What medical students value from their teachers

Maria Theresa Ho and Massimiliano Tani

Abstract
As Australian medical educators become more accustomed to the increasing pressures imposed upon them, there is a risk that the traditional educational relationship between a student and his or her teacher is replaced by a pure transactional relationship between a customer and his or her supplier. A large sample of medical students surveyed revealed that medical students seem to value directed rather than independent learning. New approaches to teaching, such as being innovative or entertaining, as well as facilitating participation, do not appear to be very important to medical students. Medical students do not seem to have strong preferences when it comes to assessment, contradicting some of the fundamental suggestions of the recent educational literature, in which assessment is often viewed as a key element in the formation and the direction of learning. The fact that medical students seem to reject many of the paradigms of the psychology-based educational literature, at least based on the large sample surveyed at the University of New South Wales, suggests that caution should be used in the development of training programs for teachers in medical faculties, and that learning and teaching should ensure that students’ expectations and teachers’ training do not mismatch.

What is known about the topic?
Current evidence on student approaches to learning identifies two different approaches with very different outcomes: the deep approach and the surface approach. Students who adopt the deep approach read widely, discuss the topic with others and seek to make sense of the new knowledge from what they already know; they are not always interested in achieving high marks. Students adopting the surface approach are primarily interested in meeting the demands the system places on them. Research studies show that the deep approach is associated with higher quality learning outcomes. Traditional medical curricula have fostered teaching and learning accommodating surface learning. The premise of new medical curricula, in encouraging deep learning, is that students will have an appropriate motivational context, a high degree of learner activity, interaction with both peers and teachers and a well-structured knowledge base.

What does this paper add?
This paper shows that, despite the trend towards curricular design emphasising deep learning, medical students seem to value directed rather than self-directed, independent learning. Medical students seem more worried about receiving good knowledge rather than being exposed to established pedagogical paradigms. Medical students do not seem to have strong preferences when it comes to assessment, in direct contrast with the educational literature, for which assessment is often viewed as a key element in the formation and the direction of learning.

What are the implications for practitioners?
The fact that medical students seem to reject many of the paradigms of the psychology-based educational literature, at least based on a large sample at the University of New South Wales, suggests that caution should be used in the development of training programs for teachers in medical faculties, and more data must be gathered to ensure that students’ expectations and teachers’ training do not mismatch.

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Effective teaching is typically informed teaching. Current thinking and evidence on student approaches to learning identify two different
approaches with very different outcomes: the deep approach and the surface approach. Students, who adopt the deep approach read widely, discuss the topic with others and seek to make sense of the new knowledge from what they already know; they are not always interested in achieving high marks. Students adopting the surface approach are primarily interested in meeting the demands the system places on them. Results show that the deep approach is associated with higher quality learning outcomes. Traditional medical curricula have fostered teaching and learning which accommodates surface learning. The premise of new medical curricula, in encouraging deep learning, is that students will have an appropriate motivational context, a high degree of learner activity, interaction with both peers and teachers and a well-structured knowledge base. This new framework places enormous new demands and challenges for university and clinical teachers.

As Australian higher educators become more accustomed to the increasing pressures imposed upon them (eg, accountability, financial constraints, multiculturalism, rising managerialism within universities), there is a risk that the traditional educational relationship between a student and his or her teacher is replaced by a pure transactional relationship between a customer and his or her supplier. While it is easy to be drawn on the normative aspects of whether to rejoice or be saddened by the challenges of the new teaching environment, this short paper focuses on the primary need to make decisions and draw conclusions on sound quantitative data on what students actually experience while at university, and what they actually expect and value from their teachers. This approach seems particularly relevant for a field such as medicine, where the rigorous initial selection restricts the pool of students to highly motivated, performing, and demanding individuals.

**Data and results**

What, then, do medical students want from their teachers? We explored this question using data from a large sample of medical students surveyed at the University of New South Wales (UNSW) in early 2005 (the results of the survey, which covers over 2500 students, are available upon request through the Teaching and Learning Unit of UNSW and the authors). Among the 274 respondents, 256 (or 93%) were undergraduates, and 18 (7%) were postgraduate students. Among the undergraduates, 145 (51%) were first-year students, 67 (26%) were in their second year, and the remaining 58 (23%) were in subsequent years. Among the undergraduates, 173 (69%) were born in Australia while Singaporean and

<table>
<thead>
<tr>
<th>Mean rank</th>
<th>What medicine students value most in teachers</th>
<th>N</th>
<th>Mean*</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explains complex concepts clearly</td>
<td>235</td>
<td>2.18</td>
<td>1.242</td>
</tr>
<tr>
<td>2</td>
<td>Knowledgeable about subject</td>
<td>233</td>
<td>2.27</td>
<td>1.265</td>
</tr>
<tr>
<td>3</td>
<td>Organised teaching materials</td>
<td>203</td>
<td>2.83</td>
<td>1.219</td>
</tr>
<tr>
<td>4</td>
<td>Innovative teaching methods</td>
<td>98</td>
<td>2.93</td>
<td>1.423</td>
</tr>
<tr>
<td>5</td>
<td>Encourages student participation</td>
<td>92</td>
<td>3.17</td>
<td>1.403</td>
</tr>
<tr>
<td>6</td>
<td>Conveys clearly what's expected</td>
<td>170</td>
<td>3.19</td>
<td>1.337</td>
</tr>
<tr>
<td>7</td>
<td>Is entertaining</td>
<td>92</td>
<td>3.21</td>
<td>1.395</td>
</tr>
<tr>
<td>8</td>
<td>Lets students discover on own without too much guidance</td>
<td>18</td>
<td>3.61</td>
<td>1.461</td>
</tr>
<tr>
<td>9</td>
<td>Methods of assessment relate to learning</td>
<td>112</td>
<td>3.66</td>
<td>1.256</td>
</tr>
</tbody>
</table>

Source: UNSW student survey 2005. *Average rank, meaning a lower number corresponds to a higher preference.
Malaysian students were the next largest group (17%). Students were predominantly female (57%), and came from families where both parents have a university degree (57%).

Expectations about what teachers ought to do were addressed in two questions. The first asked students to rank up to five pre-set possible answers about what they expect from their teachers, which included:
- being knowledgeable about the subject;
- having organised teaching materials;
- having methods of assessment that clearly relate to learning outcomes;
- encouraging student participation in class;
- explaining complex concepts clearly;
- having innovative teaching methods;
- letting students discover on their own without too much guidance;
- being entertaining;
- conveying clearly what is expected of students; and
- an open-ended option.

The answers are summarised in Box 1. The column labelled “mean” reports the average rank, so a lower number corresponds to a higher preference.

Three messages clearly arise from the summary shown in Box 1. First, UNSW medical students have very clear expectations about their teachers. In particular, they want them to be knowledgeable, to be able to explain complex concepts clearly, and, to a lesser extent, to have an organised set of notes and teaching material. Only 5 students out of 274 used the open-ended option. Clear preferences are perhaps not surprising given that medical students must have a very high Universities Admission Index (the entry point at UNSW is over 99.8), and are very motivated about their choice of study and job opportunities. What should be noticed is that medical students seem to value directed rather than independent learning, as the ability of discovering results independently was ranked only eighth out of nine pre-set options.

The second message is that new approaches to teaching, such as being innovative or entertaining, as well as to facilitate participation, do not appear to be very important to medical students. These answers ranked only in the lower part of the respondents’ preferences. Student-centred learning, which is much emphasised by the educational literature, does not appear to be a substantial aspect of medical students’ preoccupations. Medical students seem more worried about receiving good knowledge rather than being exposed to established pedagogical paradigms.

The third message is that assessments directly related to learning are ranked as last in the preference scale. Medical students do not seem to have strong preferences when it comes to assessment, in direct contrast with the educational literature, in which assessment is often viewed as a key element in the formation and the direction of learning.

The second question asked students whether they wanted teachers to fulfil other roles in addition to teaching and researching, and, if so, whether they wished teachers to give advice on personal problems, to be friendly and approachable, and to provide information on future career prospects or help with finding a job. The results are summarised in Box 2.

It is surprising that students with firm preferences on what teachers ought to do, as shown in Box 1, also indicated that they would like teachers to cover other roles: 191 medical students (70%) answered that they would like teachers to
cover other roles. Among these, 155 students would like their teachers to be friendly and approachable. Friendship and being approachable, however, are not related to students’ own personal issues or to a possible insecurity about finding a job: rather, they seem related to the need to clarify matters related to study and to the acquisition or clarification of specific medical knowledge. Medical students seem to be hard pressed to continue to perform and acquire valuable knowledge through their tertiary education. This is not inconsistent with their characteristics of being highly performing, motivated, and demanding individuals.

Concluding remarks
The fact that medical students seem to reject one of the key paradigms of the psychology-based educational literature, at least based on the large sample surveyed at UNSW, suggests that caution should be used in the development of training programs for teachers in medical faculties, and more data must be gathered to ensure that students’ expectations and teachers’ training do not mismatch.

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Competing interests
The authors declare that they have no competing interests.

References