learning enterprise. Creativity promotes active, participatory learning and personal involvement in the learning process. In this regard, it may actually advance the rigorous analytical skills serving as the primary focus of the first year of law school.

The student use of the creative arts was incorporated as an optional part of student assignments and examinations. The students could earn only extra credit from their creative submission, and thus could perform well without it. Students were given considerable freedom in how they could be creative. The only constraints placed on the students were that they must use music, visual arts, language arts, or movement/dance to demonstrate the legal concept they were conveying. There were terrific exemplars of creative thinking about the law. The breadth and nature of the projects were surprising and impressive. The students depicted scenes in cases, from class and the outside world. Students created stories around legal rules, around class examples, and about how the rules affected them in their real-world lives.

Both the intrinsic and instrumental values of using the creative arts as a supplementary learning tool were readily apparent from these experiments. Students reacted favourably to participating in the creative arts enterprise. Many students took great pride in authorship, and enjoyed the intrinsic act of creating, which happens rarely, if at all, in other areas of legal education. Students demonstrated great breadth and depth of participation, which is, in itself, for some teachers a valued goal of the educational process. Students focused intently on their projects, without appearing bored, anxious or fearful during the process.

Students used the exercise to devise and implement their own learning frameworks. Visual learners created pictures of concepts they could readily map for future use; some students used poetic and other devices to create different structures for learning analytical thinking. In essence, students had the opportunity to supplement a professor's explanation and understanding of a legal concept with one of their own, potentially through a very dissimilar process. These differences in learning styles were exposed during the creative endeayour.

The creative process offered at least one unanticipated benefit. It emphasised and illuminated an important aspect of the analytical enterprise deliberation in thinking. The students and teacher had time to think about the case or legal principle. Students were able to observe firsthand the value of plotting strategy and tactics in designing and implementing their creative exercise. Significantly, the presence of such deliberative planning in actual case analysis is often diminished by the nature of the Socratic method, which asks for immediate answers to a series of questions, and even by the time pressure of reading many pages of cases for class preparation. The various time pressures invariably lead to the sacrifice of deliberation. Having students use creative arts in their legal education promotes reasoning abilities and engages them actively, frequently and happily in the learning process.

TEACHING METHODS & MEDIA

Precision teaching in law school: an essay in support of student-centred teaching and assessment

DR Honabach 34 *U Tol L Rev*, 2002, pp 95–106

The use of the new precision farming technology has enabled the farmers to recognise site-specific differences within their fields and to adapt their farming techniques accordingly. No longer were they compelled to manage their entire fields based upon a hypothetical average condition that might not actually exist anywhere in their fields. The farmers now were able to determine much more accurately the relationship between crop output and factors, such as irrigation and fertiliser on various parts of their fields. Consequently output soared.

The situation at our law schools is analogous to that of those farmers before the farmers had been able to take advantage of the new information technology. We do not employ what might be termed precision teaching the use of pedagogical techniques that permit us to focus on the needs and abilities of individual students. Instead, we teach to the hypothetical average student who may not mirror the abilities of any of the real students in our rooms. Indeed, being the traditionalists we are, we employ what we might term 'average' instructional strategies.

The typical law school course reflects a number of assumptions about 'average' performance. First, the concept of a course itself is based on a notion of 'average' — the chunk of learning we can expect of the 'average' law student in our classes during a fifteen-week semester. While we all recognise that some of our students are capable of learning more and some perhaps less, we operate on the assumption that the 'average' student in the course should be able to handle just about the amount of stuff that composes the subject matter of the course. Individual class assignments, in turn, reflect at best an estimate of the amount of work we believe the 'average' student to be able to prepare for a class session. Likewise we design our examinations to rank our students against the mythical 'average' student on the acquisition of that 'average' amount of knowledge we assume they should

have learned and the skill sets they should have developed.

Our options are rather clear. Either we treat our students as individuals, or we treat them as members of a group. Now, all of us would prefer to treat our students as individuals, and in some ways we do but teaching individual students is something with which most of us have had little experience. We employ techniques that are a far cry from those that would qualify as precision teaching. By employing 'average' teaching methodology, we inevitably fail to maximise the educational experience of those students in our classes who are capable of achieving more than we ask of them. Likewise we fail those who somehow fall short of the 'average' and struggle with the material. We even fail to teach the students in the middle because we ignore the fact that each of them somehow came to be in the middle with a different set of strengths and weaknesses.

Why is individualised instruction so rare? It seems obvious that we would be more satisfied with the quality of our educational programs if we placed more emphasis on individualised instruction and less on 'average' instruction. There are ways we can more effectively monitor individual student learning. And there are methods available to us to provide additional learning opportunities to those students who need them while allowing students who excel to move on to more challenges. Were we to adopt those measures, we would create a far more successful educational program that would more likely engage all of our students.

Not surprisingly, we legal educators opt for an approach that focuses on the teaching process itself. We assume good teaching leads to good student learning. And how do we evaluate teaching? We rely mostly on peer evaluation. Peer evaluation of teaching, however, is as seriously flawed as a measuring device for determining educational output as is the use of grades. Peer evaluators often spend too little time to be accurate in their assessment. Moreover, there is little common agreement as to what constitutes good teaching. Even if we could accurately identify high quality teaching as measured by an input measure, there is no hard evidence that good teaching actually leads to high quality learning. The use of good teaching as a proxy for effective student learning reflects an essential belief that there is an automatic link between input and outcome. The real students in our classes differ. A teaching technique that works well for some individuals may work poorly for others. Our reliance on peer evaluation tends to cause us to overlook that simple point.

Instead, we must focus on individual student outcomes, not on faculty inputs. Fortunately, there are ways to assess teaching success. There has been a great deal of good work done in the field of learning assessment. Assuming we can get beyond the two initial hurdles of creating incentives that make teaching output a priority for law professors and devising a method of assessing education output in a measurable objective fashion, we can then tackle the task of converting from 'average'-based education to individual student-based education. To do so, we must overcome the cost hurdle. In most courses there are areas that lend themselves well to on-line learning and assessment. Rather than taking up precious classroom time when the students become hopelessly lost, the teacher can employ computer technology to work with students individually to ensure that they learned the material before they came to class and began to discuss the cases.

There are a number of specific steps we can take. We can send our faculty

members to programs that help them improve their teaching ability. We can encourage them to partner with faculty in other departments in the university, particularly the education department, in the development of new teaching materials. We can equip our classrooms with state-of-the-art teaching technology to make it easier for faculty members to use new techniques. We can provide in-house instruction on how to use commercial and proprietary software for teaching. We can dedicate technical support staff to assist professors in implementing studentcentred teaching techniques. We can recognise the creation of course materials as an important academic endeavour, even if we are unwilling to credit it as scholarship. Each of these measures — and countless others would make it easier for interested faculty members to focus on the learning going on in their classrooms.

Making it easier for faculty members to become student-centred rather than 'average' teachers, however, will not be sufficient to induce most faculty members to adopt precision teaching methods. To do that, we need to bring about a cultural change in our faculty hallways. We must create a culture of student-centred education. We must fundamentally alter the incentive structure in our law schools. We must reward faculty members for being very effective teachers and demand that every faculty member make strides toward becoming a better teacher. We can continue to make room for our publishing stars, but we cannot continue to give them the lion's share of the goodies. We cannot continue to place greater emphasis on scholarship and service than we do on teaching. Otherwise, we cannot expect faculty members to put in the effort it takes to become more effective teachers. Becoming a law school that truly champions studentcentred precision teaching will not be