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# Addressing the Academic Support Needs of International Medical Students in a Modern Medical Education Curriculum

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## Abstract

With increasing globalisation and internationalisation, student mobility, and a need for income generation, most universities in the UK and other parts of the world now seek to attract greater numbers of international students. Non-traditional approaches to teaching and learning delivery have been incorporated into modern medical education curricula. These pose additional challenges to the international medical students compared to their home student counterparts. Evidence suggests that international medical students underperform compared with home students, with odds of failure about 2.5 times higher. It has been proposed that far more guidance and support are required, but little attention has been given to the students' specific academic support challenges. This paper explores ways to address the academic support needs of this group of students.

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**Key words:** glocalization, international students, medical students, academic support

## Introduction

Most Universities in the UK and other parts of the world now seek to attract a greater number of international students to reflect globalisation and internationalisation agendas and increasing student mobility. Increasing the number of students also helps to generate more income for the school. Recruitment of international students enhances the diversity and multicultural mix of the student population (Bennell and Pearce 2003; Egege and Kutieleh 2004; Yates and Nguyen 2012; Page and Chahboun 2019). The University of Exeter Medical School is a multi-campus modern medical school in which the undergraduate medical education curriculum is integrated with a problem-based learning (PBL) approach. The Medical School defines its international students for the purpose of academic support as students whose culture is significantly different from the British and for whom English is a second spoken language. They also include EU students and other students who may be UK citizens by naturalisation but whose parents' cultural background is not British. The medical school admits international undergraduate medical students from approximately 42 nationalities. With increasing diversity of students and changes in delivery of medical education curricula, far more guidance and support are now required by students (Gibbs and Simpson 2005; Lenz et al. 2018).

Medicine and allied healthcare services are highly regulated professions. Recommendations from the UK General Medical Council (GMC) and other considerations that include patients' expectations, have informed current changes in modern medical education curricula resulting in a paradigm shift in both design and delivery (GMC 2009, 2018, 2019). Modern medical education curricula now include early patient contact, which involves communicative interactions, small

group teaching and learning, increased self-directed learning, development of scientific and reflective writing skills and less traditional didactic teaching.

The general challenges faced by international students have been well articulated and documented in the literature (Ryan and Carroll 2009-2011; Treloar et al. 2000; Egege and Kutieleh, 2004; Yamada et al. 2014; Huhn et al. 2016; Lenz et al. 2018). Some of these challenges include acculturative stress, psychological distress, language and cultural barriers, study skills, culture shock, and ethnic stereotyping. In addition to these general challenges, international medical students also encounter more specific sociolinguistic academic difficulties, which are related to the nature of the medical degree programme. These students face language and communication barriers that are further complicated by regional accents (Huhn et al. 2016; Lenz et al. 2018). The linguistic communications encountered with the local population are part of their medical training and summative assessment, rather than for social interactions as might be the case for other international students.

International students also face study skills challenges with a change from teacher-centred to student-centred learning and a need for strong writing skills, particularly scientific and reflective report writing. There is also the complex issue of cultural barriers, which may involve some sensitivities to asking questions, "respect" for the teacher, and reticence to pose questions or challenge a teacher's opinion. Furthermore, international students may be less involved and engaged in team and small group work or discussions due to a lack of confidence in language, use of idioms, syntax, colloquial

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expressions, and vocabulary. Students may reveal sensitivities or reluctance to seek pastoral support. They can also experience “culture shock” when integrating within small group learning due to problems with shyness or feelings of isolation, even alienation from peers, perceptually linked to religious beliefs and values (Egege and Kutieleh, 2004; Lenz et al. 2018). International students may have very little contextual knowledge of the complexities of working in the UK National Health Services (NHS), particularly with regard to how it relates to a patient’s referral pathway and subsequent journey, and the differences within the NHS among countries within the UK.

Most of the discussions on learning support for international students have been very generic. The medical degree programme involves learning in both academic and clinical settings. However, unlike other programmes, this requires formally assessed direct professional encounters with the local population as patients. Evidence suggests that international students are more likely to underperform compared with home students and that the odds of failure are about 2.5 times higher (Woolf et al. 2011; Huhn et al. 2016). It has been suggested that issues related to the contextualised nature of the medical education curriculum contribute to the underperformance of international medical students and to the higher dropout rate compared to home students (Woolf et al. 2011; Man et al. 2010). It is within the teaching and learning environment outlined above that a new undergraduate international medical student is expected to succeed in learning and studying medicine and the question remains as to how to best support this group of students (Lenz 2018). This paper describes possible targeted academic support provisions developed by the University of Exeter medical school to address this challenge.

### **Academic Support Provisions for International Medical Students in the University of Exeter Medical School**

A needs assessment focus group discussion and survey of the international medical students on academic support were undertaken when the medical school had its first intake of international students. Insight into the needs of these medical students experience was gained from comments such as those shown below:

*“...expressing views, and evaluation, conveying emotional intelligence can be quite hard due to socio-cultural-language barriers... we are assessed on this compared to everyone else...”*

*“... It took me a while to cope with learning in a group work ...”*

*“... problems of communicating with patients in local jargon and being able to communicate complicated medical information between healthcare professionals...”*

*“...being articulate in presentation of the cases ... it is almost impossible to be able to achieve an ‘excellent’ on the criteria when compared with a native speaker.”*

*“... we have higher failure/repeat, ... and possible dropout rates than our home students’ counterparts ...”*

In tackling these academic support needs, the University of Exeter Medical School adopted the approach of a deficit model, which is still a prevalent perspective for providing academic support (Page and Chahboun 2019). In the deficit model, the challenges faced by the international medical students are framed in terms of not meeting a predetermined set of expectations and are seen as deficits that need to be corrected or remediated (Page and Chahboun 2019; Egege and Kutieleh 2004). Education is cultural and learning and teaching are done within a cultural context. International students who come from learning cultures that do not conform to that of his or her study host country are perceived as inadequate and they represent a problem to be resolved (Egege and Kutieleh 2004). An understanding of the cultural language and communication skills in the country of study are part of the required and expected professional training of a medical doctor. Indeed, there is an expectation that the students will actively acculturate, that is, adapt to the culture of the home country where they are studying with minimal opportunity to be grounded in their own native country’s culture, in order to achieve success (Kashima and Loh 2006; Egege and Kutieleh 2004).

Using the deficit model of approach to address the challenges faced by international medical students, the University of Exeter Medical School developed targeted academic support schemes. First, students were individually assigned to an academic tutor and a designated international student’s tutor was also appointed to co-ordinate the academic support activities. The international medical students and their academic/designated tutors ran routine one-to-one needs assessments and progress monitoring meetings, which enabled referral of students, where necessary, to the University Academic Support Unit. Following performance in an exam or test, a one-to-one remediation meeting was also held with the student, as appropriate.

In addition, the Medical School, in collaboration with the University Insessional Unit (INTO), developed four English for Specific Academic Purposes (ESAP) workshop topics that were primarily intended for medical students who are non-native English speakers. Adopting a socio-cultural approach and in consultation with the Medical School educators, the Insessional team designed workshops to target the needs of international medical students. For example, in preparing the reflective writing workshop, the team first observed a workshop on reflective writing led by a medical school educator, and then incorporated more practical elements

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into their workshop design. A literature search provided the basis for a glossary of popular medical terms (Parkinson 1991), and development of activities for the workshop in problem-based and small-group learning (Davis and Harden 1999; McMahon 2013). The Medical School's Special Study Units (SSU) Handbook for Students and Providers presented useful guidance regarding academic style. The workshops adopted a common methodology of awareness raising, useful input, and practice activities using authentic materials. The workshops were reflected in the students' general timetable and each session was one hour in duration. The workshops are summarized below.

#### *Workshop 1: Medical Language Communication Skills*

Students are encouraged to reflect on the different factors (socio-economic, cultural, and circumstantial), which might affect a person's idiolect and oral performance. This is followed by a discussion of strategies for dealing with communication breakdown. Medical language, common phrases and the equivalent colloquial expressions commonly used in public medical discourse in the UK context are introduced. A glossary of these terms, accompanied by recorded audio files, is uploaded to the website as a permanent resource. This session focuses on interactions with patients and possible areas of misunderstanding. It considers 'Patient Speak' (including colloquial and medical jargon) in an effort to explain why it is sometimes hard to understand patients and to offer some strategies to manage these difficulties. It looks at some specific areas of vocabulary and considers how to handle interviews with patients by asking effective questions. Students are encouraged to bring questions arising from their experiences in clinical placements and examples of challenging encounters relating to communication.

#### *Workshop 2: Reflective Academic Writing*

Students begin by discussing the nature of reflection and its importance to being a doctor. They describe their understandings of reflection, including the extent to which reflective thinking had played a part in their prior learning experience. Students are encouraged to think about how this process might benefit their studies and the importance of developing a reflective disposition. This workshop examines key features of reflective writing using examples. Students are helped to develop strategies for effective reflective academic writing, with a particular focus on language details.

#### *Workshop 3: Scientific Academic Writing Skills*

This workshop refreshes student understanding of the conventions and expectations of academic writing. It examines the structure of scientific reports and essays, referencing styles, strategies for in-text referencing, paragraphs, and sentence structure. The generic characteristics of academic writing are summarised using a PowerPoint presentation. Students are encouraged to consider how conventions and expectations

might differ across disciplines, given the multi-disciplinary nature of writing in the SSUs, and are directed to their SSU handbook for guidance. This workshop also looks at some examples of good practice and introduces some useful online resources. Students are encouraged to bring along samples of their written work and any feedback they have received.

#### *Workshop 4: Group Work and Team Learning Skills*

The timing of this workshop in the middle of the second term enables students to discuss their experiences with group work and team learning in the context of PBL. It offers a forum for discussion and strategies to develop a positive attitude towards working in multi-national groups by inviting reflection and discussion on small group learning (e.g. PBL) with emphasis on the perspective of international medical students. It also considers how different cultures approach working in groups, problems that can arise, and strategies that are used to overcome the problems. Students are encouraged to bring their views and concerns to the workshop and are able to reflect on the challenges of working in groups with home students, including how language and intercultural issues might have impacted their experiences. Literature, both empirical and theoretical, are referred to in order to provide a context and framework for discussion and strategies to enable students to participate fully in group learning are introduced and discussed.

The workshops were seen to respond to particular needs including: the unfamiliarity of international medical students with popular medical jargon, making it difficult to understand patient speak in workplace settings, their minimal prior experience with reflection and reflective writing as instruments of learning, the need to refresh their understanding of scientific writing, and the novelty of learning in groups in the context of PBL. The University Language/Academic Support Unit also runs weekly one-to-one writing tutorial sessions which are also available to the international medical students.

The feedback from the students following evaluation using free text questionnaires and focus group surveys affirmed that most of the participants found the workshops useful as are suggested by the following quotes:

*"... I really enjoyed the small group discussion we had from that workshop. Now I feel I am not the only one who were not talkative in PBL or Jigsaw sessions. I will really try to get involved in group work more from next session".*

*"The session on scientific research was also helpful. As an international student, I did not have to write essays during my A-levels so I felt insecure when SSU was approaching. ... This made me more confident to do my SSU".*

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*"... some of them are really useful and relevant to my course. ... the communication workshop ... common phrases and wordings that used by the with British people. ... for me to realise the culture and language difference prior to the clinical placement. The most useful session would be the one-to-one tutorial as my grammatical mistake is my biggest problem. ..."*

*"... the sessions have been relevant and tailored to what we need for support. ... The sessions also gave me a chance to voice out my difficulties and I would feel empowered every time I leave the session. ..."*

*Coming from the US, ..., British English and American English have many subtle differences ... addressed the British English colloquial and language usage. These sessions were excellent! ... I learned what a "funny right turn" meant, ... learned something which has saved me from embarrassment on many occasions. In the US trousers are ... "pants," while in the UK, "pants" refer to underwear. This small difference ... make a very big impact on doctor-patient trust as well as clear communication. These sessions have greatly helped me in the clinical aspect when dealing with patients..."*

*"Medical English for International Students is vital for my placement. It built up my confidence. Now I know that I am going to be able to communicate better with my patients in terms of medical language."*

*"..., I had attended three workshops ... and I found them very useful to my learning in medical school. ... different ways could people use to describe their feelings and pains in clinical setting. ... we could not learn it from textbook or lectures. Being a non-native speaker, ... found that it was difficult for me to understand ... this workshop, ... help me a lot in my clinical skills and communication skills with patients in the future. ... this definitely was relevant and useful to support my learning challenges as a non-native speaker"*

However, not all the participants found all of the workshop sessions particularly useful, mostly because the workshop topics were only one snapshot sessions that should not have stopped as the feedback quotes below suggest:

*"... I don't think attending the sessions was very helpful. The sessions were good as an introductory class but in the long term, they were not useful. This is because when I had to write my essays or to participate in a group discussion, I would face so many other challenges that were not covered. ..."*

*"I think international students have their own perception about language and culture before they come to England to study. I think the scheme has not done very well in helping the student to identify their own mistakes because there is a lack of continuous monitoring and feedback to students ..."*

The majority of the students would have liked the workshop sessions to be sustained throughout their first two years of study to monitor progress as the quotes below suggest. However, this would have had substantial financial implications for the medical school budget.

*"I hope the program could teach us more colloquial language used in UK. As international students we may be used to formal English, but sometimes when people speak too fast or use slangs/ local words I may not understand"*

*"... I could not find a similar support for group discussion from the scheme. I ... hope that there were more group discussion opportunities where I could receive feedback right after the discussion session ..."*

*"I thought that I will be able to learn much more if there are more of these sessions that I could attend as this will provide us with more time to ..."*

### **Challenges of Delivering Targeted Academic Support Schemes for International Medical Students.**

The development and delivery of academic support schemes to address the needs of international medical students have a number of challenges. Studies have questioned the appropriateness of the 'deficit model' approach. There are debates regarding the pros and cons of this model (Page and Chahboun 2019; Egege and Kutieleh 2004; Bond 2018; Green 2006; Smit 2012) particularly from the perception of the international students generally as sojourners rather than migrants (Page and Chahboun 2019; Wu and Wilkes 2017; Robertson et al. 2018). The 'deficit model' approach has been associated with a number of disadvantages including the perpetuation of stereotypes and the alienation or marginalisation of students (Page and Chahboun 2019; Egege and Kutieleh 2004; Bond 2018; Green 2006; Smit 2012; Wu and Wilkes 2017; Robertson et al. 2018; Klingner and Harry 2007). However, the current study and others have found that the 'deficit model' approach can yield some positive results (Green 2006).

International students have multi-layered complex support needs because the issues involved are multi-factorial, interwoven, and to some extent vary from student to student ((Egege and Kutieleh 2004; Smit 2012). It is difficult to isolate and address multi-layered issues as individual support needs. A suggested alternative is to acknowledge variations in attitudes to knowledge acquisition that stem from different cultural perceptions and understandings (Egege and Kutieleh 2004; Bond 2018). This also has its own complexities and challenges. Inclusive teaching and universal design for learning approaches have also been suggested (Gradel and Edson 2009 – 2010; Bond 2018; Imperial College London Education Development Unit 2020).

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Inclusive learning and teaching recognises that all students are entitled to a learning experience that respects diversity and allows for meaningful engagement with the curriculum (Imperial College London Education Development Unit 2020). In line with inclusive teaching and learning, the concept of universal design for learning advocates the use of multiple goals, methods, tasks materials, and assessments to meet students' needs and address the academic learning challenges students face (Gradel and Edson 2009-2010).

While the concepts of inclusive teaching and universal design for learning are very relevant and appropriate in dealing with academic support challenges of international students generally, and for international medical students in particular, they are fraught with logistical challenges as these issues are time sensitive due to the students' early contacts with patients and the high stakes of their assessments. Adopting the 'deficit model' provides a more pragmatic approach that begins to immediately address the learning challenges of international medical students, its disadvantages notwithstanding. There is also the challenge of the availability of resources for providing continuous longitudinal support and progress monitoring. In a multi-campus medical school like that of the University of Exeter, logistics for the delivery of academic support workshops is a sizable challenge both for staff and the students attending academic support sessions. Additional challenges come from timetabling constraints for the workshops within an integrated small group teaching and learning curriculum, where students are assigned to different learning groups and different time slots. There are issues with variable uptake of available provided support schemes by the students. This variable uptake may arise from differences in the perception of support needs between the teachers and students, and workshop sessions timetabling complications. The teachers' approach is to identify students needing support early in the programme, in line with a 'deficit model' concept, but the students would not particularly like to be treated differently from the home students. International students tend not to think that they have challenges until they start to struggle with exams; by that time, it may be too late to remediate. There is also a perceived stigma attached to seeking support. Given that the international medical students are characteristically high-fliers who are not used to failure, this is not surprising.

## Conclusions

Education to a great extent is cultural just as the practice of medicine is both a science and an art. The professional practice of the art of medicine is influenced by the culture within which it is practiced. Language and communication skills form important parts, but not the whole, of the cultural art of the practice of medicine.

Although most of the students found the academic support workshops sessions useful, it is difficult to evaluate and ascribe credit of the impact of the support schemes on the overall performance of our international medical students. However, most medical educators feel that this group of medical students need proactive targeted academic support and it is logical to advocate for it even though it is an imperfect approach.

The support needs of international medical students are multi-layered and complex and vary from student to student; they cannot easily be isolated and addressed as individual needs and there are no easy solutions. It is pragmatically and logistically challenging to provide support schemes that address perceived culturally based academic differences without adopting a deficit or assimilationist approach.

Further research should focus on devising appropriate and effective ways to define and clarify the full academic challenge experiences that international students face, and the form and nature of the support needed. Are the issues much deeper than support for language and communication deficit? To what extent does the framing of the academic learning challenges affect the participation by international student and encourage the stigma associated with seeking language and academic literacy support?

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