### Experience of US/EU in IP Education

### INTRODUCTION

Intellectual property law is a comparative newcomer to U.S. and European university law schools. In the UK an important step forward was the publication in 1981 by Prof Bill Cornish of his textbook on patents, copyright, trade marks and applied rights. A need for national intellectual property education in the United States was recognised with the increased internet use and development of the national information infrastructure. In 1994, Senator Bruce Lehman<sup>1i</sup> envisaged a major schools and libraries based campaign which did not include development of university level programmes.

Interest in intellectual property legal education grew in the early 1980's in response to the need i for intellectual property expertise to resolve computer software based disputes. More recently, graduates have been attracted to intellectual property courses because they recognise that intellectual property strategy and management are key business skills, particularly in the knowledge based industries. Intellectual property training is also undertaken by graduates from science and technology who see a future as patent examiners or patent attorneys. Additional career paths for intellectual property graduates are in University technology transfer offices, in businesses involved with startups, or in companies involved in the securitisation of intellectual property assets.

Another catalyst for the growth of intellectual property education on both sides of the Atlantic has come from the changing attitudes of banks, financial institutions and the accounting professions. Intellectual property used only to have a balance sheet value if it had been traded. Now the commercial value of intellectual property is more likely to be the most powerful asset a company possesses. Intellectual property rights can 'command premium selling prices, dominate market share, capture customer loyalty and represent formidable barriers to customers'ii EU and U.S. government departments, particularly defence, health, agriculture and education, have also tasked themselves in recent years with responsibility for capturing the value in the intellectual property they create.

A recent new area for government attention in Europe and the United States has been 'enterprise education'. Well aware of the challenges in preparing young people to make an entrepreneurial career choice, universities are linking with regional business development organisations to develop opportunities for enterprise education. Since intellectual property management is a key entrepreneurial skill it is likely that the growth in enterprise programmes will increase interest in intellectual property.

University of South Florida uses interdisciplinary teams (comprising graduate students from business, engineering, arts, science and medicine) that work

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together on an entrepreneurship programme. The tasks the students are sent enable the teams to evaluate intellectual property portfolios, produce competitive analyses of products and services currently in the marketplace and strategic alternatives for commercialising technologies. Applying the techniques learnt, they have increased the number of new ventures launched to aid in the development and commercialisation of USF faculty new technologies<sup>iii</sup>

Another set of catalysts for the expansion of intellectual property education has been the growth in demand for suitably trained and qualified intellectual property personnel. The expansion of national and international policy making creates demand for trained support staff to work with the legislature and the civil service. As intellectual property legislation and regulation grows, the judiciary is required to demonstrate intellectual property capabilities and seeks opportunities to improve its expertise. Increasing volumes of intellectual property litigation require increasing numbers of practitioners. Growing volumes of intellectual property licensing demand growing numbers of professional advisers able to draft good licence contracts.

For all these reasons, intellectual property courses have become popular, whether they are 'pure law' or a combination of law and other disciplines. There are courses to match every competence level, from basic awareness to an ability to act in the highest court. As Bill Hennessy points out<sup>iv</sup>, though, 'preparation of curricula and teaching materials on intellectual property must take the career goals of all these potential recipients of intellectual property education into account'. What ever the level, intellectual property studies should involve students in four stages:

- how intellectual property rights are first recognised
- how they can be protected in law
- how they are commercially and exploited
- how they are legally enforced

Then, depending on the level of competence anticipated in the learning outcomes for the course, students can expect to study other related areas of law or business strategy.

### UNDERGRADUATE AND POSTGRADUATE STUDIES

A significant difference between United States and European universities is the structure of undergraduate and postgraduate studies.

In Europe, Universities have accepted the Sorbonne Bologna Declaration which aims by 2010 to have adopted a Europe wide system of comparable degrees and diplomas based on two main cycles, undergraduate and graduate. Access to graduate studies should follow successful completion of three year undergraduate studies. A Europe wide academic credit system will be introduced which recognise credits achieved both in academic and non-higher education contexts, including lifelong learning. The resulting European area of higher education is expected to enjoy the prompt and positive support

of European universities. Intellectual Property law, for example, is offered at undergraduate and postgraduate level in Europe.

A UK undergraduate student expecting to practice as a lawyer needs to study another year after their qualifying law degree for a professional qualification, or two years following a degree in any other discipline. In the UK, 50% of university law schools offer intellectual property law as part of the undergraduate law degree. Intellectual Property is usually taught in the second or final year as a full credit bearing option module. It is possible to study intellectual property as part of an interdisciplinary award, combined, for example, with computing, e-commerce, chemistry, electronic engineering, business information or economics<sup>vi</sup>

In Europe, intellectual property education has been boosted by EU aspirations to be a leading region of technological achievement. The Commission has actively promoted the objective that all students in science, engineering and business studies receive at least basic training on intellectual property and technology transfer. EU research and development funding, through the Framework Funding schemes, has made monies available for university researchers to work on developing learning and teaching resources that would enhance intellectual property curriculum development.

In the United States students first study a bachelor degree. The list of available bachelor subjects does not include law studies, which may not be undertaken until a student has completed a bachelor degree. As a result, there has traditionally been no undergraduate intellectual property 'curriculum' in most U.S. universities or technical colleges. Until very recently, few universities and technical colleges offered training of any kind in intellectual property, outside of the law schools. This was because law training, of any kind, was relegated to the professional law schools which have remained physically and institutionally separate from other disciplines. Today, the small number of U.S. graduate business schools that offer something in the way of intellectual property, perhaps a course or two on intangible assets, is slowly growing.

U.S. post graduate programmes are either academic [leading to a PhD] or professional, leading to a professional qualification. Intellectual property law postgraduate programmes are generally offered as part of law professional programmes, rather than in science or business graduate schools. As a result it is almost impossible to enrol for an intellectual property law PhD in the U.S. ix

'In the U.S. there has been relatively little attention paid to the need for additional emphasis on university instruction in intellectual property issues and the training of scholars to undertake research in the area. There has been little attention paid in economics departments and business schools. American graduate schools (other than law schools) do not turn out specialists in intellectual property research and teaching'[Maskus, 2005]<sup>x</sup> However, this is beginning to change as leading university's are beginning to introduce intellectual property to their graduate school programmes:

- Duke University's course on Intellectual Capital and Competitive Strategy,
- Harvard Business School's course on Commercialising Science and High Technology, and
- Stanford School of Engineering's course on Technology and Policy.

At the same time, new LLM programmes are being offered by increasing numbers of law schools.

University of Dayton School of Law offers its Program in Law and Technology [PILT] which aims to provide graduate students with a solid foundation in patent law, copyright and trademark law, business dimension of intellectual property law, including commercial exploitation, and computer/cyberspace law. 'Students have an opportunity to graduate with a well-rounded, cutting edge education. They are well prepared to handle the legal issues involved in these ever-expanding areas of law.'<sup>xi</sup> Student on PILT have undergraduate backgrounds from a very wide range of disciplines, from journalism, music, political science, microbiology, engineering and many more.

In researcy undertaken by Hill & Latimer(2003)<sup>xii</sup> 48 of 50 law schools surveyed offered at least a basic IP course.

In Europe it is possible to study intellectual property at Masters level in combination with a range of other law or non-law subjects. A survey in 2003 of European universities offering named intellectual property masters programmes revealed 10 universities with programmes that combined the various intellectual property law regimes with competition, marketing, ports law, ethics, e-commerce, commercial exploitation, human rights, traditional knowledge and biodiversity. The number of universities continues to grow, as does the range of subject combinations.

## COLLABORATIVE AND INTERDISCIPLINARY RESEARCH & TEACHING

A further difference between European and United States universities exists in the general approach to interdisciplinary teaching and research. On the one hand, interdisciplinary work is acknowledged to be 'fun and exciting' 'inspiring' and 'you learn a lot'xiii. On the other, there are considerable challenges. Drafting interdisciplinary research questions can be difficult, as can winning and distributing research funds. Global travel inflates research costs. But the biggest problem posed by working cross-faculty is the reluctance of universities to accommodate and encourage interdisciplinary appointments. At its most prosaic, as long as it is the department that hires, appraises, reviews and promotes, departments will prefer single disciplinary outputs. Research undertaken amongst United States universities to works with many authors is challenged. That creates a conflict when, having been lured into the collaborative research needed for progress in an interdisciplinary field,

an academic finds herself later held to the standards of the specific disciplines.

The reasons for a lack of emphasis on interdisciplinary intellectual property teaching in the traditional U.S. law school curriculum are several. Hennessey<sup>xv</sup> suggests that at root may be that law school professors, whose first degrees tend to be political science, history or government, are suspicious of patent attorneys, whose first degrees are science and technology. The lawyers doubt the patent attorneys' ability to get to grips with general legal questions! Another reason may be simply that 'attorney' and 'lawyer' mean the same thing, giving rise to another cause for suspicion. Trade mark work used to be the preserve of patent attorneys, and copyright work of lawyers who worked with creative, publishing communities. In today's intellectual property practice, lawyers are not the only profession. They will probably be interacting with tech transfer professionals, patent examiners, licensing executives, software designers, artists, laboratory researchers, translators, human rights activists – all of whom will be interested in understanding more about intellectual property.

Faculty managements might not be enthusiastic about interdisciplinary appointments or research activity, but there is a growing recognition that interdisciplinarity in the university will have to develop to keep pace with interdisciplinarity in the workplace. Research to find applications that will solve problems and generate knowledge that is intended to be useful<sup>xvi</sup> will influence the future working relationships of university faculties and departments.

In order to understand the extent to which intellectual property teachers engage with collaborative interdisciplinary teaching or research, a survey was undertaken of members of the international Association of Teachers and Researchers of Intellectual Property [ATRIP] and the UK IP Teachers Network. Responses were received from 57 respondents [from a total of about 240 members of both organisation, primarily from Europe or from the United States].

Respondents identified a wide range of law school based research projects:

# IP Law faculty research [eu/us]

- · aspects of patent law
- IP education for schools, higher education and
- business
- stemcell research patents; IPR in transition
- research exemptions in patent law
- IP policy and law in developing countries
- copyright in information society, Opensource software
- & IPR
- Brazil/Italy project on biodiversity
- artists earnings, G.I's. Historical sources of ©
- Copyright, IP History, EU projects, IPR helpdesk

- copyright ownership, copyright issues, moral rights
- IP & conflicts of law
- online digital archive
- codification of IP law, relating Slovak Private law
- database right, geospatial information, digital curation
- centre
- USPTO registry for secured transactions involving IP
- assets
- · IP research academy
- IP policy making
- implementation of EC directive on biotech,
- implementation of TRIPS

Responses from ATRIPand UK IP Teachers Network Summer 2005

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In contradiction to the U.S. findings, there are some lively examples of interdisciplinary IP work happening in Europe. Respondents, all primarily law academics, reported working on projects with a wide range of faculties for research, and an even wider range for teaching

European University faculties involved in collaborative intellectual property research

- Chemistry
- Industrial Design
- Literature
- Economics
- Engineering
- Science
- Social Science
- Business Studies: Management, Finance
- Medicine
- Theology

European University faculties involved in collabarative intellectual property teaching

- Industrial Design
- Engineering
- Bio Science
- Computing
- Literature
- Media
- Business
- Medicine

- Economics
- Art History
- Education
- Architecture
- Art & Design
- Chemistry

Teaching across disciplines requires an understanding of the relevance of law to the context of the discipline in which you are working. Student learning must focus on context as well as content. Curriculum designers expecting to integrate cognitively disparate topics into the syllabus must develop new learning and teaching strategies and methods. Respondents to the survey reported that they found their interdisciplinary, collaborative work enjoyable, although one pointed out that promotion boards did not encourage it.

### CONCLUSION

The past 25 years in Europe and the United States have seen rapid growth in intellectual property education primarily as a law school subject, studied by students hoping to follow a career as an intellectual property professional. Both regions offer Masters level postgraduate programmes. Europe, but not the United States, offers undergraduate law opportunities. It is easier to follow PhD intellectual property law studies in Europe than in the United States. More recently, and less well established, there is evidence of law schools looking outward to develop potential for interdisciplinary teaching and research. Even more recently, and even less well established, non-law faculties are looking to include intellectual property in their own programmes. Intellectual property education can be seen to have grown organically, if erratically, across the sector.

http://www.ifla.org/documents/infopol/copyright/intlprop.txt

<sup>&</sup>lt;sup>1</sup> Lehman B, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, Chair, and Brown, R, Secretary of Commerce, Chair Information Infrastructure Task force A PRELIMINARY DRAFT OF THE REPORT OF THE WORKING GROU ON INTELLECTUAL PROPERTY RIGHTS, July 1994.

ii Russel Parr, quoted in DIPS

iii see <a href="http://www.entrepreneurship.usf.edu/FountainAcademicVitae.pdf">http://www.entrepreneurship.usf.edu/FountainAcademicVitae.pdf</a>

iv Hennessey, W 'Intellectual Property Program of the Franklin Pierce Law Centre: Past Developments, Current Situation, and Future Tasks, with particular emphasis on its Educational Methodology to Develop Human Resources Meeting Social Needs', ICS Seminar, February 2004 htt:// Sorbonne Bologna

vi See UCAS entries for Dundee, City, Manchester, Exeter, Hull, Solent, Abertay and Leicester universities

vii EU Research Commissioner Philippe Busquin, 2003

viii see Hennessey op cit p.4

ix see Hennessey op cit p.7

<sup>x</sup> Maskus, K EMERGING NEEDS FOR INCLUDING INTELLECTUAL PROPERTY EDUCATION AND RESEARCH IN UNIVERSITY CURRICULA, for WIPO International Seminar on Intellectual Property Education and Research, Geneva June 30-July 1, 2005

xi see <a href="http://law.udayton.edu/Program\_Law\_Technology/ProgramLawTechMain.htm">http://law.udayton.edu/Program\_Law\_Technology/ProgramLawTechMain.htm</a>
xii Hill, D and Latimer M, THE ROLE OF INTELLECTUAL PROPERTY EDUCATION IN THE UNITED STATES (Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Washington, D.C.) March 2003 http://www.iip.or.jp/summary/pdf/USIPedu.PDF

xiii Olver, R, FORSAKING SCHOLASTIC SOLITUDE – THE PROS AND CONS OF COLLABORATIVE RESEARCH, Research Hallmark, issue 6, Goldsmiths College, University of London, June 2000

xiv Pfirman S, Collins J, Lowes S, Michaels A, COLLABORATIVE EFFORTS: PROMOTING INTERDISCIPLINARY SCHOLARS, the Chronicle Review, February 2005

xvi see Gibbons M et al THE NEW PRODUCTION OF KNOWLEDGE, 1994, Sage Publications