



Education Horizon-Scanning Bulletin - December 2019

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General Healthcare Education

What keeps people going with distance learning?

Source: Open Learning: the Journal of Open and Distance Learning

In a nutshell: Distance learning has the advantage of being convenient but can also be a lonely business with nobody to go down to the bar with after a hard day's graft in the library or to waste time with over a coffee between lectures. So what keeps distance learners going? In this study, Joan Simons from the Open University led a team of researchers asking OU students about the positive things that helped them persist with their studies. These included support from families, tutors and employers and the flexibility of studying at the OU. A key aspect of the graduates' success was the supportive feedback they got from tutors, which – they said – enabled them to build up their knowledge, skills, and confidence as they progressed to the completion of their degree. Flexibility came in different forms, from being able to access their learning materials at any time around their busy lives, to tutors being very responsive to students' needs. You can read the abstract of this article [here](#).

What do academics think about student consumers?

Source: The British Journal of Educational Psychology

In a nutshell: Now that students pay for their higher education there is a perception that some of them are a bit like those people who join a gym and pay their subscription fees, go once and then complain six months later that they haven't lost any weight. In this study, Naomi King and Louise Bunce from the University of Winchester asked 10 lecturers teaching at five newer universities in the UK whether they thought the advent of tuition fees had changed students' attitudes. The researchers said that students who identified themselves as consumers seemed to display lower levels of competence, autonomy, and relatedness. This, in turn, made the lecturers feel demotivated and disempowered by top-down pressure from managers and bottom-up pressure from students. You can read an abstract of this article [here](#).

When the internet is a problem not a solution

Source: Journal of Computer Assisted Learning

In a nutshell: Amid all the cat videos, spats on social media and games of Word Wipe it's easy to forget that the internet has made huge amounts of information easily accessible to everyone. It can also be a colossal waste of time and in this study, Roberto Truzoli from the University of Milan led a team of researchers looking into the effectiveness of problematic internet use (PIU) on students' motivation to learn. 285 students took part in the study which found that PIU reduced people's motivation to study, made it harder for students to learn productively and was linked to increased test anxiety. The negative impact of PIU on learning strategies was partially mediated by loneliness. You can read the abstract of this article [here](#).

Medical Education

Tackling burnout in junior doctors

Source: BMC Medical Education

In a nutshell: Burnout is characterised by emotional exhaustion, a cynical attitude to one's colleagues and clients and a feeling of not achieving anything – something likely to rampage through Westminster like the bubonic plague in the near future, if it hasn't done so already.

Burnout is also prevalent among junior doctors and in this study, Sundus Mari from Harvard Medical School led a team of researchers looking into the effectiveness of a resident-led initiative to tackle this problem. The researchers designed and implemented four organisational initiatives aimed at:

- Improving junior doctors' on-call experience
- Increasing social activities
- Supporting preventive care
- Promoting wellness education

39 junior doctors took part in the study which found that the initiative led to a clinically-meaningful reduction in burnout among everyone who took part. The doctors said that fitness-oriented activities were most likely to lead to change in wellness habits.

You can read the whole of this article [here](#).

[When The Healer's Art pays off](#)

Source: BMC Medical Education

In a nutshell: The Healer's Art is a voluntary course offered to medical students in Australia. It aims to address the growing loss of meaning and commitment experienced by doctors "through the exploration of compassion, empathy and awe in medicine, and early exposure to a supportive community of practice." In this study, Chanakya Jaiswal from Australian National University Medical School in Canberra led a team of researchers assessing the effects of this course. The researchers interviewed ten junior doctors who had taken the course. Four main themes emerged from the interviews:

- Developing empathy in the doctor-patient journey
- Self-care and self-awareness
- The creation of a supportive community
- Coping with a challenging medical culture

The researchers concluded that "the concepts taught in the ... course appear to have a lasting personal impact on some junior doctors, who identify the course as influencing their self-reported positive patient-doctor relationships and supportive relationships with medical peers". You can read the whole of this [article](#).

[When cameras into lungs will go](#)

Source: BMC Medical Education

In a nutshell: Lungs and cameras aren't generally considered to be a good mixture and bringing the two together is usually the province of well-trained professionals rather than Bart Simpson in a particularly inventive frame of mind. Conventional training on bronchoscopy is usually carried out on live patients or "phantoms." While the former is associated with increased rates of patients' complications, procedure time and sedation the latter does not offer any form of feedback to the trainee. In this study, Andreas Follmann from University Hospital Aachen led a team of researchers looking to see whether a bronchoscopy-guidance system could be a helpful tool for training novice bronchoscopists. 48 students took part in the study. Half of them performed a conventional bronchoscopy on a phantom whilst the test

group used an electromagnetic navigation bronchoscopy (ENB) to track the bronchoscopic tip in the bronchial system. The study found that the ENB group examined significantly more lobes and felt more confident having analysed the entire lung. All the students who used the new system said that it would be helpful during their next bronchoscopy. You can read the whole of this article [here](#).

[Junior doctors in the community: What do the teachers think about it all?](#)

Source: Teaching and Learning in Medicine

In a nutshell: In this study, Charo Rodríguez from McGill University in Montreal, studied doctors 'precepting' medical students on a community placement. 43 preceptors took part in the study in six focus groups. Enjoying teaching, promoting family medicine, and improving medical education were 'salient,' motivations for becoming preceptors. "The findings also pointed out the complexity of the student-preceptor exchanges that unfolded over the academic year, and the ambiguous and changing nature of the role that ... preceptors adopted in their relationship with students; from simply being facilitators of students' clinical observership to behaving as their mentors".

You can read the abstract of this article [here](#).

[The leaves falling off the GP tree](#)

Source: British Medical Journal

In a nutshell: Among the magical powers Prime Ministerial candidates like to attribute themselves is that of creating thousands of GPs at the drop of a hat. Unfortunately for them real life isn't that simple. The King's Fund have been surveying 840 GP trainees and found that only 27% of them intended to work full-time in general practice one year after qualifying, while only 5% thought they might do so 10 years after qualifying. 41% said that they were considering becoming a GP partner 10 years after they qualified, down from 45% in 2016. The most common reasons given for not becoming a partner were the financial implications (58%) and lack of training in business matters (47%). Most trainees (69%) said that the intensity of the working day was the reason for choosing part time or portfolio work, while 66% cited family commitments and 50% said the reason was an interest in other work, such as emergency medicine or palliative care.

If you have access to the *British Medical Journal* you can read the whole of this article [here](#).

[When students lecture students](#)

Source: BMC Medical Education

In a nutshell: Lecturers' dreams of having no contact whatsoever with their students and being free to fiddle about with test tubes, expenses and conferences in Hawaii moves ever closer with peer tutoring and assessment becoming increasingly popular. Peer lectures are the next obvious development and in this study, Charles Yin from Western University in Ontario led a team of researchers investigating The Collaboration of Practitioners and Researchers Seminar Series – a student-led programme made up of seminars delivered jointly by medical and graduate students to other medical and graduate students. The researchers found that the students who took part in the initiative improved their understanding of translational research and felt more comfortable interacting with other types of student with the participants believing that "the seminars helped in breaking barriers between medical and graduate students". You can read the whole of this article [here](#).

Can GPs cope with mental darkness in Peru?

Source: BMC Medical Education

In a nutshell: Despite having wonderful scenery and a delicious cuisine – which had the good sense to eat guinea pigs rather than keep them as pets – most people know Peru as the ancestral home of Paddington Bear. They also have GPs and those GPs face much the same mental-health problems as family doctors in the UK. In this study, a team of researchers led by Jessica Hanae Zafra-Tanaka from the Universidad Peruana Cayetano Heredia in Lima investigated what Peruvian GPs knew about depression, anxiety, alcoholism and schizophrenia. 434 GPs took part in the study and the percentages saying they felt competent in diagnosing these conditions were:

- Depression 70.5%
- Anxiety 73.3%
- Alcoholism 67.6%
- Schizophrenia 62%

Only 41.6% of the doctors were confident they could diagnose all four conditions adequately. Only 36.1% were confident in providing non-pharmacological treatment and only 20.1% felt confident in providing drug treatment for these conditions.

You can read the whole of this article [here](#).

How numerate are medical students?

Source: BMC Medical Education

In a nutshell: Those of us who struggle to add our scores up when we play Scrabble are in no position to cast aspersions but it's generally thought to be important that doctors are more or less numerate. In this study, Ivan Buljan from the University of Split - School of Medicine led a team of researchers assessing objective and subjective numeracy levels at different stages of medical education and exploring whether a research methodology/statistics course improved numeracy levels in the long run. The researchers found that while first-year medical students did not differ from first-year sociology students in objective numeracy medicine students had higher results on subjective numeracy. Students from higher years had generally higher subjective and objective numeracy scores. A course on biostatistics and research methodology led to improvements in subjective numeracy but not in objective numeracy. You can read the whole of this article [here](#).

Nurse Education

Professional values of nurses and students

Source: BMC Medical Education

In a nutshell: Once upon a time people used to behave like ladies and gentlemen and/or according to the tenets of their religion. Now these ideas have been deemed passé – at least by the metropolitan elite – secular concepts such as professionalism have been drafted in to replace them. In this study, Batool Poorchangizi from the Kerman University of Medical Sciences led a team of researchers contrasting the professional values of nurses and nursing students. 250 nurses and 100 nursing students took part in the study which found that “the students’ perspective toward the professional values’ importance was significantly more favourable than those of nurses.” Both groups placed the highest importance on caring

and justice and the least importance on activism and professionalism. The researchers concluded that “we need to pay more attention to values training, especially professionalism and activism, during undergraduate education for preparing the nurses to work in today’s complex healthcare context”. You can read the whole of this article [here](#).

What soft skills do patients value?

Source: BMC Medical Education

In a nutshell: To paraphrase Maya Angelou most patients remember more about how nurses make them feel than what they did to them. ‘Soft,’ skills are difficult to measure though – something that comes as rather a relief to this author. In this study, Lee Keng Ng from Singapore Institute of Technology canvassed opinion from members of the public as to what soft skills they valued in their nurses. Participants rated reliability and responsiveness as highly important for nursing care. “The participants’ qualitative comments pointed towards the importance of empathy, assurance and responsiveness”. You can read the abstract of this article [here](#).

How much do school nurses know about diabetes?

Source: Nurse Education Today

In a nutshell: In this study, Ewa Kobos from the Medical University of Warsaw led a team of researchers assessing how much school nurses knew about type 1 diabetes. 230 school nurses took part in the study and answered a questionnaire about diabetes. The rate of correct responses was 46.7% with the lowest rates of correct answers being about insulin pumps (36.5%), nutrition (37.4%) and insulin and glucagon (37.9%). School nurses thought their knowledge was better than it was although nurses who had relatives or friends with diabetes, and those who had had diabetes training before performed better. Interestingly, scores were higher among nurses with fewer years’ experience. You can read the abstract of this story [here](#).

Teaching nurses critical thinking

Source: Nurse Education Today

In a nutshell: The most cursory brush with social media or election debates is enough to convince most people that critical thinking is in painfully short supply at the moment. Educationalists try and encourage this quality among nursing students and in this study a team of researchers led by María López from the University of Valladolid in Spain, attempted to assess the effectiveness of an educational intervention consisting of seminars, lectures, case studies, and problem-solving activities. 112 first-year undergraduates took part in the study which found that the intervention led to an improvement in every critical thinking skill, except listening and speaking. Men demonstrated a greater change in average scores for critical thinking after the intervention although the women had scored higher beforehand. You can read the abstract of this article [here](#).

Teaching nurses empathy

Source: Nurse Education Today

In a nutshell: All sorts of revolting things have been put into bottles in the course of human history – Coca-Cola, Australian lager and Vimto among them – but sadly no one has found a way to bottle empathy. It’s a moot point whether it can be taught or not or even whether the

same people display it consistently over time. In this study Chao Yang, from Wuhan University School of Health Sciences in China, led a team of researchers looking into the effectiveness of a structured empathy educational programme. 118 fourth-year nursing undergraduates took part in the study which found that those who took part in the educational programme scored more highly for empathy than a control group. Three domains of empathy competence were significantly higher among the nurses: perspective taking, compassionate care, and standing in the patients' shoes. You can read the abstract of this article [here](#).

First contact

Source: Nurse Education Today

In a nutshell: Most people consider other people's bodies – with a few exceptions - as best looked at from a distance and touched only when dancing or in a crowded train carriage. Nurses can't afford to be so squeamish though and in this study, Letizia Dal Santo from the University of Verona led a team of researchers looking into the emotional experience of nursing students' first professional contact with a human body. 145 students took part in the study which found that the students experienced mostly social emotions. In most of the students' narratives patients were seen as a source of recognition and personal satisfaction, or lack thereof. Patients played a fundamental role in supporting the students' confidence. The researchers concluded that "providing emotional education and peer discussion/sharing may facilitate the ability of nursing students to become aware of their own feelings and to be focused on patients' needs. You can read the abstract of this article [here](#).

The self-guided learning laboratory: Coming to a university near you?

Source: Nurse Education in Practice

In a nutshell: Despite its negligible contribution to *haute cuisine* Australia has given the world plenty of good things: the late Clive James, Germaine Greer, Shane Warne and Barry Humphries to name but a few. Could self-directed learning laboratories (SDL Labs) be one of them? In SDL Labs undergraduate nursing students are given access to experienced nurses in a simulated ward environment to enhance their preparedness for clinical practice. In this study, Debra Kerr from Victoria University in Australia studied final year nursing students as they experienced SDL Lab. Twelve students took part in the qualitative study. Three main themes emerged from interviews with them which were:

- A safe environment that fosters effective learning
- Directed self-guidance strengthens confidence and competence during workplace experiences
- Enhancing accessibility and realism will improve learning

The students appreciated the safe learning environment and reported increasing confidence in performing nursing skills. You can read the abstract of this article [here](#).

Work-integrated learning

Source: Nurse Education in Practice

In a nutshell: Translating theory into practice isn't always easy; ask anyone who's tried to assemble flat-pack furniture after a Sunday afternoon trip to IKEA. Nursing students often struggle – as oft reported – translating theory to practical work on the wards. Work-integrated learning is designed to bridge this gap by enabling students to combine theoretical studies with practical work experience during their clinical placements. In this study a team of researchers, led by Ina Berndtsson, from University West in Sweden, reviewed the literature on work-integrated learning finding 16 articles that met their quality threshold. Three themes emerged from the articles which were:

- Supervisor support to enable students to develop a professional identity
- Variety of modalities for teaching
- Collaboration between academic lecturers and clinical supervisors aimed at integrating theoretical and practical knowledge

The researchers concluded “work-integrated learning enables students to integrate theory and practice, develop skills for knowledge-in-practice and prepares them for working life. It also supports the sharing of experiences between various healthcare professionals”.

You can read the abstract of this article [here](#).

Nursing students and health literacy

Source: Nurse Education in Practice

In a nutshell: Health literacy is the ability to understand health information, rather than leaving it screwed up in the bottom of a shopping bag with half a dozen crumpled receipts and some sweet wrappers. Low levels of health literacy have been associated with poorer health outcomes so it's important that people who work in health care have reasonable levels of health literacy. In this study a team of researchers led by G. Deborah Balmer from the University of Auckland, studied levels of health literacy in 845 nursing students from eight universities. The results showed a significant improvement in nurses' health literacy as they moved through their course. Universities in different regions had different levels of health-literacy but “all could be improved.” The researchers concluded that “graduating nurse professionals have a role in mediating and sponsoring a health literate health system as well as being part of supporting patients' health literacy”.

You can read the abstract of this article [here](#).

Can debriefing help nurses get into the right rhythm?

Source: Nurse Education in Practice

In a nutshell: Fats Waller was once asked what rhythm was. “If you have to ask,” he replied “you ain't got it.” Hearts should beat in a fairly steady, uninspiring rhythm – a bit like U2 – rather than venturing into more exciting jazzy territory; if they do the latter it's called dysrhythmia and can be fatal. In this study, Abeer Alhaj Ali from the University of Cincinnati in Ohio led a team of researchers comparing the effectiveness of video-assisted debriefing and verbal debriefing. Both methods of debriefing led to an improvement in the students' confidence in dealing with dysrhythmia and improved their performance although the students preferred the verbal debriefings. You can read the abstract of this article [here](#).

What makes nurses cheat in their exams?

Source: Nurse Education Today

In a nutshell: Cheating in exams is almost as old as exams themselves. Someone who cheats during their exams might be just as likely to be dishonest in their professional career so in an attempt to explore this phenomenon further a team of researchers led by Panagiotis Kiekkas from Western Greece University of Applied Sciences, looked at the reasons for academic dishonesty during exams by nursing students. 660 undergraduate students took part in the study which found that there was a high prevalence of academic dishonesty during exams. Among the most common reasons for cheating were: non-realistic demands on students; unfair treatment of students; absence of severe consequences for cheating; the way examinations are performed; and the importance of achieving high grades. You can read the abstract of this article [here](#).

Student stress on clinical placement

Source: Nurse Education in Practice

In a nutshell: One could argue that it would be more worrying if student nurses weren't stressed when they went out on placement on the wards and spent their whole time laughing, joking and whistling *Bring Me Sunshine*. Nursing academics are more tender-hearted though and exhibit a terrier-with-a-bone determination to get to the bottom of this thorny issue. In this study, Shirley Siu Yin Ching from the Hong Kong Polytechnic University led a team of researchers who interviewed 24 final-year baccalaureate nursing students. The students were divided into two groups: one with low resilience and high burnout and the other with high resilience and low burnout. Two main themes emerged from an analysis of the data:

- Stressors arising from the students aligning their expectations with the demands of the clinical placement
- Coping as a process of fitting into the ward culture

Students with high resilience and low burnout scores had self-directed goals and coped by using self-regulation strategies while those with low resilience and high burnout adopted external orientation and self-blame strategies.

You can read the abstract of this article [here](#).

Pharmacy Education

Preparing students for clinical practice

Source: BMC Medical Education

In a nutshell: In this study, Abdikarim Mohamed Abdi from Near East University in Turkish Cyprus led a team of researchers assessing the implementation and effectiveness of an eight-week structured clinical-pharmacy course. The course covered a range of subjects including internal medicine, cardiovascular and respiratory diseases, and drug information services. The students reported that the learning objectives of the course were met and the students gained substantial knowledge and skills in different areas of clinical practice. There was a significant overall enhancement in the average grades on the students' OSCEs. The students received the highest scores in drug information data retrieval and information, communication skills and public health promotion and the lowest scores in clinical prescription management problems and pharmacotherapy application.

You can read the whole of this article [here](#).

Blended learning and peer evaluation

Source: BMC Medical Education

In a nutshell: Sometimes it seems as though the more students pay in the way of tuition fees the more they are expected to do for themselves. Hot on the heels of peer-assisted learning is peer evaluation where students assess each other's work running the risk of being shunned in the college bar and struck off Christmas-card lists. In this study, Roland Lawson from INSERM in France led a team of researchers studying the use of blended learning and peer evaluation in teaching undergraduate pharmacy students about drug interactions. 72 students took part in the study. They received hybrid teaching, using Moodle. After their lectures each student submitted a report addressing a clinical case for evaluation by their peers. 95.6% of the students thought that they benefited from this evaluation and 91.2% thought they benefited from having their work reviewed. However, the peer evaluation made little difference to the students' final examination marks. You can read the whole of this article [here](#).