

Transforming Legal Education In The Era Of Fourth Industrial Revolution (IR4.0)

by

*Puteri Sofia Amirnuddin**

*Ashgar Ali Ali Mohamed***

*Muhamad Hassan Ahmad****

Abstract

The recent technological advances trigger the emergence of the Fourth Industry Revolution (IR4.0) which is very dynamic and progressive to the extent most of the major industries in the world have no option left but to transform the industry accordingly in order to adapt to the changes in the IR4.0 era. Hence, this article aims at exploring how the legal education offered at higher learning institutes can be transformed to be in line with the IR4.0 in an efficient manner but without compromising the quality. Tertiary education system should catch up with this progress to ensure that modern legal education would be fully modified and concurrent with it. Currently, there is a significant delay in transforming legal educational services offered at universities, colleges and other higher learning institutes with regard to fields of study, subjects offered, teaching and assessment methods, among others. Despite the fact that it is complex, for the time being, to transform the legal education to be in line with the IR4.0, it will benefit the society unprecedentedly for a long run as it is the 'game changer' of this era.

Keywords: Fourth industrial revolution, IR4.0, online university, online learning, legal education, legal qualification.

Introduction

In recent years, there have been much interest on disruptive technologies and disruptive innovations on various industries as a result of the IR4.0. The Higher Education Providers are not an exception as the education industries are also one of the industries that are being disrupted.¹ In this regard, it is significant here to recall the profound speech delivered at the opening of the Legal Year 2019 by the former Chief Justice of Malaysia, Tan Sri Datuk Seri Panglima Richard Malanjum, who mooted that: '[T]he legal profession must embrace technology. There is no option. It is coming soon to the legal profession. Adapt or be dropped'. He further stated that: '[U]nless the law schools start preparing their law graduates for the industry they may end up in the unemployment queue'.² It would be worthwhile to reproduce here the relevant parts of his speech on this subject.

* Faculty of Business and Law, Taylor's University

** Ahmad Ibrahim Kulliyah of Laws, International Islamic University Malaysia

*** Ahmad Ibrahim Kulliyah of Laws, International Islamic University Malaysia

We noticed the inconveniences of lawyers in coming to courts just to get hearing dates. We saw the congested parking areas. We sympathised the heavy bags the lawyers carried to courts. We responded with the use of technology. We are on the 4th Industrial Revolution. We must adapt to be able to compete successfully. Technology is the way to go. So we introduce the E-review in case management. At the appellate levels, all case managements are now done online. No more lining up by lawyers from 9am onwards. They can do case management from the comfort of their offices or homes. For the other courts, the system will be extended by March this year. Of course, in Sabah and Sarawak they have been enjoying it for the past years.

We realised that flight tickets were on the increase and so too hotel rates. These can increase the burden of clients and the public. We also noted the traffic jam on the Federal Highway between Kuala Lumpur and Shah Alam. We responded. By the end of this month Video Conferencing will be available between Kuala Lumpur, Penang and Shah Alam. It will be expanded to other areas soon. And in the pipeline is the idea of Virtual Court and the use of hologram technology instead of video conferencing. But that will be another day.

During our sittings in the Federal Court we observed lawyers dozing off while waiting for their turn to present their cases. We responded with technology through Queue Management System. Today, lawyers can enjoy their mee curry or nasi lemak in the canteen without any worry of their turns being missed. They can see from the monitors in the canteen or their mobile phones when their cases are called.

We sometimes read the blogs and public comments in the Internet. Sometimes, we do not like what we read about the courts and the judges. Believing in the old saying of prevention is better than cure, we took pre-emptive measures. In addition to judges making their regular assets declarations, we have today provided Complaint Mechanism *via* hotlines and social media to receive public complaints and suggestions on our performance. There is also now a new Judicial Officers Code of Ethics similar to the Judges Code of Ethics to ensure that our judicial officers keep a high standard of behaviour on and off Bench.

And lawyers should no longer be fearful of overlooking to file the defences or affidavits of their cases because there will be Auto Alert system to remind them. Judges too can no longer plead amnesia when their pending judgments piled up. The system will alert them and keep reminding them in various colours until they have done their work. This is what we call the Monitoring system.

So far, it has been technology all the way. It is not over yet. Hopefully by June this year the Malaysian Courts will be 'Paper Less'. Lawyers should no longer be carrying bundles of documents to courts. All files will be in the form of virtual files within the Case Management System (CMS). Imagine coming to court carrying just your tablet.

And imagine you are no longer tied up to your office and no monthly rental to pay but able to do your work anywhere in this world. The tagline will then be 'Now Anywhere Can Work'.

The use of Artificial Intelligence (AI) is also in our radar. One item is already in the work. As I speak, the Data Sentencing feature is being fine-tuned so that judges and judicial officers can use the data to guide them in sentencing process and thus avoid disparity of sentences upon accused persons convicted of similar offences. To sum up, the legal profession must embrace technology. There is no option. It is coming soon to the legal profession. Adapt or be dropped ...

The Judiciary is also in working cooperation with institutions of higher learnings. Unless the law schools start preparing their law graduates for the industry they may end up in the unemployment queue. There are murmurs that many of our fresh law graduates do not meet the expectation of the industry. I think it is the duty of the Bar to remedy such a situation. Chambering must be a period of learning the trade and not time to carry bags and photostating for their masters. Newly admitted lawyers should do as many as possible *pro bono* works in courts for it will give them the experience and confidence in court later on. Do free legal aid for the unrepresented instead of leaving the senior lawyers merely mourning for the poor souls".³

Accordingly, it is imperative for Higher Education Providers to consider the future of the legal education whether remaining *status quo* would be sufficient for the future law graduates or whether a transformation in the legal education is needed in order to ride along the waves of the IR4.0 and stay relevant to the industry. In the following discourses, the authors propose a well-designed online legal education model that would be practical and functional for any university, college and any other higher learning institute in transforming legal education to be in line with the IR4.0.

Structure Of Bachelor Of Laws Programme

In Malaysia, there are approximately 20 universities and colleges offering law programmes such as Diploma of Laws, Bachelor of Laws, Master of Laws and Doctor of Philosophy in Law. The Higher Education Providers offering law programmes include public universities, private universities, private university colleges, foreign university branch campuses and colleges as listed below.

Table 1: List of Higher Education Providers offering law programmes in Malaysia

Public Universities	Private Universities	Private University Colleges	Foreign University Branch Campus	Colleges
University of Malaya	Taylor's University	University College of Islam Melaka	University of Reading Malaysia	Brickfields Asia College
International Islamic University Malaysia	Multimedia University	International Islamic University College Selangor		Advance Tertiary College
National University of Malaysia	HELP University			Seri Stamford College
MARA University of Technology	INTI International University			UOW Malaysia KDU College
Universiti Utara Malaysia	Management and Science University			SEGi College
Universiti Sains Islam Malaysia				International Islamic College
Universiti Sultan Zainal Abidin				

The structure of the Bachelor of Laws programme usually comprises a combination of core, elective and compulsory core ('also known as mata pelajaran umum')⁴ modules introduced and/or required by the Malaysian Ministry of Education, Malaysian Qualifications Agency (MQA) and the Legal Profession Qualifying Board (LPQB). The core modules include Law of Contract, Law of Tort, Constitutional Law, Criminal Law, Land Law, and Equity & Trusts. Students reading law must pass all of the six core modules which shall be studied for the duration of one academic year.⁵ Depending on the choice of university, students can choose the elective modules from a wide array of module lists provided by the respective university. The duration to complete a law degree is a typically three academic years with an exception where students opt for a complementary study such as extension, minor, second major or additional electives which can extend the duration of the study up to four to five years. Generally, a person who has passed the final examination leading to the degree of Bachelor of Laws from the public universities as listed in the relevant *Gazette Notifications* is a qualified person for the purposes of admission to the Bar

as an advocate and solicitor pursuant to the Legal Profession Act 1976. However, holders of LL.B degrees from other universities will be required to sit and pass the Certificate in Legal Practice (CLP) examination before they can be deemed qualified for admission to the Bar in Malaysia.

Common Facilities Provided By Higher Education Providers

Most of the law faculties at the Malaysian Higher Education Providers are equipped with various learning facilities in order to enrich students' learning experience at their respective institutions. The common facilities provided at Malaysian Higher Education Providers include lecture theatres, moot courts, legal aid centres, libraries, collaborative classrooms and discussion/ seminar rooms. The facilities are provided with the intention to create an environment for learning which supports the practical application of knowledge.⁶

- (i) **Lecture theatres:** Lecture theatres are large rooms usually designed for lectures with tiered seating. Lecture theatres are different from the traditional classroom seating arrangements. They are designed for a large group of students, providing each student seated either at the front or at the back with excellent visibility of the main stage, platform or lecturer's table.
- (ii) **Moot court:** Moot courts are one of the prominent facilities provided by the Higher Education Providers specifically for law students. Moot court plays an important role for providing law students with a simulated experience of being in a real courtroom. Since the early 1890s, moot courts were considered as an important feature for law students to prepare briefs and argue cases.⁷ Law students will be exposed to mooting which is an activity that replicates the atmosphere in a court room by requiring students to present their side of each case at an appeal level based on a fictitious lawsuit before a panel of appointed 'judges'.⁸ The judges are usually the law lecturers, invited lawyers or sometimes can even be retired judges.
- (iii) **Legal Aid Centres:** Legal Aid Centres are considered one of the educational spaces for law students to bridge the gap between the theory taught in class and its practice.⁹ Some law faculties have established legal aid centres to provide legal services and legal assistance to disadvantaged communities who have limited financial access to practicing lawyers in the law firms.¹⁰ Exposing students to legal aid centres will enable them to gain real-life experience with real clients and with real legal issues under the supervision of volunteered practicing lawyers or lecturers.¹¹ Students will gain various skills by participating in legal aid which include communication, problem solving, counselling, negotiation and research skills.

- (iv) Libraries: Most of the Higher Education Providers in Malaysia are equipped with libraries in order to provide law students with a learning space where they can engage with literatures¹² and also to collaborate with other students.¹³ Law students will be able to develop their research skills through independent and/or collaborative learning while conducting legal research in the library.¹⁴
- (v) Collaborative classrooms: Apart from learning law in lecture theatres, there are also collaborative classrooms designed by the Higher Education Providers for the new generation of learners. The use of collaborative classrooms have the capability to develop law students' creativity skills, teamwork skills and also confidence when they are assigned with activities during lectures or tutorials. The manner in which the collaborative classrooms are designed allows law students to learn to delegate tasks and take charge of their learning whilst being monitored by lecturers.
- (vi) Discussion/seminar rooms: Discussion or seminar rooms are smaller rooms as compared to lecture theatres but are similar equipped with computers, projectors, Wi-Fi and whiteboards. The size of the discussion or seminar rooms varies from one room to another depending on the purpose assigned for each room. The arrangement of the discussion or seminar rooms also varies from a classroom setting, U-shaped seating or Parliamentary seating.

Transforming The Legal Education

Legal education in the era of IR4.0 is challenging but yet there are numerous exciting opportunities which can transform the future law graduates for the better. The massive proliferation of artificial intelligence, BigData, Cloud Computing, affordable mobile devices and Internet broadband connectivity are offering a new way of educating students¹⁵ that will eventually disrupt the current system of legal education. The new way of educating law students will revolutionise the legal education where law students are no longer required to be on campus to read law. With the speed of the Internet and various technological tools, learning can still take place regardless of the time and location. In the era of IR4.0, technological innovations are predicted to bring radical change to the legal education and it can already be felt with the use of Massive Open Online Courses (MOOCs). The latter is an online platform that allows universities, colleges and educators to create, design and deliver their modules *via* the Internet. Students can still study law and acquire new skills through online learning.

The online delivery is not limited to learning as more often than not, when a disruption takes place, it essentially changes the blueprint of an organisation.¹⁶ With the support of the various stakeholders involved in the educational institutions, legal education can still be delivered holistically by

introducing a more innovative and technology-friendly system. The transformation of the legal education can take place in a form of administration, teaching delivery and methods, subjects offered, assessment methods and facilities offered.

Administration

Prior to enrolling into a programme at a University, the current practice requires students to complete their registration process and this is usually done electronically. Most of the Higher Education Providers are equipped with online facilities when it comes to registration as it promotes ease of processes. Upon successful enrolment, students will be guided by the administrative staff, typically during orientation day, on how to manage their student portal. Students are provided with a username and password to perform their enrolment, subject registrations, payment and other academic as well as non-academic matters. However, the existing practice is not without flaws. Technical errors, delay in replying students' enquiries and not-so-friendly webpage are causing frustrations amongst the students. In order to increase students' confidence towards the transformation of the legal education, the education institutions need to satisfy students' needs at the ground level starting from the administration itself. Once the changes in the administrative levels have been met, the education providers can provide effective online legal education from students' first day of online enrolment until the completion of their programmes.

Teaching Methods And Delivery

Given the fact that the education industry is being disrupted and that law practices are operating in a disruptive market as well, it is pertinent for the law faculties to take a step forward to enhance the teaching methods and delivery. The introduction of technology to the teaching methods and delivery are becoming increasingly important to prepare law students for future employment. The traditional law instructions such as one-way lecturing and students to memorise cases and statutory provisions are becoming a fading fashion.¹⁷ In order to place students' needs at the heart of educational institutions, it would be desirable for lecturers to incorporate various teaching and learning activities over course management system (CMS). Most of the education providers have adopted various course management systems (CMS) such as Moodle, Blackboard, Schoology, SAP Litmos and TalentLMS, to name but a few. Students will access the respective module page on CMS in order to obtain access to the relevant learning materials uploaded by their lecturers. The ease of access to download the learning materials has resulted in CMS to be the most adopted educational technologies in higher education.¹⁸

Due to the common usage of CMS, the education providers may consider the following two options to enrich law students' learning *via* online. The first option is for law faculties to consider reducing the in-person face-to-face (as opposed to online face-to-face) teaching hours and to replace the hours with learning over CMS by getting the students to interact with lecturers over the module page on CMS or to view pre-recorded lectures.¹⁹ This will allow students to use the extra time to collaborate with students on a research project or assignment and get in touch with their lecturers over CMS regardless of their locations. The students will also have the opportunity to learn law at their own pace, but viewing the pre-recorded lectures as many times as they want until they have fully grasped on the content covered.

The second option is a more advanced option for a more advanced law faculty whereby the in-person face-to-face learning will be replaced with fully online law courses. The teaching and learning will take place completely on CMS and the lecturers are provided with the autonomy to adopt various interactive contents to engage with the students. The content of the CMS for each module will contain either pre-recorded lectures on CMS for each topic or live lectures depending on the creativity of the lecturers. Lecturers can utilise H5P²⁰ contents to assess students' understanding for each video uploaded on CMS. This way, the lecturers will be able to monitor students' activity, performance and understanding through the completion of H5P activities on the relevant topics.

In addition to that, one University has taken one step ahead in introducing learning law *via* augmented reality (AR).²¹ The adoption of AR allows students to combine online data with the real environment to learn law outside the classroom.²² The use of AR in learning law will encourage law students to explore online resources to find solutions to real issues which will subsequently develop their problem-solving, critical, cognitive and independent learning skills.²³ By familiarising themselves with the use of AR, the students can provide new perspectives to legal problems due to their exposure in AR technology in their future world of work.

Subjects Offered

The MQA has provided in its Programme Standards for Law and Syariah that the requirement for Bachelor of Laws degree without the professional year shall be taught with a minimum credits of 120 credits whereas for programmes with the professional years, it shall be a minimum of 160 credits.²⁴ The list of core modules is not specified in the programme standards but in order to comply with the requirements provided by the LPQB, students are required to sit and pass the examinations for six compulsory modules as mentioned earlier.²⁵

Most institutions will offer a combination of core modules, elective modules and internship programme for their respective Bachelor of Laws degrees. The structure of the Bachelor of Laws programme at each institution varies in terms of the semesters offered and also subjects offered. Some institutions designed their Bachelor of Laws programme to be taught across one semester a year. For example, one institution may only accept an intake in September of each year. On the other hand, there are some institutions that offer their law degree programmes across two or three semesters a year. Some institutions offer two intakes a year such as in February/March and September in each year and there are institutions that offer three intakes a year namely in January, March and September in each year. Despite the varieties of structure for the Bachelor of Laws programme, it is common for law students to complete the programme in a period of three years (or four years, with professional year).

The current practice on the structure of the Bachelor of Laws programmes provided by the institutions have never been questioned particularly when the institutions have obtained accreditation from the MQA. Nevertheless, it is wise to consider the effect of the IR4.0 in the education industry where the fusion of technologies has narrowed the gaps between physical and digital spheres. The democratisation of technology has created extraordinary levels of innovation and efficiency promoting massive flows of digital information on an unprecedented scale. In light of this, it is perhaps high time to consider new innovations pertaining to the structure of the Bachelor of Laws programmes.

Given the fact that the courts have adopted technology to improve and enhance the delivery of justice efficiency, which include the e-Filing, e-Service, e-court system, Queue Management System, Case Recording and Transcribing, among others, it is apt for the law schools to adapt to the changes so that the legal education and the legal profession will embrace the disruptive force of the technological changes hand-in-hand.²⁶ Law Schools should consider moving away from the traditional models of providing legal education to offer a programme that is cost-effective, more efficient and accessible. Instead of offering core modules across two semesters, law schools can consider offering the modules in a single semester thereby reducing the span of completing a law degree soon, in less than three or four years.

The Law of Contract I and the Law of Contract II, for example, can be converted into 'Law of Contract' which covers all the relevant topics in one semester. The transformation can be made possible by encouraging academics for each module to upload pre-recorded lectures covering all topics that usually covered in two semesters into one semester. The transformation is not to be done overnight but the institutions can provide a specified duration for the lecturers to convert their modules for the upcoming future intakes. For a lecture that takes two hours of face-to-face

lecture, the pre-recorded lecture can be designed to be in 20-minute length covering all relevant key points. The pre-recorded lectures will encourage self-learning and life-long learning where students can learn at their own pace by providing them with an option to rewind the pre-recorded lecture or fast forward to a particular sub-topic.

With regard to the structure of the programme, there are two options that may be opted by the law schools. First option is for the law school to allow students to enrol for one module until the successful completion of the activities in that particular module before allowing students to enrol into the second module. The process is repeated until students have completed all modules for the single semester. In order to cater to various students' needs, the institutions can also create the structure of the law programme based on the students' learning ability. The second option is for the law school to allow students to take four or more modules in a single semester until all core courses are done. The aim of the variations in the structure of the modules offered is to fill the gaps of the future demands of the future consumers, ie, the future law students. The disruptive changes brought by the IR4.0 will require law schools to be more flexible in designing the structure of the law programmes. Given the fact that future law students are already tech-savvy and becoming more advanced technologically, their learning abilities will be much ahead as compared to students enrolling in the law programme a decade ago.

Assessment Methods

The notion of transforming the legal education also call for changes to be made towards the traditional assessment methods in assessing students' level of understanding in each module. The MQA has provided a guideline pertaining to the assessment methods which states that the assessment must contain continuous and final assessments.²⁷ The guideline specified that the continuous assessment can be in a range of 40% to 70% and the final assessment can be in a range of 30% to 60% for the suggested assessment such as collaborative work, final examination, oral assessment, peer review, practical assessment and written assessment.²⁸ The guideline also provides that the continuous assessment can be in a range of 0% to 100% and the final assessment can be in a range of 0% to 100% for the suggested assessment such as student attachment/placement, projects or academic exercise. The guideline does not provide a restriction in terms of the types of assessment which can or cannot be used in assessing students' level of understanding. The guideline also does not assign the assessment methods for any module and hence, the law schools have the liberty to design the relevant assessments for each module.

The most commonly used assessments for Bachelor of Laws programme would include written assignments, oral presentations, class/tutorial participations and final examinations. The choice of assessment is usually

selected depending on the particular module and the learning outcomes assigned for each module. Nevertheless, the selection of the typical assessments has always been the same since law programmes were introduced. Academics need to incorporate new ways of assessing students in order to be in line with the new structure of the Bachelor of Laws programme. Once the transformation in the structure of the programme has been done, changes need to be made with respect to the continuous and final assessment.

Given the fact that the lectures are done by way of pre-recorded lecture in a single semester, the lecturers can opt to utilise H5P activities for each pre-recorded lecture in order to assess students' level of understanding for each video or topic uploaded. The markings for each H5P activity will be done automatically where the system will be able to capture students' correct or wrong answers and also able to provide a summary of all students who have completed the H5P activity within a stipulated time and date. The new way of assessing students *via* H5P activity will encourage students to re-view the pre-recorded lectures in order to capture a better understanding on the area of law covered in the particular pre-recorded video. The activity will support the justification of having purely online lessons instead of having to attend to lectures physically on campus. The students can view the pre-recorded lectures regardless of their location and still able to attempt the assessment for each video without having the need to be present on campus.

It is understandable that some modules will require students to answer essay questions or provide full written answers on particular factual scenarios. Instead of having students to sit in the classroom or exam hall to provide their written answers, the lecturers can opt to utilise platforms that use artificial intelligence to mark students' answers such as Assessment 21²⁹ or e-rater.³⁰ The new way of assessing students' answers will ease lecturers' workload in terms of marking particularly when there is a rise in the student population with the limited number of teaching academics. The use of these platforms will align the means of assessment with modern teaching and learning methods *via* e-learning platforms. In addition to these two platforms, there are a number of platforms that offer various technologies that can assist lecturers in marking e-assessment even for high-level complex summative examinations. Depending on the platforms used, there are 'cheat-proof' technologies provided for the platforms in order to prevent or detect any elements of cheating when attempting the assessments. The concept of using these platforms for marking students' assessment is not a novel approach as it is already been utilised by academics in the United States (US), Australia and China.

With regard to the final examinations, the conventional approach is to require students to sit and attempt the examination questions physically on campus. Moving forward, the education institutions can consider other manners apart from requiring students to sit for the traditional sit-down examinations for a specified period of time. This would ease the academic and non-academic staff from performing hours of invigilation duty. Students' knowledge and understanding can still be assessed in the final examinations by way of take-home examinations or online final examinations. The latter works in a way where the questions will be released on CMS on a specified day and the students are provided with a specified duration to complete the final examinations, ie, three to five hours. For online final examinations, it is suggested to design problem-based questions in which students' ability to apply the relevant laws and decided cases to the legal issues covered in the questions could be tested.

The difference between continuous assessment and final examinations by way of take-home examinations is that the latter will test students on their knowledge and understanding for each topic weekly whereas the former will test students on their ability to answer questions based on the relevant laws that have been covered in the single semester.

Facilities Offered By The Higher Education Providers

Studies have shown that facilities offered by the Higher Education Providers in terms of lecture halls, moot court, legal aid centres, library, collaborative classrooms and seminar rooms do not necessarily make a law student more work-ready.³¹ The facilities provided simply create an environment for learning but having limited cumulative effect with regard to the practical applications.³² Unless the facilities provided replicate future working environment, then the facilities provided can be said to better prepare students for the world of work.³³ It is understood that the facilities provided are intended to promote an environment where students can network, acquire and disseminate knowledge but it is a high time for educational institutions to consider on the effectiveness of the facilities to prepare the future law students for their future world of work.

The future students will be the students who are intrigued with the incorporation of new technologies and innovations. They are the ones who are living in an environment which is becoming automated and more systematic. Hence, it is logical for law schools to venture into new domains for disseminating knowledge. Against this backdrop, it is proposed that the law schools should also opt for online classrooms such as Google Hangouts, YouTube Live, WizIQ, augmented reality and virtual reality where learning takes place outside the physical classroom. It can still be face-to-face between lecturers or facilitators and students by using the aforesaid online tools and

apps (as opposed to in-person face-to-face). The existing facilities can still remain but to be utilised for non-curricular activities by creating an academic environment to organise law hackathons, legal conferences or legal summits to name a few.

Conclusion

It is uncertain what the future holds for the law schools as it depends on the external forces that shape the law, legal education, legal profession, and the legal industry as well as market. Literatures have predicted that the future of law schools can be contested as the educational institutions are at odds as it can be disrupted by new innovators. One thing which is certain is that technology is growing rapidly and the growth dynamics in terms of disruption is constant as each and every day there are new innovations being introduced. Technology can make things that are relevant in the past becomes irrelevant in the future. By taking a deep look at the current practices relating to the institutions' administration, teaching methods and delivery, subjects offered, assessment methods, facilities offered, and how it can serve the needs of the future students effectively and efficiently, it is important for Higher Education Providers to take heed of the changes that are and will affect the future condition of the legal education. Given the fact that even the courts have taken a leading role in the implementation of technology in the delivery of justice, it is suggested that the Malaysian Ministry of Education, the MQA, the LPQB and the Malaysian Bar should recognise and accredit that the legal education that has been transformed to adapt to the challenges in the era of IR4.0, of course, without compromising the quality.

Endnote:

1. Ray Schroeder, '*Disrupting the Disrupters*', (Inside Higher Ed, 9 January 2019) <<https://www.insidehighered.com/digital-learning/blogs/default/online-education-was-disruptive-force-25-years-ago-now-it-being>> accessed on 26 October 2019
2. Speech by the former Chief Justice of Malaysia Tan Sri Datuk Seri Panglima Richard Malanjum at the Opening of the Legal Year 2019 held at The Putrajaya Marriott Hotel, Putrajaya, 11 January 2019 http://www.kehakiman.gov.my/sites/default/files/OLY%202019%20CJ%27s%20Speech%20-%20Final_0.pdf, accessed on 7 November 2019.
3. *Ibid.*
4. Jabatan Pendidikan Tinggi, '*Buku Garis Panduan Mata Pelajaran Umum (MPU) Edisi Kedua*', <<http://jpt.mohe.gov.my/portal/penerbitan/garis-panduan-mata-pelajaran-umum-mpu-edisi-kedua/buku-garis-panduan-mata-pelajaran-umum-mpu-edisi-kedua>> accessed on 26 October 2019.

5. Legal Profession Qualifying Board, 'Entry Requirements for the CLP examination', <http://www.lpqb.org.my/index.php?option=com_content&view=article&id=130&Itemid=77> accessed on 26 October 2019
6. Jason Turner, Puteri Sofia Amirnuddin and Harmahinder Singh, 'University Legal Learning Spaces Effectiveness in Developing Employability Skills of Future Law Graduates' (2019) 16 (1) Malaysia Journal of Learning and Instruction 49 at 52
7. PA Joy, 'The uneasy history of experiential education in US law schools' (2018) 122 Penn State Law Review 551
8. BK Bucholtz, MA Fray and ML Tatum, *The Little Black Book: A Do-It-Yourself Guide for Law Student Competitions* (Durham DC: Carolina Academic Press, 2002)
9. JD Lawton, 'Teaching Social Justice in Law Schools: Whose Morality Is It?' (2017) 50 (3) Indiana Law Review 813
10. SA Rosenbaum, 'Beyond the Fakultas' Four Walls: Linking Education, Practice and the Legal Profession' (2014) 23 Pacific Rim Law & Policy Journal 395
11. Jason Turner, Puteri Sofia Amirnuddin and Harmahinder Singh, (no. 44) at 54
12. C Wilders, 'Predicting the Role of Library Bookshelves in 2025' (2017) 43(5) The Journal of Academic Librarianship 384
13. W Ellison, 'Designing the Learning Spaces of a University Library' (2016) 117 (5/6) New Library World 294
14. WM Sullivan, A Colby, JW Wegner, L Bond and LS Shulman, *Educating lawyers: Preparation for the Profession of Law* (1st edn, San Francisco: Jossey-Bass, 2007)
15. Bo Xing and Tshildzi Marwala, 'Implications of the Fourth Industrial Age for Higher Education' (2017) 73 The Thinker 10. Available at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3225331> accessed on 27 October 2019
16. *Ibid*
17. Mutaz M Qafisheh and Stephen A Rosenbaum, *Experimental Legal Education in a Globalized World : The Middle East and Beyond* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2016)
18. Richard E West, Greg Waddoups and Charles R Graham, 'Understanding the Experiences of Instructors as They Adopt a Course Management System' (2007) 55 Education Tech Research Dev 1 at 2

19. The Government is looking into the possibility of using recorded lessons by selected teachers to be shared with other schools in Malaysia which is aimed, among others, at simplifying and enhancing the quality of teaching: 'Govt exploring use of recorded lessons in schools, says PM' <https://www.malaymail.com/news/malaysia/2019/09/07/govt-exploring-use-of-recorded-lessons-in-schools-says-pm/1788287> accessed on 8 November 2019.
20. 'H5P' is an abbreviation for HTML5 Package. H5P contents include interactive videos, interactive presentations, quizzes and many other features. It is responsive and mobile-friendly.
21. Jason Turner, Puteri Sofia Amirnuddin and Harmahinder Singh (no. 44) at 52
22. R Azuma, '*A survey of augmented reality*' (1997) 6 (4) Presence: Teleoperators and Virtual 355, J Carmigniani and B Furht, '*Augmented Reality: An Overview*' in B Furht (Ed), *Handbook of Augmented Reality* (New York, NY: Springer, 2007) and E Klopfer and K Squire, '*Environment Detectives: The Development of an Augmented Reality Platform for Environmental Simulations*' (2008) 56 (2) Educational Technology Research and Development 203
23. Puteri Sofia Amirnuddin, '*Redesigning Formative Assessments for Law using AR*' in FA Ghaffar and FD Yusop (eds), *Redesigning Assessment for Holistic Learning: A Quick Guide for Higher Education* (ADEC: University of Malaya Press, 2018) and H Serin, '*Augmented Technologies in the Education: AR apps*' (2017) 7 (2) Journal of Educational Sciences and Psychology 4
24. Malaysian Qualifications Agency, *Programme Standards: Law and Shariah Law* (2nd edn, 2015) 22
25. Legal Profession Qualifying Board, '*Entry Requirements for the CLP examination*', <http://www.lpqb.org.my/index.php?option=com_content&view=article&id=130&Itemid=77> accessed on 26 October 2019
26. Mark A Cohen, '*How Will Legal Education And Training Keep Pace With Change?*' (Forbes, 10 Sept 2018) <<https://www.forbes.com/sites/markcohen1/2018/09/10/how-will-legal-education-and-training-keep-pace-with-change/#36e7c9fa7055>> accessed on 29 October 2019.
27. Malaysian Qualifications Agency, *Programme Standards: Law and Shariah Law* (2nd edn, 2015) 29
28. *Ibid*
29. Assessment 21, '*Taking e-assessment at the next level*' <<http://www.assessment21.com/index.html>> accessed on 30 October 2019

-
30. e-rater, '*About the e-rater scoring engine*' < <https://www.ets.org/erater/about> > accessed on 30 October 2019
 31. Jason Turner, Puteri Sofia Amirnuddin and Harmahinder Singh (no. 44) at 52 and C Batt, '*Integrating Experiential Education into the Law School Curriculum*' (2015) 7 *Elon Law Review* 43
 32. *Ibid*
 33. *Ibid*
-