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# Transition Pedagogy for an undergraduate, casebased learning medical program

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# Abstract

Transition Pedagogy provided a framework for a case-study of the first year experience of students entering Medicine at the University of Adelaide. The first three dedicated areas of the Transition Pedagogy Model were investigated for the 2011 first year cohort. A mixed-methods research design was used with students, academic and administrative staff completing surveys and participating in focus groups. Results revealed that international students experienced a more positive transition to university than domestic students and investigation of strategies explored differences in the first year experience of the two groups in the three areas. International students participated in an International Program and, in comparison with domestic students, received an extended orientation process, additional scaffolding to engage in case-based learning and more consistent support in academic, administrative and personal matters. Evidence from this study supports changes to the first year medical program at this institution and others to improve student transition in the future.

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# Introduction

The first year experience of students transitioning to university is of interest to all programs for both students and tertiary institutions, with the transition process having an impact on "the cognitive, social and moral development of students" (McInnis, 2001, p. 105). In addition to the usual changes students experience in their academic and personal lives on commencing tertiary study, students entering medical programs face further challenges. Workloads are higher than most other university programs, and students are required to deal with emotionally charged topics, including exposure to anatomical specimens. In many courses they are also introduced to a small group problem-based (PBL) or case-based (CBL) learning approach which, as a student-directed approach based on the principles of adult learning, is most likely to be very different from their previous way of learning.

Past research on transition has considered evaluation and institutional program assessment. The need for research to improve understanding of the transition experience from the student's point of view has been advocated (McInnes, 2001). Research concerning transition into medical programs has investigated the state of being a first year medical student rather than the transition process itself (Teunissen & Westerman, 2011). Little research has considered the impact on the transition into a medical program of using a PBL or CBL approach.

This study reports on the transition into a first year medical program using the framework of the Transition Pedagogy Model, which has been described as "a guiding philosophy for intentional first year curriculum design and support that carefully scaffolds and mediates the first vear learning experience" (Kift, 2009, p. 40). The model defines six generic First Year Curriculum Principles that provide a framework for a first year curriculum, and four dedicated areas where the design must ensure that students are being supported by key strategies that extend across these six curriculum principles. The Transition Pedagogy Model places emphasis on the first year curriculum and co-curriculum *design* rather than on the *experiences* of transitioning students. In this study, the framework was used to explore an existing curriculum within a complex medical education environment. from the perspective of students and their tutors. The learning and teaching experiences of students and tutors were used to focus on existing conditions and strategies in the first three of the four dedicated areas of the Transition Pedagogy Model. The following research questions were based on these three areas, and designed to explore the transition experience for students within the context of an undergraduate, case-based learning (CBL) medical program: (1) How does the curriculum engage students in learning in the first year of a CBL medical program? (2) How proactive and timely is the access for students to learning and life support? and (3) Is a sense of belonging intentionally fostered amongst transitioning medical students?

# Method

A case-study of the 2011 first year medical student cohort at the University of Adelaide in Australia was conducted using a mixed methods data collection strategy (Cresswell & Plano Clark, 2011). The changes students experienced during transition were explored through triangulation of quantitative and qualitative data from the students, their CBL tutors and medical students in higher years. The first year medical cohort (187 students) comprised 172 domestic (92%) and 15 international (8%) students. All students participated in three two-hourly CBL tutorials per week and in addition, international students were required to attend weekly, 90 minute sessions within the International Program. The objectives of this program were to assist international students with their academic language and learning and to provide support for the transition to learning in a CBL environment. Both quantitative instruments and qualitative approaches were used.

# The First Year Experience Questionnaire

The First Year Experience Questionnaire (FYEQ) (James, Krause, & Jennings, 2010) modified to fit the context of a medical program was used, and allowed comparison of the medical cohort with a general cohort of first year students entering a variety of courses at nine universities throughout Australia. Nine domains, identified by grouping together items that describe underlying constructs of students' transition experiences, were used for these comparisons (pp. 80-81). Independent ttests were used to investigate the following comparisons in mean domain scores: the medical versus general cohorts, domestic international medical students and separately versus the general cohort, and domestic versus international medical students.

### The CBL Perceptions Questionnaire

This survey investigated students' and tutors' perceptions of learning and teaching and was developed from a previously validated instrument, "Perceptions of Learners and Faculty at Two Institutions about Small-Group Teaching Methods: Problem-Based Learning and Case-Based Learning" (Srinivasan, Wilkes, Stevenson, Nguyen, & Slavin, 2007). Additional items (9, 12, 13 and 15) were developed to investigate specific areas of learning. Participants rated their agreement with statements about CBL on a scale of 1 (strongly disagree) to 6 (strongly agree). The mean "CBL perception score" (range 19-114) was calculated for the student and tutor cohorts. Three items which could be regarded as negative perceptions of CBL (Items 17, 18 and 19) were re-coded so that the most positive responses received the highest score. A linear mixed model, which took into account clustering within CBL tutorial groups, tested the differences between the means and the significance of any differences between the means for individual items for students and tutors. Statistical analysis of data was performed using the Statistical Package for the Social Sciences (SPSS20) with significance set at p<.05.

### Focus groups and interviews

A total of nine focus groups, containing seven to nine participants per group, explored the quantitative data that emerged from the questionnaires. Four focus groups were held with students from the whole cohort, two with international students, two with CBL tutors. and one with administrative staff involved in the first year medical program. Interviews were completed with first vear student representatives on the Year 1 Committee, administrative staff, a representative from the Students' Medical Society and the International Program Coordinator. Focus groups and interviews, each lasting between 60-90 minutes, were recorded and transcribed. Thematic analysis was completed with NVivo9 software, using themes defined by the theoretical framework of the Transition Pedagogy Model.

Thus we compared the transition experiences of a cohort of medical students with a general cohort of students, and the experiences of domestic and international students within the medical cohort.

### Results and Discussion

# *Quantitative results: Challenges and experiences*

Results from the modified First Year Experience Ouestionnaire (Table 1) showed that on four of the nine domains the medical cohort scored a significantly higher mean score than the general cohort. These domains were Sense of Purpose (Cohen's Student Identity (Cohen's d=0.533). d=0.313), Course Satisfaction (Cohen's d=0.543) and Prepared and Present (Cohen's d=0.455). However, for the Comprehending and Coping domain, the mean score for the medical cohort was significantly lower (Cohen's d=0.316). Analysis within of items the Comprehending and Coping domain showed that there were no significant differences between the two cohorts in the number of students who found it difficult to understand the material they were studving. in how often thev felt overwhelmed by all they had to do, nor in finding it difficult adjusting to the style of university. teaching at However. significantly more of the medical cohort found the workload too heavy (52.5% vs. 32.6%,  $\chi^2$ =43.9, p<.001), and found it difficult to keep up with the volume of work  $(41.5\% \text{ vs. } 32.0\%, \chi^2 = 9.49, p = .009).$ 

As expected, when domestic students (who comprised 93.4% of the medical cohort)

were compared with the general cohort, results (Table 1) were identical with the comparison of the whole medical cohort with the general cohort. However. international students were more similar to the general cohort, the only significant difference being for the domain *Academic* Application. for which international students scored significantly higher than the general cohort (p=0.003). Unlike domestic students, international students did not score significantly lower than the general cohort on the Comprehending and Coping domain.

A comparison of domestic and international students using the independent t-test (final column in Table 1) confirmed results from the comparisons with the general cohort for all but two of the domains. For Sense of Purpose, domestic students, but not international students, scored significantly higher than the general cohort, although the comparison between domestic and international students showed no difference. For significant the Comprehending and Coping domain, domestic students, unlike international students, scored significantly lower than the general cohort (2.75 vs. 3.01), but the difference between domestic and international students did not reach statistical significance (p=.076), probably the because of small number of international students (n=15) resulting in inadequate statistical power.

The total mean score (max score 114) on the CBL Perceptions Questionnaire (Table 2) was significantly higher for CBL tutors than for the students (91.4 vs. 83.9, p=.012). To understand the differences between the perceptions of CBL tutors and their students, the responses to the individual items of the questionnaire were investigated. For all the positive items, students and tutors were in general

Domains (in order of mean score of General Cohort)	General Cohort		Medical Cohort    Whole Medical cohort (n=187)  Domestic students (n=168)  International students (n=15)										
	(n=2) M /5	422) SD	Whole M /5	SD	ort (n=187) Indep. t-test GC vs. MC	Dom M /5	sD	nts (n=168) Indep. t-test GC vs. domest	Interna M /5	sD	ents (n=15) Indep. t-test GC vs. internat.	Indep t-test. domest. vs. internat.	
1. Sense of purpose	4.04	0.81	4.42	0.60	p<.001	4.42	0.61	p<.0001	4.45	0.52	p=.059	p=.825	
2. Course satisfaction	3.94	0.84	4.33	0.57	p<.001	4.34	0.58	p<.0001	4.26	0.44	p=.154	p=.608	
3.Student identity	3.82	0.93	4.08	0.72	p=.001	4.12	0.70	p<.0001	3.82	0.75	p=.999	p=.127	
4. Teaching	3.52	0.70	3.50	0.52	p=.344	3.48	0.54	p=.480	3.79	0.32	p=.149	p=.033	
5.Academic orientation	3.51	0.87	3.63	0.62	p=.672	3.62	0.63	p=.109	3.86	0.53	p=.133	p=.168	
6. Prepared & present	3.36	0.89	3.73	0.73	p<.001	3.76	0.75	p<.0001	3.48	0.50	p=.614	p=.175	
7.Peer engagement	3.05	1.07	2.97	0.96	p=.326	2.98	0.97	p=.412	3.00	0.83	p=.862	p=.940	
8.Comprehendi ng & coping	3.01	0.79	2.77	0.73	p<.001	2.75	0.73	p<.0001	3.11	0.68	p=.637	p=0.076	
9.Academic application	2.95	0.90	3.06	0.84	p=.585	3.01	0.81	p=.403	3.68	0.64	p=.003	p=.003	

#### Table 1: Comparing mean scores (M) of domains in the First Year Experience Questionnaire.

agreement (i.e. both groups with scores >3.5) but the degree of agreement of the tutors was higher than students for these items. For the three negative items (items 17. 18. and 19). tutors showed disagreement (scores <3.5) and students were close to neutrality (scores close to 3.5). Items 17 and 19 both related to the nature and quantity of work for students outside CBL tutorials. While tutors disagreed that the quantity and nature of work in developing understanding placed unrealistic demands on students, students were close to neutral on these statements. even showing slight agreement with Item

17 that there was 'an unrealistic quantity of work outside tutorials'.

This outcome was consistent with findings from the First Year Experience Questionnaire that students perceived the course workload to be too heavy and found it difficult to keep up with the volume of work during their transition into Medicine. Better alignment between tutors' and students' perceptions of the workload for students outside tutorials is needed, as more effective learning has been shown to occur when students' and teachers' expectations and understandings of the learning process are completely aligned (Crisp et al. 2009).

### Table 2: Comparing items of CBL Perception Questionnaire for students and their tutors.

Items					
(in order of Mean Scores of students)	Students	(n=183)	CBL tuto	Statistical	
The CBL process results in: (strongly disagree=1 to strongly agree=6)*	Mean	S.D	Mean	S.D	Wilcoxon p
1opportunities to explore a single case in depth	5.19	0.77	5.38	0.50	p = 0.489
2an emphasis on students being able to work on their own (independent learning)	5.12	0.84	5.25	0.86	p = 0.487
3an environment that enhances learning	5.05	0.71	5.37	0.62	p = 0.070
4 productive work that enhances learning	5.02	0.78	5.50	0.63	p = 0.010
5opportunities to explore topics related to the case	4.97	0.78	5.13	0.62	p = 0.537
6opportunities for the application of clinical reasoning skills	4.84	0.87	5.37	0.62	p = 0.012
7students being encouraged to decide what is most appropriate to learn for the next session, how they will learn it (self-directed learning)	4.80	0.93	5.07	0.46	p = 0.384
8quiet students being encouraged to participate	4.49	1.09	5.06	0.77	p = 0.047
9tutors and other staff helping students to understand what the process of CBL involves	4.48	1.10	5.06	1.00	p = 0.009
10opportunities to use knowledge/skills from Resource Sessions	4.44	0.92	5.13	0.50	p = 0.002
11the efficient use of time during CBL tutorials	4.43	0.99	4.62	1.03	p = 0.240
12students being helped with answers to questions for which they have been unable to find satisfactory answers	4.34	1.00	4.00	1.46	p = 0.442
13students being helped to work out the depth of learning that they need for different concepts	4.18	1.24	4.62	1.20	p = 0.144
14small group tutors asking direct questions	4.05	1.08	4.31	1.37	p = 0.169
15students being given helpful suggestions about resources	3.98	1.07	4.56	0.96	p = 0.036
16a manageable workload between sessions	3.87	1.06	4.50	1.10	p = 0.018
17unrealistic quantity of work outside tutorials	3.57	1.26	2.75	1.07	p = 0.013
18the group being side-tracked unproductively down blind alleys	3.39	1.10	2.69	1.01	p = 0.020
19 unrealistic demands on students in developing understanding of concepts and principles associated with the case, outside tutorials	3.35	1.21	2.19	0.91	p <0.001
Mean of the Total CBL Perception Score (/114)	83.9	10.33	91.4	11.22	p=0.012

Therefore both students and their CBL tutors would benefit from making explicit the work expected of students outside tutorials.

### Qualitative results from exploring three dedicated areas of the Transition Pedagogy Model

Differences emerging from the quantitative data comparing the transition experiences of domestic and international students were investigated further through the Transition Pedagogy Model. The model facilitated an orderly exploration of the components of the complex educational environment of the medical program. Comments from students and tutors are identified according to the Focus Group they participated in (Student Focus Group 1=Student FG1, Tutor Focus Group 1=Tutor FG1). Results of these investigations provided the following answers to the research questions:

### How does the curriculum engage students in learning in the first year of a CBL medical program?

Students generally found that the casebased approach helped them to engage in learning through its use of clinical cases:

I don't think I could just sit down and read about the heart and remember it all. But when you have a patient (case) in front of you, you can relate it to them .... It's not just completely abstract ... you can actually put it into context (Student FG2).

Orientation to the CBL approach, involving two introductory lectures with the whole first year medical cohort before students began working in small groups, did not reflect the reality of CBL tutorials as they did not convey how confused and pressured students could feel in a tutorial situation. One student commented: "The lectures seemed to teach students very little about the CBL process itself" (Student FG2). Orientation has been described as a process rather than an event (Clarke, Kift, & Nelson, 2010), and one "...in which the learner engages, facilitated by structured learning opportunities. An orientation prepares the learner for an approach to learning that may be new to her/him and which may involve habits changes to established and expectations of learning" (Taylor & Burgess, 1995, p. 2). International students, through additional weekly sessions in the International Program, experienced orientation as a process extending throughout first semester, which provided them with structured learning opportunities to support development of both their knowledge base and process skills for CBL

First year students described encountering three main difficulties with CBL, requiring changes from their previous ways of learning. These were: difficulties in determining the depth of study for themselves, finding that rote learning did not help them with elaboration of knowledge and clinical reasoning skills, and adjustment to actively participating in CBL tutorials where the role of their tutor was that of a group facilitator rather than a provider of knowledge, which had been the main role of their secondary school teachers.

Students reported spending a great deal of time working out the depth at which to study: "You were given the information [in Year 12] so, whereas here you have to sort of find it yourself and as there's an endless amount of information out there, it's like 'Where do I stop'?" (Student FG3). By Semester 2, students employed a variety of strategies, either self-discovered or learned from their tutors or peers, to discern the depth of knowledge required. These strategies included looking at the big picture and not going into too much detail, comparing their level of detail with other students. and consulting repeating students. Students reported great variation in support from their CBL tutors, with some tutors providing useful strategies such as students initially consulting their text book rather than journal articles. One tutor advised students that "When you're reading, you must have a question in mind and if you don't know what question you're answering, stop, and think 'Okay, what am I trying to find out here?' and then go back to it" (Tutor FG1). Some tutors believed that allowing students to discern the depth of understanding required for themselves enhanced their self-directed learning skills. whilst others seemed uncertain as to how to guide students, with one tutor commenting: "I need actually more guidance in how much depth they [students] need to know about things, because I have no idea" (Tutor FG2).

International students described how additional scaffolding through the International Program helped them to discern the depth of study by providing extra notes on the cases, guidance as to what resources to use, where they could locate resources and the depth at which to study these resources. One international student explained:

In the prompts given during CBL tutorial, they are usually like websites given and some of them are really hard to find and so she (the International Program Coordinator) will provide us with materials which are from the links provided in the prompts, so it saves us quite a bit of time (International student 3).

This scaffolding helped international students with time management because

as one student found "...you know you're not going too much or too far" (International student 6).

Rote learning, which many students had relied on in Year 12, was found to be appropriate in some areas of anatomy and physiology, but did not provide sufficient understanding for elaborating on their knowledge in CBL tutorials, nor for developing clinical reasoning skills:

I really like it (learning for understanding) I prefer it. I don't like to rote learn and I don't like Anatomy because you have to learn all of these things and it's just no context, but with clinical reasoning it's a lot easier, you understand (Student FG2).

Two important processes in CBL tutorials that help students with their knowledge base and clinical reasoning are the development of learning issues (knowledge needing to be researched between tutorials and elaborated on in subsequent tutorials) and mechanisms (diagrams to illustrate the sequence of events in a pathological process). Students reported great variation in the guidance from CBL tutors for students in both these processes and even by Semester 2, some students felt they needed more guidance in these areas:

We'd end up spending at least like an hour on learning issues and then this semester our tutor, we don't do the learning issues at all unless there's problems, there's like a massive difference between what we've been doing in the two different tutes (Student FG4).

International students reported that the provision of extra scaffolding resulted in them spending less time than domestic students in investigating learning issues. They were given opportunities to practise writing mechanisms in sessions held before their CBL tutorials, and "When we did have problems [with mechanisms], the International Program Coordinator would also get us to discuss it all together until we could get to something that we all agreed on" (International student 8).

Medical students reported difficulties in adapting to the role of the CBL tutor as a group facilitator rather than a provider of knowledge, yet evidence shows it is important for students to understand this role if they are to successfully adapt to CBL (Hmelo-Silver & Barrows, 2006) Tutors should provide a major source of scaffolding for engaging students in curriculum by discerning whether further questioning is required to help students confirm their content knowledge, and providing timely, honest and specific feedback to the group and individual students. Active participation in CBL tutorials was a requirement of students from the third week of Semester 1, and was assessed on a formative and summative basis. Many students reported that their tutors varied greatly in the frequency and quality of feedback they provided. Reflecting on feedback can help students to improve how they learn and tutors to improve their facilitation skills. (Sandars, 2009). The inability or unwillingness of some tutors to facilitate these key features of learning through the CBL process could have contributed to students studying inefficiently outside tutorials, with the resulting perception of a heavy workload and difficulties in keeping up with the volume of work. Many students struggled with lack of direction early in the course and looked for more consistency and structure.

Some tutors believed that it was important to create a "safe environment" for active student participation: "I tell them it's going to be a safe environment where they can say whatever they want to say, and even if it's wrong, it's important to say it so that everybody can discuss it" (Tutor FG2). Without a safe environment, participation in CBL tutorials was stressful for some students:

I've had two fantastic tutors so far and really good groups and other people dread CBL but I have a friend who doesn't sleep the night before 'cos that person's so worried about what's going to happen (in next CBL tutorial) (Student FG1).

Tutors saw giving feedback to individual students as an important strategy for "... highlighting their strengths and using strategies to help overcome their weaknesses", but some reported difficulties with giving feedback and maintaining a good relationship with the group: "I mean I'm guilty of being too nice ... maybe confusion here that you can't be nice and give effective feedback at the same time" (Tutor FG2). Students desired consistent feedback rather than inconsistency between verbal feedback during the semester and the grade at the end of semester: "I got positive feedback every feedback session and yet I failed both assessments in my CBL" (Student FG1).

For international students. active participation CBL tutorials in was particularly important. The International Program Coordinator (IPC) gave high priority to scaffolding the actual processes of CBL for students by encouraging them to practise the participation skills required. Students learned to recognise prompts from their tutors about the case, and how to respond to these prompts. They practised oral responses to their CBL tutors' questions, thus helping with elaboration of their knowledge: "She [the IPC] gets us to talk about what we know and what we don't and try to understand certain things together, so it kind of helps you with the CBL process." (International student 1).

Students were given strategies for speaking up in tutorials and for holding the attention of other group members. They were guided on how to give case presentations and provided with opportunities to practise this skill:

In every session she made everyone do a case presentation so we got more chance to practise. At the beginning of the year she gave us notes on how to do case presentations properly, so this actually helped a lot (International student 7).

The provision of feedback by the IPC was timely and specific, enabling students to improve their skills where needed: "The good thing is that she's really honest with us so when there is something that goes wrong she tells us straight so we know" (International student 5). Thus international students received additional scaffolding for engagement with the curriculum to assist their activation of prior knowledge, elaboration of learning and learning in context.

### How proactive and timely is the access for students to learning and life supports?

Students were expected to be proactive in seeking access to learning and life supports. When they sought assistance. both international and domestic students found that it was accessible and timely and provided by peers, administrative staff. and academic staff. Administrative staff described how transitioning students often needed support in the areas of enrolment and relocation from interstate or overseas in the first few weeks of the year. Students found that help with learning was more readily accessible from peers than from CBL tutors and this is consistent with previous findings that "the tutor can be considered a last-resort device. Students seek guidance from their tutor mainly when everything else fails" (Schmidt & Moust, 2000, p. 40). Peer help was often sought informally, but was also available through programs run by the Medical Students' Society. Whether students sought help from tutors depended on their perception of the tutor's knowledge base: "Sometimes when I had a CBL tutor who was a doctor, she was really good at answering questions for us" (Student FG4).

International students felt confident in administrative staff accessing and participating in peer support programs. In addition, the IPC took on the role of mentor, with students confident to approach her with any problem: "I think knowing that she's [the IPC] there if anything goes wrong .... there's someone you can fall back on." (International student 6). This additional support contributed to a more positive learning experience for international students: as one student commented "...it allows you to enjoy the [learning] process much more." (International student 6).

# Is a sense of belonging intentionally fostered amongst transitioning medical students?

Fostering a sense of belonging is an important element of the Transition Pedagogy Model (Nelson, Creagh, Kift, & Clarke, 2010) as it has been identified as an important factor in helping students engage in the first year experience (Krause & Coates, 2008). The Student identity domain in the First Year Experience Questionnaire showed that first year medical students had a significantly stronger sense of identity than general first year students (p=.001, Table 1). They identified strongly with other students in the medical program:

It's a community and [in] other courses you have different subjects and different people and different buildings and all that. But in Med you're doing all the same stuff with all the same people. There is a real 'These are the people that you're going to be spending the next six years of your life with' sort of thing (Student FG3).

Students attributed this sense of identity to the nature of the medical program where all students in a year level study the same courses, and to academic and social activities organised by their peers in the Medical Students' Society. An early sense of identity with the medical profession was also evident and students attributed this to the very close medical fraternity modelled to the students by those lecturers who were also clinicians, both in their teaching and their clinical roles (interview with student representatives). For international students, the support provided by the IPC fostered a sense of belonging through helping them to develop friendships with other international students, and by giving them confidence to contribute during other group activities outside the International Program. Domestic students did not attribute their strong sense of belonging to their CBL tutors.

# Conclusions

**Ouantitative** data indicated that transitioning domestic medical students, but not international students, experienced significant difficulties with coping with the workload they perceived to be required. Investigation of this difference using the Transition Pedagogy Model to guide enquiry showed no differences in relation to a sense of belonging, as both groups of students experienced strong and positive fostering in this area. Three differences emerged that may be contributing to the smoother transition experienced by international students. Firstly, international students had a more extensive and longer orientation process, rather than an event (as experienced by domestic students). Secondly, additional scaffolding provided through the International Program was effective in facilitating adaptation to selfdirected learning required for CBL. Thirdly, this Program provided a more consistent source of help for international students in academic, administrative and personal matters, than was accessible to domestic students. We conclude that these three differences explain why, compared with domestic students, international students did not find the workload too heavy, nor were they struggling to keep up with the volume of work.

These results suggest that to improve the experience for transitioning medical students. orientation. scaffolding and training of CBL tutors need careful consideration. Changes to the medical program at this institution will address these differences, with small group CBL tutorials and assessment of student performance not commencing until Semester Two. In Semester One, students will be introduced to the CBL process in a large-group, lecture situation. and participate in small group activities within the lecture. Throughout the semester, the process of working through a case, including the development of learning issues and mechanisms, will be modelled to the whole group, thereby providing an extended orientation and consistent scaffolding in the CBL process for all students. With ongoing revisions of the medical program, the opportunity exists to apply a Transition Pedagogy incorporating the principles and strategies espoused by Kift (2009), in order to provide an optimal first year experience. With commitment at both the policy and practice levels, a curriculum specifically designed to promote the transition to first year, distinct from other years of the program should enhance

the first year experience for students entering Medicine.

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