Introduction

Sabine Jacques and Ruth Soetendorp

One of the drivers for this book is to share best practices of innovative intellectual property (IP) legal education methods. If legal education can be traced back to the eighteenth century for European countries, IP entered university programmes only in the twentieth century. Since then, its coverage has not ceased to expand, and its relevance is also of increasing importance outside the traditional setting of the law school. This is not surprising given the role IP plays in ensuring that creators, inventors and traders can generate remuneration for their activities. Today, according to the European Intellectual Property Office (EUIPO), IP-intensive industries contribute 47 per cent of the total economic activity in the EU with a worth of EUR 6.4 trillion.[1] Furthermore, IP-intensive industries are integral to global trade as these industries currently account for most of the EU's trade with the rest of the world.[2]

If IP has pervaded many different fields, its teaching methods have mostly been relatively static. Modelled on traditional teaching methods, they combine lectures – where educators give a synopsis of legal rules and reasoning whilst encouraging students to think critically – and small-group teaching – where the onus is on the students to engage in discussions on particular points of law whilst the educator acts as facilitator. Today, there is a crucial need to rethink the way we teach IP law within and beyond law schools to cater for a greater number of students with very different learning profiles, backgrounds and interests. This need for change was also bolstered by the worldwide pandemic which has challenged the delivery of traditional education in unprecedented ways.

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[1]   EPO and EUIPO, IPR-intensive industries and economic performance in the European Union (Industry-Level Analysis Report, October 2022, fourth edition), p. 17 available at https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document _library/observatory/documents/reports/IPR-intensive_industries_and_economic_in _EU_2022/2022_IPR_Intensive_Industries_FullR_en.pdf.

[2]   Ibid.

A CHANGING LANDSCAPE FOR IP EDUCATION

Advances in technology, a worldwide pandemic and changes in access to the legal professions are challenging the way we, as IP educators, conceive our role. Given the significant social and economic challenges we encounter as a society (e.g. COVID-19, difficulties for creators and start-ups to maximise their remuneration, exploitation of their IP or access to culture), legal education becomes more significant not only in law schools but in many different disciplines. To cater for these new ways of living and working, IP educators must rethink their approach to teaching law. This exercise becomes even more timely since law schools must not only provide a route to access the legal profession but must diversify their offering to deliver a wide range of professional and transferable skills tailored to the world in which we live. It is believed that the future of IP education must build on the resilience and agility required in learning. This requires IP educators to become more flexible in the teaching methods employed and include even more real-life experiences within teaching materials.

A MULTI-DISCIPLINARY APPROACH

In an attempt to diversify the IP educator's toolkit, this book adopts a multi-disciplinary approach. The reader can find chapters authored by academics, IP professionals and IP practitioners. In so doing, the idea is to multiply the perspectives through which one single subject can be taught without making a concerted effort to integrate different disciplinary perspectives in a systematic way. By teaching a discipline through a single perspective, we are inherently bound by its limitations which are driven by the norms and framework of the discipline, and which tends to sidestep alternative perspectives and views on the same subject. Adopting a multi-disciplinary approach will hopefully inspire IP educators to widen the perspectives in their modules to reflect the difficulties and considerations to deal with real-life situations instead of textbook problem-questions.

In essence, this book intends to fill a gap left by the development of IP teaching in law schools which may lead to hegemony of thoughts and loss of critical assessment. By bringing together different perspectives about a topic, adopting a different discipline or bringing real-life experiences shared by this book's authors, we aspire to instil a greater and more thorough understanding of complex issues as well as challenges that future graduates may be faced with in their professional career by drawing from these different perspectives to design creative solutions to new problems. Eventually, this approach should boost learning outcomes and enthusiasm throughout the learning journey,

thereby contributing to enabling students to think more critically. This explains why this book includes perspectives not only from teaching IP in law schools but also from how IP is taught in other faculties, including STEM disciplines, business and management, and art schools.

TEACHING INNOVATION

One of the main goals of this book is to identify new ways of teaching the fundamentals of IP law. There are excellent innovative teaching methods employed by IP educators around the world. We wanted to share these best practices amongst those teaching IP whether as an expert in the field or not. Facilitating the design and implementation of non-traditional teaching methods will hopefully build confidence and generate interest to influence student learning positively.

Many IP educators will be familiar with the concept of 'peer-observation of teaching' at institutional level and whilst worthwhile, this peer-observation also bears its limitations due to the fact that some methods may not lend themselves to teaching IP. These informal or more formal reviews of one's teaching aim primarily to provide feedback to the educator about their teaching to foster improvement. Although these exercises are formative and transformative, they may lead to some frustration on the part of IP educators who may not feel inspired or equipped to venture into new teaching perspectives. Whilst this book does not confer the answers to all the questions an IP educator might ask themselves, it represents a starting point which hopefully will begin a dialogue amongst the academic community to share best practices and inspire adoption and development of new methods to teach IP.

ASSESSMENT METHODS

At this pivotal moment for higher education, it is important to rethink the way we assess knowledge. Most IP assessments take the form of a coursework, examination, or presentation. However, as demonstrated by some authors in this book,[3] innovative approaches to assessment can help learners demonstrate a deeper understanding of the knowledge acquired and foster the development of skills useful for their professional career or participation in society (e.g. the ability to communicate successfully through different channels). Yet, a lot could still be done in this area. With the recent pandemic, there has been a push for online examinations (also known as take home exams). This is consequently a timely moment to reflect how best we can use technology to develop

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[3]   For more, see chapters 3, 5, 13, 14, 15, 16.

new ways of assessing knowledge. Most traditional assessment methods are designed to determine whether students have reached the learning outcomes set for a specific module. Yet, there is also value in building a curriculum based on acquired *competencies*. Here, the onus is less on the achievement of learning outcomes but includes developing measures to assess the acquisition of skills across multiple areas, including those relevant for future education or employment. This could include involving real-world experiences, IP practitioners and other IP professionals. In doing so, the idea is to focus less on the knowledge acquired but more on how students are applying the knowledge to real-world complex problems. Although it may be difficult to predict what skills students may need tomorrow in the workplace, there is no denying that, for example, computers and technology are here to stay. Consequently, digital literacy is gaining importance not only for preparing students for future employment but to align assessment methods to our current environment.

Within the chapters of this book, you can expect to find a selection of tried and tested IP education ideas. They have been developed to enhance the hard and soft skills of students whose future careers will benefit from them having had an opportunity to learn about IP rights and their management.

KNOWING YOUR AUDIENCE: IP STUDENT PROFILE

Sabine Jacques

IP education traditionally took place in a law school. As you will see from the following chapters, IP education may now be received in any university faculty. At the same time, today's typical law classroom has very little in common with a law classroom of 20 or even ten years ago. And yet, whilst the world changes, a certain reticence for change can be felt in law schools throughout the world. If decades ago, university law classes were filled with the traditional 18-year-old heading off to live in a dorm, today, a legal educator can expect the student cohort to be much more diverse. With a student population from varied backgrounds and contexts comes different needs and expectations. And this can present a real challenge for faculty members trying to support students on their learning journey. This can be partly explained by the fact that legal educators find it more and more difficult to relate to students as they all have different characteristics whether due to their social backgrounds, geographical origins, prior experiences or concurrent commitments (e.g. a job or caring responsibilities etc). But also, because the educator cannot necessarily rely on their own experience as a student to understand the current cohort's educational experience.

Changes in student demographics, institutional management (whose main responsibility is the financial stability of an institution and its growth rather

than education) decisions, and the rise of vocational training for accessing the legal profession require educators to constantly reinvent themselves.[4] Furthermore, world changing events such as a global pandemic will also bring new approaches to higher education (or an accelerated trend such as the reliance on technology-enabled learning). Whilst offering opportunities to reshape one's teaching methods, it is nevertheless unsurprising that educators might find it challenging to navigate these external pressures and accommodate a diverse group of learners. Even without considering world changing events or institution management desires, there is dissonance between educators who value independent study and critical thinking, and the expectation of some students who place a higher value on contact time, feedback and being entertained.[5]

So, who are the learners of today and what are their needs and expectations?

LEARNER PROFILES

In order to cater for students with different personalities, experiences and learning curves, it is essential to know one's audience. This section overviews some of the most common characteristics present in today's cohort.

Today's students are *immersed in technology*. Whilst most senior faculty members tend to belong to the baby boomer generation (i.e. heavy consumers of traditional media (TV, radio, print) without refusing technology), most law educators belong to Generation X (still enjoy traditional media but are tech savvy) or the Millennial generation (where TV remains an important source of information and entertainment but is overtaken by streaming services and other online media). Learners will mostly constitute a mix of Millennials and Generation Z for whom the digital world has very few secrets although they do not necessarily understand how best to use the technology for a specific task. Teaching methods in IP must recognise the changes in students from one generation to the next and especially their ways of processing information.[6] With the advent of the Internet and personal computers becoming as popular as televisions in the household, students have relied on the Internet and search engines as a learning tool, a means of communication and wider engagement

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[4]　　See, for example, the introduction of the Solicitors Qualifying Examination (SQE) by the Solicitors Regulation Authority (SRA) in 2021. www.sra.org.uk/become -solicitor/admission/pathways-qualification/solicitors-qualifying-examination/.

[5]　　Obviously, these are not mutually exclusive either. Educators also value contact time and feedback.

[6]　　M. Prensky, 'Digital Natives, Digital Immigrants: Part I' (2001) 9(5) On the Horizon 1–6.

with the world.[7] They grew up in a hyper-connected world, relying on smartphones as their preferred method of communication as well as a valuable source of information. Against this backdrop, the emphasis appears to be less about *what* content to learn and more about learning *how* and *why*.[8] This is obviously not to say that learning legal content is frivolous but in a field such as IP law where content can become out of date pretty quickly, providing learners with the tools to find up-to-date information together with the ability to critically assess the authority of a source becomes as crucial as being able to recall certain legal concepts in order to later be able to make good legal decisions. To remain relevant, there is therefore a need to ensure that pedagogy does not solely rely on knowledge transfer but construes learning as a system where learning activities grant as much importance to the correct application of knowledge as the recollection of substantive legal concepts.

There is also a certain expectation of multimedia content or reliance on technology in teaching without which students will be bored. However, to maximise student engagement, the reliance on multimedia and technology must be carefully considered. Here, it is less about adopting a new gadget for the sake of it but more about thinking of ways in which the gadget might present an opportunity to design new learning challenges or present information. A common example is the use of hyperlinks in PowerPoint presentations, reading lists or other Microsoft Sway materials, enabling students to explore resources on their own. Another example relates to the use of clickers which can foster student participation with immediate feedback for both learners and educators. It is important that students be less interested in the tech itself (which is ephemeral) than in the content embedded, or what the user might be able to do with this new technology. What is important is to acknowledge the initial existence of the 'wow' factor associated with new technology will not last and therefore, to sustain interest, technology must be used wisely.[9] This requires a certain monitoring from educators to evaluate whether the technology or multimedia content enhances the learning or overwhelms students.

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[7] For advantages and disadvantages of laptop use in class, see R. Kay and S. Lauricella, 'Exploring the Benefits and Challenges of Using Laptop Computers in Higher Education Classrooms: A Formative Analysis' (2011) 37(1) Canadian Journal of Learning and Technology / La revue canadienne de l'apprentissage et de la technologie 1–18.

[8] S. Brown, Learning, Teaching and Assessments in Higher Education: Global Perspectives (MacMillan Education UK, 2014) p. 21.

[9] Studies on the impact of interactive whiteboards. Bruce Torff and Rose Tirotta, 'Interactive Whiteboards Produce Small Gains in Elementary Students' Self-Reported Motivation in Mathematics' (2010) 54(2) Computers and Education 379–83.

The learner is increasingly a *multi-tasker*. If educators might have been used to learning concepts in a linear way and predominantly from text-based sources,[10] students now believe they can multi-task by rapidly shifting their focus between tasks. Although we are all multi-taskers to a certain extent, research demonstrates that younger generations are better at multi-tasking because of their greater 'working memory', meaning the mental space in which thinking happens.[11] Whilst students perceive this as a way to either maintain focus or get more done in a specific period of time, research demonstrates that multi-tasking can nevertheless lead to delays in completing a task as shifting the focus from one task to another can also take time in itself but beyond this, multi-tasking can lead to distraction and therefore, errors.[12] Here, research suggests that it is not because there is a perception of being multi-taskers that multi-tasking is desirable in a learning context.[13]

Yet multi-tasking also has its advantages as it is also well-known that focus depletes when spending too long on an exercise or activity. This perception draws from the society we are living in where entertainment, stimulation and information are endless. Consequently, the educator encounters a hurdle by having to capture and retain a student's focus without losing those who struggle with ADD or ADHD for whom shifting quickly or doing several things simultaneously would necessarily negatively impact their learning experience.[14] One lesson to be learned here is that with complex tasks or subjects, multi-tasking should be discouraged. However, this greater 'working memory' can also be used positively by educators.[15] The ability to combine elements more easily is also linked to how students will remember multimedia content. If used appropriately, students will be able to combine text, visuals and sounds in a way to gain a deeper understanding of materials. Yet, if the visuals, for

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[10]   Supra, n. 8.
[11]   D. T. Willingham, 'Have Technology and Multitasking Rewired How Students Learn?' (2010) 34(2) American Educator 23 and 25.
[12]   E. Ophir, C. Nass and A. D. Wagner, 'Cognitive Control in Media Multitaskers' (2009) 106(37) Proceedings of the National Academy of Sciences 15583–7.
[13]   Supra, n. 11.
[14]   A. Conner and J. Brown, 'Adult ADHD and Higher Education: Improving the Student Experience' (Times Higher Education, 2022) available www.timeshighe reducation.com/campus/adult-adhd-and-higher-education-improving-student -experience.
[15]   It must be reminded that although today's classroom population may have a greater working memory, all students are not equals. Some students will have a greater working memory than others. Supra, n. 11, p. 27.

example, conflict with the text, then this will create confusion in the minds of students.[16]

Students are driven by *motivation*. As highlighted by Wijnia et al., a motivated student is more likely to put more effort into completing a course and subsequently graduate than less motivated students.[17] However, motivation can be different for students. If the student sees value in the topic learned and that the task is perfectly calibrated to provide enough challenge without appearing unachievable, motivation can be intrinsic, meaning that the learner does not need another reason to engage in the learning process and sees the activity as rewarding in itself.[18] Yet, motivation can also be extrinsic, meaning that the motivation is induced by rewards and/or sanctions being contingent on the success or failure in a particular task and/or module.[19] In essence, learning is akin to something which is imposed on the learner rather than a self-initiated process. Whilst the lecturer's goal is to build upon intrinsic motivation to be a catalyst for life-long learning, many students report that 'getting a good grade' constitutes their primary motivation in modules, therefore favouring the extrinsic reward.[20] Both are not incompatible. Indeed, as demonstrated by Covington, a student may well be working towards achieving a high grade and valuing learning if they understand marking to provide feedback on their learning journey and are not failure eluders.[21]

In a society where learners are assessed from the youngest age, there is a need to recalibrate the balance to ensure that students go beyond their extrinsic motivation and engage with intrinsic motives. After all, learning takes place well before a student enters a classroom and continues after a student leaves

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[16]   R. E. Mayer and R. B. Anderson, 'The Instructive Animation: Helping Students Build Connections Between Words and Pictures in Multimedia Learning' (1992) 84(4) Journal of Educational Psychology 444–52.

[17]   L. Wijnia, S. M. M. Loyens and E. Derous, 'Investigating Effects of Problem-Based versus Lecture-Based Learning Environments on Student Motivation' (2011) 36 Contemporary Educational Psychology 101–13.

[18]   Y-G. Lin, W. J. McKeachie and Y. C. Kim, 'College Student Intrinsic and/or Extrinsic Motivation and Learning' (2003) 13(3) Learning and Individual Differences 252; C. S. Rigby, E. L. Deci, B. C Patrick et al., 'Beyond the Intrinsic-Extrinsic Dichotomy: Self-Determination in Motivation and Learning' (1992) 16 Motiv Emot 167. See more recently L. G. Wyatt, 'Non-Traditional Student Engagement: Increasing Adult Student Success and Retention' (2011) 59 The Journal of Continuing Higher Education 10–20.

[19]   Rigby et al., supra n. 18, p. 169.

[20]   S. Van Etten, M. Pressley, G. Freebern and M. Echevarria, 'An Interview Study of College Freshmen's Beliefs About Their Academic Motivation' (1998) 13 European Journal of Psychology and Education 105–30.

[21]   M. V. Covington, 'Caring About Learning: The Nature and Nurturing of Subject-Matter Appreciation' (1999) 34 Educational Psychologist 127–36.

the school bench. This is not to say that an educator should try to persuade learners that marks do not matter but it is the role of the educator to demonstrate the relevance of an activity and the value in a particular learning challenge. It is by appealing to both motivation drivers that student performance might be enhanced, and that the student is left with a feeling of progress in their learning journey.[22]

Being used to having everything just a click away has also rendered more learners *impatient*, *less focused* and *somewhat lazy*. Although yesterday's learners might have been used to undertaking research to find particular information through a visit to the library or different archive centres, today's learners typically rely on well-known search engines or reading lists embedded in institution internal portals directly linked to digital resources without having to search for information.[23]

NEEDS AND EXPECTATIONS

The student population needs to evolve in an autonomy-supportive learning environment. The creation of a supportive learning environment requires the investigation of all the factors that impact the learning journey of students which ranges from an understanding of the classroom (physical or virtual) to its population (students and educators). Not only do these elements interact with each other but they feed off each other.

This can be achieved through providing *choice* to the learner rather than building on extrinsic rewards such as evaluations, deadlines, and other imposed goals. Whilst there has been an increase of module-based assessments to decrease the anxiety linked to the success of a module being determined by a single assessment technique, this trend has increased controlling motivation rather than stimulating the student's intrinsic motivation for a subject. When planning for learning activities it is therefore important to instil in the learner the feeling of choice through, for example, a breadth of materials to learn about a particular topic. But on its own, choice is insufficient to enhance the learner's self-motivation. Here, it is also important to calibrate teaching activities adequately so that they represent *a challenge that exceeds the current ability*

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[22]   Y-G. Lin, W. J. McKeachie and Y. C. Kim, 'College Student Intrinsic and/or Extrinsic Motivation and Learning' (2003) 13(3) Learning and Individual Differences 255. The importance of having active learners rather than passive recipients of knowledge has also been at the forefront of educational methods for children such as M. Montessori and C. A. Claremont, The Absorbent Mind (Holt, Rinehart and Winston,1967), J. Piaget, The Origins of Intelligence in Children (W.W. Norton & Co., 1952) and J. Dewey, Experience and Education (Macmillan Company, 1938).
[23]   Prensky, supra n. 6.

of a learner, yet remains solvable. This is obviously harder to achieve when teaching cohorts as diverse as those educators are teaching today. Another way to enhance intrinsic motives is to rely on *positive feedback*. In the UK, a quick look at the National Student Survey (NSS) results shows the importance attributed by students to feedback.[24] Not only is the type of feedback (positive feedback being more beneficial than critical feedback) important but the environment in which it is given matters (i.e. feedback given in a supportive learning environment will have a greater impact than feedback associated with controlled activities). In other words, feedback is a need and an expectation but not all feedback is equal. Instead of focusing on providing more opportunities to be assessed and to improve one's overall module mark, educators should focus on ensuring feedback opportunities when designing learning activities but also being careful in how feedback is provided.

Although not accepted by the academic community, students see themselves as *consumers*. If such recognition would be akin to an attack on academic integrity from the perspective of the educator, there is no denying that many students perceive themselves as consumers especially in relation to modules choices, feedback and even broader institutional communication.[25] Without entering the debate of whether students should be considered as consumers, this contribution would be incomplete if we were to avoid touching the sensitive subject of the students' expectation to be viewed as consumers. Here, Guibault offers avenues as to how to treat students as customers without losing academic integrity in an attempt to meet students' expectations.[26] Following Guibault, universities are akin to fitness centres where all the necessary equipment and trainers are at the disposal of the member, but the payment of a membership does not equate to guarantee of an improvement in fitness. Fitness will only improve if the member actively works out. The same goes for students in higher education. Student engagement is therefore essential to achieve the desired educational outcomes. And this is an area where technology and multimedia content can be beneficial if correctly relied upon as a tool for students to get excited about a particular topic as well as fostering direct engagement with content.

Students expect *flexibility* in their learning journey, meaning the ability from the room or educator to adapt to the students' changing needs. This flexibility can therefore be linked to the physical space in which the learning takes place

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[24] The National Student Survey can be found at www.thestudentsurvey.com/.

[25] R. Koris and P. Nokelainen, 'The Student-Customer Orientation Questionnaire (SCOQ): Application of Customer Metaphor to Higher Education' (2015) 29(10) Int. J. Educ. Manag. 115.

[26] M. Guilbault, 'Students as Customers in Higher Education: The (Controversial) Debate Needs to End' (2018) 40 Journal of Retailing and Consumer Services 295–8.

(temperature, set-up etc. but also offering the possibility to accommodate both current and future technologies), including the ability for a student to change groups due to clashing commitments or other personal circumstances, but it can also mean participation flexibility. Offering students choices in how, what, when and where they participate in learning-related activities can go a long way in fostering engagement.[27] Whilst in the 1990s, the rise of the Internet led some universities to move towards online only modes of knowledge delivery, the recent worldwide pandemic has propelled many universities to consider blended approaches to learning, that is, a mix of in-person and online learning events. Furthermore, the majority of universities have adopted web-based course management systems (i.e. virtual learning environments aka VLEs) but their use has mostly been for logistic purposes rather than ways in which to foster collaborative learning environments. Some institutions make greater use of discussion boards than others but there are multiple ways in which technology can be used to provide more flexibility or avenues for under explored interactions.

This brings us to learning flexibility covering both pedagogy and learning activities. Moving away from the traditional delivery of content contributing to the acquisition of skills and knowledge to providing opportunities for participation and becoming active participants in a learning community. The idea is to empower students to take part in the shaping of their own learning experience. This can be achieved through self or peer evaluation, project-based learning, creation of portfolios, brainstorming activities and gathering resources. In a more tech-reliant situation, we can think of online portfolios, blogging or other social media entries or even the student development of courses using Wikis.

Finally, students have an expectation that higher education will *prepare them for the workplace*. However, in a world where obtaining a university degree does not necessarily mean a ticket to high-level employment, there is a crucial need to understand how the workplace is changing. As a result, higher education should also evolve.[28] With the widening of participation schemes to access the legal profession, there is a real opportunity to cater for a broader range of jobs.[29] Increasingly, employers appear to value graduates with entrepreneurial attitudes and skills.[30] To meet this expectation, educators

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[27] B. Collis and J. Moonen, 'Flexibility in Higher Education: Revisiting Expectations' (2011) 37 Comunicar La Universidad Red y en Red 15–25.

[28] Supra, n. 1.

[29] After all, only a minority of law graduates eventually practice as a solicitor or barrister.

[30] Also supported by governmental measures such as in the UK where the UK government aims to encourage greater levels of enterprise, small business and entrepre-

should focus not only on the acquisition and assimilation of knowledge but increasingly develop the student's ability to *manage* and *apply* knowledge. This includes understanding the students' entrepreneurial needs to ensure correspondence between university offerings and student's needs.

CONCLUSION

For such learners, it is unsurprising that relying solely on the Socratic method as a way of learning will be unsatisfactory. On the contrary, these changes in learners must invite a deeper reflection as to the learning methods favoured and the role of the educator to adequately prepare new lawyers for the professional world without constituting a disservice to the consumers of legal services. To borrow from Biggs's 'constructive alignment' concept, the student plays a central role in the learning and the teacher is responsible for providing 'a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes'.[31] Whilst many of us see the constraints in resourcing conventional on-campus teaching and current changes in Higher Education as detrimental to learning, perhaps these are the catalyst for change by forcing educators to rely further on technology but also to think about the learning outside the classroom. This is what the contributors to this book have attempted to achieve by exploring new ways of conceptualising and delivering learner-centred IP legal education.

COVERING IP LAW IN NON-LAW PROGRAMMES

Ruth Soetendorp

My introduction to IP Law came through choosing to study IP as a postgraduate qualification following a first degree in law and an LLM. More recent entrants to IP teaching may have selected an IP undergraduate or postgraduate module at their chosen law school. Others will have carved out a more innovative introduction to IP law through a medley of short courses and a purposeful engagement with online resources. Whatever our entry into IP education, we each had to consider the questions that have dominated my thinking every time I sit down to plan an IP module: How should this module cover the law? What range of legal topics is appropriate? What depth of legal study is appropriate for these students?

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neurship and create the environment in which these activities can flourish. For a similar position at EU level, see EU commission and OECD.

[31] J. Biggs, Aligning Teaching for Constructing Learning (The Higher Education Academy, 2003) 2.

Before considering current and anticipated future challenges to IP educators, it is worthwhile considering the roots of IP Education, starting with the 'founding father' of IP education in this country, the late Professor Bill Cornish.[32] In the 1960s he was persuaded to become involved in IP, which was at that time perceived as a 'fringe (law) subject', and developed an LLM of IP law at LSE. It eventually became a major undergraduate and postgraduate research programme. Bill Cornish produced the first and still standard text on the subject that he helped establish as a major topic in the UK, the EU and globally – *Intellectual Property: Patents, Copyright, Trademarks and Allied Rights*, first edition 1981.[33] In the early 1990s, he chaired the National Academies Policy Action Group, Working Party on IP, and brought out the first edition of *Cases and Materials on Intellectual Property*, in 1990. IP studies were further enhanced by the endowment of the Herchel Smith Professorship of IP Law at Cambridge. Cornish was its inaugural occupant from 1995. He was keenly aware of the contemporary problem of 'greedy people trying to capture huge territories of information to do with the genetic makeup of plants and animals' and to monopolise it for their own commercial exploitation. During his tenure of the Herchel Smith chair, Cornish published three further editions of *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights*, in 1996, 1999 and 2003, which is an indication of how fast the subject was developing.

Bill Cornish's legacy has been to inspire a legion of academic IP legal text authors. This ensures that the IP educator looking to resource a law-based IP course will be spoilt for choice. The main focus of this chapter, however, is the challenge faced by IP educators tasked to design IP modules for students whose main discipline is not law. In 2004, Yo Takagi, then Executive Director of WIPO said: 'In view of the expanded role of IP in knowledge-based economies and societies, it is increasingly important to teach IP to students who do not have a legal background.'[34]

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[32]   An extended biography of Cornish is provided by The University of Cambridge's Squire Law Library Eminent Scholars Archive, www.squire.law.cam.ac.uk/eminent-scholars-archive/professor-william-rodolph-cornish.

[33]   B. Cornish, Intellectual Property: Patents, Copyright, Trademarks and Allied Rights (Sweet & Maxwell, 1st edn 1981, 9th edn 2019).

[34]   Y. Takagi, Executive Director, World Intellectual Property Organisation, Teaching of Intellectual Property, WIPO Arab Regional Conference on the teaching of Intellectual Property, Dubai 2004.

INSTITUTIONAL RECOGNITION AND SUPPORT

An IP module for disciplines other than law may be located in a faculty or department specialising in a branch of business, arts, humanities, natural and applied sciences or the social sciences. A literature search is unlikely to reveal a clear path to suitable texts, since academic IP education articles can appear in education journals, industry journals and publications or reports emanating from national and international intellectual property institutions, for example, UKIPO, WIPO, EUIPO, EPO. IP Education of non-lawyers, outside a law school, is not recognised as an academic discipline in its own right. This creates an 'absence'[35] of literature, and of academic institutional support.[36] It is difficult for university departments to give time or financial resource to encourage IP Education research, or refund expenses of participation in groups such as the Intellectual Property Awareness Network (IPAN)[37] or the European Intellectual Property Teachers Network (EIPTN).[38]

IP education beyond the Law School is interdisciplinary. This means it is difficult for it to be included in UK Research and Innovation's (UKRI)[39] Research England's Research Excellence Framework funding applications.[40] In 2017, the UK Government, via UKRI, introduced the Knowledge Exchange Framework (KEF)[41] which seeks to quantify the many different ways in which universities interact with, and impact upon, the wider world. It is measured by UKRI which provides funding, via the Higher Education Innovation Fund (HEIF),[42] and supports higher education providers to help them play a central role in society and the economy. The KEF Dashboard assesses universities on seven perspectives of knowledge exchange.[43] One of these is 'IP and Commercialisation'. Although generally understood to refer to how universities exploit their IP, explicit reference to 'IP and Commercialisation' as a KEF

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[35] CIPU, Intellectual Property Education at Business Schools: An Evolving Landscape (April 2021) available at www.understandingip.org/wp-content/uploads/2021/04/BSchoolRpt4.24.21.pdf.

[36] My IP Educational research at Bournemouth University was made possible in 1997 by a four-year grant from the then Patent Office (now UKIPO), and was subsequently supported by a Leverhulme Innovative Teaching Award in 1999 and the award of a Higher Education Academy National Teaching Fellowship in 2001.

[37] See Ipaware.org.uk.

[38] See www.eiptn.eu/.

[39] www.ukri.org/opportunity/.

[40] https://re.ukri.org/research/research-excellence-framework-ref/.

[41] https://kef.ac.uk/.

[42] https://re.ukri.org/knowledge-exchange/the-higher-education-innovation-fund-heif/.

[43] https://kef.ac.uk/dashboardass.

perspective might encourage universities to develop a more positive approach to IP education.

Despite lack of institutional support, this is the area of IP education that appears to have seen the greatest growth over the past decade or so. As the range of disciplines opening up to include IP education grows, so does the body of literature written to serve the needs of IP educators in each discipline. But the literature is not coherently catalogued. The EPO[44] and the EUIPO have recognised this problem.[45] Through their backing since 2007 of the EIPTN, they have given IP educators the opportunity to exchange ideas, share intelligence and collaborate.

MIXED MESSAGES

How can we be sure that students are interested in IP Education? In 2012 and 2016, the IPAN, in conjunction with the UK National Union of Students (NUS), undertook two research projects.[46] Findings showed that there is a high level of students (80 per cent) who consider IP is relevant to their courses and to their future careers. The IPAN/NUS research revealed a low level of available IP education courses, and low numbers of academics prepared to offer IP education to their students. In 2021, the US Center for IP Understanding's report *IP Education at Business Schools: An Evolving Landscape*,[47] presented evidence that where IP education modules are available, take up by students is low. Why might this mixed message be?

There is evidence that adults are sceptical about IP because it is 'mysterious', expensive and is not seen to offer small businesses sufficient protection against infringers. This was borne out in findings of the 2018 UKIPO report into design infringement,[48] which resonates with findings of Professor Hargreaves' Review of Intellectual Property and Growth, published in 2011,[49] highlighting difficulties faced by SMEs in accessing the IP system: a lack of

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[44]   www.epo.org/about-us/services-and-activities/academy.html.
[45]   Supra, n. 37.
[46]   https://ipaware.org/resources/education/.
[47]   Supra, n. 34.
[48]   IPO, Research into Designs Infringement: Attitudes and behaviour of design rights owners towards infringement (May 2018) available at https://assets.publishing .service.gov.uk/government/uploads/system/uploads/attachment_data/file/758496/ Design-Rights-Infringement-report-2018.pdf.
[49]   I. Hargreaves, Digital Opportunity: A Review of Intellectual Property and Growth (May 2011) available at https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/file/32563/ipreview-finalreport.pdf.

strategic commercially based IP advice; difficulties identifying the right source of advice and the cost of IP management.[50]

Students whose core discipline is not law are also wary of studying anything remotely legal. This includes IP law. They are reluctant to spoil their end of year assessment marks by taking a module that has 'Law' in the title. They perceive it as carrying a risk that might result in them achieving a poor end of year result. In 2013, the promotional leaflet for the IP management module I had been invited to introduce in 2011 had to include the sentence 'No prior legal knowledge is necessary' because the first two cohorts of students had been put off by the mention of IP law in the module content. At Harvard Business School, Gary Pisano teaches an elective course that illustrates these points. His course is called 'Driving Profitable Growth' and is offered through Harvard's Technology and Operations Management Department. Notably, there is no mention of 'IP', 'law' or 'entrepreneurship' in the title of his course. This likely casts a wider net because students who are not particularly attracted to those terms, or are even turned off by them, are probably still interested in 'profitable growth'.

Awareness of the conflict presented by students who are both interested in studying IP – because it will be relevant to their future career – and on the other hand, are reluctant to take on the risk of signing up for an 'IP Law module', led to the questions that frame this chapter: 'How should the module cover IP law? What is the range of IP law? What is the appropriate depth of legal study?'

I first asked myself those three questions when, in 2011, I was invited to offer an IP management module to City University of London Business School undergraduates, and in 2017, to Bayes Business School masters in Innovation, Creativity and Leadership.[51] At Bournemouth, I taught IP law as LLB and LLM law school modules. Law school students were expected to graduate with an understanding of how to find their way around the relevant UK and European legislation, and to support any research they undertook with application of appropriate judicial decisions. What could I expect of the IP management students?

City University of London is located at the heart of London's Old Street area (the 'Silicon Roundabout'). In the second decade of the twenty-first century, students were beginning to realise that their default career choice of Financial

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[50]   HM Government, The Government Response to the Hargreaves Review of Intellectual Property and Growth (August 2011) available at https://assets.publishing .service.gov.uk/government/uploads/system/uploads/attachment_data/file/32448/11 -1199-government-response-to-hargreaves-review.pdf.

[51]   See www.cass.city.ac.uk/study/masters/courses/innovation-creativity-and-leadership ?gclid=CjwKCAjwlYCHBhAQEiwA4K21m0oKXQf2S3DOFRwR4uTUyzsUDJ iO6dtef6Se_7akwtZTqUO00l-OWhoCi4cQAvD_BwE.

Services was giving way to software start-ups as a future career goal. They realised the significance of IP, but needed convincing that they could do well on a module that included studying law, especially if they had not previously studied law. They wanted reassurance. My first job was to circulate a clarifying statement that not having previously studied law would not be a barrier to them succeeding at the module. My second job was to ensure I had designed a module that would deliver achievable – yet credible – goals without prejudicing my reassurances.

It had been difficult to conceive an IP module that was not fully focussed on IP law. I was not comfortable with the notion of 'IP law lite' and felt it would be almost impossible to decide which cases to omit, which sections of the statutes could be bypassed. There were two significant constraints. The module was only 11 weeks in duration, and it had to take the students into two significant areas of study: IP law and IP management. Whilst there would be overlap between the two parts, I felt 'IP law' and 'IP management' should each receive an equal share of time. 'Covering the Law' on an IP management module was going to be quite different from covering the law on an LLB or LLM module. What were the intended learning outcomes (ILOs) that would be appropriate for the module?

GOALS, OBJECTIVES AND LEARNING OUTCOMES

Intended Learning Outcomes (ILOs) are statements of what a student is expected to be able to do through engaging in the learning process provided by the module.[52] They are written from the student's perspective – 'At the end of the module. I will be able to …' and they contain an action verb 'At the end of the module, I will be able to understand/apply/recognise …'. The actions are achievable, and assessable. Considering what ILOs were appropriate to the IP management module was more positive than worrying how to cover essential topics. ILOs in turn influence the content of the syllabus, its mode of delivery and the assessment pattern. If you start by asking yourself what is this module's learning goal, the ILOs will be drafted to achieve that goal. If circumstances change your goal for a module, the ILOs will need to change to reflect that change. On completing the module, what could a student reasonably expect to be able to do?

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[52]   www.bristol.ac.uk/academic-quality/approve/approvalguidance/intendedlearnin goutcomes/#:~:text=Intended%20Learning%20Outcomes%20(ILOs)%20define,are %20measurable%2C%20achievable%20and%20assessable.

THREE SETS OF ILOs ILLUSTRATE DIFFERENT APPROACHES

The ILOs for the first iteration of City's IP management module offered on City's BSc Business Management degree in 2013 reflected my recent involvement in Law School teaching:

> At the end of the module you will be able to:
> 1. Recognise when an invention has the potential to be patented.
> 2. Apply the requirements of confidentiality in respect of patents.
> 3. Understand the relationship between copyright, design right and design registration.
> 4. Follow the necessary procedures to initiate patent and registered design applications.
> 5. Anticipate the risks and benefits of contract law as applied to intellectual property exploitation.

By 2020, the ILOs for City's IP management module had changed radically. They reflect changing module goals, as students are expected to acquire knowledge, understanding and skills in law and management, combined with relevant values and attitudes.

> On successful completion of this module, you will be expected to be able to:
> Knowledge and understanding:
>   Analyse an innovation's potential intellectual property.
>   Apply legal knowledge to intellectual property issues.
>   Advise on appropriate actions to recognise, protect, exploit, enforce intellectual property rights.
> Skills:
>   Elicit relevant information from clients and colleagues regarding IP management and advise appropriately orally and in writing.
>   Identify, analyse and assess issues raised by the creation and use of IP rights and communicate findings effectively.
>   Research appropriate IP policy and law and apply research findings.
>   Analyse facts/scenarios to determine when it is appropriate to engage an IP specialist (e.g. patent attorney, trademark attorney).
>   Apply knowledge and understanding gained to influence IP management.
> Values and attitudes:
>   Share, through written and oral communication, the significance of IP recognition, protection, exploitation and enforcement, to a client or colleagues.
>   Influence management behaviour in an area of commercial activity which is subject to international law and policy making.
>   Appreciate the ethical issues relating to intellectual property rights.

David Orozco, who leads a module called 'Intellectual Property and Business Strategy' at Florida State University College of Business, identified five learning goals for his undergraduate course IP and Business Strategy:

1. Understand the innovator's role in the value chain and the need for strategic complementary assets.
2. Understand how public policy and regulation can strategically impact the innovator.
3. Understand the innovator's role in developing internal firm capabilities to generate IP-enabled business models.
4. Understand how legal strategy, litigation, and other adversarial processes can impact innovation.
5. Understand how ethics and public opinion impact innovation-related outcomes.[53]

A module may only be of short duration. It is not possible to fit in everything one would like the student to know on completion of the module. Decisions have to be made on the range of content, and the depth to which it will be covered.

As an IP law trained lecturer, I found it difficult to reduce my legal knowledge down to the relevant IP law that a business management student could be expected to absorb and retain after 11 weeks. The UKIPO's comprehensive online resource – IPTutor – proved to be a practical guide.

IPTutor is described more fully in another chapter of this book.[54] Here, its suitability to help answer the questions of depth and range when covering IP law on a non-law module is explored. To begin, IPTutor[55] invites users to choose a path through its material depending on their discipline: Business, Law and Accounting; Creative; Humanities; STEM (Science, Technology, Engineering and Maths). This ensures students can be comfortable that they will be working with IP relevant to their discipline. If the student chooses, they can be accredited by UKIPO as having completed their course, which comprises five sections and should take 40 minutes to complete.

The IPTutor sections are: IP the Bigger Picture; Patents and Trade Secrets; Design; Trade Marks; and Copyright. The different discipline paths determine the order in which the five modules are presented for the student to work through. For example, Business, Law and Accounting students first study IP

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[53]   D. Orozco, 'The Evolution of an Interdisciplinary Course' (2017) www .ingentaconnect.com/content/nai/ti/2017/00000019/00000002/art00006?crawler=true &mimetype=application/pdf 533.
[54]   Infra, chapter 23, https://www.ipo.gov.uk/ip-support.
[55]   Ibid.

the Bigger Picture, then Patents and Trade Secrets, Design, Trademarks and Copyright, whilst Creative students begin with Copyright.

Taking IPTutor's Patents and Trade Secrets section as an example, the student leaves the first page knowing that patents give the owner exclusive rights, which give a competitive advantage and encourage companies to invest in R&D. The student learns what inventions patents protect, the maximum life of a patent (20 years), the three essential criteria for patentability of an invention and what cannot be patented. Patenting 'problematic' inventions (e.g. of software, or using known or existing products) is presented and the student is invited to consider why patents are useful to society and to themselves. The page concludes with points on confidentiality, headed 'keep shtum!'. The second page covers how to get a patent and how much it costs, the geographical 'reach' of a patent, alternatives to patent protection for inventions and the risks of relying on trade secrets. On the third page of the module, the student is presented with a problem 'You have just graduated university and decide to go travelling for a year. On your travels you come up with an innovative way to repel mosquitoes. Upon your return you set up a project team to do research and create a prototype', which leads to four yes/no questions for the student to consider.

IPTutor's emphasis is on practical relevance and student engagement. Similarly, resources produced by WIPO,[56] EPO,[57] EUIPO[58] and other national IPOs employ case studies to engage the student. A benefit of this approach is that it directs the student focus towards IP principles and concepts and frees them from memorising extensive statute sections and judicial decisions. IPTutor may be used in preparation for tutorial discussions of topical IP issues or short comment assessed work. As module tutor, I invite students to use the IPTutor as backup to our module lectures, which do make reference to key statute sections and to decisions. Assessment of the City module has been influenced by the IPTutor approach.

Students are expected to prepare coursework for 70 per cent of total module marks:

1. Short Comment work,[59]
2. Individual Essay, and
3. Group Report.

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[56] www.wipo.int/portal/en/index.html.
[57] www.epo.org/.
[58] https://euipo.europa.eu/ohimportal/en.
[59] *Infra*, chapter 1.

30 per cent of module marks come from a 60-minute unseen multiple choice question exam paper, which encourages students to engage with the basic IP law terminology that they will find useful in their coursework and their future careers.

Assessed coursework presented a challenge. Our lectures mention, but do not focus on, primary legal sources. Should we expect students to refer to primary legal sources in their coursework? The individual essay is a case study style problem, where students analyse a situation and offer advice. The marking grid advises that marks will be awarded for identification of IP issues, analysis and advice (40 per cent), IPR challenges and other issues (50 per cent), references and bibliography (10 per cent). The group work exercise requires students to choose (following guidelines) a company and prepare: (i) a report in which marks are awarded for presentation of the company's IPR profile, identification and analysis of IPR challenges the company may have faced, and to offer advice (65 per cent) plus references and bibliography (10 per cent) and (ii) an executive summary of their work in PowerPoint slides (25 per cent). Both courseworks are designed for a successful grade to be achieved without reference to primary legal sources. However, the 10 per cent allocated to references and bibliography gives opportunity to those who wish to, to refer to primary sources.

The international IP institutions set clear examples that it is not essential to teach IP law on non-law school IP modules in the way expected on a law school module, that is, by reference primarily to legislation and judicial decisions. In fact, the Center for IP Understanding's report on IP Education in top US Business Schools questions whether lawyers are indeed the best qualified to teach on such interdisciplinary modules![60]

Where IP Education is offered via a module that combines IP law with one (or more) of the myriad topics that innovative academics come up with to offer in combination with IP (including strategy, management, economics, valuation, enterprise, entrepreneurship) the goal is not to produce IP law experts. Such modules are designed to achieve something different. This was summed up neatly by a student completing the City module: 'Thank you so much for sparking my interest in IP management and a great module!' David Orozco writing of his Intellectual Property and Business Strategy module wrote 'One of the goals of a course like Intellectual Property and Business Strategy is to spark the imagination of innovators who are curious about their role in the larger value-creation ecosystem and stimulate their interest in pursuing

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[60]   *Supra*, n. 34.

business opportunities.'[61] To spark an interest, to spark the imagination – these are not learning outcomes. Yet for a student to be able to say 'at the end of the module my interest and imagination have been sparked' is an achievement. Igniting that 'spark' may be the difference between success and failure for a student achieving their more formal intended learning outcomes.[62] 'My interest in IPM has really been sparked over the last term, and I would like to pursue it further by gaining real experience during the final year of my undergraduate studies' (city student completing IP management module 2022).

WHAT'S IN A NAME?

IP educators teaching beyond law schools have begun sharing their doubts about the very term 'intellectual property'. They have become aware of the problems facing IP modules aimed at non-law school students. Students feel inhibited and deterred from enrolling on such modules because they either (a) do not understand what IP or intellectual property is, and (b) if they have an idea of its meaning, are anxious that IP or intellectual property implies a heavy burden of law study. This hesitancy on the part of students exists despite modules being designed to present an opportunity to learn about legal aspects of IP in the context of another subject, often business related.

At City, the undergraduate IP module is titled 'IP Management'. It is offered as a Business School elective. Students who choose it will find something familiar in the title to which they can relate (management). At the same time, they must face the unknown, unfamiliar area of law, probably for the first time. Many students, faced with the choice between a module containing law and one that does not, will choose not. Unless they can be shown through the module's ILOs, that IP law will not make the module any more nor less daunting than other modules. This is borne out by Rudi Bekkers and Gunter Bombaerts, writing in 2017 from the University of Technology Eindhoven. They were specific. They considered that student ignorance of the term intellectual property may be so high, that prospective students may be put off from even considering an IP Ed module.

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[61]   D. Orozco, 'The Evolution of an Interdisciplinary Course: Intellectual Property and Business Strategy' (2017) 19(2) Technology and Innovation – Journal of the National Academy of Inventors 525–35.

[62]   City student email 14.06.21: 'I just wanted to say thank you for all the support and teaching provided for the (IP Management) module! I was extremely happy with my decision to choose this course as my elective and have learned so much through the same. Your effort, guidance and teaching was extremely helpful and useful. Thank you so much for sparking my interest in IP management and a great module!'

Note that we deliberately decided to use the word 'patents' in the title of the course, not the term 'intellectual property or 'IP'. Although the course also extensively covers copyrights, trademarks, design rights and other forms of IP, our prospective students may not be acquainted with the term IP.[63]

The Centre for Intellectual Property Understanding report[64] found that 'IP courses' were offered by approximately ten distinct departments. Whilst the formal names of the departments in which the IP courses were located differed, the courses offered were generally a combination of IP with one of: Entrepreneurship and Innovation, Law and Ethics, Strategy, Management, Economics, Accounting, Logistics, Marketing, Organisational Behaviour & Theory or Operations.

Some of the names chosen for IP modules or courses illustrate the lengths that innovative IP educators will go to avoid having to label their programme as IP. Stephen Johnson,[65] a professor at Stanford, teaches Protecting Ideas. The goal of his course, located in the Business School's Strategy Department, is to attract as many students as possible to appreciate how IP is reflective of society and to see where IP can decrease inefficiencies and increase opportunities, which are missed when IP is not considered. MIT offers entrepreneurial students Entrepreneurial Strategy. At Harvard Business School Gary Pisano teaches Driving Profitable Growth which, whilst it covers them, does not mention 'IP', 'Law' nor 'Entrepreneurship' in the title. At University of Berkeley Haas School of Business, David Teece teaches Management of Innovation and Change: Knowledge Intellectual Capital and Competitive Advantage. Melissa Schilling, at New York University's Stern School of Business, says that success depends on 'butts on seats' and calls her course Technology Innovation Strategy.

LEXICON CONSIDERATIONS

IP education modules that are located in faculties other than law schools, and which combine IP law with topics from other disciplines, present an additional challenge. Students may find concepts that are remote from their core disciplines difficult to relate to. Both teacher and learner should be prepared to learn unfamiliar concepts in unfamiliar languages. My earliest experience of

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63   R. Bekkers and G. Bombaerts, 'Introducing Broad Skills in Higher Engineering Education: The Patents and Standards Courses at Eindhoven University of Technology' (2017) 19 Technology and Innovation 493–507.

64   Infra, n. 34.

65   D. Teece, author of the seminal article: 'Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy' (1986) 15(6) Research Policy 285–305.

teaching IP in a non-law faculty was in 1989. Bournemouth's BSc Engineering Product Design team agreed to include a half module on Patenting at Level 2. The product designers' ability to produce inventive solutions to problems, which they presented visually, was awesome. But the difficulty they found articulating those solutions, particularly when it came to describing them for discussion with an attorney to establish potential patentability, was perplexing. The half module was supported by an enthusiastic patent attorney who offered to mentor the students' attempts to prepare a patent specification for their invention. The Portsmouth Patent Library (as was) kindly offered to host the students on a visit and to help them research their draft patent specifications in the Patent Library. Both experiences significantly enhanced the engineers' ability to relate to the language and concepts of the patenting course. A couple of years later Paul Cole, a patent attorney who contributes to patent education at Bournemouth, wrote an email saying that a pair of Bournemouth Product Designers had presented themselves at his office for advice about an invention. 'They were so much better able than the average inventor to present themselves and get their ideas across. As a result their time with me was shortened, and they saved themselves some money.'[66]

When teaching students from a non-law core discipline, I acquaint myself with enough of their 'language' to be able to present IP concepts to them in a familiar context. I found Professor Theodor Zeldin's question 'what is the minimum time it would take to learn to engage in meaningful conversation with someone from a different profession?'[67] relevant and helpful. I asked an engineer how long it would take him to teach me to be an engineer. 'Three months', he said. Not to be a real engineer, but to understand their language and their problems, to learn the essence of the way they think. Professor James G Conley from Kellogg Business School, suggests, when seeking to introduce an IP course to another faculty, that the IP educator acts as interpreter. He gathers support from departments to host IP courses by recognising that 'professors of the classic courses have their own lexicons. If you cannot speak to them and frame a topic in a way that translates in their lexicon, it is very difficult to get them excited about a topic like IP'.[68]

CONCLUSION

From its beginnings 60 years ago, IP education has progressed from being a 'fringe law school subject' to one that has diversified across management, risk,

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[66] Author's private conversation.
[67] T. Zeldin, Conversation (The Harvill Press 1998) chapter 4.
[68] Infra, n. 34.

strategy, and is offered in increasing numbers of faculties across a very wide range of disciplines. That progress has come about by enthusiastic IP educators being prepared to consider how they 'cover the law' as well as looking beyond the legal dimensions of IP in the modules they deliver. Ongoing consideration of how module design can fulfil the goals and address the concerns of learners and academics will contribute to IP Education's continued progress.

ORGANISATION OF THIS BOOK

Following this brief introduction, the book is organised in six thematic parts before concluding. Part I focuses on techniques to foster student engagement. This includes specific techniques on enabling primarily non-law students to engage with IP concepts though the exercises described can also transfer into a law school setting to stimulate engagement (Soetendorp, chapter 1). This contribution introduces the idea of including simple current and interactive activities within any teaching event. It is then followed by more targeted chapters, all of which deal with a specific method to increase engagement and participation. These include entrepreneurial education and the reliance on curiosity-based learning (Penaluna and Penaluna, chapter 2), teaching IP to biotechnology students where developing the commercialisation of IP knowledge, if ever more important, is considered (Curto Polo, chapter 3), using musical instruments to demystify the complexities of copyright law (Scharf, chapter 4) or overviewing a series of techniques to further engage students in large group teaching settings (Manderieux, chapter 5).

Part II focuses on the incorporation of varied perspectives in IP modules. Starting off with the inclusion of empirical studies which not only provide a different way to strengthen research-led teaching but provide means to develop skills necessary for the workplace as well as for further education (Kheria, chapter 6). Valuable skills for employment are strengthened through looking at ways to teach IP licensing outside law schools (Brestnichska, Koleva and Molhova-Vladova, chapter 7). Continuing that theme, developing arts-based learning through embedding creativity in law school is explored (Wallace, chapter 8). Two chapters introduce the importance of fully integrating IP ethics and its societal impact (Gubby, chapter 9) and with the demand for sustainability (Denoncourt, chapter 10) to IP education across disciplines, including law schools.

Part III overviews teaching methods to stimulate collaboration within and amongst cohorts. Once again, an important skill to develop to be market-ready, this part includes a series of techniques. These include how to make the most of peer-assisted learning in IP modules (Page, Bosse and Aronsson-Storrier, chapter 11), and how to start and successfully manage an IP law clinic (Bosher, chapter 12). Collaboration can also be fostered between students from diverse

programmes where they impersonate advisers and clients on a specific project (Mendis, chapter 13).

Part IV aligns IP teaching methods onto the digital world. It looks at ways in which technology can support the delivery of IP teaching, whether this is done through a gamified app (Jacques, chapter 14), a greater integration of social media platforms (Sekhon, chapter 15) or a future-looking contribution on how to make the most of artificial intelligence and virtual reality to immerse students into real-life scenarios (Coles, chapter 16).

Part V appreciates the contribution IP practitioners and other professionals make to IP education. Looking beyond law textbooks, the lived experience of an inventor and patentee will always engage students (Haberman, chapter 17). Networking with professionals is an innovative way to further IP learning (Rosati, chapter 18) and where an IP lawyer can join a teaching team, they can help students recognise the crucial importance of IP management (Michel de Cazotte, chapter 19). IP professionals have also much to contribute to learning about IP management (van Dongen, 20).

Part VI shares an appreciation of resources developed to enhance student IP learning. Using podcasts in IP education delivery is an unexpected but effective approach (Frye, chapter 21). Copyrightuser.org has taken a fresh approach to copyright law, and the need for it to be accessible to all (Meletti, chapter 22). The UKIPO has a good history of IP education resources, which have recently been updated to reflect current education approaches (UKIPO, chapter 23).

Our conclusion does not only offer a reflection on the best practices of IP teaching methods, but it provides an outlook of what the future of IP teaching might look like. Touching upon themes of inclusion, diversity, ethics or the increasing reliance of dematerialised technology such as non-fungible tokens, this final part puts the final nail to debunking the myth that because law is an accredited subject, it is limited in the teaching methods educators may employ. If anything, the recent changes in the UK, in this regard, have made our task even easier given that accreditation has been dropped after 2021. Societal changes also increase the need to diversify our ways of teaching and we hope this book will provide a helpful discussion start!