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Churchill College, University of Cambridge CB3 0DS, UK

Group 1 of theme sessions

Educational innovation and enhancement

Core paper and theme paper abstracts

Tuesday 2 September 2014

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Please note:
References are as supplied by authors
USA and Australian spelling has been retained as appropriate
Papers included are those being presented at the conference at the time of going to press.

Core paper

Biographical details of core presenters

Educational innovation and enhancement

John Ferraris, Research Assistant; Rick Fisher, Senior Lecturer; Christos Gatzidis, Senior Lecturer, Bournemouth University, UK

John Ferraris is a PhD researcher at the School of Design, Engineering and Computing at Bournemouth University, UK. He received his BSc (Hons) in Computing at Bournemouth University in 2009. His research interests include real-time 3D graphics, terrains, lighting and texturing. His current research is in the field of terrain texturing and has been working to improve exiting blending algorithms. He is currently working as a Research Assistant at the Bournemouth University Dementia Institute.

Dr Rick Fisher is a Senior Lecturer in the School of Health and Social Care at Bournemouth University. His professional background is district nursing (nursing in the home). He is also a member of the Bournemouth University Dementia Institute (BUDI) where he leads on education. He has held a number of positions in higher education, primarily focused around district nursing and is a member of the Steering Committee of the Royal College of Nursing Education Forum. His primary research interests centre around patient safety, with a focus on safety related to people living with dementia at home. Other areas of interest include the use of power in nursing practice which was a focus of his PhD thesis. Currently he is developing a number of relationships with international partners in Australia, Finland, Sweden, Belgium and the Netherlands.

Dr Christos Gatzidis is currently the Programme Coordinator for all the games courses on the creative technology framework of degrees in the Faculty of Science and Technology, Bournemouth University, UK following holding the post of Framework Leader. He also teaches across all years on the BSc Games Technology degree. He has co-authored with a colleague from DigiPen a textbook titled ‘UDK iOS Game Development Beginner's Guide’, released in September 2012 by Packt Publishing. The book is intended for iOS development but also covers fundamentals of the Unreal Editor to create gameplay environments and interactive elements by guiding the reader through the creation of a third-person shooter. During mid-September 2013 he ran, as a General Chair, the 5th International conference on Serious Games and Virtual Worlds in Bournemouth.

C3

An approach to teaching dementia care in higher education via the use of gaming technology

John Ferraris, Research Assistant; Rick Fisher, Senior Lecturer; Christos Gatzidis, Senior Lecturer, Bournemouth University, UK

Abstract
Higher education students who enter the nursing profession may have little experience in working with people with this condition in the initial stages of their taught programme. Additionally, it is very difficult to expose nursing students to 'live' situations related to dementia care, for a variety of reasons, which include a diminishing number of student placements as provider mechanisms change in the UK. This paper addresses this problem by introducing an approach to enhance student experience of such nature by providing them with a fully interactive game in which they can interact with people affected by dementia and those who care for them in a completely safe and risk-free environment. Following recommendations from the recent Francis Report, the game enables students to very carefully consider the ways in which they can, in their professional capacity, offer safe and compassionate care for those they are engaged with, be that dementia patients or other people closely associated with them in their daily life.

Introduction
There are currently 800,000 people with dementia in the UK, costing the economy £23 billion a year. This figure is expected to double by 2040 and the costs are likely to treble. As of April 2013, the UK government has initiated a policy drive to address the growing issue of dementia care by increasing funding for research and facilities as well as training for those in health care (Department of Health, 2013).

The use of computer games as training and therapeutic tools (often termed 'serious games') is an emerging field of research (Mayer *et al.*, 2014). Within the field of healthcare, such games show potential of helping patients be more adherent to treatment regimens and train staff how on how to manage patients in different clinical situations (Kato, 2010, Baranowski *et al.*, 2008). Within the field of dementia, serious games can help patients with a range of physical, cognitive and emotional tasks (McCallum and Boletsis, 2013; Imbeault *et al.*, 2011). Assessing the best methodologies for designing such games remains an active area of research (McCallum, 2012; Robert *et al.*, 2014; Bouchard *et al.*, 2012; van Rijn *et al.*, 2009). In this paper we present a training tool for undergraduate nursing students in order to help prepare them with the skillsets necessary for caring for people with dementia. Our goal is to give them an authentic experience for the sorts of challenges they will be facing throughout their career. Through the use of an interactive game-like environment and conversation system, we have recreated the cognitive and communication challenges people face with dementia and offer a training tool to help nurses improve their person-orientated care.

Literature review
Graafland *et al.* (Graafland *et al.*, 2012) remark that virtual reality and e-learning applications have led to consistent learning outcomes and already play a role in surgical residency training programmes. They conclude that the interactive learning of serious games can help train both technical and non-technical people alike in the skills required within the surgical field but such games need further validation before being integrated into standard curricula. Sisarica *et al.* (2013) present their research that utilizes computer-based serious games to help foster creative problem-solving for carers of people with dementia. They highlight the need for critical thinking in dementia care as part of the shift towards more person-orientated care that recognizes the uniqueness of each individual. By utilizing serious games, they can offer the challenges of dementia care a carer will encounter within the safety of a virtual environment.

Stapleton (2004) assesses what it is about serious games that make them efficient for learning and the possible opportunities for the application of games as learning technologies, arguing that they provide a powerful and meaningful context for learning as the control of the experience and outcome is placed in the hands of the player. He argues that this is in contrast to the classic teaching model, where, instead, it is the role of the teacher(s) that transfers knowledge to the student.

Susi *et al.* (2007) survey the use and application of serious games across a range of application areas, from education to the military. Remarks are made on the advantages of serious games over real-world practices, such as the ability to explore simulated environments and situations that are impossible in the real world for reasons of safety, time and cost. However, the work also highlights the difficulty of objectively evaluating the impact of serious games with regards to their target goals.

Developing the game
In order to offer a realistic experience, and based on data from actual, existing nurse-patient interactions, the game employs a modern game engine called Unity (Unity Technologies, 2014a), which is used in many different modern commercial titles and is capable of multiplatform deployment, including mobile ones, such as smartphones and tablets. The virtual environment was populated with license free 3D models from the Unity Asset Store (Unity Technologies, 2014b). As a result, students are able to engage in a visually authentic virtual scenario, undertaking meaningful dialogue with virtual patients with dementia and those who care for them. Specific scenario material, gathered in collaboration with people with

dementia, carers and professionals in the field is already integrated in the game and drives the gameplay, which is currently underpinned by dialogue-driven action and incorporates other notable features such as a scoring system. Using a fully interactive, first-person 3D simulation/game with realistic contemporary graphics, students are able to converse with virtual clients and receive verbal and also non-verbal responses. Therefore, by playing the game, students are able to interact verbally with people with dementia in a convincingly realistic manner, make mistakes and learn from them in a very safe environment, receive feedback at different steps of the way and, finally, fulfil crucial higher education nursing course requirements.

The premise of the game is for the player to engage in patient care by performing tasks and communicating with a patient within a controlled environment in a manner that is both compassionate and accommodating to the patient's individual needs. In order to measure the performance of the player, we assign four attributes to the patient to track their wellbeing (see Figure 1, on the left hand side):

- **mental:** The patient's mental wellbeing, ranging from confused to coherent
- **emotional:** The patient's emotional state, ranging from distressed to relaxed
- **physical:** The patient's physical state, ranging from discomfort to comfort
- **rapport:** The patient's bond with the player, ranging from animosity to friendship.

Figure 1: ***The attributes (left) and the conversation system (center)***

The player must navigate around the virtual environment and engage with the patient, conversing and performing certain tasks within a given timeframe. Most of the interaction with the patient is through the conversation system where the patient speaks and the player has the opportunity to respond by selecting from a selection of dialogue options. Throughout the scenario, the player must complete tasks by interacting back and forth with both the patient and environment. The choices the player makes and how well he or she performs a given task will have an impact on the patient's attributes, which can in turn affect future events in the scenario. For example, during the last phase of the scenario the player must coax the patient into taking her medicine but if the player's rapport is low or the patient is in a state of confusion the task will be considerably more difficult and time-consuming. Thus, it is not simply a matter of achieving the scenario goals but also doing so in a manner that accommodates the patient's needs and wellbeing.

At the core of the game is the conversation system, a non-linear dialogue engine that allows scenario designers to develop complex, hierarchal conversations with non-linear paths that can be opened and locked depending on the player's previous choices (Figure 2). For this we used a tool called ChatMapper by Urban Brain Studios (2014) as it offers an intuitive visual means for developing complex dialogue trees as well as integration of the Lua scripting language (Ierusalimschy, 2014). The use of Lua allows logic to be embedded into the dialogue nodes for the conversation system to interact with the other components of the game, such as triggering events, changing the patient's attributes and altering the player's score. The dementia experience is captured through confusing, repetitive and often seemingly nonsensical dialogue between the player and patient.

Results of the pilot

The pilot testing was conducted with a sample of 48 first year nursing students set to play the game under a time limit of 20 minutes. The scenario itself consisted of 8 phases:

1. The player enters a dark flat with the TV playing static. They must make sure the patient can see and hear them clearly. Otherwise, the patient will get confused and distressed.

2. The player must introduce themselves to the patient by mentioning their name and reason for being here. If they fail to do so, the conversation will be confusing and disorientating for the patient.
3. The player has the opportunity to have a cup of tea with the patient. The patient will offer to make it (and their success will depend on their mental state) and by doing so, physical comfort and rapport will increase.
4. The player and patient will make small talk to bond. The player must let the patient guide the conversation and try not to disorientate the patient with off-topic questions.

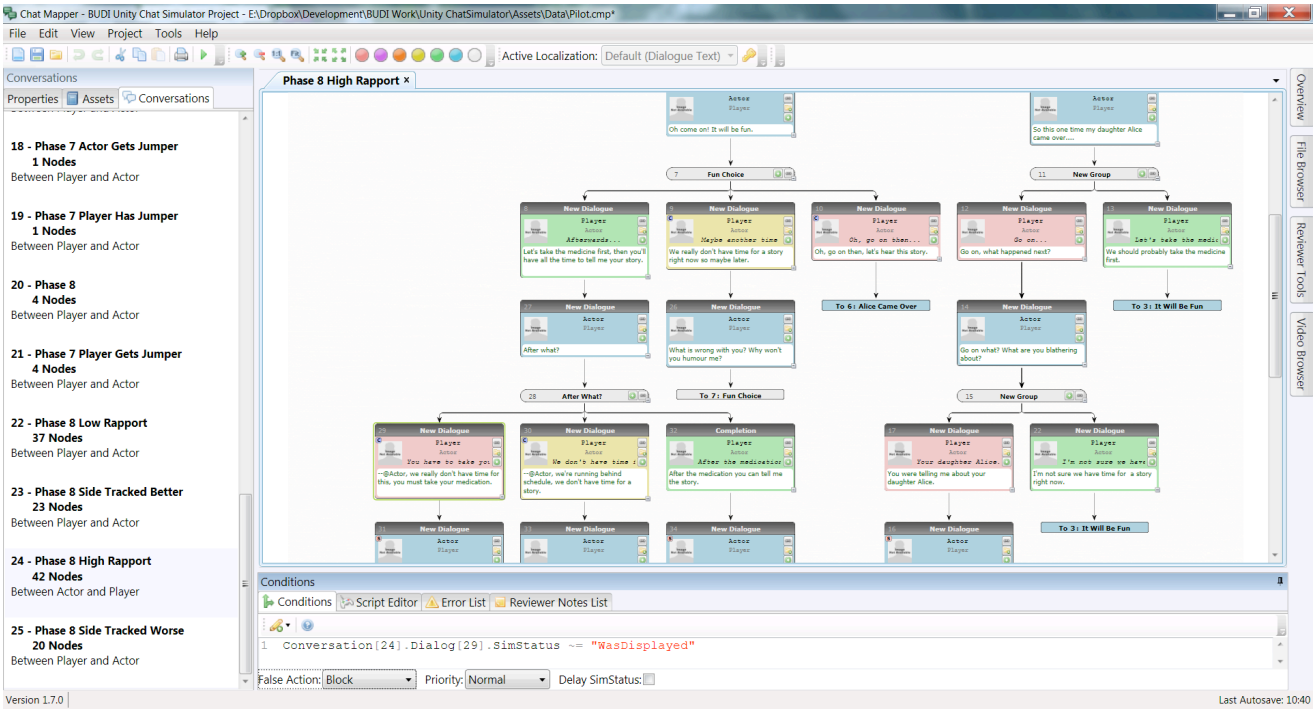

Figure 2: Using Chat Mapper (Urban Brain Studios, 2014) to create the dialogue trees

5. The patient will proceed to tell the player about her childhood. The player must be understanding and keep the patient on track without confusing her.
6. The patient will proceed to tell the player a long and confusing story about how she lost her glasses. By keeping the patient on track and dealing with the confusing tale compassionately, rapport will increase.
7. The patient is cold and will put a jumper on. However, in her confusion she turns off the lights and forgets what she was doing. The player must turn on the lights before engaging with her and ensure she does not heighten the patient's hysterical state by feeding off of it.
8. The player must convince the patient to take her medication. Depending on the rapport and psychological state, this task will range from trivial to demanding.

In Figure 3(a), we can see the phases that the students reached before the time limit expired. As can be seen, the majority of the players completed the scenario within the allotted time limit. Of particular note is the spike at Phase 7 where 14 players ended the scenario prematurely due to a bug that did not facilitate completion of that phase . The rest finished between Phase 1 and Phase 6, with the lower phase finishes highlighting the issues that some students (particularly those with little to no experience of playing computer games) had with the control system and game mechanics.

In Figure 3(b), we can see the completion times for the 25 students that completed the scenario. The majority of students finished in less than 15 minutes, with 11 to 14 minutes being the typical time. The exceptional time of one student (under 4 minutes) along with the portion of students who finished under 10 minutes suggests that those with significant computer game literacy (and thus not encumbered by an unfamiliar control system) had a notable advantage over those who didn't.

Our qualitative feedback highlighted that, whilst the students felt the patient's dialogue was realistic for someone with dementia, the wording of some of the dialogue options to choose from were not what they wanted to say to the patient. With regards to the mechanics and controls of the game itself, a few students noted that they found the control system difficult, as reflected in the phase completions in Figure 3(a).

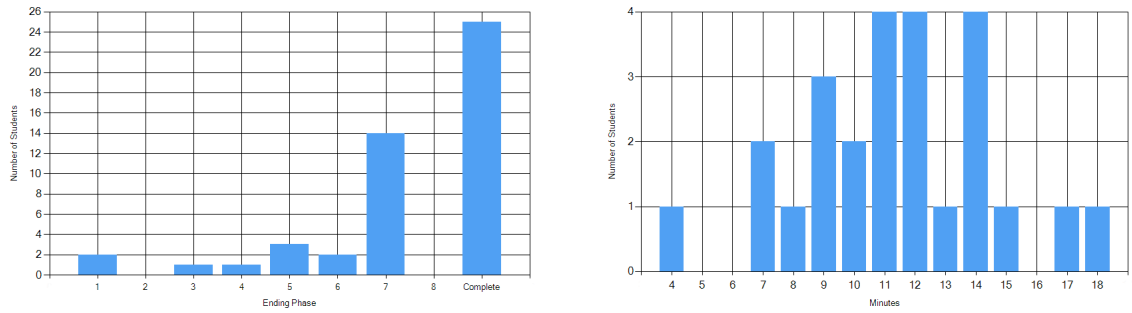

Figure 3 a and b: ***The phases which students ended on before the time limit expired (3) and the time taken for those who completed the scenario (4)***

Conclusion

In this paper we have discussed a serious game for training nurses in dealing with dementia patients in a compassionate and person-orientated care. Although the majority of students completed the pilot scenario and felt the experience was comparable to that of dealing with real dementia patients, there is room for improvement with regards to the control system utilized. For the pilot, paper handouts detailing the controls and mechanics were given to the students prior to testing but future developments will include an interactive tutorial to expose the students to the controls in an unscored training environment. As some students felt that some of the dialogue options presented to the player were not what they wished to choose, further research will be carried out in this area.

References

Baranowski, T., Buday, R., Thompson, D.I., Baranowski, J. (2008) Playing for real – video games and stories for health-related behavior change. *American Journal of Preventive Medicine*, 34: 1,74-82+.

Bouchard, B., Imbeault, F., Bouzouane, A., Menelas, B-A. J. (2012) *Developing Serious Games Specifically Adapted to People Suffering from Alzheimer.* Proceedings of the Third International Conference on Serious Games Development and Applications, SGDA'12, 243-254, Berlin, Heidelberg. Springer-Verlag.

Department of Health (2013) *Improving Care for People with Dementia*. Available from: https://www.gov.uk/government/policies/ improving-care-for-people-with-dementia

Graafland, M., Schraagen, J.M., Schijven, M.P. (2012) Systematic review of serious games for medical education and surgical skills training. *British Journal of Surgery*, 99: 10, 1322-1330.

Ierusalimschy, R. (2014) *Lua scripting language*. Available from: http://www.lua.org/

Imbeault, F., Bouchard, B., Bouzouane, A. (2011) *Serious Games in Cognitive Training for Alzheimer's Patients.* Serious Games and Applications for Health (SeGAH), 2011 IEEE 1st International Conference, 1-8.

Kato, P.M. (2010) Video games in health care: closing the gap. *Review of General Psychology*, 14: 2, 113-121.

Mayer, I., Bekebrede, G., Harteveld, C., Warmelink, H., Zhou, Q., van Ruijven, T., Lo, J., Kortmann, R., Wenzler, I. (2014) The research and evaluation of serious games: toward a comprehensive methodology. *British Journal of Educational Technology*, 45: 3, 502-527.

McCallum, S. (2012) Gamification and serious games for personalized health. *Studies in health technology and informatics*, 117.

McCallum, S., Boletsis, C. (2013) *Dementia Games: A literature review of dementia-related serious games.* Serious Games Development and Applications, volume 8101 of Lecture Notes in Computer Science, 15-27. Berlin, Heidelberg. Springer-Verlag.

Robert, P.H., König, A., Amieva, H., Andrieu, S., Bremond, F., Bullock, R., Ceccaldi, M., Dubois, B., Gauthier, S., Kenigsberg, P.A., Nave, S., Orgogozo, J. M., Piano, J., Benoit, M., Touchon, J., Vellas, B., Yesavage, J., Manera, V. (2014) Recommendations for the use of serious games in people with alzheimer's disease, related disorders and frailty. *Frontiers in Aging Neuroscience*, 6.

Sisarica, A., Maiden, N., Morosini, D., Panesse, L., Pudney, K., Rose, M. (2013) *Creativity Support in a Serious Game for Dementia Care.* Proceedings of the 9th ACM Conference on Creativity & Cognition, C& C '13, 349-352, New York, NY, USA: ACM.

Stapleton, A.J. (2004) *Serious Games: Serious opportunities.* Australian Game Developers? Conference, Academic Summit, Melbourne.

Susi, T., Johannesson, M., Backlund, P. (2007) *Serious games: An overview.*

Unity Technologies (2014a) *Unity 3d.* http://unity3d.com/

Unity Technologies (2014b) *Unity 3d asset store.* https://www.assetstore.unity3d.com/en/

Urban Brain Studios (2014) *Chat mapper.* http://www.chatmapper.com/

van Rijn, H., van Hoof, J., Stappers, P.J. (2009) Designing leisure products for people with dementia: Developing 'the chitchatters' game. *American Journal of Alzheimer's Disease and Other Dementias*, 25.

Theme papers

T14

Innovation and enhancement through art and story: Adapting pedagogies to prepare mature nursing students for degree level study

Sue Griffith, Lecturer and Practice Educator; Kate Powis, Lecturer, St Helena Hospice, Colchester, UK

Background

The difficulty of bridging the gap from 'A' level to degree level writing is well documented for students moving from college to university (Wingate, 2006). Many universities offer study skills courses and advice to help address this issue (Wingate, 2006). However, registered nurses who have qualified in a system where they have studied at diploma level at most and possibly have not undertaken 'A' level study, face unique problems which have not been comprehensively addressed by current published research. Many have memories of attending schools where they were made to feel unintelligent, and were told that they would never be 'academic'. Added to this, assignments within a nursing degree are often based on student's evaluating their own practice. A frequent request at this stage is 'how can I write about my own experience without describing it?'

This paper will examine how one University partner college addressed this issue by adapting their existing preparatory study skills day to incorporate two new approaches.

Method

In the spirit of 'Action Research' (McNiff, 2002) the pedagogical changes were made to two lecturers' practices, evaluated by the lecturers themselves through reflection, and by the students' completion of an evaluation form. These approaches will be re-evaluated and refined during the course of the students' studies. The new initiatives were developed specifically to demonstrate to students how the skills of critical analysis and incorporating evidence into accounts of practice could be developed.

1. Paintings by Robert Priseman were given to students, divided into groups, in order to highlight the students' ability to identify and analyse what is not always seen at first glance. They were encouraged to ask the basic questions of 'Who/What/Where/When and How' of firstly the paintings, then additional information as they accessed it in stages. Finally each group gave a short presentation of what they had found out, and how they had gone about it.
2. Building on this, three versions of a well-known fairy-tale were given to the groups to study and 'mark' using the university's marking criteria. One account was purely descriptive, the second contained some references and direct quotes, whilst the third had been written in such a way that the whole piece was supported by references to other work, and was no longer descriptive.

Although these were new approaches devised by the lecturers, they were based on established principles of putting the student at the centre of the feedback process and demonstrating how to 'close the gap' between their own performance and 'good performance' (Nicol and Macfarlane-Dick, 2006). They also address the major principles of feedback, by showing the students where they are going and how to get there (Hattie and Timperley, 2007). Although Duffy *et al.* (2009) present a good case for using literature to demonstrate critical analysis, pictures and fairy-tales were chosen in this instance to maintain the focus on the analysis, without being distracted by the content of written work. Marking the written pieces together helped the students to develop their ability to interpret the criteria, and understand what is expected of them; an approach which will embed these principles and help to prepare them for their whole degree pathway (Wingate, 2006).

Results

Evaluation of the sessions demonstrated the value of these two new approaches. Lecturers and students have referred back to these pieces of work during subsequent teaching, thereby affirming and reinforcing the learning.

Conclusion

Re-visiting and refreshing pedagogies prior to each session, with constant re-evaluation of their effectiveness can ensure that new and effective approaches to old problems are found.

References

Duffy, K., Hastie, E., McCallum, J., Ness, V., Price, L. (2009) Academic writing: using literature to demonstrate critical analysis. *Nursing Standard*, 23: 47, 35-40.

Hattie, D., Timperley, H. (2007) The Power of Feedback. *Review of Educational Research*, 77: 1, 81-112.

McNiff, J. (2002) *Action Research for Professional Development: Concise advice for new action researchers* (3rd edn). Available from: http://www.jeanmcniff.com/ar-booklet.asp (accessed on 15 January 2014).

Nicol, D.J., Mcfarlane-Dick, D. (2006) Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, 31: 2, 199-218.

Wingate, U. (2006) Doing away with 'study skills'. *Teaching in Higher Education*, 11: 4, 457-469.

Key words:

- study skills
- degree level studies
- education methods
- nurse education.

How this contributes to knowledge development within this theme:

- using the action research approach ensures that this study adds to the small body of evidence on this specific, under-researched area
- this evaluation of a novel strategy offers other educators a new approach to tackle an existing problem
- this paper will add to the debate around how study skills can be embedded into the whole curriculum, and not just a 'bolt-on' approach at the beginning of the course.

T15

Cultivating creative learners in higher education: Engaging students in anatomy through art

Katherine Rogers, Lecturer; Maggie Bennett, Lecturer, Queen's University, Belfast, UK

Introduction

Nursing and midwifery students often struggle to engage with bioscience modules because they lack confidence in their ability to study science (Fell *et al.*, 2012). Consequently many have difficulty applying anatomical and physiological information, essential to providing safe and effective patient care (Rogers, 2014; Rogers and Sterling, 2012); therefore a need exists for nurse educators to explore different methods of delivery of these important topics to enhance current curricula (Johnston, 2010). Inspired by the reported success of creative methods to enhance the teaching and learning of anatomy in medical education (Noel, 2013; Finn and McLachlan, 2010), this pilot study engaged nursing students in anatomy through the art of felt. The project was underpinned by the principles of good practice in undergraduate education, staff-student engagement, cooperation among students, active learning, prompt feedback, time on task, high expectations and respect for diverse learning styles (Chickering and Gamson, 1987).

Method

Undergraduate student nurses from Queen's University, Belfast, enrolled in the year one 'Health and Wellbeing' model were invited to participate in the project. Over a six week period the student volunteers worked in partnership with teaching staff to construct individual, unique, three dimensional felt models of the upper body. Students researched the agreed topic for each week in terms of anatomical structure, location, tissue composition and vascular access. Creativity was encouraged in relation to the colour and texture of materials used.

The evaluation of the project was based on the four level model detailed by Kirkpatrick and Kirkpatrick (2006) and included both quantitative and qualitative analysis:

- pre and post knowledge scores
- self-rated confidence
- student reflections on the application of learning to practice.

Results

At the end of the project students had created felt pieces reflective of their learning throughout the project and 'memorable' three dimensional mental maps of the human anatomy. Evaluation revealed not only acquisition of anatomical knowledge, but the wider benefits of actively engaging in creative learning with other students and faculty teaching staff.

The project has enabled nurse educators to assess the impact of innovative methods for delivery of these important topics.

References

Chickering, A.W., Gamson, Z.F. (1987) Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin,* 39: 7, 3-7.

Fell, P., Borland, G., Lynne, V. (2012) Lab versus lectures: can lab based practical sessions improve nursing students' learning of bioscience? *Health and Social Care Education,* 1: 1, 22-24.

Finn, G.M., McLachlan, J.C. (2010) A qualitative study of student responses to body painting. *Anatomical Sciences Education,* 3: 1, 33-38.

Johnston, A.N.B. (2010) Anatomy for nurses: providing students with the best learning experience. *Nurse Education in Practice,* 10: 4, 222-226.

Kirkpatrick, D.L., Kirkpatrick, J.D. (2006) *Evaluating Training Programs: The four levels* (3rd edn). San Francisco: Berrett-Koehler.

Noel, G.P.J.C. (2013) A novel patchwork model used in lecture and laboratory to teach the three dimensional organisation of mesenteries. *Anatomical Sciences Education,* 6: 1, 67-71.

Rogers, K.M.A. (2014) A preliminary evaluation of a new life science module for year one nursing and midwifery students. *Health and Social Care Education,* 3: 1, 46-47.

Rogers, K.M.A., Sterling, W.J. (2012) The science of wellbeing. *Nursing Standard,* 26: 47, 64.

Key words:
- creativity
- active teaching and learning
- student engagement
- anatomy
- undergraduate nurse education.

How this contributes to knowledge development in this theme:
- creative interactive teaching strategies can create 'memorable' experiences for students which build learning and confidence in challenging subject areas
- this demonstrates innovative, student-centred learning that actively engages participants and facilitates deeper learning of key concepts in nurse education
- nurse educators need to assess the wider impact of innovative teaching strategies on student learning.

T16

Dementia care: Preparing the nurses of the future

Margaret Brown, Senior Lecturer; Mhairi Kidd, Senior Lecturer; Allan Donnell, Senior Lecturer; Alison McLachlan, Senior Lecturer, University of the West of Scotland, Hamilton, UK

This entry summarises and gives examples of how we integrated the journey of the person with dementia into the pre-registration programme in the largest centre for nurse education in Scotland. The Scottish government published a skills and knowledge framework in 2011, called Promoting Excellence (2011a), developed to support all dementia related learning programmes. The team here have produced a programme-based on this knowledge and skills framework and mapped to the main Scottish policy documents about dementia. These include Scotland's National Dementia Strategy (2010), Standards of Care for Dementia in Scotland (2011b) and Scotland's National Dementia Strategy 2013-2014 (2013). The university has committed to all our nursing students reaching a minimum of the Skilled level of the Promoting Excellence KSF standards on graduation. This presentation will explain how we developed the programme and introduce some of the research results from two of the learning experiences students undertake.

The programme is based on a spiral curriculum using unfolding scenarios where a family group, centred on Dorothy, who has dementia, helps students apply their learning. All four campus sites have a highly adapted, home like environment that provides a setting for the student learning experience called the Domus Initiative. Here students learn about the built environment and the impact on the person with dementia. They have the opportunity to engage with a person-centred approach to risk enablement, including the use of support from telehealth and telecare.

As part of a blended learning approach, simulation is a thread throughout the programme and we have introduced an experience which represents some of the cognitive, sensory and mobility challenges the person with dementia might be faced by in their daily life. This experience has had a dramatic impact on the students, who have expressed disbelief and distress on reflecting about this experience, in relation to their own care and practice. This experience has been measured in a research study to examine the impact on students' attitudes and values.

In a pilot research project, in partnership with local schools, nursing students from year one and year three deliver learning about dementia to pupils in primary and secondary schools. The selected schools then integrate the learning acquired from this dementia awareness workshop into daily classroom activities. The workshop and artwork and poetry produced by the children have been developed into an exhibit entitled 'Dementia: through the eyes of a child' and has been on show at the Scotland Street School Museum, Glasgow.

References

Scottish Government (2010) *Scotland's National Dementia Strategy*. Available from: http://www.scotland.gov.uk/Publications/2010/09/10151751/0 (accessed on 18 January 2014).

Scottish Government (2011a) *Promoting Excellence: A framework for all health and social services staff working with people with dementia, their families and carers*. Available from: http://www.scotland.gov.uk/Resource/Doc/350174/0117211.pdf (accessed on 18 January 2014).

Scottish Government (2011b) *Standards of Care for Dementia in Scotland.* Available from: http://www.scotland.gov.uk/Resource/Doc/350188/0117212.pdf (accessed on 18 January 2014).

Scottish Government (2013) *Scotland's National Dementia Strategy*. Available from: http://www.scotland.gov.uk/Topics/Health/Services/Mental-Health/Dementia/DementiaStrategy1316 (accessed on 18 January 2014).

Key words:
- dementia
- pre-registration
- environment
- simulation
- evidence.

How this contributes to knowledge development in this theme:
- integration of police and strategy on dementia into a pre-registration nursing programme
- creating a fusion of cognitive, affective and sensory learning about dementia
- developing iterative evidence from elements of the programme.

T17

Using nursing students' clinical research seminar as a platform for changing hospital healthcare workers' hand hygiene behavior: Is it feasible?

Nancy Hurvitz, Ben Gurion University of the Negev; Ilana Livshiz-Riven, Ben Gurion University of the Negev and Soroka University Medical Center; Ronit Nativ, Soroka University Medical Center; Alina Kuperman, Soroka University Medical Center; Vlada Shor, Ben Gurion University of the Negev; Leah Cohen, Soroka University Medical Center, Israel

Twenty-first century healthcare delivery systems are undergoing rapid change and development. Nursing educators today are endeavoring to prepare students for this complex clinical reality. Educators are expected to equip young nursing graduates with the necessary skills to facilitate change in a dynamic workplace. Many educators have called for curriculum change and greater emphasis on learner-centered activities. Healthcare Associated Infections have become one of the major issues facing present clinical settings. The use of simulation to develop clinical and critical thinking skills is widely accepted in nursing education and practice. The aim of this project was to evaluate the feasibility of student led simulation in a clinical setting. This paper will present an innovative approach to improve nurses' compliance with hand hygiene guidelines.

Method
A clinical research seminar composed of 3 semesters (6-credit) aims to enhance clinical reasoning and teach research methodology. The course is given to 3rd and 4th year baccalaureate nursing students with a choice among several topics. The subject of the current seminar is infection control and prevention, specifically the issue of hand hygiene compliance. The seminar intervention was carried out in the gynecology-obstetrics division in a large university affiliated hospital. During the first semester students are taught to read and evaluate evidence critically and write a literature review, with bibliography, on factors and strategies affecting hand hygiene, according to academic style and standards. They also performed an initial assessment using the Israel Ministry of Health hand hygiene observation tool. The course instructors, hospital nurse managers and students developed simulation scenarios jointly. At the beginning of the second semester the instructors prepared the students to guide simulation sessions through lectures and practice exercises. Subsequently the students led the simulation sessions and debriefings with nurses. The students worked in pairs; each pair led one simulation session with 10-12 nurses, supervised by the course instructor. Both nurses and students filled out feedback questionnaires. The nurses' feedback tool was comprised five questions on a 5-point liker scale evaluating simulation effectiveness and the importance of the subject. The students answered 12 questions regarding the seminar experience, also on a 5-point liker scale. The final semester (in process) includes a second round of observations and focuses mainly on writing a seminar paper using observation results and session descriptions. The students are challenged to analyze and present their findings.

Results
Seventeen students and 95 nurses (2 nurses from each department per week) participated in the process. Feedback was received from 15/17 students (88%) and 70/95 nurses (74%). The majority of the students (80%) reported that the academic reading and writing improved their understanding of the research process. Most of them (82%) discovered that

simulation is an effective tool to bring about behavioral changes in the clinical settings. Additionally 78% believed that appropriately trained students could guide such sessions with hospital staff. However, only half (54%) felt that they received sufficient preparation. The nurses' feedback was largely positive as well; many (94%) thought that the simulation helped them rethink common actions. The scenarios encouraged self-awareness and recognition of the subjects' importance (99%). Both students and nurses added mainly positive comments on the feedback forms. The second round of observations will soon be carried out.

Conclusions
Infection control and prevention is an issue of great concern in today's healthcare systems. Simulation is known to be an effective teaching method and the current seminar demonstrated that students could succeed as simulation leaders and facilitate behavior change among healthcare workers.

Key words:
- infection control
- student-led simulation
- clinical research seminar.

How this contributes to knowledge development within this theme:
- student-led simulation is feasible in clinical settings
- student-led simulation is a valuable educational method
- students and hospital staff may benefit from clinical research seminars.

T18

Workshop on dignity and care in pregnancy and childbirth: Two sides of the story

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Both the Nursing Midwifery Council (2008) and Department of Health (2013) are unambiguous in their declaration that patients and services users must be cared for with dignity and respect. Yet recent national concerns have been raised which illustrate that too often service users receive care that falls below this standard (Birthrights, 2013). In addition a global survey by the White Ribbon Alliance (2012) identified that many pregnant women receive varying degrees of ill treatment. Other research confirms that many women describe their encounters with midwives as uncaring (Eliasson *et al.*, 2008; Bowser and Hill, 2010). There is evidence to show that more effective education around these subjects is required (Birthrights, 2013).

The challenge for healthcare education is whether the core values of caring, compassion can be taught or learned. At the University of the West of England a team of nurse and midwifery educationalists embraced the challenge by organising a series of workshops with the aim of exploring what 'dignity' and 'respect' mean in contemporary healthcare settings and to promote positive practice.

The purpose of our workshop around 'Dignity and respect in pregnancy and childbirth' was to present a series of creative triggers to highlight the potential for the loss of dignity, as well as to consider the needs to preserve dignity for both parents and the baby. The triggers included images, sounds, recordings and narratives and comprised negative and positive images in order to stimulate thought. A global perspective was also included with reference to campaigns for international promotion of dignity in childbirth.

The participants were then invited to consider their individual responses to the triggers and to debate the issues in relation to their own practice areas. The discussion was wide reaching and at the end the participants were enabled to identify key areas for practice improvement in order to develop personal organisational action plans. These were collated and evaluation identified that the workshop had successfully triggered consideration of some relevant issues and it was clear that the participants had been able to apply the content to their own areas of practice.

The success of the workshop we feel lies in the use of creative methods to stimulate emotional as well as cognitive response to the issues. By using real stories participants were able to recognise the importance of their contribution to dignity in healthcare. We aim to provide this workshop in further arenas including our midwifery programme.

The presentation will consider the context of this educational initiative, illustrate some of the creative triggers and explore the suggestions made by participants for practice.

References
Birthrights (2013) *Dignity in Childbirth; The Dignity survey 2013: Women's and midwives' experiences of UK maternity care.* Available from: http://www.birthrights.org.uk/campaigns/dignity-in-childbirth/ (accessed on 7 January 2013).

Bowser and Hill (2010) *Exploring Evidence for Disrespect and Abuse in Facility-based Childbirth*. Report of a Landscape Analysis. White Ribbon Alliance.

Department of Health (2013) *Treating Patients and Service Users with Respect, Dignity and Compassion.* London: HMSO.

Eliasson, M., Kaing, G., Von Post, I. (2008) Uncaring Midwives. *Nursing Ethics* 15: 4, 500-511.

Nursing and Midwifery Council (2008) *The Code: Standards of conduct, performance and ethics for nurses and midwives*. London: NMC.

White Ribbon Alliance (2012) *Respectful Maternity Care*. Available from: http://whiteribbonalliance.org/campaigns/respectful-maternity-care/ (accessed on 26 November 2013).

Key words:
- dignity education
- creativity
- reflection
- innovation.

How this contributes to knowledge development within this theme:
- development of education for dignified care for health professionals
- facilitation through use of creative triggers
- identification and reflection on learning points to improve practice settings.

T19

Facilitating and assessing student learning of professional values through digital stories

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Introduction
A lack of person-centredness and deficits in care and compassion, have recently been identified in a number of high profile reports (Francis, 2013; Keogh, 2013). Nursing students care for a variety of patients/service users within both NHS and non-NHS institutions. There is debate however, as to how useful written assignments can be in stimulating effective learning or making it explicit to others (Eraut, 2000). Facilitating a deeper understanding of the needs of others provides a simple yet powerful means by which effective as well as cognitive work-based learning can take place and professional knowledge and behaviour improved (Christiansen, 2010).

Aim
This paper will describe an innovative assessment method for gauging students' assimilation of professional values and the authentic learning gained within the clinical learning environment-based on a module entitled 'Enhancing Person-Centred Care'.

Approach
The module used action learning approaches in which students became co-creators of the knowledge gained from the module and actively participated in the direction of this project to ensure that it was relevant to their learning and professional development. Students developed a digital story-based on their personal experiences when caring for patients which helped them clarify their thinking and make sense of multiple and disparate clinical experiences by reviewing, analysing and ordering their thoughts and sharing these in a safe and creative but mutually challenging pedagogic space (Boarse, 2008).

Considerations
This method of assessment engages faculty staff and students in the use of new media and alternative ways of presenting information through narrative description and the selection of appropriate photographic images which portray the concepts and ideas being discussed. Students had full ownership of the module and responsibility for the portrayal of their stories once they had been introduced to the theoretical concepts of person-centred care and emotional intelligence. They were encouraged to share this learning with others, both in the form of this abstract, and the use of digital stories as the starting point for discussions with new applicants to subsequent nursing programmes about the values which underpin nursing.

Conclusion
Evaluation of digital stories as a teaching, learning and assessment method is in its infancy. A key learning point is that parallel changes in the learning and teaching culture of the department in which it is delivered are also occurring as teachers reflect on reified practices and engage in more creative teaching and assessment strategies whilst preparing their own digital stories as part of this process. This ensures that both student and teacher learn from each other. Its potential for transforming the student experience of learning is becoming clearer, as is the possibility of collaborating with other HEIs to evaluate this novel assessment method further.

References
Boarse, C. (2008) *Digital Storytelling for Reflection and Engagement: A study of the uses and potential of digital storytelling*. Available from: http://resources.glos.ac.uk/shareddata/dms/766118A3BCD42A03921A19B460003A91.doc (accessed on 8 April 2012).

Christiansen, A. (2010) Storytelling and professional learning: a phenomenographic study of students' experience of patient digital stories in nurse education. *Nurse Education Today*, 31: 289-293.

Eraut, M. (2000) Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70: 1, 113-136.

Francis, R. (2013) *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry: Executive summary*. London: HMSO. Available from: http://www.midstaffspublicinquiry.com/report (accessed on 7 February 2013).

Keogh, B. (2013) *Review into the Quality of Care and Treatment Provided in 14 Hospital Trusts in England: Overview report*. Available from: http://www.nhs.uk/NHSEngland/bruce-keogh-review/Documents/outcomes/keogh-review-final-report.pdf (accessed on 27 December 2013).

Key words:
- digital stories
- assessment
- emotional intelligence
- professional values.

How this contributes to knowledge development within this theme:
- new media offers alternative assessment methods which can support creative thinking about concepts for teachers and learners
- learner outputs can influence new learners through sharing in recruitment processes
- the pedagogic space can be more equally defined.

T20

Innovation in teaching and learning in health higher education: A Council of Deans of health survey

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Introduction
Universities delivering health education (nursing, midwifery and allied health professions) internationally need to recognise both the inter-dependency between the quality of healthcare and the quality of education, alongside the potential for education to support innovation.

This paper reports the findings of the first phase of a Higher Education Academy sponsored project undertaken by the United Kingdom Council of Deans of Health in 2012/13 that focused on identifying and sharing good practice on innovation in health education.

For the purposes of the project, innovative practice was defined as 'a new, sustainable approach that has led to an overall improvement in the student experience, and which is supported by evidence (for example student evaluations, commendations by internal or external review processes etc.)'. This could include recruitment, widening participation, retention and pastoral care, curricula and course development and design, applications of technology, management skills and institution structure, changes to the culture and process of innovation, or improving future employability of students.

Aims of Project:
- to support the exchange of innovative practice amongst United Kingdom Council of Deans of Health members across the four nations, highlighting examples of innovation from the academic literature and those provided by members
- to scope and identify a range of curriculum innovations currently in practice across the United Kingdom within the education of healthcare professionals.

Research Design and Methods
This project was a qualitative design and case study, data were collected through the completion of a structured template. A structured template was developed and pilot tested in order to capture examples from across the student experience that reflected a student's journey through their course, commencing with selection and recruitment and concluding with innovations to support employability and career development. In addition, two optional questions on developing a culture of innovation were asked within the template.

The 85 member organisations of the United Kingdom Council of Deans of Health were invited to participate in the project. Participants were asked to complete one template for each case study of innovation in teaching and learning within their nursing, midwifery or allied health professional courses.

Thematic data analysis was undertaken in the completed templates.

Findings
One hundred and twenty completed case study templates were returned from 39 universities across the four countries of the United Kingdom. These included Bachelors, Masters and Doctorate level courses and reflected a range of innovation in classroom and practice learning settings. In addition, 120 responses to the optional questions on the characteristics of the factors that facilitated and created barriers to education were received.

The findings of this project identified innovative practice across the education of health professionals in the key areas of: recruitment and selection, service user involvement, simulation in skills teaching and the use of mobile technology in clinical practice learning settings. It also highlighted the perceived major facilitators of and barriers to developing and embedding a culture of innovation in health education. Data showed that facilitators include management support, infrastructure, team working, freedom to explore ideas and relationships outside the institution. Barriers include time pressure and high workloads, the complexity of internal and external structures and the need to win over colleagues.

Conclusion
The findings of this project provide internationally relevant examples of the successes and challenges to overcome when developing innovation in teaching and learning among health students. The findings of this project provide clear evidence of how successful projects were developed across a wide range of courses and provide a foundation from which to further investigate the processes of embedding a culture of innovation in the education of health professionals.

Key words:
- curriculum innovations
- culture
- case studies.

How this contributes to knowledge development within this theme:
- this project provides evidence of successful innovation within the education of health professionals that is evidenced across Bachelors, Masters and Doctorate level courses
- the identification of the characteristics that facilitate or impede the development of innovation in education, supported by case studies, provides a foundation from which sustainable innovation in education can be developed in higher education courses
- the findings of this project are being further developed in the project's second phase to explore how a culture of innovation in teaching and learning can be embedded within higher education courses.

T21

Constructing a Paraversity using the Web

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Higher Education institutions across the globe are changing and changing fast. Several writers have expressed dismay, as well as seeing opportunities to move in different directions in response to what has been called the 'University in Ruins' (Readings, 1996). Gary Rolfe (2013), picking up on Readings' work addressed 'scholarship in the corporate university' and suggested that academics must 'dwell in the ruins' in an authentic and productive way through the development of a 'community of philosophers' who will dissent, subvert and challenge the 'corporate university' from within. One way to do that is to either ignore impact metrics and research exercise framework assessments or work alongside them. Tools for subversion are at hand. Social media, and the development of new academic websites such as Researchgate and academia.edu, give academics new ways to reach students, and indeed anybody, way beyond the physical confines of their campus. Accepting that there are issues of peer review and hence quality, these tools allow open access and may facilitate

dialogue in ways unheard of just a few years ago. This paper shares one experience of using such tools and suggests that this might then assist in building Rolfe's 'community of philosophers' or Zizek's (2008) 'liberated territories'.

References

Rolfe, G. (2013) *The University in Dissent*. London: Routledge.

Readings, B. (1996) *The University in Ruins*. Cambridge, MA: Harvard University Press.

Zizek, S. (2008) *Violence*. London: Profile.

Key words:

- paraversity
- web 2.0
- corporate university
- publishing.

How this contributes to knowledge development within this theme:

- shares experience of using web tools
- challenges the orthodoxy of publication
- critiques current educational ideas on the function of universities.