Approaches to IP teaching in different disciplines

EIPTN 20/21 July 2009
London

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Coping with IP Ignorance

'To be conscious that you are ignorant' is 'a great step to knowledge'. Disraeli

'since there are no resources in the world that would equip anyone to pin down all knowledge, we are all forced, all the time, to choose which knowledge we will pursue, and which we will do without' Smithson 1989

- Non-law students come to learn about intellectual property
- With no background study of law
- From a different cognitive area
- Unfamiliar with legal concepts
- With pre-conceptions about lawyers, and how the law works
- Intimidated or inhibited by the mystique of law and how it operates
- Aware of the 'bad' press, bad image enjoyed by aspects of IP

How do students respond to their own ignorance?

- When describing how they would respond to a situation in which they felt ignorant, students gave positive examples of things they would expect to do, themselves, to reduce their feelings of ignorance.

- They did not present expectations that someone else should intervene to remove them from their ignorant state.

- They accepted resolution of their ignorance as their own responsibility.

- Although they did not make a direct link in their responses between 'ignorance' and 'learning' they indicated an expectation to make a transition, to change, from a state of discomfort to one of ‘happiness and conceptual clarity’.

Student ignorance responses

Read	Talk to people around to learn about it
Talk to friends	Research and understand
Ask questions	Listen to what others are saying, to learn from them
Listen carefully	go online
learn from lectures and seminars	read a newspaper more frequently
get help from my mates	read more and work
try to remember	ask friends
look up things I need to know	try to listen
try to budget and manage my money	read around the subject
ask people sitting next to me	ask members of staff
study information more carefully	

Hennessey's five styles of intellectual property teaching -

- Approaches which may be appropriate, depending on time, level, discipline. May be a blend of pedagogic approaches

- Case Method ☺
- Problem solving Method ☺
- Simulation Method ☺
- Clinical Method ☺

- Doctrinal Method ☹

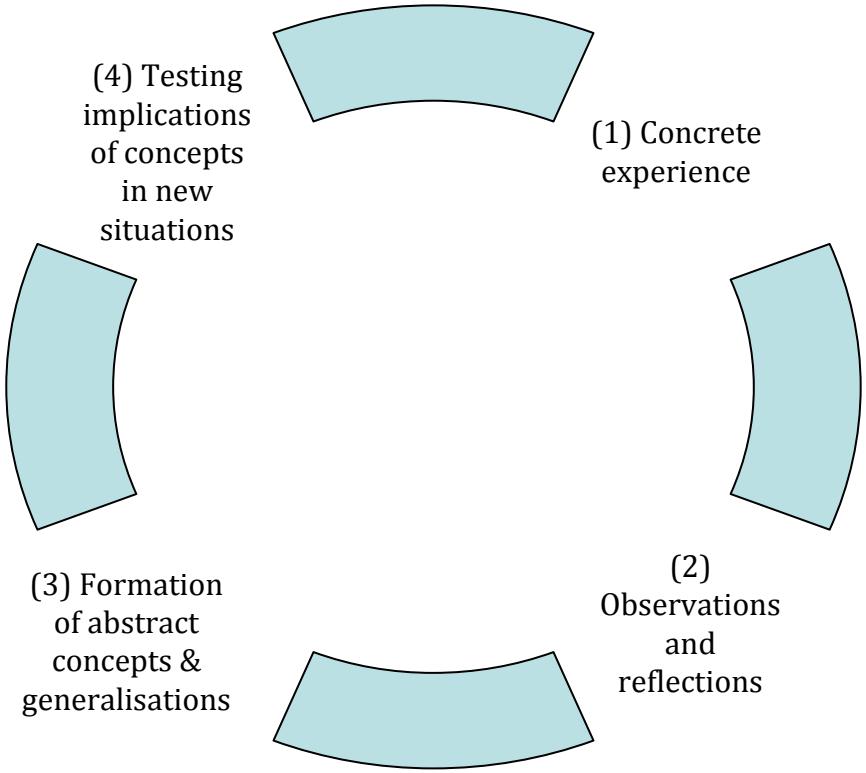
Pedagogic approaches

- **Problem based learning** – through being confronted with real problems to solve, relevant to learners world
- **Inquiry based learning** – learning through working together to solve problems
- **Project based** learning -
- **Active learning** – learning through fun helps learning retention
- **Experiential learning** – see next

- Experiential learning

Kolb's learning circle

"ideas are formed and re-formed through a cycle of experience. The learning process starts with a concrete learning experience; the learners need time to reflect on what they have learnt by drawing up theories and processing the new ideas through 'abstract conceptualisation.' During the final stage, 'active experimentation,' learners use the theories they have drawn up to test and solve problems. Put simply, the learner undertakes a task, reflects/thinks about what they have done, considers whether there are other ways of undertaking the task (an opportunity to compare and contrast) and, finally, tries the task again, but from a position backed by new experience and understanding."



Experiential Learning

BU Product Designers research IPO/EPO patent database

Product Designers advised to look at Trade Mark database

Product Designers advised to look at Design database

Product Designers discus their final year project with IP Law students

Discussion covers exploitation, international commercialisation, ownership issues etc

Product Designers LEARN about IP experientially

IP law students re-inforce their IP learning through simulated client work

- Product Design students:
- Faculty Commercialisation class
- Faculty Commercialisation team available
- ‘Student advice letter’ exercise with IP Law students
- Product Designers write up the IP in their project in their project report

BU Product Designers – ‘pick a stem’







Engineering faculty IP questions

- What ways can the design idea be protected?
- What would be necessary before starting commercialisation talks with a manufacturer?
- What are the choices to commercialise the product?
- How best would the student learn about these issues?
- How could we engage IP Law students to help product designers learn?

Traditional Engineering and IP Encounters

- **New engineer:**
- how to describe IP needs?
- Mystique surrounding legal requirements
- Uncertain about costs, timing of advice

- **New IP Lawyer:**
- What questions to ask?
- How to find most appropriate advice
- How to present advice in the best way for client?

Can we help new lawyers and engineers prepare for the modern encounters of professional life?

The IP Advice Letter

- IP law students have an assignment advising a product design student on the IP in their final year project
- They produce a letter of advice which is useful to the product design student client
- + an appendix of legal authority
- Their work is summatively assessed

- Product Design engineers are paired with an IP student as an adviser and have to send the IP student details of their project
- Respond to the IPP student's questions
- Think of questions to ask their adviser
- They write about their IP in the final project report, which is summatively assessed

IP professionals and product designers present a masterclass attended by both groups of students. It's an opportunity to meet f2f, to network, and set up their first meetings.

Hiccups and Wrinkles

- Doing the admin to match students from two different Schools
- Getting their contact details in place
- Doing the admin to get the project going in good time
- Encouraging both student groups to be in touch in a timely fashion
- Can’t guarantee the quality of either adviser or client student
- Some clients and some advisers let their partner down by not making contact or appearing

Self managed learning interaction

"I am designing a sensory table for wine bars, activated by the user" (Colin)

"I understand that we have a joint masterclass and wondered whether you would be able to meet up afterwards" (Natasha)

"Client confirmed following:i. His product will be controlled by sound levels… 4 electromagnets will control the rippling effect in the ferrofluid EFH1 ii. he is not aware of any similar or identical products on the market iii. He is designing a logo for the product (N)

"I've attached a logo for you to see. I'm going to call it 'skimming stone' (C)

"I have been looking at your trade mark and on searching the PO website it doesn't appear that anyone else has registered "skimming stone" as a TM, nor as a domain name.

In terms of your logo, I note that one of the squares contains a ripple effect. I wondered whether this is a drawing you have produced yourself, or whether you have copied it? (N)

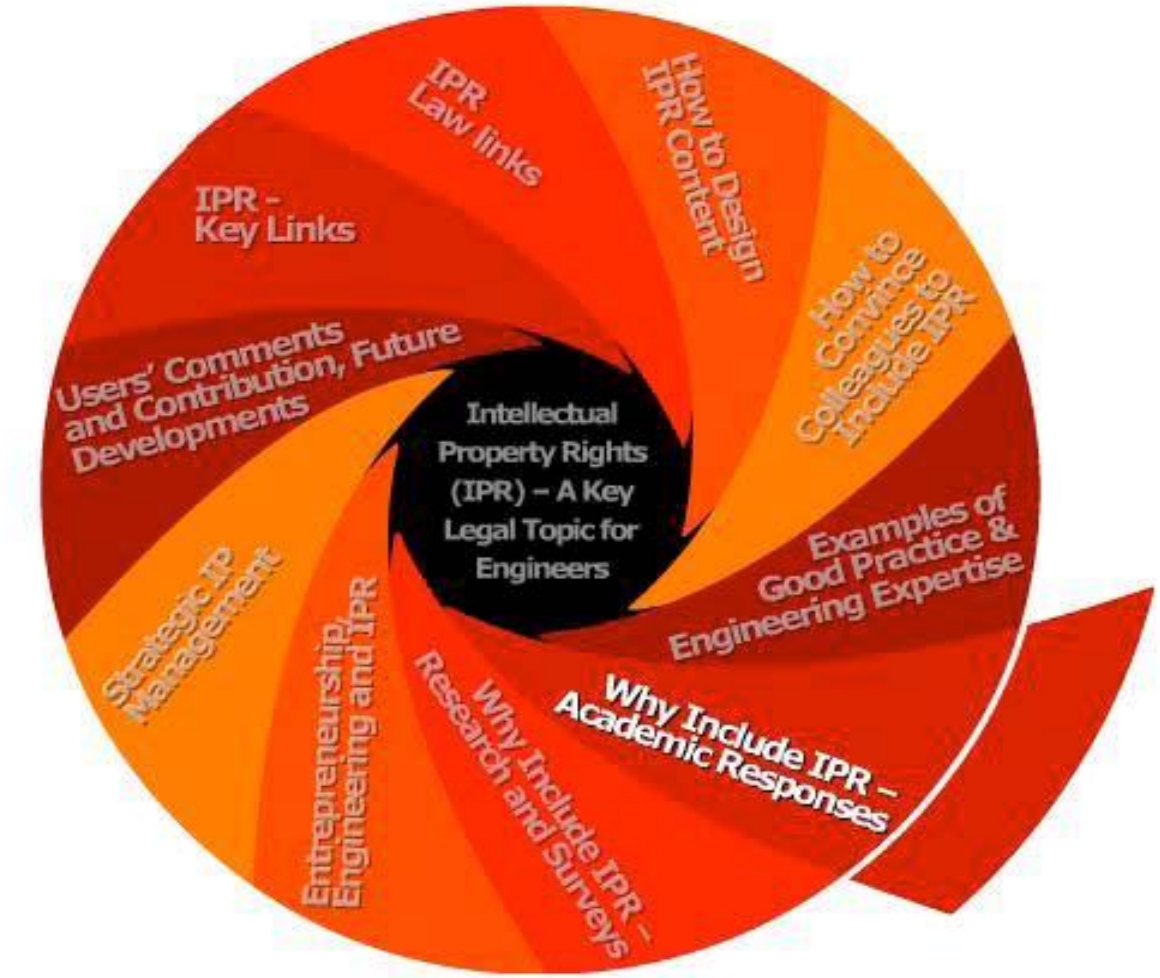
"With regard to the logo, I did use a copied picture which I manipulated a bit. However, I will be making my own version of a ripple for that square for my design show (C)

N asks about: software, hardware, ripple visual effect, and Colin's relationship with the bar that is interested in 'skimming stone'

C responds to the questions, and explains that he has not been commissioned to make 'skimming stone' but is allowed to use the bar's logo

The whorl

http://www.engsc.ac.uk/resources/ipminiproj/index.asp



INTERNATIONAL CONFERENCE ON ENGINEERING AND PRODUCT DESIGN EDUCATION
10 & 11 SEPTEMBER 2009, UNIVERSITY OF BRIGHTON, UK

COLLABORATIVE STUDENT CENTRED LEARNING – INTELLECTUAL PROPERTY FOR PRODUCT DESIGNERS

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ABSTRACT

This paper fits into the topics of student centred learning and learning spaces and explores the question - How will the academic/industrial interface develop?

At least a basic understanding of intellectual property (IP) rights is essential for practice as a professional engineer and/or designer to ensure commercial success. Yet it is recognised that there are barriers to incorporating learning and teaching of IP within the Higher Education design and engineering curriculum. These barriers include an already 'over-packed' curriculum and no established pedagogy.

This paper reports on an example of collaborative student centred learning activity between BA/BSc Product Design (PD) and LLB Law (Intellectual Property Practice option) (LLB) final year students at Bournemouth University (BU). The final year product design students are required to design and produce a working prototype of a marketable product. The LLB students advise on the intellectual property aspects of the design. This learning activity has been ongoing for a number of years, however, last academic year changes were made to incorporate an assessed element for both sets of students and make the learning space almost entirely virtual using the BU virtual learning environment (VLE) called myBU. It is the outcome of these changes that are reported in this paper, using data gathered from the on-line discussion forums and the feedback from students.

The activity has proved to be an extremely valuable learning experience for both sets of students, providing simulation of real life for both designers and IP lawyers and bridging the academic/industrial interface.

Keywords: Intellectual Property; student centred learning; collaborative learning; product design

IP at Vishwakarma Institute of Technology, Pune



IPR “catalysts” working with academic senior management

- “IPR internalise" project incorporates IPR thinking from the start of student projects.
- Catalyse a group of IP-professionals within the institution, which in turn can catalyse a core group in other institutions. Core group identifies potential commercial partners.
- Core group works with final year student projects; to pursued patents and commercialisation opportunities

IP internalisation emphasises learning process

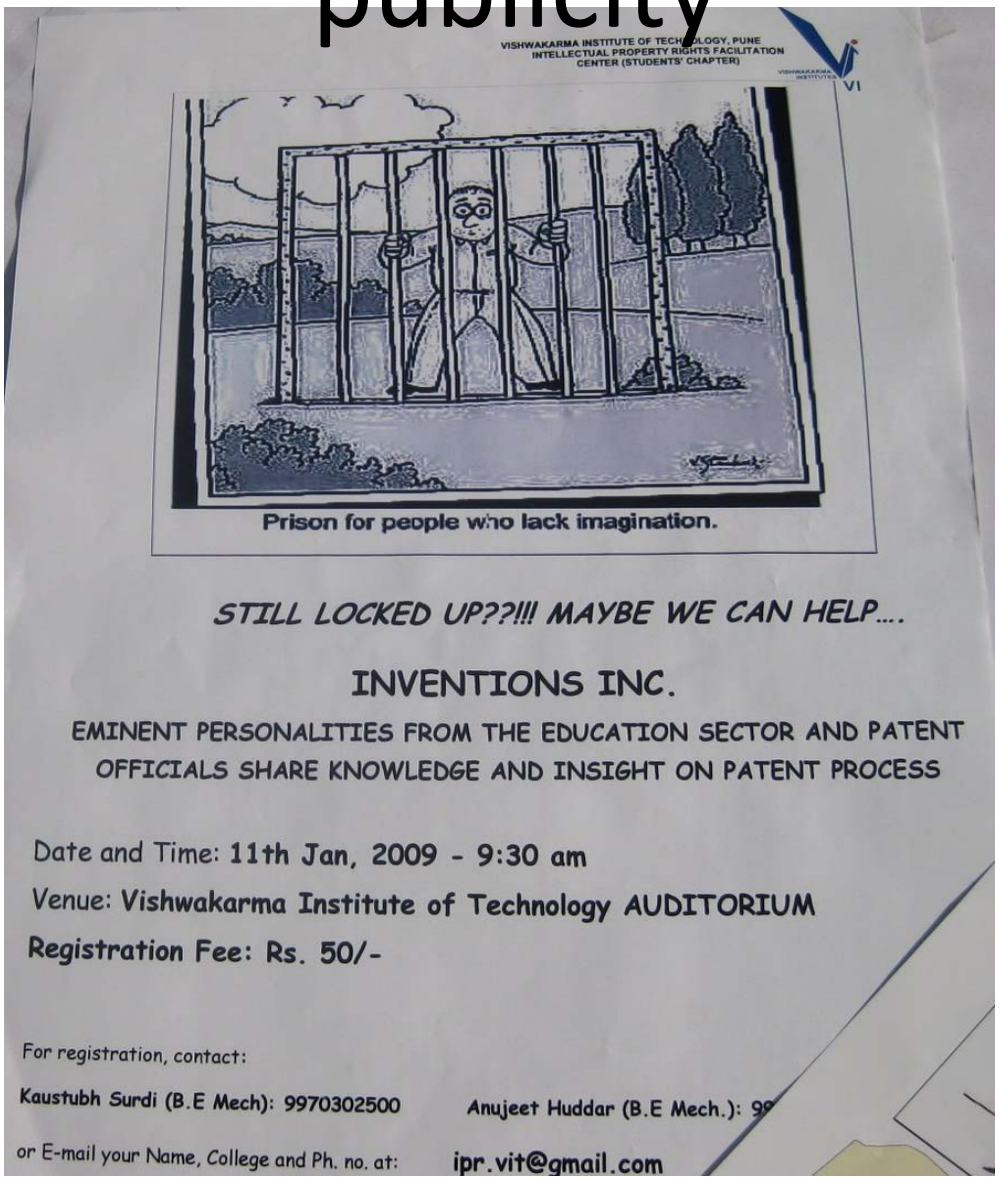
- Participants learn how patent information in combination with other literature can be strategically used to avoid rediscovering the wheel and possible infringement of others' intellectual property rights.
- Quality of students' project reports enhanced with relevant and critically analysed citations, and documentations.
- Any patents or design registrations that might emanate from "IPR internalisation" are only a bonus over the ***primary objective of seeding and creating purposeful querying minds.***

Successful products from V.I.T., Pune

- Amol Kadam Novel Milk 1613/Mum/2006- **manually operable, simple and cost effective milk extracting device from animals obviating use of pressure pulse generating means integrated in the vacuum line and electrical intervention, appropriate for rural application.**
- Prafulla Kesari, Rohit Kadam, Sumeet Chordiya Voice-Interacting-fare 616/Mum/ 2006 - **electronic meter/device, when fitted to a hired indication device transportation vehicle, is capable of calibrating, displaying in regional language, and voice play backing the fare, of the distance travelled by such transporting vehicle. There is inherent cross checking of the fare displayed and read.**
- Sanket Dodia, Rahul Bhat, Prof. (Mrs.) Mhetre Telemedicine System 615/Mum/2006 - t**elemedicine communication system in ambulatory vehicle with capability of transmitting data using available local wireless network to nearest hospital for substantially reducing time delay in medical attention in rural sector.**

Reported in the Association of Commonwealth Universities magazine Research Global, June 2007 p18-20

Student produced IPR workshop publicity



VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE
INTELLECTUAL PROPERTY RIGHTS FACILITATION CENTER (STUDENTS' CHAPTER)

Prison for people who lack imagination.

STILL LOCKED UP??!!! MAYBE WE CAN HELP....

INVENTIONS INC.

EMINENT PERSONALITIES FROM THE EDUCATION SECTOR AND PATENT OFFICIALS SHARE KNOWLEDGE AND INSIGHT ON PATENT PROCESS

Date and Time: **11th Jan, 2009 - 9:30 am**

Venue: **Vishwakarma Institute of Technology AUDITORIUM**

Registration Fee: Rs. 50/-

For registration, contact:

Kaustubh Surdi (B.E Mech): 9970302500

Anujeet Huddar (B.E Mech.): 9

or E-mail your Name, College and Ph. no. at: **ipr.vit@gmail.com**

Launching the students IPR facilitation centre



What's he doing there?



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