# Faculty of Health



## Expanding opportunities for students formative and summative assessment

Gibbs and Simpson (2005) argue that assessment should be designed firstly to support learning that is worthwhile and secondly to meet intended learning outcomes and assessment criteria. Race (2007) asserts that as educators, one of the most important things we do for our students is to assess their work and/or performance. While Biggs and Tang (2011) state the first thing we have to get right as educators is the reasons as to why we are assessing our students. According to Biggs and Tang (2011) there are two principal reasons for assessing students. Firstly to provide feedback to students during their learning (formative feedback) and secondly to provide an index as to how successfully the student has learnt when teaching has been completed (summative feedback).

In relation to assessing students employability the assessment task needs to represent the knowledge that students will learn in a way that relates to real life (Biggs and Tang, 2011); and for our students the transition from student into the working world and the next stage of their career journey. This approach is known as authentic and performance related assessment (Biggs and Tang, 2011).

For students undertaking the Transition to Registered Practice nursing module at Birmingham City University (BCU) there are three components of summatively assessed work; as seen in diagram 1. This poster (and part B poster submission) will now explore how students are encouraged to successfully achieve authentic performance related assessment activities via their three assessed components.

Part A
Achievements of
standards of
competence in practice
(Pass/Fail)

Part B
Clinical numeracy
assessment
(Pass/Fail)

Part C
Invigilated assessment –
Problem/Enquiry Based
Learning Presentation
(100% of mark)

Diagram 1. Three components of student's transition to registered practice summatively assessed work.

#### Part A: Achievements of standards of competence in practice

Students are enabled to achieve part A, standards of competency in a work-based placed practice learning setting, via an associated practice learning opportunity (PLO). Each student has an associated PLO competency document. By the end of the nursing programme our students have to be able to demonstrate that they are fit for practice to register as a nurse. Students must be able to practice safely and effectively, with minimal supervision by year three, to meet the standards for competency and all other requirements as set out by the Nursing and Midwifery Council (NMC, 2004, NMC, 2010, BCU, Department of Practice Learning, 2011).

Within the NMC 2010 standards four domains of nursing are defined as follows: 1) Professional Values

2) Communication and Interpersonal Skills
3) Nursing Practice and Decision Making an

3) Nursing Practice and Decision Making and4) Leadership, Management and Team Working; see diagram 2 (NMC, 2010)



Diagram 2. NMC (2010) Domains of Nursing

Students' current PLO documents are organised into the four domains. Each domain has a set of performance descriptors as well as a set of skills and attributes the students must achieve to pass the assessment in practice process. The skills and attributes of the current PLO document are mapped against the principles of the five NMC Essential Skills Clusters (ESC's) as characterised throughout the 2010 NMC nursing standards. A feature within the nursing practice and decision making domain is that of assessing students' knowledge, skills and abilities in medicine management; which includes theoretical, practical and numerical assessment (BCU, Department of Practice Learning, 2011).

Students must demonstrate competency across all four domains in order to gain entry to the professional nursing register. The assessment of practice and theory is given equal weighting throughout the students nursing programme. Students are actively encouraged to take responsibility for their own learning. As are they required to regularly record and update evidence of their achievement via learning logs considering their development of knowledge, practical abilities, attitude and attributes (BCU, Department of Practice Learning, 2011). Additionally students have to demonstrate evidence of their ability to link practice and theory via any associated modules of learning; e.g. transition to registered practitioner. All of which has to be provided as part of an on-going achievement record.

Students engage in their transition to registration module prior to commencing their final and sign-off placement. The module learning approaches (e.g. flipped classroom and problem based learning PBL), the module learning outcomes and the assessment brief are all designed to align to and prepare students for their PLO and to achieve all associated assessment activities.

## Part B: Clinical numeracy assessment

Numeracy testing spans the three years nurse training programme. Commencing at pre-course interview stage where applicants undertake an initial numeracy and literacy test. To be successfully invited to interview a prospective student must pass both tests.

On entry to the nursing programme students are then assessed once per year for each of the three years of their course. The first year numerical assessment examines generic numeracy skills. In year two the application of numeracy skills becomes field specific and increasingly clinical in nature. By year three the numeracy tests are clinical focused and assess application of numeracy within nursing fields.

At present the pass rate for each test in every year of the programme (for all nursing fields) is 7/10 or 70%. However a staged numeracy pass rate will be introduced in the faculty in the near future. Under the new numeracy assessment system students will be required to achieve a score of 7/10 (70%) in year one, 8/10 (80%) in year two and 9/10 (90%) in year three.

Module field leads are responsible for creating numeracy assessment papers. Papers are sequenced so that questions become progressively more difficult. Students are asked ten questions in total within a thirty minute timeframe.

Accepted abbreviations are given on the front of the numeracy paper and workings out grids are included. There are no more than three questions on each page of the test and a separate answer box is indicated for each question answer. Students are asked an array of questions bespoke to their nursing field yet include conversions, calculations, percentages and fractions.

Feedback forms provide students with detailed response about each question type. The feedback will indicate whether the student provided a correct and/or incorrect answer and any specific feedback for each question. Additionally feedback forms point towards the students overall provision mark (until ratified at an exam board), guidance with regards receiving a failed attempt, where/who to go to for support and re-submission dates (where appropriate).

Feedback forms provide students with detailed responses considering students strengths and abilities as well as areas for continual professional development

Students are afforded practice numeracy papers as a means of formative preparation which commence at module launch and are shared via the module moodle page throughout the module delivery; students can also access these while on their PLO.

Interesting in responding to student requests for more formative numeracy papers the most recent cohort of students achieved either 100% pass rates at first attempt (learning disabilities and mental health nursing students) or 95% (adult students) This is the CMT best cohorts first attempt pass rates so for numeracy examinations so far. The questions/test paper was not deemed to be any easier than previous exam papers and instead is attributed to responding to students requests for additional formative preparation. Furthermore formative opportunities for numeracy development do not only come via way of practice papers. Application of numeracy is weaved throughout field specific problem based learning activities. Additionally assessing students' numerical skills is a feature of their part A, PLO competency standard assessment too.

Part C: Invigilated assessment – Problem/Enquiry Based Learning Presentation

The core module team (CMT) introduce student to the module assessment activities via their student course handbook, module consolidation and preparatory activities, via their module guide, at module launch and throughout modular formative and summative preparation activities via reference to their assessment brief.

All students are invited to an assessment launch session (which is recorded and uploaded as a vodcast onto their module moodle page) and a further summative presentation preparatory session. Students' are afforded three formative attempts at their part C assessment; through their engagement in flipped classroom and PBL activities The assessment brief for part C is summarised below (adapted from exemplar assessment briefs used within diploma, degree and graduate diploma nursing programmes).

With reference to a student's self-assessment skills inventory, students are asked to reflect upon the skill that they have acquired/improved during PBL activities (which includes flipped classroom approaches) and associated PLO. Students are enabled to negotiate and choose a managerial skill and/or ability (via summative assessment preparation activities) and identify how this will be of value to them during their transition from student to registered practitioner and when they organise and/or managing patient care in the clinical environment.

Students are advised they should clearly state the aim of their presentation and how they intend to achieve these. During summative assessment presentation preparation activities students in their sub-groups are enabled to select one skill/attribute from one of the four domains of nursing (NMC, 2010) they will present on for their summative assessment. The basis for their decision should be informed by their self-assessed skills inventory. Students are then required to explore the development of their chosen skill through reflecting upon their engagement in PBL activities and associated PLO.

Students are afforded the opportunity to self-select their preferred model of reflection. Although not an exhaustive list, reflective models include Atkins and Murphy, 1994, Bourton, 1970, Boud et al, 1985, Boyd and Fales, 1983, Gibbs, 1988, Johns, 1986, and Kolb, 1984; a popular student's choice tends to be that of Gibbs, 1988. Within their presentation students are asked to justify their choice of reflective model and to follow it carefully as they articulate their learning.

As part of their assessed work students are asked to explore PBL activities considering the evidence base of the strengths and limitations of these learning styles critiquing supporting literature when compared to their own experiences. Throughout their presentation students are required to demonstrate their learning as they self-identify areas of personal and professional development. Part of this includes students demonstrating their ability to analyse the personal and professional knowledge they have gained within the academic, clinical and transferable activities aligned to their chosen skill/ability.

Students are required to demonstrate evidenced-based strategies they have used to address/improve their ability and/or confidence in relation to their chosen skill. Part of this includes creating a self-determined action plan using **S**pecific, **M**easurable, **A**chievable, **R**ealistic **T**imely and **F**ocused (SMART/F) criteria highlighted through short-term, medium-term and long-term developmental goals.

Throughout their work students are encouraged to discuss how the development of their chosen skill will be of value when organising and managing patient care and when working as a newly qualified nurse/registered practitioner in the clinical environment. A division of this includes students utilising relevant literature in support of discussion/analysis as well as incorporating referenced material from their professional body e.g. NMC. A feature of which should demonstrate the students commitment to lifelong learning and the NMC prep requirements (2010).

Students work should be summarised by drawing together a synopsis of their main learning points and what they feel their presentation/learning has demonstrated. Ideally students will complete their presentation within 8-10 minutes although are advised they will be stopped by the assessor at 12 minutes on the day of their summative assessment.

In 2011 CBI worked with its members to define what employers mean by employability skills. The summary in table three outlines the skills that were highlighted by the CBI (2011) report and how students, via their part C summative assessment, are encouraged to demonstrate the attributes outlined.

Business and customer awareness (CBI, 2011). The Part C assessment requires students
to translate their PBL/EBL learning showing how what they have developed relates to
the organisation and management of patient care within their role as a newly qualified
registered practitioner. As such students are required to demonstrate the key drivers
for success in a nursing context and 'customer satisfaction' in terms of enhanced
patient care.

Problem Solving (CBI, 2011). Through the use of their reflective model students are
required to articulate the situations they faced during PBL/EBL learning activities and
show how they have developed appropriate solutions through their self-created action
plans as they self-define through short, medium and long-term goals.

Communication and literacy (CBI, 2011). During the presentation students are asked to
produce clear, structured written work as well as effective oral communication skills.
Once their presentation is completed their observing peers and/or assessing staff are
able to ask questions. In providing answers the student is required to show their listening
and questioning abilities. Furthermore students are enabled to use a script, prompt cards
etc and these are submitted as part of their assessed work; and is another means of
assessing the students' communication abilities.

Application of information technology (IT) (CBI, 2011). Students choose their presentation
format (e.g. Powerpoint, Presi) and as they guide listeners through their work they are
additionally demonstrating their IT skills. Use of search engines stems from probing
library databases and is demonstrated through their inclusion of a reference list (using
the Harvard referencing system) at the end of their presented work.

 A positive attitude (CBI, 2011). Part of the presentation asks students to explore and analyse their PBL experience. Through which they are encourage to discuss their readiness to take part in flipped classroom/PBL/EBL activities, explore how open their were to new ways of learning and how committed their were to each other, within their action learning sets, to prepared their group work for each theme.

Entrepreneurship/enterprise (CBI, 2011). The flexibility of the assessment and grading criteria enables those students who wish to showcase their ability to innovate, be creative and take positive risks within their learning; an aspect of which can include how collaboratively they worked to implement their short-term goals during their PLO.
 Application of numeracy (CBI, 2011); as discussed in part B.

#### Table 3: CBI (2011) Employability Skills

Student presentation feedback is provided in writing via a purposefully designed form that combines faculty marking criteria with a section for meaningful feedback. Affording students focused critique that considers the strengths of the students' presentation performance, how there mark could have been enhanced and/or what to do to retrieve an unsuccessful attempt.

## Summary

Gibbs and Simpson (2004-2005) suggest that designing assessment to support worthwhile learning is more important than accurately measuring limited learning. The transcript of assessment activities within this poster submission suggest the assessment methodologies does support worthwhile learning; particularly during students transition from university into the world of work.

However all assessment activities are subject to student engagement strategies and the approach students afford ranging from surface to deep learning; and the measures of such learning are debatable.

Interestingly Fry et al (2003) suggest that students who engage in PBL are better able to take deeper approaches to learning. Yet as Yardley, Malkin and Wilcox-Tolley (2014) suggest ideally students will be supported within constructivist approaches to learning by consistent staff teams who are motivated and engaged; which in turn means students are more likely to be supported by enthusiastic and inspiring educators (Pegg et al, 2012). This leads to a separate poster submission – learning approaches, module teams and their impact on student assessment results.

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