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Mid Cheshire Hospitals
NHS Foundation Trust

Education Horizon-Scanning Bulletin – January 2018

Compiled by John Gale

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General Healthcare Education

What makes student bloggers happy?

Source: International Journal of Educational Technology in Higher Education

In a nutshell: Many degree courses now make use of blogs – either asking students to write one or providing information using one. In this study Princely Ifinedo, from the Shannon School of Business in Canada, studied 108 undergraduates using blogs as part of a management-information-systems (MIS) course. The results showed that how well the blogs matched the students’ needs, perceived individual learning support, perceived usefulness, confirmation and satisfaction all had positive effects on students’ continued usage intentions of blogs.

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

Mobile education – spoken or written?

Source: British Journal of Educational Technology

In a nutshell: There are many situations – both in real life and in education – where people are expected to pay attention to more than one thing at a time. When this happens research shows that people learn more from a picture and the spoken word than from a picture and text, something known as the modality effect. In this study a team of researchers, led by Tzu-Chien Lu, from the National Taiwan Normal University, looked into how the modality effect worked in mobile-learning environments. The researchers studied how students coped with a mixture of pictures, written and spoken text and observation in a class on leaf morphology. They found that people who learnt from a picture and the spoken word paid more attention to observing the plants and were more able to transfer their knowledge to looking at the leaves than the students who had learnt from a picture and the written word. However, both the spoken and written-learning groups had similar scores on how much information they retained and in a comprehension test.

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

It’s official – texting really does rot your brain

Source: Computers and Education

In a nutshell: Sometime in the last few years common sense was abolished and replaced by evidence. Common sense might tell you that texting during a presentation impairs your ability to understand it but students might maintain otherwise so in this study Bradley M. Waite, from Central Connecticut State University, led a team of researchers looking into this issue. 183 students were split into three groups. One group listened to a presentation without texting, one group listened to the presentation and texted and the other group didn’t listen to the presentation at all. The group that didn’t listen to the presentation at all learnt least showing that everyone who was there had absorbed at least some information. However, non-texters scored better than texters on knowledge and comprehension (although not on analysis, evaluation and synthesis of information). Texters did worse on questions about subjects presented during the times they were tested and non-texters took better quality notes than those who were fiddling with their mobiles. So telling people to stop messing about with their phones is now backed up by evidence. Which only leaves waiting for the results of studies into the deleterious effects of banging one’s head into a brick wall.

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

Gamification

Source: Computers and Education

In a nutshell: Now that everyone has a mental age of twelve education has to be made to be entertaining in case – God forbid – anyone should find things difficult or hard work. Gamification is one way of doing this – turning things into a game in order to make them more interesting. In this study Crystal Han-Huei Tsay, from the University of Greenwich, led a team of researchers looking into the use of gamification in a business studies course. 136 students took part in the study which found that those who took part in the game performed significantly better than those who learnt using more traditional methods. ‘Behavioural engagement in online learning activities,’ was positively related to course performance. Women participated significantly more in online learning activities than men and students with jobs engaged significantly more in online learning activities than those without them. If only Albert Einstein had played more charades how different the world could be now...

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

Inter-professional Education

[Going for the bachelors in Germany](#)

Source: BMC Medical Education

In a nutshell: Inter-professional education for inter-professional health services is being seen as increasingly important these days. At the University of Heidelberg students are able to do a bachelor’s qualification in Inter-professional Health Care and in this study Cornelia Mahler, from University Hospital Heidelberg, asked some of them what they thought about it. The students were positive about the course and wanted to have a more intense experience and collaboration with different health professions during their studies. The students said they had benefited from the programme due to a better understanding of other professions and their different perspectives and said they were less reluctant to approach other health professionals in every-day practice.

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

Medical Education

[When medical students go to prison](#)

Source: BMC Medical Education

In a nutshell: Not many doctors want to work in prisons but a few choose to do so as part of their general-practice clinical placements. In this study Ron Brooker, from Western Sydney University, led a team of researchers who asked medical students doing GP placements in prison what they made of the experience. The students identified many challenges in the work of a prison doctor but got more confident as they did more ‘challenging’ consultations and developed a professional approach to prisoners. They felt they had acted in accordance with their personal values and rejected stereotypes, becoming more interested in working with prisoners and convicts.

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

Are orthopaedics doctors getting enough training?

Source: BMC Medical Education

In a nutshell: When junior doctors go out onto the wards it's all too easy for training to go by the wayside. Looking after patients is always more pressing and it can be hard to justify spending an afternoon in a lecture theatre. In this study researchers collected diaries kept by 935 junior doctors kept between eight a.m. on the 18th January 2015 and eight p.m. on the 22nd of January 2015. The doctors recorded the time they spent on various activities and the results were as follows:

- Providing cover on the wards 34.6%
- On a zero session 20.7%
- On call 14.8%
- Attending a theatre-list session 8.5%
- Attending an outpatient clinic 3.2%
- Going to a teaching session 1.7%

The researchers concluded that only 5% of core surgical trainees met both the JCST standards for minimum weekly clinical exposure in the specialty.

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

What makes junior doctors happy

Source: BMC Health Services

In a nutshell: Every year junior doctors fill out a survey about their training for the General Medical Council. Simon Gregory, from Health Education England and Chiara Demartini from the University of Pavia have been looking back at trainees' responses from 2012 to 2015 trying to work out what makes a good training experience. They found that the most important factors contributing to junior doctors' happiness were:

- Strong clinical supervision
- Frequent and useful feedback meetings
- An adequate workload
- A supportive environment

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

Pressure to conform

Source: BMC Medical Education

In a nutshell: Whether it's maverick detectives, unconventional politicians or 'edgy' pop stars everybody loves a non-conformist, partly because most of us are forced unwillingly into conformity as soon as we set foot through the school gates. Junior doctors are no exception and in this study Jan Grendar, from the University of Calgary, led a team of researchers

asking 166 junior doctors about ‘pressure to conform.’ Most of the junior doctors (89.8%) reported pressure to conform at least sometimes in at least one educational or clinical setting and they reported higher rates of conformity during informal, rather than formal, teaching sessions. The pressure to conform was greater when juniors worked with senior doctors rather than when they worked with people at their own, or lower, levels.

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

Anaesthetists say exams are stressful and irrelevant

Source: British Medical Journal

In a nutshell: The Royal College of Anaesthetists has been asking 2,312 trainees how they are doing. The trainees told them that their exams were stressful and not always relevant to contemporary clinical practice. Trainees felt under pressure to sit exams when they were poorly prepared and some felt that the cost of exams and revision courses was prohibitive. 85% of respondents said that they were at high risk of burnout and 64% felt that their job had damaged their physical health. Two-thirds of trainees said that they had worked through a full shift without a meal and three-quarters said they had worked through a shift without enough liquid. 95% said that they had stayed on at work after their shift had finished and 26% had stayed on for more than two hours.

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

Dropping out Down Under

Source: BMC Medical Education

In a nutshell: Despite medical schools taking great pains to choose their students carefully people still drop out of medicine courses wasting a lot of their own and other people’s money, causing themselves psychological distress and wasting a place that could otherwise have gone to somebody else. In this study Bunmi S. Malau-Aduli, from James Cook University in Australia, led a team of researchers looking into students facing academic difficulties or outright dismissal at a “regionally-located medical school.” The study found that being the first in one’s family to go to university, being an Aborigine and coming from a very-remote area were all linked to a greater risk of getting into academic difficulty as were doing badly in one’s first- and second-year exams. A high proportion of the first-in-family students who experienced academic difficulty eventually failed and left their medical course.

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

Forget Blackpool – have a surgery-skills weekend instead

Source: BMC Medical Education

In a nutshell: For most people a pleasurable weekend might include beer and chips in Blackpool, smoked salmon and claret at Glyndebourne or a long walk in the mountains and a plate full of venison. Medical students are a bit different though and in this study Ho Seok Seo, from the Catholic University of Korea, led a team of researchers looking into the effectiveness of a Surgical Skills Weekend at remedying the wide variation in surgical skills of junior doctors and the lack of doctors wanting to go into surgery as a career. The weekend included hands-on (easier than with feet, one presumes) training sessions at suturing, using

advanced surgical procedures such as laparoscopic and robot-assisted surgery and an operating-room session. 91 students took part in the weekends over two years and their overall satisfaction rate was high. All of the participants' surgical suturing skills significantly improved and their interest in a surgical career increased significantly.

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

Getting more medical students into research. Part 369

Source: BMC Medical Education

In a nutshell: The percentage of physicians going into medical research has gone down in the last ten years. Various programmes have been put in place to try and tackle this problem including the Vanderbilt University School of Medicine Medical Scholars Programme (MSP). This programme is a competitive, one-year, mentored research experience which aims to give students a chance to do research, foster an interest in it and build skills that could lead to a career in academic medicine. In this study Abigail M. Brown, herself from Vanderbilt University, led a team of researchers who surveyed 55 people who had gone on the MSP course. The course alumni had published an average of 1.9 peer-reviewed manuscripts and 51% of them had presented at national meetings. 58% of the respondents reported that MSP participation had changed their career goals, or helped to confirm or refine them.

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

Sorting the sheep from the goats

Source: BMC Medical Education

In a nutshell: TV shows such as Masterchef rely on a tried and trusted formula. At the end of each round contestants are judged and some sent packing. The Michelin-standard triumphs and the burnt crème brûlées are easily assigned to the right categories but the tension comes from the contestants in the middle who are on the borderline between success and failure. The judges debate their merits, some tension-inducing music is played, and eventually a decision is made. In the same way a number of students fall into the same grey area when it comes to their exams with examiners unable to decide whether they deserve to pass or fail. In this study Boaz Shulruf, from the University of New South Wales, led a team of researchers looking into the effectiveness of a new technique called Objective Borderline Method Version 2 (OBM2) at assigning candidates into the pass or fail camps. The researchers found that “the correlations between scores for each station and pass/fail outcomes increased significantly after the mark reclassification, yet the reclassification did not significantly impact on students' total scores. Examiners, students and program [sic] leaders expressed high levels of satisfaction and the Faculty's Curriculum Development Committee has decided that OBM2 will be used for all future clinical examinations.”

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

Getting medical students to see the whole person

Source: BMC Medical Education

In a nutshell: Although patients come to see doctors on their own and in the rather spartan setting of a consultation room they are, of course, part of a complex web of interconnecting relationships and circumstances all of which can affect their health – ‘biopsychosocial

factors,' in the jargon. In this study – led by Shao-Yin Chu, from Tzu Chi General Hospital in Taiwan – 50 medical students doing a paediatrics placement wrote about patients' psychosocial issues and took part in group discussions about them. 108 different psychosocial issues were identified which fitted into six main themes:

- Medical communication
- The intricate medical ecological system
- Role and function of a family
- Development of medical professionalism
- Ethical dilemmas
- Perspectives from different cultural backgrounds

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

What makes students go into medicine

Source: BMC Medical Education

In a nutshell: All over the world people are crying out for doctors so finding out why people might want to go into medicine in the first place is quite important. In this study Sonu Goel, from the School of Public Health in Chandigarh, India led a team of researchers reviewing studies into this very topic. The researchers found 24 studies that met their quality criteria. The main motivating factors (in 'Strictly' fashion in no particular order) were:

- Interest in science/medicine
- Social interest and academia
- Flexible work hours
- Work independence
- Prestige
- Job security
- Financial security
- Serving the poor and under-privileged

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

Why do junior doctors go into oncology?

Source: BMC Medical Education

In a nutshell: Looking after people with cancer (oncology) is a complex job yet little is known about why people want to go into it. In this study J.C. Faivre from the Lorraine Institute of Cancerology [sic] in France led a team of researchers trying to find out by sending a questionnaire to young oncologists. 505 of them answered. The main reasons people went into oncology were: the cross-sectional nature of the field (70.8%); the depth and variety of human relations (56.3%) and the multi-disciplinary field of work (50.2%).

Most of the doctors said they would like to complete a rotation outside their assigned region (59.2%) or abroad (70.2%) in order to acquire additional expertise. Most of the junior doctors said they would like to do a fellowship involving care, teaching and research in order to hone their skills (85.7%). However, many of them were worried about their professional future due to the shortage of openings (40.8%), the workload (52.8%) and the lack of work-life balance (33.4%).

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

How do medical students go about learning?

Source: BMC Medical Education

In a nutshell: People go about learning things in different ways. Some people like to gain an understanding of the whole topic and how it all fits together; some people like to get the best mark possible with good time management and organisation and others frantically memorise the minimum possible information they need to pass whatever tests are put before them. These approaches are called deep, strategic and surface respectively and in this study Sonali Prashant Chonkar, from the KK Women's and Children's Hospital in Singapore, led a team of researchers looking into which approaches 250 medical students doing obstetrics and gynaecology placements adopted. The researchers found that among 238 students with one, predominant, learning approach 40.3% adopted the deep-learning approach, 50.8% adopted the strategic learning approach and 8.8% used surface learning. Men were less likely to use a strategic-learning approach than women.

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

Multiple mini interviews. What's in it for the Paxmans?

Source: BMC Medical Education

In a nutshell: An increasing number of institutions use multiple mini interviews (MMIs) to select candidates. Instead of one longer interview with two or three people candidates have lots of shorter interviews on separate topics with many more people. This can create a lot of extra work, particularly when medical schools are under pressure to recruit more students, and in this study Annette Burgess, from the University of Sydney, led a team of researchers asking interviewers what motivated them to take part in the process. 308 interviewers took part in the study which found their main motivations were:

- A sense of duty
- Their desire to contribute their 'expertise' to the process
- Their desire to have input into selection of GP registrars
- A sense of duty to their profession
- An opportunity to meet with colleagues and future trainees

Factors reducing the interviewers' motivation included the large number of candidates they had to see in one day.

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

Does caring wear off over time?

Source: BMC Medical Education

In a nutshell: Patient-centred care is seen as increasingly important these days but some people worry that caring, idealistic medical students can gradually become bitter, cynical, jaded junior doctors. Hirono Ishikawa, from the University of Tokyo, looked into this topic in a survey of 95 medical students. The survey found that the students' scores for being patient-centred declined significantly in their first year as junior doctors, both in terms of their attitude towards sharing information and decision-making with patients and their attitudes towards caring for patients' expectations and emotions. Men were more likely to become less caring over time than women.

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

Nurse Education

Do Dedicated Education Units make a difference?

Source: Nurse Education Today

In a nutshell: Recently Dedicated Education Units (DEUs) have been set up in hospitals to allow nursing students to do clinical placements in a more supportive environment. In this study Christina Plemmons, from South Dakota State University, led a team of researchers comparing how effective DEUs were at improving nurses' self-efficacy and attitudes towards teamwork. 272 nursing students took part in the study. 84 of them did their placements in a DEU, 122 did traditional clinical placements and the rest did a mixture of the two. All three types of placement led to a significant increase in self-confidence and a better attitude towards teamwork but the students who did their placements in a DEU or a mixture of a DEU and a traditional placement had significantly greater increases in their self-confidence.

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

Going crackers over clickers

Source: Nurse Education Today

In a nutshell: As anyone who has ever been forced to hear adults say 'yay,' can testify people these days are supposed to have the maturity of an eight-year-old girl and the attention span of a hyperactive goldfish. Listening politely to someone who might be supposed to know a thing or two about a particular topic is considered somewhat old hat and one of the ways nursing lecturers like to liven things up is by the use of clickers. Multiple-choice questions are put up on a screen and, like a US presidential election or a Labour leadership contest, people are free to make asinine choices under the cloak of anonymity helping people to participate unimpeded by a consciousness of their own ignorance. In this study Rebecca Toothaker surveyed 99 second- and final-year nursing students about the use of clickers. 91% agreed, or strongly agreed, that the use of clickers had helped them to develop a better understanding of the subject matter compared to the use of traditional lecture-based classes.

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

Training nurses to spot delirium

Source: Nurse Education Today

In a nutshell: Despite the protestations of the late Cilla Black being delirious is not usually a happy state to be in and training nurses to recognise it is usually seen as a good thing. In this study Catherine Travers, from Queensland University of Technology, led a team of researchers who trained 34 nurses from six hospital wards as Cognition Champions asked to lead their wards in a “collective social-education process”^{*} about cognitive impairment and the assessment of delirium. The Cognition Champions were themselves given extensive training, then asked to pass this on and develop ward-specific action plans aimed at educating and evaluating ward nurses’ ability to accurately assess and care for patients with delirium. Over five months there were significantly-improved screening rates of patients for delirium.

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

*© People’s Republic of North Korea

Using virtual simulation to spot deteriorating patients

Source: Nurse Education Today

In a nutshell: Like Olympic skiers – but without the cowbells and schnapps – patients can go downhill quickly resulting, in some cases, in catastrophic harm. This deterioration doesn’t, mercifully, always happen often enough on the wards to give student nurses experience of spotting it but it’s vital that they can do so. One of the ways around this is to use simulation to teach nurses about deterioration and it was this approach that a team of researchers, led by Alexis Borg Sapiano, from Mater Dei Hospital in Malta, investigated. 166 second- and third-year diploma and degree nursing students took part in the study and used a virtual-simulation programme called FIRST²ACTWebTM. The simulation included three scenarios portraying deteriorating patients and the finding showed a significant improvement in the students’ post-scenario knowledge.

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

Serious games for serious topics

Source: Nurse Education Today

In a nutshell: Serious games are being used increasingly often in nursing education but few studies have assessed their value and effectiveness. In this study Hege M. Johnsen, from the University of Agder in Norway, led a team of researchers looking into the effectiveness of a serious game designed to teach clinical-reasoning and decision-making skills to 249 second-year nursing students. Overall, the students saw the serious games as educationally valuable and easy to use.

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

Clinical placements with the homeless

Source: Nurse Education in Practice

In a nutshell: Homeless people often complain that prejudice on the part of health workers stops them looking for help. In this study, led by Janet Gardner, from the University of Arkansas, a university got together with a charity for the homeless to organise work placements for nursing students. Eight students took part in the project and by the end of it they felt less fear of homeless people, more empathy towards them and were more inclined to stand up for homeless people.

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

Information and innovation in nursing students

Source: Nurse Education Today

In a nutshell: The way nurses look for information – information-seeking behaviour in the jargon – can be an important factor not only in their academic success but also in how they go on to translate research into practice later in their careers. In this study Zhuqing Zhong, from Central South University in China, led a team of researchers looking into nursing students' information-seeking behaviour and innovative behaviour and the links between them. 1,247 students took part in the study which found that information-seeking behaviour and innovative behaviour improved as nurses moved on through their training. The better the students' information-seeking behaviour the better their innovative behaviour and 'information utilisation' was found to be the strongest predictor of innovative behaviour.

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

Why don't other healthcare students go into nursing?

Source: BMC Medical Education

In a nutshell: Compared to other jobs working in healthcare nursing finds it difficult to recruit students. In this study Ling Ting Wu, from the National University of Singapore, led a team of researchers asking 604 first-year medicine, pharmacy, dentistry and social-science students why they hadn't chosen to do nursing. The answers were:

- Lack of autonomous decision making
- Perceived lower ability to make a diagnosis
- Having to attend to patients' hygiene needs
- Engendered stigma
- Lack of parental support

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

Physiotherapy Education

Getting physios to put research into action

Source: BMC Medical Education

In a nutshell: Knowledge translation is the rather pretentious term used for putting research into practice. Health professionals aren't always that good at it and in this article Jessica Stander, from Stellenbosch University in Cape Town, lead a team of researchers looking into how physiotherapists tackled it. The team reviewed the literature on this topic and found nine studies that met their quality criteria. Interactive sessions, didactic sessions, printed material and discussion and feedback were all consistently associated with effective knowledge translation. When knowledge-translation strategies addressed local barriers to the use of evidence they tended to work better.

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