process of learning, new knowledge is built, of course, on existing knowledge and understanding and on the creation of robust, well-organised and useable cognitive structures in memory (Bartlett, 1932; Piaget, 1952; Bruner, 1966; Baddeley, 1986; von Glaserfeld, 1989). Learning often has elements of a social activity between stakeholders (Vygotsky, 1978) where teachers, and other students, facilitate and support individuals in their learning. We have tried to replicate this.

- Feedback on learning is also essential (Torre, Schuwirth and Van der Vleuten, 2020) and distance learning must build this in more systematically than on-campus learning might consciously do. There are a number of potential ways of achieving this effectively at a distance. These include feedback, and reflection upon feedback given and received (Taylor and Hamdy, 2013). This can be achieved (Grant, 2015) in many integrated ways including through in-text activities, formative tutor-marked assignments, virtual tutorials, student real and virtual groups, on-line support and discussion forums, and assessments. Each of these might represent a minor modification to existing materials and resources.

- Distance learning must engage, guide and retain the student. In opposition to current dominant ideas about self-directed learning, distance learning works best when students are absolutely clear about the pathway that they must follow. Giving students options and choices at a distance is problematical. Distance learning students can get lost. They tend not to have a consistent or predictable approach to using such options which means that the distance teacher cannot be sure about what is being learned, unless the pathway is clear and specified (Halbert et al., 2011).

- To ensure an effective student learning pathway, distance learning must be clear in its organisation and purpose, engaging and giving a sense of achievement. It must be accessible. The actual visual presentation should be attractive, and in sections to give the student a sense of progress. There must be opportunities for students constantly to use what they have learned by the provision of learning activities. The same principles apply to materials delivered under the banner of e-learning, or as downloaded notes and workbooks or video lectures or synchronous learning events such as tutorials or seminars.

**The process of change**

The challenge faced by institutions during the coronavirus pandemic is that of switching existing courses to remote learning very quickly. In our case our programs were heavily reliant on lectures, practicals and small group work,
supported by the provision of some resources on-line. Our postgraduate program in Health Professions Education was already based on-line, with the addition of face to face sessions held four or five times a year. We have changed all of our programs to be on-line.

We have been able to use our existing virtual learning platform, our resources, and our experience in delivering open learning in our postgraduate courses. But this has meant a change in the way that our students and staff think about what is important in education and professional development.

The main point is not where the students are located, but in helping them to use their time to learn effectively and be able to recall and use the elements for analysis, discussion and problem-solving. So, although we had already started to use the best possible on-line resources to support our face-to-face interaction, we have discussed the ways in which we can reconceptualise the role of the lecturer and give a greater emphasis to their role in developing the individual stage of learning.

Learning delivery methods will improve and build up over time - this is an incremental process, given that it has occurred halfway through the academic year. An incremental approach also allows evaluation of effect. So this is an exciting opportunity to rethink delivery methods and to be more collaborative with students. Those who are being asked to learn from the redesigned platforms will make it clear (by their engagement, absence or feedback) what needs adjustment, and what is holding their interest and allowing them to learn.

In each of our constituent colleges and programmes at GMU, we identified academic champions who had more experience than others in using technology. Their role is to lead the change and help people to learn from each other. We also learnt through our previous experiences of on-line learning and distance education, that it is crucial to have other staff who are dedicated to making the system work. There are two reasons for this. The first is to achieve a consistent approach. The second is that it means that the academics do not get bogged down in managing the technology but can focus on the business of helping students to learn their subject.

Bates’ (2019) authoritative text shows us that online learning can encompass any use of the internet in supporting learning, providing educational experiences, and delivering materials. Although several of our staff have been involved in developing and delivering on-line learning packages over many years, we provided everyone with a simple template to plan their on-line sessions, to ensure a blend of guided learning, use of that learning, and feedback.

We held workshops and documentation to refresh people’s skills at using the on-line platform. Importantly, we held an International Virtual Workshop using “GoToMeeting”, which allowed for presentations and discussions between our Faculty, our local experts and our close partners in CenMEDIC who help deliver our Master’s Program in Health Professions Education.

Open learning
Although there are many terms for our developing approach to education, rather than emphasise the delivery platform, we now talk about “Open Learning” in which the over-riding philosophy is about ensuring that students have high quality resources, and the enthusiasm and learning skills to benefit from them. There are three elements to this: resources, skills development and support.

Resources
Although open learning is almost invariably mediated via the web, the materials themselves should be varied and include downloadable written resources, as well as technology-based resources. Research findings consistently show that learners prefer print to other modalities (Mizrachi, 2014).

Reasons for preferring print include:

- tactile aspects of holding, flipping and thumbing through a printed work;
- linear progression as opposed to vertical scrolling;
- better memory cues on printed pages;
- greater inclination to highlight and annotate their printed readings,
• less eyestrain and fatigue (Mizrachi, 2014, p. 7440)

The delivery of resource materials asynchronously, where people do not all need to be on-line at the same time, is much more likely to be successful than aiming for “live” delivery. This is a function of the interface between people, their timetables and commitments, their access to technology, and also of the connectivity, bandwidth and even power supply issues that we face in some parts of the world.

The resources themselves must be mapped on to the curriculum and its timetable, and laid out in a coherent flow, just as it would be in on-campus teaching:

‘Distance learning must be seen as a whole system which integrates a wide variety of elements for curriculum coverage. These might include print, use of resources, practical classes, technology-based methods, face-to-face learning, individual and group work and many others. once the learning experiences are planned, these should be presented to students as a timetable or flow diagram, so that they are clear about what is planned for them and how the elements relate to the curriculum.’ (Grant, 2015)

Students at a distance can get lost. So, if you move towards an on-line delivery of course material it is important to develop a clear and simple pathway to help staff and students navigate through the curriculum. A “student guide” and a “tutor guide” should be provided to help each navigate the flow and know what is expected of them. In GMU, that carefully organised flow consists of:

• Program handbooks
• Module/Unit handbooks
• Online access to resources through our VLE
  • Pre-prepared lectures and podcasts
  • Curated reference lists
  • Key resources
  • Self-assessment quizzes
• Online access to the library
• Online access to small group discussions
• Online access to team-based and problem-based learning classes
• Email support and access to other support services

We also provide discussion boards and blogs on-line for students to ask questions, clarify their ideas and receive feedback on their skills in organising the material in their own minds.

Alongside the material that needs to be understood, we also provide formative assessments, on which we try to give high value, timely, feedback. This is important, because it helps students to know how well they are understanding the material and provides encouragement to progress further. Snyder (Snyder, 2000) discusses the way that a student’s hope for the future derives from the way in which they feel they can navigate through their program of study, and their motivation to use that pathway. Through targeted, timely and helpful feedback we can guide them to success.

The online mediated face to face element

Face-to-face teaching is a common element in distance learning, open learning and resource-based learning. It enables almost any subject and discipline to be taught at a distance, including clinical medicine (Grant, 2008). It is important not
only for teachers to ensure that they continue to know their students, but also for students to rehearse a different type of use of knowledge. Social distancing and social isolation measures mean that this is now mediated on-line.

Lectures, of course, can be migrated on-line although they need to be constructed in such a way that they can be paused for reflection and consideration, and learning activities should be provided for students to undertake as part of their listening. Webinars and on-line conferences can help groups of people discuss the issues, although they need careful preparation and planning, and access to technical support. The familiar “flipped classroom” approach to learning (Hew and Lo, 2018) is used to help students prepare for webinars, which really should not become monologues from the teacher! 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university into one where all delivery, resources and support is delivered from a distance. To make this happen, an institution needs to be agile, identify key champions for change, and invest in the technical resources and personnel to make it possible.

We have found the process of change to be both stimulating and positive. Colleagues spend far more time thinking about how to help their students understand what is important. This pushes for even greater clarity about things that really matter. It is clear to us now that the future of health professions education, is going to be different. The challenge will be to ensure that the best of the lessons that we are learning now will survive into the future.

**Take Home Messages**
- The disruptive force of the COVID-19 pandemic required a rapid shift to online delivery of resources, discussion and student support
- The process of change itself needs careful planning
- The changes needed are as much about culture as the use of hardware
- As far as possible use existing resources and familiar platforms
- Keep it as simple as possible
- Change is easier and more consistent if there are local champions who are active teachers
- Distance learning does not run itself; we need dedicated technical personnel to support and manage the process.
- Training students and staff in the new learning environment is crucial

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Declarations
The author has declared that there are no conflicts of interest.

Ethics Statement
Ethical permission was not required as our institution does not require approval for discussions of strategy or quality assurance projects.

External Funding
This article has not had any External Funding

Acknowledgments
We would like to acknowledge the support, constructive criticism, and advice of our colleagues and students across the globe.

Bibliography/References

Baddeley, A. D. (1986) Working Memory. Oxford: Oxford University Press.

Badiu, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Bates, A. W. (2019) Internet and Resource-based Learning. London: Kogan Page.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

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Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

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Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

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Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.

Badiou, A. (2007) Being and event. Translated by Feltham, O. London, New York: Bloomsbury Academic.

Bartlett, F. C. (1932) Remembering: A study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.
Snyder, C. R. (2000) Handbook of hope: Theory, measures, and applications. Academic press.
Tait, A. (1995) Student support in open and distance learning, in Lockwood, F. (ed.) Open and distance learning today. London: Routledge, pp. 232–241.
Taylor, D. C. M. and Hamdy, H. (2013) Adult learning theories: Implications for learning and teaching in medical education: AMEE Guide No. 83. Medical Teacher. 35, pp. e1561–e1572.
Tomaz, J. B. C., van der Molen, H. T. and Mamede, S. (2013) The design and program evaluation of a distributed PBL curriculum for training family doctors in Brazil. European Journal of Open, Distance and e-Learning. 16(1), pp. 11–26.
Torre, D. M., Schuwirth, L. and Van der Vleuten, C. (2020) Theoretical considerations on programmatic assessment. Medical Teacher. 42(2), pp. 213–220.
von Glaserfeld, E. (1989) Constructivism in education. in Husen, T. and Postlethwaite, T. N. (eds.) The International Encyclopedia of Education. Oxford/New York: Pergamon Press.
Vygotsky, L. S. (1978) Mind in Society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
Wikipedia contributors. (2020) Impact of the 2019-20 coronavirus pandemic on education. Available at: Reference Source (Accessed: 12/04/2020).
Zawacki-Richter, O. (2008) The Growing Importance of Support for Learners and Faculty in Online Distance Education. Carl von Ossietzky University of Oldenburg, Centre for Lifelong Learning (C3L). Available at: Reference Source (Accessed: 12/04/2020).
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Migrated Content

Version 1

Reviewer Report 29 April 2020

https://doi.org/10.21956/mep.20044.r30697

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Judy McKimm
Swansea University

This review has been migrated. The reviewer awarded 5 stars out of 5

Thank you for writing this timely article which is very well referenced, with a lot of literature that people might not be aware of. I like the balance of practical steps and tips plus aspects of cultural and organisational change. This is a good addition to the current series and draws on the authors' extensive open learning experience. In these current times, many who are unused to a remote learning approach are having to rapidly learn on the job and any papers like this which provide useful guidance are very welcome. I would recommend this paper to those who are adapting their programmes and also maybe to learners, to help them understand some of the issues their teachers are struggling with.

Competing Interests: No conflicts of interest were disclosed.

Reviewer Report 29 April 2020

https://doi.org/10.21956/mep.20044.r30700

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Samar Ahmed
Ain Shams University Faculty of Medicine

This review has been migrated. The reviewer awarded 5 stars out of 5

I am commending this work not as a reviewer but as an end user. I think the presence of a well written
A reflection piece that captures existing experience like that of Janet and other reviewers during this transformative time is very important. While we are all struggling to make this transition as less chaotic as possible it serves a great purpose to have an article mention principals guiding an approach. I think this is genius. We look at articles and their utility from the angle of whether or not the message in it is replicable and useful to readership. The basic idea that of replicability in my view is a detailed description of purpose. I believe this is generosity on the side of the authors who did not just give us a detailed description of their approach but instead helped us understand principals that in my view are the best thing to be transferred out of an educational experience. This is because principals can be manifested differently in each if our settings yet they remain solid. I think this article speaks to the “smart educator” the way I would like to be addressed.

**Competing Interests:** No conflicts of interest were disclosed.

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**Reviewer Report 27 April 2020**

https://doi.org/10.21956/mep.20044.r30702

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**Da-ya YANG**
First Affiliated Hospital of Sun Yat-Sen University

This review has been migrated. The reviewer awarded 5 stars out of 5

This paper offers practical recommendations for the management of distance learning in the midst of the COVID-19 pandemic. As a beneficiary of the programme mentioned in the article, I can personally attest to the approaches of ensuring accessible resources, online-mediated interactions, and strong support for students being instrumental in the facilitation of learning. And among the take-home messages, "The changes needed are as much about culture as the use of hardware", "As far as possible use existing resources and familiar platforms", "Keep it as simple as possible", "Change is easier and more consistent if there are local champions who are active teachers" were helpful advice for healthcare institutions trying to capitalize what they have and move forward in medical education in the coronavirus outbreak. Overall, in my opinion, this article is a must-read for all who are involved in managing distance learning programmes during turbulent times like this.

**Competing Interests:** No conflicts of interest were disclosed.

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**Reviewer Report 27 April 2020**

https://doi.org/10.21956/mep.20044.r30696
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Fan Lian
the first affiliated hospital of Sun Yat-sen University

This review has been migrated. The reviewer awarded 5 stars out of 5

This paper articulates a constructive set of ideas about distance learning, which is timely and enlightening. We face a lot of challenges, but surely online teaching and learning provides opportunities to study without the limit of time and space. We have been working on this issue as well. And this paper has so many things that we are interested in.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 25 April 2020

https://doi.org/10.21956/mep.20044.r30701

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P Ravi Shankar
American International Medical University

This review has been migrated. The reviewer awarded 5 stars out of 5

This is a very good addition to the series of articles in MedEdPublish on teaching-learning and assessment during the current pandemic. One characteristic feature of the current situation is that the apple cart has been suddenly toppled without any prior warning. So schools have to scramble together to put in place a system of online learning. I have been looking at this issue carefully over the last five weeks and I feel the 'easiest' component to put together may be online teaching. Many schools have simply created or rather converted their lectures slides to be delivered online. This of course, is not to be recommended. The other components to put in place are a system of assessment, system of student support and counselling, well-set mile posts, and an efficient learning or I would put it a student management system (which brings together admissions, student tracking, human resources, finance, curriculum, assessment and learning). Putting in the components like student support and assessment and linking them to competencies will be challenging. I always remember Prof Janet Grant telling us way back in 2007 about the proposal for an online medical school which the Open University had submitted to the General Medical Council. If I remember correctly she said all the components were in place but the
Council had its reservations. The pandemic is a challenging time and most of us are staying cooped up in our homes and under a lot of physical and mental stress. Providing proper counselling and support is important. This is true not only for students who have received most attention but also for faculty members and others. There are a lot of behind-the-scenes people who are vital for an online system to run smoothly. Educational technologists, e-learning support specialists, online support and administrative staff which many universities do not have at present. Gulf Medical University was fortunate in having a forward looking academic leadership, good technical resources, and facilities and being located in a high-income country. Another challenge I definitely foresee in many parts of the world will come from universities and councils. A form of ‘blended‘ learning in my opinion is the most likely way forward. We have to educate doctors and other health care professionals who can support and protect human lives. The challenge will be less with regard to delivery but more in the areas of student support, interaction and assessment if these have to be shifted online for prolonged periods of time. The article will be of broad interest.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 25 April 2020

https://doi.org/10.21956/mep.20044.r30699

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John Cookson
University of Worcester

This review has been migrated. The reviewer awarded 5 stars out of 5

A very topical paper in an area where most of us need some guidance

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 23 April 2020

https://doi.org/10.21956/mep.20044.r30698

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Trevor Gibbs
This review has been migrated. The reviewer awarded 5 stars out of 5

During the Covid-19 pandemic, there have been many questions asked. Many faculty are looking towards quick answers, much of which is not available, simply because we are moving very fast into unchartered waters. This is frequently complicated because different contexts require different answers. We do however learn from each other and this paper is one of those we can all learn from. It has some new and interesting references and refers to theories and models that many faculty may not be appreciative of. Some areas of the paper point to a common sense approach; other areas to a changed approach to a specific need, many areas are what we can all learn from. I would recommend this paper to all who are involved in changing their programmes in the light of the pandemic.

**Competing Interests:** No conflicts of interest were disclosed.

[Reviewer Report 23 April 2020](https://doi.org/10.21956/mep.20044.r30695)

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**Felix Silwimba**

University of Lusaka

This review has been migrated. The reviewer awarded 5 stars out of 5

This is a very informative article. Brings out some of the challenges of Covid-19 and the sudden switch to distance learning mode. It is a real challenge in low come countries with challenges of internet connectivity and unreliable power supply.

**Competing Interests:** No conflicts of interest were disclosed.