Online Dispute Resolution Simulation: Shaping the Curriculum for Digital Lawyering

Faye F Wang

Brunel University London

Abstract

Online dispute resolution (ODR) simulation workshops are designed to provide students with a virtual learning environment that empowers our students to gain legal and digital skills for their readiness in future employment. Students are invited to act as complainants, opponents and arbitrators/mediators to resolve a real-life case in a team-based, student-centred and research-informed teaching and learning environment. The ODR simulation workshops have been conducted by the author among both undergraduate and postgraduate law students since 2007 at Brunel University and other places. This ongoing project was initially funded by the Nominet Trust in 2010. Throughout these years, ODR simulation workshops have been well-received by students from different cultures, particularly where English is not their first language. Students were asked to conduct online arbitration or mediation hearings and submit arbitral awards and mediation settlements, as well as delivering technical observation notes and group presentations after the process. This article promotes the use of ODR simulation to effectively enhance students' learning experience, legal skills (i.e. critical thinking, legal reasoning, problem-solving skills) and digital skills. It puts ODR simulation into the context of the shift in teaching approaches in the digital age and explains how modern legal education can be shaped to prepare for digital lawyering.

Keywords: online dispute resolution; online arbitration; digital literacy; digital empowerment; artificial intelligence; digital lawyering; flexible learning; team-based learning; student-centred learning, research-informed teaching.

[A] INTRODUCTION

Online dispute resolution (ODR) is a mechanism for resolving disputes via the use of electronic communications, which broadly includes many forms of alternative dispute resolution (ADR) and e-courts. The use of electronic communications for ODR includes but is not limited to emails, telecommunications application software and other communication technologies. Whilst ODR can be used in most civil and commercial disputes, those involving electronic transactions or internet-related cases are most suitable because electronic evidence can be submitted easily via the internet on the ODR platform (Wang 2017: 8). ODR provides a more efficient, cost-effective and flexible way to resolve disputes than traditional ways (Wang 2009, 2010).

In the age of artificial intelligence (AI), at present, ODR services still require a great degree of human interaction, i.e. human decision-makers. In the partly AI-assisted ODR environment, AI technology may help transcribing evidential audio to text and provide a provisional outcome for a human mediator or arbitrator to review and make the final decision. In the next generation of ODR development, established technologies can be employed to provide automated service in ODR. In the entirely AI-enabled ODR service environment, once a complaint is filed and accepted, and relevant evidence is submitted, a robotic mediator or arbitrator may help us resolve the issue without any human intervention. In the medium to long term, the dispute resolution intelligence machine itself may be able to collect and analyse critical data concerning previous decision-making by arbitrators or mediators, understand the nature of the dispute and the associated rules and laws relating to the case (Wang 2017: 98). In 2015 Arbitrator Intelligence, a global information aggregator, was set up to collect arbitrators' past decision-making information, including published and unpublished international arbitral awards (Arbitrator Intelligence Questionnaire).

With regard to technological developments in ODR provision, service-oriented computing 'offers a promising solution in discovering other appropriate agents, reaching agreements between service providers and customers, managing the joint execution of tasks and dealing with any problems that arise' (Wang & Griffiths 2010: 156). The more recent blockchain technology (a shared and distributed ledger; and an alternative to traditional databases) can support the automated execution of smart contracts (Daniel & Guida 2019: 46-53). It is argued that blockchain and service-oriented computing may be combined as 'service-oriented permissioned blockchain' to optimize services such as verifiable data

(Qiu & Ors 2020). These advanced technologies may be employed in the ODR process to execute arbitration or mediation agreements and shape online written communications to avoid escalating conflict by blocking foul language in the process (Wang 2017: 80).

Modern legal education should educate students in legal and digital skills, assisting the development of their ability for global competence. It has been observed that an increasing number of lawyers in the United States are involved in international cases due to the expansion of legal services driven by a global economy (Kim 2018: 908). The concept of 'basic global competency' has been characterized as 'a basic understanding of international law and awareness of fundamental differences in legal systems and cultures, rather than specific expertise in any particular aspect of international law or foreign legal system' (Kim 2018: 907). A problem-solving approach is essential to legal education as lawyers are generally considered to be problem solvers (Nathanson 1997: 53). When dealing with cross-border or transnational commercial legal disputes, international commercial arbitration has become one of the most popular methods, surpassing international commercial litigation. This is largely due to the possible benefits of arbitration as a process that is fast and cost-effective and its outcome enforceable. In modern legal education, basic global competence should be extended to the attainment of current digital lawyering skills and the life-long learning skills to understand and develop technologically assisted legal services due to the ever-increasing usage of technologies in legal services. A well-designed ODR simulation workshop (in particular, an online arbitration simulation workshop) would assist students to achieve the above expected learning outcomes, e.g. legal, digital and global competence, and to be ready for their future employment.

This article discusses how the adoption and inclusion of the ODR simulation workshops in legal education could be used to prepare our students' readiness to use advanced technologies to resolve disputes as legal practitioners in contemporary society. It considers how the methods and practice of ODR simulation workshops can be further enhanced to enable students to gain practical experience in the digital age and inspire them to foresee the future of robotic or other technology in legal services (Wang 2019). It promotes the use of ODR simulation as a generator for student-centred and team-based learning in order to effectively enhance students' learning experience, legal skills (i.e. critical thinking, legal reasoning, problem-solving skills) and digital skills. It puts this into the context of the shift in teaching approaches in the digital age and explains how modern legal education can be shaped to prepare for digital lawyering.

[B] DEVELOPMENT OF ODR SIMULATION FOR LEGAL EDUCATION

ODR simulation workshops have been utilized by the author since 2007 in both undergraduate and postgraduate modules, through a wide spectrum of internet law, dispute resolution, international commercial arbitration and international trade law. In ODR simulation workshops, students are invited to form teams acting as complainants, opponents and arbitrators or mediators to resolve a case using online conferencing facilities. These workshops provide an interactive learning platform for subject matter debate and analysis, a real-life experience of dispute and issue resolution in a virtual environment, and low-cost and flexible facilities for teaching and learning, which should enhance students' learning experience and improve their legal and technological skills for future employment. Based on students' feedback in the module survey, they have been well-received by students from different cultures, particularly where English is not their first language. The online platform enables students to communicate with each other in a more relaxed atmosphere than a face-to-face environment.

In recent years, digitalization has produced new requirements in jobs and changed the content and ways that people learn and work (Cedefop 2019). It was estimated in 2018 that more than 80 per cent of workers in the EU required some level of digital competence in their jobs (Cedefop 2018), however, only 58 per cent possessed basic digital skills before the onset of Covid-19 in 2020 (European Commission DESI 2020). There is ongoing promotion in organizations and among academics of 'digital literacy' action plans to provide students with new skills to adapt to the digitalized professional services including legal services (European Commission Flagship Initiative 2010; Thanaraj 2018). A recent focus has been on a 'digital education action plan' to enhance 'digital literacy and competences' throughout education in the second quarter of 2020 (European Commission Communication 2020). The European Commission has stressed:

> The need for digital skills goes well beyond the jobs market, however. As digital technologies permeate our professional and private lives, having at least basic digital literacy and skills has become a precondition for participating effectively in today's society (European Commission Communication 2020).

The European Commission White Paper on Artificial Intelligence (2020) further emphasized that:

> Harnessing the capacity of the EU to invest in next generation technologies and infrastructures, as well as in *digital competences* like *data literacy*, will increase Europe's technological sovereignty in key enabling technologies and infrastructures for the data economy [emphasis added] (European Commission White Paper 2020).

Meanwhile, the Commission also reinforced the need of the Skills Agenda with an updated Digital Education Plan to make better use of data and AI-based technologies (i.e. learning and predictive analytics) in readiness for the digital transformations of the EU economy (European Commission White Paper 2020: 6). The meanings and requirements of 'digital literacy' may change in different contexts, though it is generally considered that a plan for digital literacy education should not only develop students' skills in information gathering, usage and production, but also develop lifelong learning skills (Thanaraj 2018: 67). In the context of legal education, digital literacy means that law graduates are 'competent in professional, social, cultural and personal communication practices appropriately utilizing a variety of digital media and technologies' (Galloway 2017: 6). In the context of modern legal education, digital literacy may also include general data literacy, in particular the use of big data and analytics, for quantitative legal analysis. It was stressed that lack of general data literacy is a great impediment to the development of the data economy and society (A European Strategy for Data 2020: 10-11).

ODR simulation workshops assist the goal of 'digital literacy' for law students. They offer students an opportunity to learn the current technologies and inspire them to think about possible future development of technologies, in particular how AI could assist law practitioners' cases in areas of filing, processing and decision-making.

ODR simulation workshops also involve a blended learning platform that should empower students to gain legal and digital skills for their readiness in future employment. Empowerment, a linked but different concept to literacy, links individual mental strengths, skills and competencies to fit into the changing society (Amichai-Hamburger & Ors 2008: 1776). It has been argued that 'e-empowerment' (empowerment on the internet) involves different elements, such as reframing individual identity and increasing self-efficacy and skills; bridging cross-cultural boundaries; helping group decision-making and improving accessibility to information (Amichai-Hamburger & Ors 2008: 1776). Digital empowerment emphasizes 'enabling' learners, in particular disadvantaged learners. ODR simulation workshops provide a great degree of flexibility in learning (such as text-based interactions), which is particularly helpful to empower disadvantaged groups of students from different cultures with the same

level of interactive and effective learning opportunities. They also prompt students' perceptions of what technology may be further developed in order to improve access to justice.

[C] PEDAGOGY OF USING ODR SIMULATION TO ADVANCE DIGITAL LAWYERING AND MODERNIZE LEGAL EDUCATION

Taking 'digital lawyering' to be 'the use of appropriate, safe, and effective online technological innovations and techniques both for delivering training in legal education and for delivering legal services' (Thanaraj 2017: 11), it is apparent that legal practice and services have become digital, using increasingly sophisticated digital sources (Frostestad Kuehl 2019: 2), including encrypted data and information; blockchain; service-oriented computing; cloud computing; AI; social media; and electronic forensic evidence.

A well-designed ODR simulation learning environment may assist the academic aspect of digital lawyering and further advance the journey to understand the ever-changing technology for lawyering in the digital age. The design of an ODR workshop should focus on the pedagogy of simulation, but it should not be restricted to one single online teaching platform or software such as the institution's chosen platform. Allowing students to select software or a platform for group activities such as ODR simulation workshops empowers them to develop their digital skills. Quality teaching and learning can be achieved consistently by using multiple learning platforms if there are clear instructions, good planning in the curriculum, and minimum technical standards (such as relating to software functionalities and security safeguards). Nevertheless, it would be advisable to choose a university-wide teaching platform as a designated main teaching platform, along with the flexibility for instructors to adopt a wider range of software and technology to supplement group activities.

In order to design a functional and efficient ODR workshop, it is important to know how an ODR workshop can be designed to deliver a set of intended outcomes. *Firstly*, from the perspective of learning legal subject matters, an ODR workshop can be designed to teach substantive law in the form of the legal problem scenario that students are required to solve, and procedural law in the form of the arbitration or mediation procedure that students choose to use. Embedding problem-solving activities into teaching enables students to apply new legal knowledge to resolve legal issues, while integrating legal processes into problem-solving activities may help to develop students' legal skills for future professional

practice (Ryan 2017: 138-139). *Secondly*, from the perspective of learning digital skills, an ODR workshop can be designed to encourage students to explore, learn and test a variety of software before they choose a suitable one for their intended procedure. Reflections on their choices can be part of what is assessed; and students can be invited to venture to think about the future deployment of AI in ODR process. *Thirdly*, from an effective learning perspective, an ODR workshop can provide a team-based, student-centred and research-informed teaching and learning environment.

Technologically Advancing Legal Education: ODR Simulation Experiences and Technological Reviews

Technologically assisted learning is a flexible-learning methodology which provides increased choice, convenience and personalization in learning. Flexible learning in a traditional face-to-face teaching environment typically begins by allocating group tasks and handing over self-learning materials. Its second phase integrates 'e-learning', namely 'the use of digital technologies and media to deliver, support and enhance teaching, learning, assessment and evaluation' (Sharma & Mishra 2007: 3), or 'the systematic use of networked information and communication technology in teaching and learning' (Armitage & O'Leary 2003), or teaching and learning 'delivered, enabled or mediated by electronic technology for the explicit purpose of learning' (Rossen & Hartley 2001: 109). Significant features of the initial e-learning environment include: a) utilizing digital devices; b) employing electronic software; and c) delivering information without face-to-face appearance.

Since the early 2000s, internet-based course tools for course delivery and management, such as Blackboard Learn and WebCT software, have been adopted by educational institutions (Carnevale 2006), permitting video lectures and discussion forums. In the 2010s, additional tools such as Blackboard Collaborate, Google Classroom, Canvas, Moodle and Brightspace allowed virtual classroom sessions (e.g. Release Notes 2014), known as 'webinars', for lectures, seminars and tutorials, allowing instructors to share their PowerPoint slides and conduct Q&A via voice or instant messaging. Additional video-recording tools, such as Loom and Panopto, can pre-record presentations for teaching and learning. Loom provides advanced recording functions capturing camera, microphone and desktop simultaneously and sharing videos instantly (Loom website). Communication tools, such as Skype, and social media tools, such as Facebook, have further broadened the usage of information technology in teaching and learning.

Between 2007 and 2011, the author held ODR text-based simulation workshops using various platforms, including MSN messenger, IMO, ooVoo, Google Hangouts and Skype. *Firstly***,** MSN Messenger, an instant-messaging client software, was most popular among students. Students were inventive, using MSN functions for arbitration and mediation hearings to have fun while learning, e.g. students hit the nudge button which would not just ping group members with an alert or gentle tone but shook the entire conversation window. Unfortunately, MSN Messenger was discontinued from 2012 in most countries and from 2014 in China. *Secondly,* ooVoo was also well-liked by students. It provided a cross-platform instant voice and text-messaging app supporting HD video calling simultaneously with eight people. Students found that functional tools in ooVoo were easy to use, which benefitted the control of the process of arbitration hearings. *Thirdly,* 'IMO free video calls and text' was also tried by students who considered it functionable because IMO has the ability to pass files, send music, videos and pdfs etc. without any limitation. *Fourthly,* in 2009-2010, distance-learning students located in different countries and time zones were invited to conduct their ODR simulation on Blackboard Learn. Case scenario and procedural materials were available on Blackboard Learn to prepare for the simulation. Students were asked to conduct mediation or arbitration hearings online within the time limit on Discussion Board non-simultaneously. And, *finally,* Skype was the second most popular communication tool among students, as its communication tools are most reliable, supporting instant voice and video, files, picture and text messaging and group chats.

During this period, in the ODR simulation workshops, as reflected in students' feedback in each module survey, students were enthusiastic about their ODR experience, some even wishing to repeat the simulation again after the ODR process. However, students often encountered problems with the technology (i.e. broken or incorrectly configured computers or software faults) just shortly before the workshop started. It appeared that some students were panicking and struggling to find alternative computing facilities that were pre-installed with the required instant-messaging software. Under such circumstances, web-based messenger could be an immediate solution, provided that there was a working computer and normal internet access. Web-based messenger provided one-stop browser-based chat rooms connecting all popular communication tools, MSN, AIM, Gtalk, Yahoo, ICQ, Skype etc., without the need of users' installing any software.[1]

[1] Such service was provided by http://web-messenger.eu/ between 2009 and 2011 and http://cha-cha-chat.com/ in 2011.

Between 2011 and 2020, the author's students continued to use communication tools for ODR simulation workshops for text-based online arbitration and mediation hearings, though students used other functionalities such as video calls for their preliminary hearings or workshop preparation. During this period, students in the postgraduate (PG) modules of internet law (approximately 35 students per academic year) participated in the ODR simulation workshops. The participation rate was between 75 per cent and 100 per cent, depending on the quality of the cohort. Students were expected to reflect on their ODR simulation experience and conduct further research for their coursework, analysing how the efficiency of ODR service can be improved to resolve cross-border consumer internet-related cases. Students found that ODR simulation workshops were interesting, giving them inspiration and helping them with research skills for their coursework, though a small number of students showed frustration when fellow group members were not engaging enough in the process.

Google Hangouts communication software was a new tool that was tested by students during this period. However, Google Hangouts software was not very well liked by students as it only provided instant voice, picture and text messaging but no support for attaching files. Skype became the most popular tool to conduct online arbitration and mediation hearings among students. Since 2011, most communication tools have provided users with instant access without the need of their downloading the app and installing the software. It is also noted that a new generation of instant messaging has emerged. The most well-known products are Zoom, Telegram, Slack and Discord. Zoom was launched in 2011, using a cloud platform for users to share video, voice and content. Telegram, established in 2013, provides multiple user groups, mobile and desktop clients, file transfer and encrypted voice calls. Slack, also established in 2013, provides persistent chat rooms, customizable for business via integration with third-party services. Discord, released in 2015, supports VoIP chat, messaging and has been widely used in the gaming community. During this period, students observed the suitability of the functionalities of these free communication tools to conduct ODR simulation and to enhance the due process of arbitration or mediation hearings. Based on observations provided by students in their presentations and coursework, more specialized software packages with case management dashboards or tools may be helpful to manage evidence submission within time limits and enhance the fairness of the procedure. In addition, there are specialized ODR software packages available in the market. For example, Decider, a UK company, provides an ODR service and offers commercial software

with secure internal messaging, case management tools and auditing facilities (Decider website). Caseload Manager, a US company, offers cloud-based commercial software and a subscription model based on the number of new cases annually (Caseload Manager website). AI-powered tools such as Fireflies, Microsoft Teams and Google Live Transcribe can also be used to transcribe live audio into text to assist evidence gathering and analysis in the ODR process (Fireflies, Microsoft Teams and Google Live Transcribe websites). Students can experiment with these tools in their ODR simulation workshops.

[D] DESIGN OF AN EFFECTIVE AND FLEXIBLE ODR SIMULATION LEARNING ENVIRONMENT

With appropriate IT facilities and support, ODR simulation workshops can provide a great degree of flexibility in terms of time and location for learning and teaching. Appropriate procedural guidelines and technological supervision are required, and the success and effectiveness of the experience will depend on the design of tasks (Matthew & Butler 2017: 152), namely allocation of roles within the group, preliminary hearings, hearings, students' reflection and feedback etc.

ODR simulation workshops can be designed to serve multiple functions and achieve a wide range of intended essential learning outcomes in legal education as follows.

1 ODR simulation workshops generate a flexible and student-centred learning environment. The pedagogy of student-centred learning builds from the students' experience, knowledge base and strengths and keeps students' ambition and desire for learning afloat (Lustbadder 1997: 859). Students appear to learn most and best when they are actively involved in and responsible for their own learning with the help of facilitators (Ponte 2006: 169-170). In ODR simulation workshops, students are required to identify and understand the differences between possible methods of ODR (negotiation, mediation and arbitration), so as to decide which one to use and develop the corresponding procedure for the chosen method. They are provided with a scenario in which to identify legal issues and relevant legislation and are required to debate their arguments and play different roles as arbitrators or mediators, complainants or respondents. This creates a problem-based and role-play learning environment. After the ODR simulation, students present their group work with added reflection and feedback from peers and instructors on their presentations. This generates a student-centred learning

environment that enhances cognitive skills and accommodates different students' levels and styles of learning (Ponte 2006: 171).

2 In addition to individually assessed activities (such as answering questions on legal concepts), the workshops involve team-based learning, as students are required to engage with each other collectively. This includes common elements of evidence-based best practice (i.e. cooperative learning, interactive teaching and feedback) and adds in four practical elements: 'strategically formed, permanent teams; readiness assurance; application activities that promote both critical thinking and team development; and peer evaluation' (Michaelsen & Sweet 2011). Team-based learning is commonly used in disciplines such as medical education but has been gradually recognized and adopted in legal education in recent years (Weresh 2019: 304). In an ODR workshop, students must: (a) strategically form their study groups or teams (perhaps with the instructors' assistance); (b) agree on methods, procedures and individual roles of resolving the case (either for mediation or arbitration); (c) prepare materials outside the classroom; and (d) conduct application activities such as preliminary hearings and hearings online. They can also be invited to answer a series of questions on legal concepts within each group in class, reflect on and evaluate the ODR process through peer evaluation and group/team presentation, followed by the instructor's summative and reflective wrap-up lecture.

3 ODR simulation workshops boost technologically advanced practice and enable digital empowerment of students to improve their readiness for future employment as students are required to choose the software to conduct their group ODR preliminary hearings and hearings, observing the merits and drawbacks of the functionalities of the chosen software, and thereby practise their computer skills and acquire other necessary digital and legal skills. Some have argued that online engagement in higher education should be considered a form of student participation rather than empowerment, despite the fact that online engagement enables students to form their academic experience from different learning contexts (Costa & Ors 2018: 150). What is correct is that digital empowerment is not a given and will not occur simply by connecting students to the internet (Amichai-Hamburger & Ors 2008: 1786). Well-designed ODR simulation workshops may facilitate digital empowerment by encouraging students to learn legal and digital skills and boost their critical thinking and self-confidence via the internet, while also stimulating critical thinking about the impact of new technologies

in legal services, the enhancement of due process in legal practice in the digital age, and the future readiness of being professionally competent (including skills for life-long learning for substantive and procedural law, and digital literacy) for employment.

4 ODR simulation workshops also support research-informed teaching as they encourage the development of students' critical thinking and reasoning skills. Students are required to prepare debating materials by completing the reading list and following the instructions, observing and reflecting on the ODR process and providing a group/team presentation after the workshops. Students are encouraged to discuss whether their chosen software provided efficient and appropriate functions to assist their ODR hearings and help facilitation of fair procedures and, if not, suggest how it can be improved. Students also conduct research into the differences in terms of styles, strategies and procedures in negotiation, mediation and arbitration and incorporate their practical experience and research findings into their coursework assessment. It was argued that 'teaching can be research-informed in the sense that it draws consciously on systematic inquiry into the teaching and learning process itself' (Griffiths 2004: 722). However, there is no consensus on the interpretation of research-informed teaching as some academics even considered it to be just a marketing tool (Carr & Dearden 2012: 273). A variation of terminologies for the research and teaching nexus (such as research-led, research-tailored, research-oriented and research-based) have also been used by academics and institutions, depending on their agenda and emphasis (Nicholson 2017: 43). Recent work on the linkage of research and teaching at the postgraduate-level in maritime law to non-law students, showed that integrating the research-informed teaching approach in the curriculum may help 'systematically address the progressive nature of learning' (Zhu & Pan 2017: 437). The example of ODR simulation workshops may help shape the conceptual understanding of 'research-informed' teaching in legal education. Research-informed teaching, based on the experience of ODR simulation workshops, means that the process of teaching and learning is linked, integrated and interacts with up-to-date and curiosity-driven research involving both instructors and learners, in a continuous cycle in which instructors use their research expertise (substantive and procedural law on specific subject matters) to inform and inspire their students via lectures, seminars, activity instructions and reading lists. In turn, students research relevant

legal and technical issues and give feedback to the instructors for their further reflection and research, and so on. This process may intertwine with other appropriate teaching skills and methods, such as student-centred and team-based learning group activities.

[E] SHAPING THE LAW CURRICULUM TO MODERNIZE LEGAL EDUCATION AND ADVANCE DIGITAL LAWYERING

Driven by globalization, legal education should be equipped to prepare students to meet the emerging trend of global law firms which manage multi-jurisdictional practice and need lawyers with international law knowledge (Faulconbridge & Muzio 2009: 1358). ADR modules have become common in the law school curriculum, first in the USA and then after debate in Australia (Australian Law Reform Commission 1997), its pedagogy allowing interdisciplinary elements including but not limited to law, communication skills, social sciences, management, psychology and game theory (New South West Law Reform Commission Report 1991: 41; Douglas 2008: 126). In more recent years, law schools have become more aware of the importance of introducing standalone ADR subject modules in their law curriculum and subsequently using ODR simulation in their practice (Ainsworth & Ors 2019: 95).

In the age of information technology, globalized communications magnify the need of digital competency in employment, which requires graduates to have basic digital literacy and skills and, more importantly, to be empowered to adapt to ever-changing technological developments in their professions, including as lawyers, judges, arbitrators, mediators and other legal practitioners. It was argued that, due to practical differences between ADR and ODR, law schools should consider incorporating ODR elements into their ADR teaching in the law curriculum (Goldberg 2014: 13). More recent use of Modria, a text-based ODR platform (founded in 2011 and acquired by Tyler Technology in 2017), was considered as adding to the benefits of using ODR simulation for ADR students (Ainsworth & Ors 2019: 101). Researchers also conducted a survey on the benefits and limitations of the use of ODR for legal education where students were invited to use an ODR platform to prepare for traditional face-to-face mediation role-play (Grant and Lestrell 2020: 92) known as 'blended learning' (Ireland 2008; Douglas & Ors 2019). The survey showed that the online component enabled students to easily exchange and access information, including facts, legal problems and to build mutual trust among students to work together (Grant & Lestrell 2020: 100-101).

However, some researchers argued that ODR should not form part of the traditional curriculum at some law schools (Simmons & Thompson 2017: 222). For example, in 2015 researchers conducted an online mediation simulation for students among four universities in England and Canada to generate a cross-bordered collaborative learning environment in which they faced the challenge of a lack of student participation (Simmons & Thompson 2017: 240-241).

Student participation appeared to be a common issue for those universities recently testing ODR simulation for legal education, though it never seemed to be a concern for the author's student-led online simulation sessions between 2007 and 2020. However, between 2019 and 2020 one out of five groups appeared to lack full participation while they also showed lack of attendance in lectures and seminars. In the author's experience, the designs and continued redesign of suitable tasks may be the key to motivate student's enthusiasm. Groups or teams should be strategically formed among students. In-class lectures and seminars before ODR simulation workshops should be carefully planned to boost students' curiosity and stimulate students' desire to conduct the ODR simulation in order to work out answers by themselves. A well-designed ODR simulation can be embedded into the law curriculum, reflecting on all levels of structure, enabling students to gain legal and digital knowledge and skills in an interactive, flexible and effective student-centred learning platform so that it also empowers them with life-long learning of knowledge and skills.

The effectiveness and flexibility of ODR simulation workshops could also help students to be equipped to meet the standards of the Solicitors Qualifying Examination (SQE), which the Solicitors Regulation Authority plans to introduce as a new route to becoming a solicitor from 1 September 2021 subject to final approval (UK Solicitors Regulation Authority 2020). The SQE comprises two parts, namely: functioning legal knowledge assessments (SQE1) which include dispute resolution; and a single legal skills assessment (SQE2) which includes six skills —client interview and attendance note/legal analysis, advocacy, case and matter analysis, legal research, legal writing and legal drafting (UK Solicitors Regulation Authority 2020).

It is noteworthy that prior to the new route being implemented, the current route to qualification for solicitors and barristers in the UK includes three stages:

1 the academic stage, including Qualifying Law Degree (QLD) or non-law degree plus Graduate Diploma in Law (GDL). Alternatively, the

QLD and GDL must include six foundation law subjects, plus legal research skills;

2. the vocational stage, including the solicitors' Legal Practice Course (LPC), or the barristers' Bar Professional Training Course (BPTC); and
3. practical training, including two years of recognized training plus a practical skills course or pupillage.

When the new route is implemented, qualification for solicitors in the UK will likely be extended to include four stages: 1) the academic stage—this is different from the current route in that it can be a degree in any subject or any other equivalent qualification; 2) the training stage, including completing a minimum period of two years of qualifying legal work experience; 3) SQE1 stage, passing the first part of the centrally assessed SQE which contains legal knowledge with dispute resolution (SQE1 functioning legal knowledge assessments will consist of two 180-question examinations); and 4) SQE2 stage, passing the second part of the centrally assessed SQE which contains six legal skills (UK Solicitors Regulation Authority Decision 8 June 2020).

The UK law school curriculum is in need of an update to reflect these changes. In particular, changes need to be made to educate and navigate students who still choose law as their degree in the first stage. In the author's view, from a meta perspective, a law curriculum needs to be designed to aid effective understanding of law and regulations from different contextual perspectives such as social, technological and historical perspectives, and not only to focus on legal content. From a micro perspective, a law curriculum needs to be specific to core law subjects with a wider range of selective law subjects and non-law subjects, plus teaching six skills through practical exercises and activities. Dispute resolution is one of the core subjects and legal skills that SQE1 and SQE2 assess. ODR simulation can be used to teach both substantive and procedural laws of any law subject matter (in particular, dispute resolution), plus legal skills. From a macro perspective, a technologically advanced, research-informed, student-centred and team-based learning environment needs to be generated to equip students to gain legal knowledge and skills, including digital skills. Although the six skills to be assessed by SQE2 do not include digital skills, digital skills and literacy are essential to the success in achieving the six identified skills. For example, digital literacy and competency can aid students' ability to conduct 'client interview' by electronic means and help them to learn; how to write 'attendance note/ legal analysis' using technological devices; how to gain 'advocacy' skills in virtual courts; how to use computing algorithms to assist 'case and

matter analysis' in the age of AI; how to use databases to conduct 'legal research'; and how to use grammar-checking functionality in software to improve the standard of 'legal writing and legal drafting'.

[F] CONCLUSION AND REFLECTIONS

ODR simulation in legal education promotes a technologically advanced, research-informed, student-centred and team-based learning environment which facilitates negotiable, collaborative and cooperative skills, stimulates independent and critical thinking, cultivates legal reasoning and digital skills, and fosters life-long learning and research on legal and digital subject matters. Well-designed ODR simulation workshops empower our students, especially certain disadvantaged students (e.g. due to language obstacles), to gain legal and digital skills for their readiness (including digital competence, legal skills and life-long learning skills) for future employment.

Based on the author's ODR simulation workshop experience between 2007 and 2020, preparation and planning (from both instructors and students) is the key to the success of the ODR workshops. ODR simulation workshops are also a fun learning process, which helps to achieve additional learning outcomes compared with the traditional problem-solving teaching approach. It was observed that there are four key learning outcomes achieved by students through problem-solving activities, namely, decision-making skills, contextualized knowledge, student autonomy and collaborative learning skills (Ryan 2017: 146-147). Based on the author's observations, additional benefits from the ODR simulation experience include practising teamwork and developing professional ethics, legal and digital practical skills through a virtual platform for multicultural learners (i.e. to meet the need of learners from different cultures and countries and, often, with English language barriers). It also inspires students to develop an awareness of challenges that lawyers may face using technology-assisted processes in resolving disputes and stimulates further research in the embedding of AI in legal services. The experience of ODR simulation workshops may help adapt our teaching approaches to our law students in the digital age and shape our curriculum to prepare digital lawyering in the modern legal education.

References

A European Strategy for Data, COM/2020/66 final, Brussels, 19 February 2020.

Ainsworth, N, R Colin & J Zeleznikow (2019) 'Piloting Online Dispute Resolution Simulations for Law Students Studying Alternative Dispute Resolution: A Case Study Using Modria Software at Victoria University' 8 *Journal of Civil Litigation and Practice* 95-104.

Amichai-Hamburger, Y, K Y A McKenna & S-A Tal (2008) 'E-empowerment: Empowerment by the Internet' 24(5) *Computers in Human Behavior* 1776-1789.

Armitage, S & R O'Leary (2003) *A Guide for Learning Technologies* (LTSN E-learning Series No 4) York: LTSN Generic Centre.

Australian Law Reform Commission (1997) 'Review of the Adversarial System of Litigation Rethinking Legal Education and Training' Issues Paper (21) Sydney: ALRCIP.

Carnevale, Dan (2006) 'Justice Department Sees No Antitrust Concerns in Blackboard's Plan to Take over WebCT' 54(24) *Chronicle of Higher Education* A37.

Carr, H & N Dearden (2012) 'Research-led Teaching, Vehicular Ideas and the Feminist Judgments Project' 46(3) *The Law Teacher* 268-280.

Cedefop (European Centre for the Development of Vocational Training) (2018) 'Insights into Skill Shortages and Skill Mismatch: Learning from Cedefop's European Skills and Jobs Survey' Luxembourg: Cedefop Reference Series No 106.

Cedefop (European Centre for the Development of Vocational Training) (2019) 'Briefing Note: Artificial or Human Intelligence? (Digitalisation and the Future of Jobs and Skills: Opportunities and Risks)' June Luxembourg: Cedefop.

Costa, C, M Murphy, A L Pereira & Y Taylor (2018) 'Higher Education Students' Experiences of Digital Learning and (Dis)empowerment' 34(3) *Australasian Journal of Educational Technology* 140-152.

Daniel, F & L Guida (2019) 'A Service-oriented Perspective on Blockchain Smart Contracts' 23(1) *IEEE Internet Computing* 46-53.

Douglas, Kathy (2008) 'Shaping the Future: The Discourses of ADR and Legal Education' 8(1) *Queensland University of Technology Law and Justice Journal* 118-138.

Douglas, K, T Popa, C Platz & M Colasante (2019) 'Technology Aided Learning in Dispute Resolution and Evidence: Combining Video with Online Annotation/Discussion in Blended Learning Design' 19 *Macquarie Law Journal* 189-208.

European Commission (2020) Digital Economy and Society Index (DESI) 2020: Human Capital.

European Commission Communication (2020) Communication: Shaping Europe's Digital Future.

European Commission Flagship Initiative (2010) *Flagship Initiative: A Digital Agenda for Europe*, Communication from the Commission: Europe 2020—A Strategy for Smart, Sustainable and Inclusive Growth Brussels, 3 March 2010 COM(2010).

European Commission White Paper (2020) *White Paper on Artificial Intelligence—A European Approach to Excellence and Trust* Brussels, 19 February 2020 COM(2020) 65 final.

Faulconbridge, James R & Daniel Muzio (2009) 'Legal Education, Globalization, and Cultures of Professional Practice' 22(4) *Georgetown Journal of Legal Ethics* 1335-1360.

Frostestad, Kuehl H (2019) 'Technologically Competent: Ethical Practice for 21st Century Lawyering' 10 *Case Western Reserve Journal of Law, Technology and the Internet* 1-30.

Galloway, Kate (2017) 'Digital Literacies in Legal Education' 27(1) *Legal Education Review* 1-27.

Goldberg, Jordan (2014) 'Online Alternative Dispute Resolution and Why Law Schools should Prepare Future Lawyers for the Online Forum' 14(1) *Pepperdine Dispute Resolution Law Journal* 1-25.

Grant, G & E Lestrell (2020) 'Bringing ODR to the Legal Education Mainstream: Findings from the Field' in C Denvir (ed) *Modernising Legal Education* Cambridge: Cambridge University Press.

Griffiths, Ron (2004) 'Knowledge Production and the Research–Teaching Nexus: The Case of the Built Environment Disciplines' 29(6) *Studies in Higher Education* 709-726.

Ireland, Jennifer (2008) 'Blended Learning in Intellectual Property: The Best of Both Worlds' 18(2) *Legal Education Review* 139-162.

Kim, Rosa (2018) 'Globalizing the Law Curriculum for Twenty-First-Century Lawyering' 67(4) *Journal of Legal Education* 905-948.

Lustbader, Paula (1997) 'From Dreams to Reality: The Emerging Role of Law School Academic Support Programs' 31(4) *University of San Francisco Law Review* 839-860.

Matthew, A & D Butler (2017) 'Narrative, Machinima and Cognitive Realism: Constructing an Authentic Real-world Learning Experience for Law Students' 33(1) *Australasian Journal of Educational Technology* 148-162.

Michaelsen, L K & M Sweet (2011) 'Team-based Learning' 128 *New Directions for Teaching and Learning* 41-51.

Nathanson, Stephen (1997) *What Lawyers Do: A Problem-Solving Approach to Legal Practice 4* London: Sweet & Maxwell.

New South West Law Reform Commission Report 67 (1991) Training and Accreditation of Mediators 3.41.

Nicholson, Alex (2017) 'Research-informed Teaching: A Clinical Approach' 51(1) *The Law Teacher* 40-55.

Ponte, Lucille M (2006) 'The Case of the Unhappy Sports Fan: Embracing Student-centered Learning and Promoting Upper-Level Cognitive Skills through an Online Dispute Resolution Simulation' 23(2) *Journal of Legal Studies Education* 169-194.

Qiu, Chao, Haipeng Yao, Richard F Yu, Chunxiao Jiang & Song Guo (2020) 'A Service-oriented Permissioned Blockchain for the Internet of Things' 13(2) *IEEE Transactions on Services Computing* 203-215.

Release Notes for Blackboard Collaborate: Blackboard Collaborate Building Block (2014).

Rossen, E & D Hartley (2001) *Basics of e-Learning Info-line* Alexandria VA: ASTD Press.

Ryan, Philippa (2017) 'Teaching Collaborative Problem-solving Skills to Law Students' 51(2) *The Law Teacher* 138-150.

Sharma, R C & S Mishra (2007) 'Global E-learning Practices: An Introduction' in R C Sharma & S Mishra (eds) *Cases on Global E-Learning Practices: Successes and Pitfalls* Hershey PA: Information Science Publishing.

Simmons, M E & D Thompson (2017) 'The Internet as a Site of Legal Education and Collaboration across Continents and Time Zones: Using Online Dispute Resolution as a Tool' 34 *Windsor Yearbook of Access to Justice* 222-243.

Thanaraj, Ann (2017) 'Making the Case for Digital Lawyering Framework in Legal Education' 3 *International Review of Law* 1-21.

Thanaraj, Ann (2018) 'Studying Law in a Digital Age: Preparing Law Students for Participation in a Technologically Advanced Multidisciplinary and Complex Professional Environment' 27 *Nottingham Law Journal* 62-81.

UK Solicitors Regulation Authority (May 2020) Solicitors Qualifying Examination.

UK Solicitors Regulation Authority (8 June 2020) Decision to Proceed with Final SQE Design.

Wang, Faye F (2009) *Online Dispute Resolution: Technology, Management and Legal Practice from an International Perspective* Oxford: Chandos.

Wang, Faye F (2010) *Internet Jurisdiction and Choice of Law: Legal Practices in the EU, US and China* Cambridge: Cambridge University Press.

Wang, Faye F (2017) *Online Arbitration* Oxford: Informa.

Wang, Faye F (2019) 'Technologically-advancing Legal Practice: Online Dispute Resolution Simulation [Conference Presentation]' Legal Education Research Network LERN Conference 27-28 June, University of Cumbria, UK.

Wang, Faye F & Nathan Griffiths (2010) 'Protecting Privacy in Automated Transaction Systems: A Legal and Technological Perspective in the European Union' 24(2) *International Review of Law, Computers and Technology* 153-162.

Weresh, Melissa H (2019) 'Assessment, Collaboration, and Empowerment: Team-based Learning' 68(2) *Journal of Legal Education* 303-337.

Zhu, Ling; and Wei Pan (2017) 'Application of Research-informed Teaching in the Taught-postgraduate Education of Maritime Law' 54(5) *Innovations in Education and Teaching International* 428-437.

Websites

Arbitrator Intelligence Questionnaire

Caseload Manager

Decider: Online Dispute Resolution Platform

Fireflies

Loom

Microsoft Teams Transcription (Live Captions)

Google Live Transcribe (to capture audio and transcribe it as text on the screen)