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# Fostering Self-assessment by Scaffolding in the Operating Department Practice ePortfolio

by Barbara Nicolls, Shane Roadnight and Danny Clarke  
Editor: Ellen Zeman

## INTRODUCTION

Self-assessment is defined as "the involvement of students in identifying standards and/or criteria to apply to their work and making judgments about the extent to which they have met these criteria and standards" (Boud, 1995, p. 12). In other words, self-assessment requires students to reflect on their own work and judge how well they have performed in relation to assessment criteria. Internalizing these criteria encourages deep rather than surface learning, greater autonomy (Brown, Rust, & Gibbs, 1994) and helps students better engage with feedback from tutors and peers. However, Boud warns that learning how to make effective judgments is an acquired skill because of the difficulty to articulate standards and criteria in a way which can be understood. Moreover, educators have discovered that engaging undergraduate

students in reflective practice through self-assessment to enhance their clinical decision making along with their Personal Professional Development Portfolio has been reported as an ongoing challenge (Owen, Sprick, & Sanderson, 2010; Sandars, 2009). Students cite a lack of knowledge and skills required for assessing their own work, or they view assessment as the responsibility of their tutors (University of Reading, n.d.). Rust, Price and O'Donovan (2003) support these observations by reporting that not only novice learners in the discipline, but also experts are challenged by self-assessment. Therefore, as highlighted by Boud (1995), for students to acquire the skill to make these judgments, educators must help students develop:

1. the understanding of and an appreciation for how the appropriate

standards and related criteria apply to authentic work scenarios, and

2. the capacity to make judgments about whether or not their own work does or does not meet these standards.

Wood, Bruner, & Ross (1976) explain that the interventions that educators design for student acquisition of self-assessment skills usually involves a kind of "scaffolding" process that enables a novice to carry out a task, which would be beyond his or her unassisted ability.

Scaffolding is defined as "a teaching strategy in which instruction begins at a level encouraging student success and provides the right amount of support to move students to a higher level of understanding" (Jafari & Kaufman, 2006, p. 557) in the zone of proximal development (ZPD). Vygotsky's concept of ZPD is explained as the difference between what students can do independently and what they can do with the teacher's guidance, or in collaboration with more capable peers (Vygotsky, 1978). Pedagogical scaffolding can enable interactions not only with humans but also with technology, resources and environments through structured activities that aim to move students progressively toward a stronger understanding of concepts and ultimately greater independence in the learning process. In so doing, teachers help students to develop as autonomous, independent lifelong learners. However, Bruner (1983) alerts educators to the gradual removal of the scaffolding to prevent student dependence and helplessness. Lifelong learning capabilities are developed through raising self-awareness which, in turn, is an outcome of reflective writing during which the writer examines interactions with colleagues, identifies knowledge gaps, ac-

knowledges weaknesses and finds ways to improve them (Kuiper & Pesut, 2004).

**Reflective writing has the potential to facilitate both self-reflection and integration of theory and practice. It also assists students in identifying the connection between personal experiences and professional values (Walmsley & Birkbeck, 2006).**

Because of the challenges inherent in engaging undergraduate students in reflective practice to enhance their clinical decision-making and personal / professional development, we propose a Personal, Professional Development Portfolio (PPDP) to facilitate reflective practice in the healthcare professions. Operating Department Practice (ODP) and other healthcare professions in the UK have a history of using portfolios within both undergraduate and postgraduate curricula to facilitate reflective practice and support learning and development (Owen et al., 2010; Sandars, 2009; Tochel et al., 2009) through reflective writing. The Joint Information Systems Committee (JISC, 2015) endorses this finding: eportfolios facilitate peer-to-peer and peer-to-tutor dialogue, private reflection and in some cases, assignment submission and receipt. This paper presents the scaffolding that is in place within the Diploma in Higher Education (HE) in ODP eportfolio to promote self-assessment of the achievement of the Standards of Proficiency through inquiry and reflection-centered strategies for professional learning.

## OPERATING DEPARTMENT PRACTICE – THE PROFESSION

Operating Department Practice is a relatively new profession, regulated since 2004 by the UK's Health and Care Professions Council (HCPC), formerly known as the Health Professions Council (HPC), which protects National Health Service users by keeping a register of health professionals who meet the standards for their training, professional skills, behavior and health. In order to ensure a high standard of skilled support during peri-operative care, the HCPC expects its practitioners to provide evidence of continuing personal and professional development (CPPD) through the maintenance of a portfolio of evidence, not only at the undergraduate level but also at the registrant level, to remain on the register. Practitioners' broad knowledge and skill base, including management and communication skills, is used in the assessment, delivery and evaluation of peri-operative care. As of September 2016, there were 12,986 registered ODPs in the UK working as members of multi-disciplinary teams that include surgeons, anaesthetists and

theatre nurses to ensure that surgery is as safe and effective as possible. Bucks New University is one of UK Higher Education Institutions (UKHEIs) that is currently offering the Diploma in HE in Operating Department practice. Table 1 shows the cohorts and the numbers since 2011.

## BACKGROUND OF THE BUCKS OPERATING DEPARTMENT PRACTICE EPORTFOLIO

Since 2011, the Bucks Diploma in HE in ODP curriculum has embedded the projectional eportfolio (Barnett, 2000; Moore, 2001), which is outward facing to employers and the economy rather than the introjectional, facing inwards to the discipline. The aim is to develop highly flexible, integrative and adaptive lifelong learners who are capable of keeping pace with the rapidly changing demands of new knowledge, emerging work roles and changing work environments. The process of creating this eportfolio, including reflective writing on academics, practice, and experiential learning, aims to prepare the students for employment in the hospital setting as registered ODPs through 40% theory and a minimum of 60% practice. Learning takes place in diverse environments across a range of settings in the National Health Service (NHS), the independent and voluntary health and social care sectors as shown in Figure 1.

Table 2 illustrates the structure of the two-year course with theory modules. Table 3 shows how, in Year 1 Semester 1, teaching of theory and concepts integrated with practice placements enables student ODPs to apply their learning in a real environment. This format is repeated

Table 1: Cohorts and numbers of ODPs recruited at Bucks New University

Year	Recruited	Graduated
2011	8	6
2012	35	23
2013	26	26
2014	35	30
2015	45	32

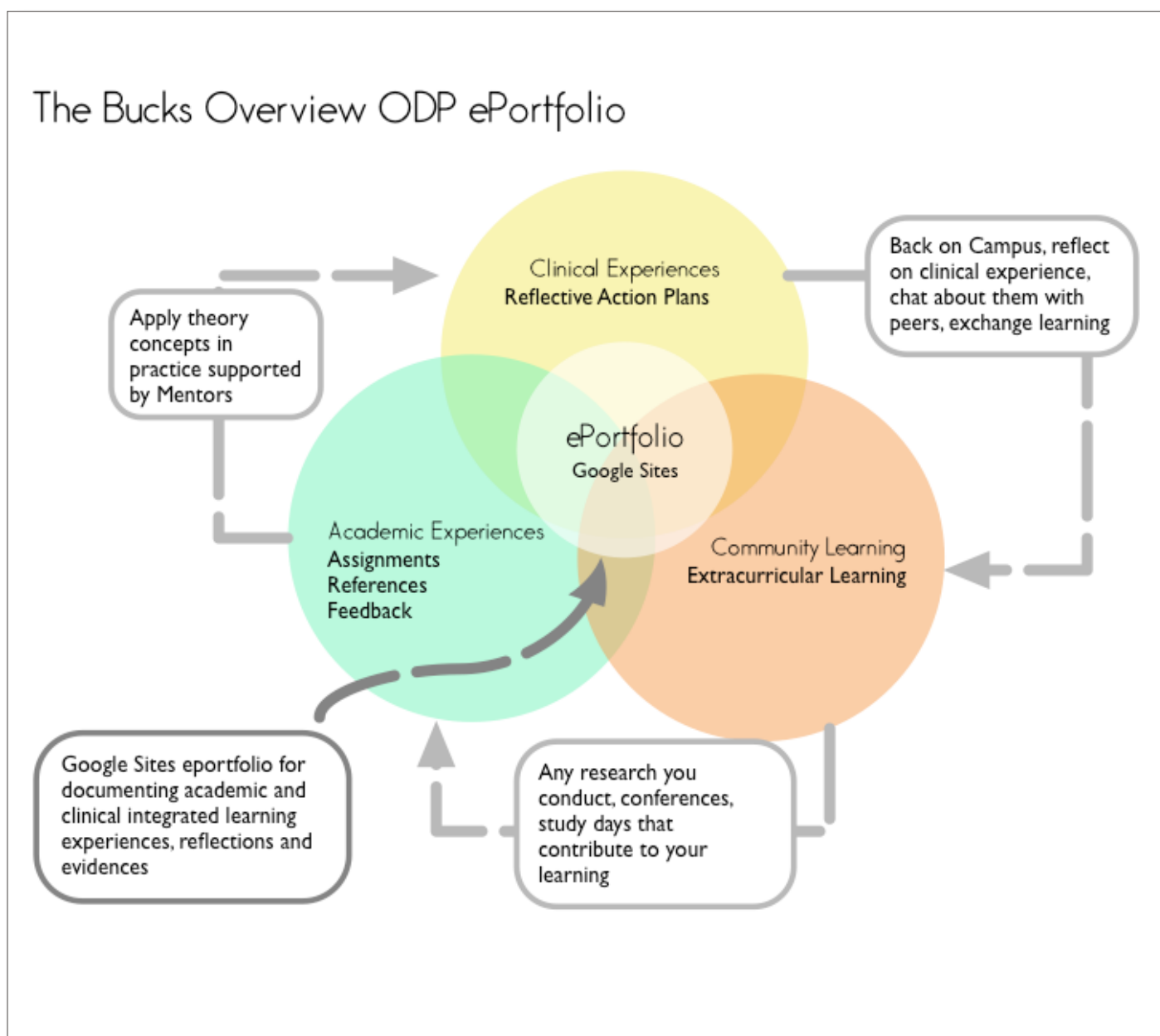


Figure 1: The holistic ODP ePortfolio

over the two-year course of study and is unique to the Bucks Diploma in HE in ODP. Returning to the campus on Debrief Days during the placement period allows the student ODPs the opportunity to reflect on their experience in a safe and familiar environment with the

course team and their peers and discover ways of doing things differently or confirm their understanding of the professional models of practice. This is an example of scaffolding in the ZPD to help the students integrate theory with practice.

Table 2: Structure of the Diploma in HE in ODP COURSE

Bucks Diploma in HE in Operating Department Practice				
Year 1 Sem 1	Level 4	CL 401  Fundamentals of Perioperative Practice Clinical Practice in Anesthetics, Surgery	CL 402  Principles & Practice of Anesthetics & Surgery Clinical Practice in Anesthetics, Surgery	ePortfolio induction, familiarization, exploration, collection, selection of evidence
Year 1 Sem 2	Level 4	CL 403  Developing Perioperative Practice Clinical Practice in Emergency Anesthetics, Surgery	CL 404  Anatomy & Physiology Clinical Practice in Emergency Anesthetics, Surgery	ePortfolio confidence building, making connections, reflection, self-assessment Summary of learning in Y1
Year 2 Sem 1	Level 5	CL 501  Advancing Perioperative Practice Clinical Practice in Complex Anesthetics, Surgery	CL 502  Applied Anatomy and Physiology Clinical Practice in Complex Anesthetics, Surgery	ePortfolio progression
Year 2 Sem 2	Level 5	CL 503  Specializing in Perioperative Care Clinical Practice in Specialist Anesthetics, Surgery	CL 504  Developing Leadership Qualities in the Perioperative Care Environment Clinical Practice in Specialist Anesthetics, Surgery	ePortfolio presentation with achievement of course learning outcomes

Week commencing	2015 Cohort Activity
14-Sep-15 21-Sep-15 28-Sep-15 05-Oct-15	Campus Study Block for CL401 & CL402
12-Oct-15	Clinical Placement
19-Oct-15	Debrief Day
26-Oct-15 02-Nov-15	Clinical Placement
09-Nov-15	Debrief Day
16-Nov-15	Clinical Placement
23-Nov-15 30-Nov-15 07-Dec-15	Campus Study Block for CL401 & CL402

Table 3: Delivery typical semester in the Diploma in HE in ODP course: Year 1 Semester 1

The curriculum is translated into the integrated eportfolio, which is structured around the course learning outcomes with evidence slotted in to demonstrate how the learning outcomes have been met (Figure 2). Thus, student ODPs develop a digitized collection of evidence relating to curricular and co-curricular achievement and reflection (Lorenzo & Ittleson, 2005). In its embrace of eportfolios for reflection, employability and lifelong learning, the Bucks ODP eportfolio is unique in that it

uses the free, institution-independent, student-owned Google Sites platform and is based on the concept that students will create a sense of personal ownership over their accomplishments, because "ownership engenders feelings of pride, responsibility and dedication" (Paris & Ayres, 1994, p. 10), allowing students to demonstrate continuous personal and professional development through self- and peer assessment in the eportfolio. Student ODPs share their individual Google Sites eportfolios with the course team during their learning journey rather than keeping it private to enable formative feedback on their reflections using the COMMENTS box in the eportfolio environment. The course team, therefore, promotes critical reflection upon both the course work and the practice experiences.

In order for the students to overcome the challenges of creating a web-based eportfolio with Google Sites, the course team developed cohort-specific templates (see Figure 2 for the template for cohort 2015). The course team's experience has been that students with techno-phobia become more confident when they successfully adopt and adapt the template and see their name on an online space. Lamson, Thomas, Aldrich, and King (2001) noted the

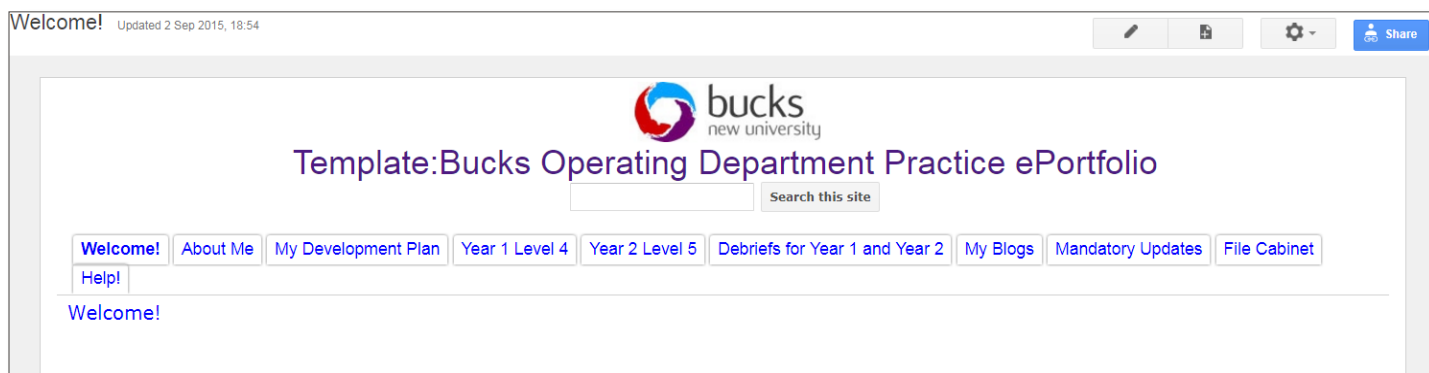


Figure 2: Bucks ODP eportfolio 2015 template

value of templates in creating eportfolios, a finding which the ODP eportfolio team strongly supports. However, in order to promote creativity and initiative in demonstrating individuality through the eportfolios, the course team has allowed changes in the eportfolio design provided students maintain the required content.

Table 4 below shows the functions of the different sections in the eportfolio where the student ODPs display their work.

The course team believes that not only does the ODP eportfolio serve a practical purpose

by allowing students to compile course work, reflect on academic and clinical experiences, and store and publish their work, it also helps students draw connections between academic learning and clinical practice and to integrate learning over time. As they select and organize work in their eportfolio, student ODPs are encouraged to envision the “big picture” of their academic journeys and to reflect on their overall goals and accomplishments. ePortfolios serve both a personal and a public function, helping students to synthesize work for themselves and allowing them to share that work with others.

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Table 4: Functions of the different sections in the ODP eportfolio

Welcome	Students’ welcome message includes the type of eportfolio, the purpose and the site navigation. Comments from viewers are invited.
About Me	Students introduce themselves to the viewers, describe their background and their reason for being on the course, often including current CVs, preferred learning styles, a SWOT analysis, pictures and favorite quotes related to learning.
My Development Plan	Students document the areas for academic and clinical development identified at the beginning of each semester using SMART goals to demonstrate the journey traveled from Year 1 Semester 1 to Year 2 Semester 2 until graduation.
Year 1 Level 4	Students reflect on their performance based on the feedback on all course work focusing on the academic skills and the clinical competence selected by the assignment. Identified development needs are recorded in My Development Plan. At the end of each year students also complete the Position Paper: a snapshot of their journey through the course, drawing together reflections on their personal and professional development resulting from the application of theoretical knowledge in practice, evaluating their current position and projecting forward to the future where they want to be.
Year 2 Level 5	As above.



Debriefs for Year 1 and Year 2	Students reflect on the clinical experience focusing on one of the fifteen HCPC Standards of Proficiency (HCPC, 2014). A minimum of ten reflections are required for submission at the end of the two years acknowledging the possibility of cases where two or three standards could be demonstrated in one experience e.g. communication, confidentiality, awareness of the impact of culture, equality and diversity on practice. The reflective writing in this section should provide evidence of their ability to think metacognitively about their profession and practice that would develop a deep conceptual understanding and also provide a basis for making more informed clinical based decisions.
My Blogs	Students use this page to record individual practice experiences similar to journal entries or a diary. They then select a critical incident linked to an appropriate HCPC Standard of Proficiency to reflect on from this log of entries on Debrief Days. A critical incident is anything that seems important to the student ODP in relation to their development as a student ODP. This includes times when things went well and times when they found operating department practice particularly challenging (adapted from Fade, n.d.). Blogging is similar to writing a journal which is commonly used as an educational tool within nursing programs but has an added value of using technology in line with the changing needs of health care and technology.
Mandatory Updates	Students document the practice skills updates required for fitness to practice as an ODP. They may use the skills acquired in their reflections.
File Cabinet	Students store their work within the allocated space in their eportfolios making them self-contained environments.
Help!	Students can find assistance with common technical issues: how to upload YouTube videos to the Filing Cabinet, how to create hyperlink from the Filing Cabinet to another page in the eportfolio, etc.

## SCAFFOLDING IN THE GOOGLE SITES EPORTFOLIO FOR SELF-ASSESSMENT

### Self-assessment of achievement of module learning outcomes

The ODP eportfolio is structured according to the learning outcomes of the course, as reflected in the template (Figure 2). Figure 3 shows a breakdown and the progressive nature of the year one and two modules, designed to help students visualize the modules they will need to complete. In this section students are required to reflect on feedback provided by the tutor on marked assignments in which students described, analyzed and explained an experience in practice in an academic style. During the self-assessment task, as an exercise for reflection on practice, students actively engage with the assessment criteria and the process of evaluating performance against those criteria in a way that leads to improvement. The aim is to help students develop as independent learners capable of monitoring and regulating their own learning, which results in deeper learning. The course team believes, in accordance with Nicol and Macfarlane-Dick (2006), that simply pro-

viding feedback does not promote deep learning. Therefore, creating opportunities for students to take responsibility for setting their own learning goals and evaluating progress in reaching those goals in the eportfolio environment fulfills the education requirement of Bucks New University's Strategic Plan 2016-21 (Bucks New University, 2016).

Figure 4 is an example of a student ODP's self-assessment of the achievement of the module learning outcomes using the Level 4 marking criteria recalling their experience in fulfilling each assignment. It demonstrates the scaffolding provided within each module to

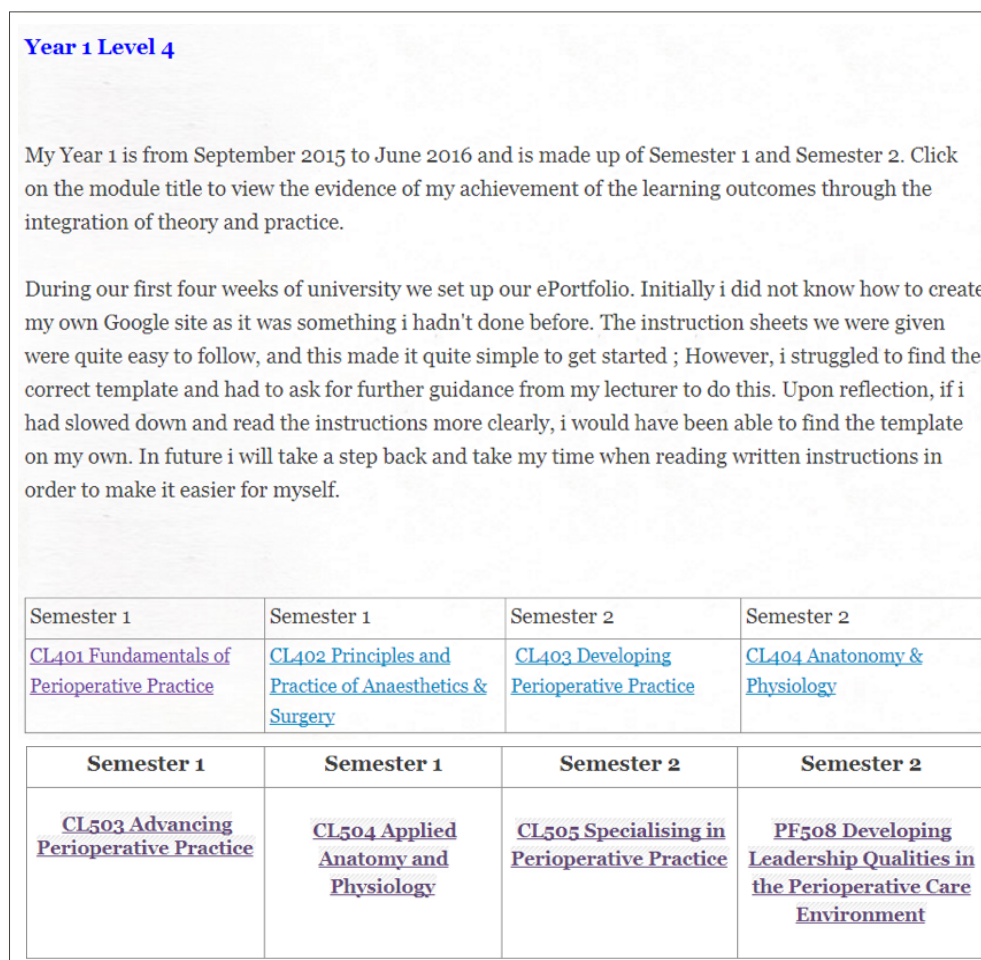


Figure 3: Breakdown of modules by semester over two years

help students self-evaluate their professional knowledge and academic skills in the assignment and to show them what a good academic essay looks like.

Scaffolding takes the form of timetabled eportfolio sessions during which the course team explain to students what self-assessment is, how to do it and why it may be useful to them. These sessions help students move through the integrated and dynamic process of reflection:

- first, when comparing tutor feedback with their evaluation of their own ability to observe, analyze and judge their

performance (O’ Brien, 2006, Chapter VIII, p. 74 in Jafari & Kaufman, 2006) based on the marking criteria, they may feel “surprise (Schon, 1991), disjuncture (Jarvis, 1992), or dissonance (Boyd & Fales, 1983) that all is not well” (Kennison, 2012);

- second, they begin to understand the causes of the successes and failures through dialogic discussions with the tutors; and
- third, it may result in a recalibration of their self-assessment before determining

### CL 401 Learning Outcomes: evidence of achievement & reflections

In the module **CL401 Fundamentals of Perioperative Practice**, I need to demonstrate achievement of the following Learning Outcomes through 3 pieces of assessment:

1. Demonstrate a professional manner, in line with Trust protocols, professional guidelines and consider legal and ethical issues related to healthcare delivery.
2. Evaluate the use of team working and communication in the peri-operative environment.
3. Demonstrate knowledge of the underlying principles associated with peri-operative care.
4. Have an understanding of the typical patient pathway and be able to make judgements on the patient experience.
5. Demonstrate the development of clinical skill in line with the competencies for this module
6. Develop basic competence and skills in the peri-operative environment and to begin engagement in the concept of lifelong learning, through the use of their PDP (ePortfolio).

Here is my evidence and reflection on it.

*(create links to your evidence in the File Cabinet and reflection in the Reflections page)*

1. Reflection on the marked presentation
2. Reflection the marked essay
3. Evaluation of clinical placement focussing on this module

[This is a reflection on my marked essay](#)

[For this assignment i had to create a presentation. At the time of giving the presentation, i was very nervous. I am not used to speaking in front of a group of people and I can remember feeling quite clammy before having to give my presentation. I practised giving my presentation in front of my family at home beforehand, this was so i could get used to speaking in front of people. I think by practising my presentation i was able to build up my confidence, it also ensured i knew what i was going to say and what was coming next. Reflecting upon the slides i used, I think if i had to give a presentation again i would put less information onto them. Looking back over my presentation, i had a lot of information contained on some of my slides. This makes them more difficult to read and understand. I would also use idfferent colours for my presentation if i was to do it gain. This is because looking back, the backgrounds i used were quite bright, and when displayed on the overhead projector they became quite difficult to look at.](#)

[I was unsure whether I had met the learning outcomes as reflective writing was a new expereince for me. I had to learn how to write reflectively and i struggled with this initially. I did not understand the reflective writing and found it very difficult to write in accordance with](#)

Figure 4: Student reflections on the feedback on module assessment

the strategy for improvement and learning success, giving them a fresh perspective or new learning (Kennison, 2012; Olin & Sullivan, 2004).

The majority of year-one student narratives in the eportfolios demonstrated that the students were beginning to learn the meaning of the professional knowledge including theories and models by trying to interpret them and apply them in their own work. The course team found that self-critique increased students' responsibility for their own learning and made their relationship with peers more collaborative. Students also appeared to have a clearer understanding of the assessment criteria and became more reflective in their judgments, as we observed in their reflective accounts. Students also became more interested in the tutor's comments and feedback than in grades.

Furthermore, the course team found that by the second year, self-evaluation of the achievement of learning outcomes had become second nature for this cohort of ODPs, which can be attributed to the embedded reflective tasks in the ODP eportfolio space as shown in Figure 5. The ODP eportfolio could, therefore, be described as a "Learning Portfolio" (Commander & Valeri-Gold, 2001), as it invites the students to participate in self-assessment of their growth and development in their learning journey and helps them set goals and devise strategies to be successful despite the structured nature of the eportfolio, intentionally created to meet predefined expectations (Stevenson, 2006).

## Self-assessment of achievement of the HCPC Standards of Proficiency

The Standards of Proficiency (SoP) are the professional standards which every registrant must meet in order to become registered and must continue to meet in order to maintain registration. These standards set safe and effective practice in the professions regulated by the HCPC and are the threshold standards considered necessary to protect members of the public (HCPC, 2014). Student ODPs need to demonstrate what they must know, understand and be able to do by the time they complete their training at Bucks in order to register with the HCPC. Through reflective writing, the course team aims to enable the students to explore their understanding of their actions and experiences, and the impact on themselves and others. They are expected to do this by integrating experiential and academic learning as part of an ongoing process of meaningful knowledge construction.

To facilitate the integrative learning, the course team has structured Debrief Day eportfolio sessions based on the Learning Communities model underpinned by the pedagogical theory of integrating reflection (constructivism) through shared and student-centered learning (Dewey, 2016; Vygotsky, 1978). Here integrative learning refers to how students connect theoretical learning from modules with their practice experiences to synthesize and transfer discovery and realization to new, complex situations within and beyond the safe learning environment.

On a typical Debrief Day students receive a verbal prompt to assist with reflection on their practice experiences, for example:

- Select an experience from practice recorded in My Blogs; this will be a critical incident as it would be significant to you in some way
- Record:
  - What the situation was
  - What you did in it
  - What happened as a result of your actions
  - A reflection on the situation or event and the process by which it unfolded, identifying any knowledge, understanding and/or ability to practice lawfully, safely and effectively as a student ODP in relation to a HCPC generic SoP that presents your chosen area and ensure you demonstrate understanding of the ODP profession specific standards
- Record your development needs in My Development Plan

The eportfolio facilitator and an ODP professional are always present in the computer suite as “guides on the side” rather than “sages on the stage,” facilitating the technical or the professional aspects of working in the virtual environment through dialogue with individual or groups of students. The presence of the instructors seems to ensure that students engage with the content of the session, their tutors and their peers. More importantly, the course team believes that learning takes place most effectively in the company and with the guidance of those who are only slightly more advanced in their learning (Vygotsky, 1978).

During the Debrief Day eportfolio session, students appear to develop a sense of professional community, while being challenged to con-

sider things more deeply, and to learn from others’ experiences. In year one, the students relied heavily on the course team to facilitate the process of making a reflective critique of their practice but the examples below show that as they progressed through their placements they became more and more autonomous in this respect. The course team’s powerful and constructive questioning technique could have facilitated effective reflection on action. This questioning could have enabled students to identify their strengths and weaknesses and to devise an action plan to ensure good progress. The students commented that the dialogic nature of the questioning process helped them to summarize the topic and discussion points during the one-hour session and refine the reflection later in their own time. Therefore, as Fade (n.d.) argues, time and questioning style are the two influencers for the success of facilitated reflection.

Figure 5 is an example of a year-two reflection on a selected SoP. *The student’s name has not been included to maintain confidentiality.*

From the reflections above, it could be argued that the oral prompts in Debrief Day eportfolio sessions helped the student build and create knowledge: she applied lecture constructs in her practice context and came up with plausible explanations and solutions to realistic problems. As Gagnon and Collay (2001) explain, the student assimilated the new experience in the theatre. Then, using her preferred learning style, and meaning making abilities, she rendered the unfamiliar familiar before accommodating new information demonstrating self-regulated learning; this in turn imposes a substantial burden on her and asks for a high responsibility of her as a

**“Be able to maintain fitness to practise”**

posted 27 Apr 2016, 11:36 by ..... [ updated 15 Jun 2017, 09:50 ]

I have chosen to reflect on this standard because I understand my profession requires career-long learning. As new evidence and techniques are researched it is important I keep up-to-date so my practice is well informed. My experience to date has highlighted to me that even though I feel I have learnt a considerable amount up until this point in my studies, I still have much to learn. During my placement I attended a role-play simulation session with an anaesthetist and other students. I played the ODP in a scenario where an unidentified anaesthetic complication arose with the patient and we had to identify the problem and take appropriate action. I found during the simulation that I could demonstrate some knowledge and understanding, but I required prompting to identify the complication and to choose the appropriate interventions.

This session highlighted to me areas of my practice where I lack some confidence and don't yet have the required skills or knowledge. This included how to identify key difficulties with the patient's airway, breathing and/or circulation using the 'ABCDE' approach to assess the patient. I felt quite disheartened that I wasn't able to act in this scenario without some guidance. However, it also motivated me to read around the subjects and look up specific topics such as how to identify if the patient is having laryngospasm and what action to take. This experience demonstrated to me why it is important as an ODP I keep my knowledge up to date throughout my career, especially as these scenarios are not a routine part of the role. Therefore I may forget how to deal with a complication if I am not regularly practicing it.

To address the gaps in my skills and knowledge I am going to undertake reading to understand common difficulties around airway, breathing and circulation in anaesthesia, and understand the recommended course of action to take. Specifically I am going to become familiar with the difficult intubation guidelines by the Difficult Airway Society (2015) which can be found here. I have identified this as one of my learning needs which can be viewed here. Additionally I want to participate in further simulation sessions to apply this knowledge in a role play simulation.

**“Be able to practise as an autonomous professional, exercising their own professional judgement”**

posted 1 Oct 2016, 17:33 by .....[ updated 12 Jun 2017, 12:11 ]

I have chosen to reflect on this standard as I have had the opportunity to practice autonomously, under the supervision of my mentor in the Post-Anaesthetic Care Unit (PACU). I was recovering a patient who had surgery under a general anaesthetic and the patient had been receiving prescribed oxygen through a facemask after their airway had been removed. Once the patient became awake and alert the facemask was removed to determine whether the patient's oxygen saturation levels (SpO<sub>2</sub>) remained above 94% on room air. However, as the patient fell asleep their SpO<sub>2</sub> levels were not maintained and I therefore decided to use a nasal cannula with a low flow of oxygen. Additionally the patient was experiencing pain, so I determined the level of pain using the verbal pain scale (Portenoy, Kanner and Davis, 1996) and referred the information to my mentor who was able to administer pain relief. As a result of my actions the patient's SpO<sub>2</sub> levels increased to 100% and their pain was effectively managed, so they were able to be discharged to the ward.

Williamson and Hoggart (2005) suggest however, the verbal scale using “mild, moderate and severe” options is not very sensitive to small differences in the patient's pain level, while the numerical scale using “0 to 10” is generally preferred by patients and is more sensitive. Therefore I could use the numerical scale to get a more sensitive understanding of the patient's pain level. In future as a student, I will continue to work within the limitations of my role and consult my mentor if I have any doubts about a patient's care. I will also consider a range of methods to determine patient pain levels based on the individual needs of each patient.

Figure 5: Student reflections on SoPs

student. The scaffold provided in the form of timetabled classroom support and guidance during placement gave the student ODPs the opportunity to examine their experience in the context of a dialogic process (Knowles, 1980) thus helping them to develop connections between the “abstract world” of concepts with the “real world” of personal experiences” (Gitterman, 2004, p. 96).

Unlike the self-assessment of the achievement of module learning outcomes where the artifact to be reflected on was the marked assignment and therefore, specified by the course team, in the self-assessment of the achievement of the HCPC SoP, the students themselves chose a practice experience to reflect on. According to the constructivist paradigm, students in this situation behaved as autonomous, self-aware, self-regulated and self-mediated thinkers which could be attributed to the verbal prompts during the eportfolio session on the Debrief Day. Moreover, as demonstrated in the study by Nguyen and Ikeda (2015), the scaffolding provided in the form of timetabled eportfolio sessions, the structured templates and the staged process of reflective writing may also have developed self-regulated learners. The two entries (Figure 5, see previous page) also demonstrate how the student made the first entries on the Debrief Day and then reviewed them later, in her own time, demonstrating the accessibility and approachability of the student-owned eportfolio.

On the other hand, providing students with a rubric for the self-assessment of the SoPs could have helped the students ensure the quality and depth of their reflections. Rubrics are defined as a set of rules or instructions for performing a certain task used for teachers for

assessment purposes and by students for self-evaluation (Flanigan & Amirian, 2006, Chapter XI, p. 102; Fritz, 2006, Chapter XXIII, p. 248 in Jafari & Kaufman (Eds.), 2006). The criteria and performance-level descriptions in rubrics would help students

1. understand what the desired performance looks like
2. understand how they would know to what extent they have performed on each criterion and
3. identify future development

Lassonde, Black, Miller, and Hanfu (2009) recommend that the reflective writing rubric contain the maintenance of a strong “I” voice when responding (text to self), using metacognitive understanding, demonstrating analysis, synthesis, and evaluation and, basing insight upon theory and practice.

## CONCLUSION AND FUTURE ACTIONS

Here we have demonstrated the efficacy of scaffolding within the eportfolio environment for helping students develop as professionals from the commencement of their learning programme at university. Students experienced a mixture of prescribed and self-selected artefacts in their eportfolio, both of which guided and motivated them to engage with the tasks in the eportfolio resulting in 32 remaining students from the original 45 handing in their ODP eportfolios for summative assessment in mid-July 2017. It was encouraging that the one-hour eportfolio sessions over the two-year course appeared to contribute to 29 students fulfilling all the requirements of the eportfolio assessment and demonstrating the skill for the

self-reporting of personal and professional experiences. The remaining 3 students, on the other hand, submitted incomplete eportfolios with descriptive narratives and were therefore required to resubmit. One important point noted was the lack of an overarching narrative to connect the academic and practice experiences to produce a reflective whole. The course team attribute this to the structure of the eportfolio template in which the different aspects of theory and practice in the reflective accounts were assessed separately. Therefore, instead of the spinal column type eportfolio emphasizing the original work of the students with the evidence used to support or illustrate the case being made as envisaged by the course team, the ODP 2015 eportfolio remains a toast rack (Endacott et al., 2004) described as a set of self-assessed assignments stacked by their progression through the learning programme.

As Lassonde et al. (2009) recommend, we will provide modelling, scaffolding and teaching of the professional content as well as reflective writing to help ensure successful transitions to practice. A rubric to self-assess achievement of the SoPs will clarify performance expectations and can help facilitate successful transition of new ODPs into practice. Thus, in the future, scaffolding for self-assessment in the eportfolio will be made explicit: to develop independent and autonomous learners we need to embed an explanation of self-assessment, as well as how and why it is done in the online environment rather than explain verbally. Feedback will be made through comments embedded in the eportfolio following student self-assessments rather than through verbal feedback in the eportfolio classroom. Devising a checklist requiring students to verify that they have met the basic criteria for the reflective accounts

in their eportfolios prior to submission will ensure engagement with the guidelines and encourage students to recognize the different elements of the eportfolio assessment.

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## AUTHOR BIOGRAPHY



Barbara Nicolls is a Senior Lecturer in the Learning Development Unit at Buckinghamshire New University. Barbara received the MSc in technology-enhanced learning with the dissertation on the role of academic staff in the learning eportfolio development in 2010. Since then she has

led Web 1.0 and Web 2.0 eportfolio use and implementation at Bucks mainly within health care courses by collaborating with discipline-specific academic staff designing customised templates delivering conceptual and technical workshops contributing to their CPD. Her advocacy for social constructivism is obvious at the Staff Development events and international eportfolio conferences where a concerted effort is made to showcase the contributions made by her collaborators for the success of their students' learning. Additionally, Barbara delivers and evaluates student eportfolio workshops which focus on pedagogy rather than the technology. Barbara was awarded the Bucks Fellowship Award 2015 for exceptional impact on learning and teaching across the university especially for her creativity in applying technology-enhanced learning approaches for student engagement with their academic development. She is also a Senior Fellow of the HEA demonstrating her sustained engagement with the UK Professional Standards Framework (UKPSF) highlighting a thorough understanding of effective approaches to learning and teaching.





Shane Roadnight spent twenty years as an Operating Department Practitioner (ODP) and has been a full time academic at Buckinghamshire New University for the last five years delivering both an undergraduate professional programme and three post registration professional

modules. Shane has gained a wide range of experiences that enable a transfer of knowledge in relation to the perioperative environment and critical care. This resume is supported with a foundation of scholarly activity including presenting at a range of conferences, both national and international with further activity seen through the authoring of a number of academic papers.

Throughout this journey, a single constant can be observed, creating a thread which links all of these activities together. The construction and development of the eportfolio for use within the ODP programme for both personal and professional development has been a hub from which a range of pathways have emerged allowing a recordable structure demonstrating achievement alongside advancing the use of technology within both fields.



Danny is a motivated registered nurse with more than 14 years of practical experience in the high-level care of patients in the operating department. Additional to this, Danny has been working in full time education for more than 3 years, teaching

on undergraduate and post graduate courses and modules. Aligned to this, Danny has presented at University and International conferences on the subject of student engagement with eportfolios.

Danny's research interests are on how to improve student engagement with the eportfolio and the use of marking rubrics for the assessment of the eportfolio. These interests have led to Danny developing novel ways of designing the eportfolio to benefit the professional growth of students both clinically and academically.

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