(a close approximation to a real life situation), which raises a number of legal issues, and asking the students to advise on these issues.

However, problem based learning is something more than simply asking students to transfer the information from a lecture to a given fact situation. It involves a good deal of attention in designing problems which will allow the student to embark on a process of independent study whereby the student recognises the issues involved, undertakes the necessary research and analysis and applies the law. This will also allow students to assess their own level of learning.

Problem based learning, which is now an integral part of education in many disciplines, has two main benefits. First, it can develop basic knowledge and skills to equip students for legal practice. Second, it enables students to take responsibility for learning and allows them to evaluate their own levels of learning. However, it also has numerous shortcomings. It places emphasis on what is needed, on the ability to gain propositional knowledge as required, and to put it to the most valuable use in a given situation. Problem based learning approaches ideally should not focus on one particular area of law, as this is not realistic. Legal problems in the real world do not always come under subject headings as they do within a law school. This is a problem that goes to the heart of the way we teach law. Perhaps the best way to address it is to make students aware of these limitations in the way we teach.

The most significant shortcoming of relying solely on problem based learning in the teaching of any subject is that it may ignore the contextual nature of law, whereby the issues of history, culture, social organisation, politics and economics and law reform are insufficiently considered. Asking the right question will be important if the learning is going to explore some of the multi-dimensional issues with a critical perspective.

It is clear that neither problem based learning nor teaching in context alone can accommodate the objectives of legal education. Whereas problem based learning may encourage independent thinking and prepare students for legal practice, it will not allow them to appreciate the values that are built into Competition Law. The introduction of context can allow students to assess critically the values inherent in our legal systems and identify some alternative and creative ways of examining laws. Using these different learning strategies can facilitate a deep approach to learning by linking a complex chain of events to theoretical knowledge.

## **Teaching evidence, proof and facts: providing a background in factual analysis and case evaluation** P Murphy

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This article describes a model for a class in factual analysis and case evaluation. It is a class about facts, and about evidence; but, insofar as it is a class about evidence, it does not follow the contemporary law school model. This is a class about evidence itself, its science and philosophy, as opposed to the law and rules of evidence. It deals with the questions of what exactly we mean by evidence, proof, probability and other terms of art that we tend to bandy about in an evidence class with little, if any, consideration of their real significance.

What, then, is the study of evidence and proof, and why should it be of concern to law teachers? Ultimately it is simply the study of the treatment of facts, a subject that involves a wonderfully rich mixture of disciplines, is of vital importance to practitioners and judges and yet has often been marginalised or even ignored in our law schools. There are compelling reasons why the law school syllabus needs a class such as the authors' course, Evidence, Proof and Facts (EPF). Most young lawyers spend a lot more time worrying about the facts of their cases than they do worrying about the law.

The lack of training available to lawyers in the rigorous analysis of masses of interrelated facts is a major weakness of our system of legal education and a major weakness of our profession. A student can go through three years of intense legal education without ever stopping to ponder the meaning of such terms as evidence, proof, probability and causation, and without once having the opportunity to construct an inference network.

The authors' EPF students are required to investigate the philosophical and scientific basis for our use of evidence in judicial trials, as reflected in jurisprudence, logic, rhetoric, psychology, mathematical and nonmathematical approaches to probability theory, and even a hint of metaphysics. Consequently the class demands considerable intellectual rigour and also offers some important practical work. It places evidence and other litigation-related subjects in an appropriate theoretical context.

The class starts out by examining a number of important foundational issues. The first is the question of what evidence is, and what separates the use of evidence by lawyers in a judicial trial from its use by those in other fields, for example scientists, historians and journalists. At this stage the class talks in a very general way about the process of judicial reasoning, the difference between logic and rhetoric, the use of evidence in support or contradiction of factual hypotheses, and the role of generalisations. The second major issue is the distinction between evidence and the law of evidence. This involves consideration of how the law of evidence evolved. The next stage is to develop the process of judicial reasoning in far greater detail.

The practical work consists of working through the inferential process step by step, recording the findings in an inference network and finally evaluating the overall strength of the case as reflected in the inference network.

The first stage is to identify the factual hypotheses that require proof. The difficult thing here is to make sure the students do not confuse factual hypotheses with legal conclusions. The legal conclusions are drawn only upon proof of a number of factual hypotheses. Next the students prepare a list of all the available evidence. Before beginning to construct an inference network, it is crucial to understand how the pieces of evidence interrelate and how they relate to the hypothesis. The precise nature of the interrelationship will be reflected in the inference network. Writers have recognised that the process of inductive reasoning and the chain of inference depend on the use of intermediate assumptions often referred to as generalisations. Generalisations are assumptions about the course and causes of events in the world based on our shared understanding of human affairs. Most of the remainder of the class is spent evaluating the case on a partial basis and finding the best answer to the question of whether to settle, make a counter-offer, or go to trial.

The remainder of the class is spent considering other aspects of proof, principally the rhetorical and psychological aspects of the subject. Once we move from pre-trial evaluation to proof in the courtroom, there are obviously some important aspects of trial work, which do not depend solely on logic and probability. The role of narrative and storytelling in the art of persuasion is one. This leads on to discussion of the role of rhetoric in advocacy and considerations such as: the impact of the order in which evidence is introduced; the phenomenon of transitivity, whereby successful attacks on the credibility of a particular piece of evidence may also damage the credibility of other evidence and potentially the entire case even though the discredited evidence is not logically connected to the remaining evidence and may even be peripheral to the case as a whole; and the advantage of primacy and recency which accompanies the right to the first opening statement and the last rebuttal.

Why do law schools largely ignore the science of evidence and proof in favour of the legal rules of evidence? In a surprising number of cases, teachers are simply unaware that other dimensions of the subject of evidence exist. It cannot be denied that knowledge and understanding of the rules is very important to practice, as well as crucial to success in examinations. From there, it is probably a simple question of supply and demand. We give the students what we and they perceive they need. The examination requirements will always be with us, but an EPF class makes for a challenging and useful elective.

The format of the class is ripe for further development. There is much that could be included in a class on evidence, proof and facts. But whatever detailed approach is taken, the aim is to give the students a sound understanding of the basis on which judicial trials proceed, a method of analysing facts in a practical way and a method of proceeding from analysis to case evaluation.

## INSTITUTIONS & ORGANISATIONS

## The sorting function: evidence from law school

R A Ippolito 52 *J Legal Educ* 1 & 2, 2002, pp 533– 553

In a path-breaking book Michael Spence advanced the rather startling proposition that higher education may not add value in the conventional sense of conferring learning, but rather may mostly act as a sorting device. In its starkest form the model portrays institutions of higher learning as places that erect a series of hurdles. The more capable applicants anticipate clearing the hurdles with relative ease, thereby encouraging less capable individuals to reveal their comparative disadvantage by sorting themselves out of the applicant pool for higher education.

It is possible to subscribe to this idea without abandoning the idea of learning. Colleges and universities would more efficiently employ their resources by erecting hurdles that both provide a sorting function and confer some learning. Additionally, there must be a time dimension to the sorting process. Presumably almost anyone might be willing to do enough work to pass some arbitrary test that lasts one week or one month. But the prospect of having to incur these costs over a long period is an important component to the sorting.

Presumably, other attributes besides IQ and SAT scores must be importantly related to success in the labour market. In this sense, the sorting problem for universities is twofold. First, universities must devise acceptance criteria that add value to simple selection based on some metric like the SAT or LSAT. Second, they must employ a grading system that awards the highest grades to the most capable students, the next-best grades to the second-highest group of students, and so on, all the while ridding this hierarchy of as much noise as possible. Universities that are good sorters gain a reputation in the labour market as reliable places to recruit entry-level professionals.

If law schools are providing a sorting function for future employers, then presumably grades importantly reflect hidden character attributes, like internal discount rates or preferences for work versus leisure. The problem for empirical study is that students do