**A follow up to new approaches to providing practice placements in the
pre-registration nursing programmes:
A comparison study of the year one pilot students and their year 2 experience**

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**ACKNOWLEDGEMENTS**

## Executive Summary

### *Introduction*

Issues that may impact on student retention and attrition are multifactorial but a number of key areas have been highlighted, including the quality of support and learning experiences in practice settings. The first phase of this project (Roxburgh et al 2011), explored student, mentor and clinical manager perceptions of 'Hub and Spoke placement models in Year One of a Pre-registration Nursing Programme. The funders Scottish Government Health Department, Recruitment and Retention Delivery Group agreed to commission further study of this cohort through Year 2 of the programme, when the hub and spoke allocation model was not used to support clinical placement allocation. Following the original pilot students through Year 2 of their programme, wherein they experienced a 'traditional' placement model, provided an opportunity to compare perceptions of both models and to build on and further explore the issues of belongingness, continuity, continuous support and quality of practice learning which had emerged from Phase 1 of the study.

### *Synopsis of our Phase 1 Pilot Hub and Spoke Model*

'Hubs' and 'Spokes' are contrasting but complementary learning experiences (Roxburgh et al 2011). For the purposes of the pilot a working definition of both hub and spoke placements was devised by the project team.

A Hub is the term used to describe a clinical area that is the main base for practice learning and student attainment of NMC competencies and essential skills (NMC 2004). A hub can be conceptualised as geographic in location but also is defined by consistency of and continual access to a named mentor / mentor team.

Students return to the same hub placement in subsequent periods of clinical learning with the anticipated aim being to; facilitate a higher level of learning and development, deepen assessment validity and increase independent supervised practice. The return to the hub area also sought to allow guaranteed access to the same mentor and mentor team.

Spoke placements were characterised as secondary learning opportunities, derived from and related to Hubs through the provision of additional learning experiences not offered in the hub placement. Spoke placements could be in health or social care settings but all such placements aimed to emphasise the patient journey and allow experience of models of local care delivery / integrated care pathways.

While spoke placements could be assessed or non-assessed, spoke mentors communicated with the hub mentor of each student to allow the hub mentor to carry out assessment of student performance. Additional documentation was devised to ensure consistency of approach in the spoke placements used.

### *Overview of the 'Traditional' Placement Model*
The University of Stirling's traditional placement model used for second year student nurses meant that students experience a single 9 week placement, then two linked short (4 week) placements interrupted by a holiday entitlement of two weeks and finally one elongated 9 week placement which spans 4 weeks of year 2 and 5 weeks of the year 3 programme in phase 2 of the study.

This model meant that, in contrast to the hub and spoke model whereby one mentor supported and facilitated student learning for the whole of the first year, the traditional model means that each student has a minimum of 3 mentors over three placements, in the second year of study.

Indeed, in exceptional circumstances, such as periods of high levels of registered nurse holiday or absence or, as occurred at the time of both phases of this study, in the commissioning of a new replacement hospital, students may be attached to more than the that standard amount of mentors over a more segmented clinical placement.

In the traditional allocation model students are placed in practice based upon availability of practice placements and those placement options are streamed by a typology of traditional nursing clinical specialisms. In this fashion, mentors welcome students to their clinical area with perceptions of being asked to provide, for example, a 'surgical', 'medical' or 'management' experience. It could be argued that, this perceptual framework influences assessment of competence for that nursing specialism rather than the stage of student education and experience.

Use of a traditional placement model, it could be argued, has the potential to pose risks in relation to consistency of support, planning of learning opportunities, continuity and belongingness for both the student and mentor

### *Project Design – Phase 2*

Phase 2 of this study aimed to provide an opportunity for a direct comparison of both models; hub and spoke versus the traditional placement model from the student perspective and to build on and further explore issues of belongingness, continuity, continuous support and quality of practice learning.

The theoretical framework for phase 2 of the project continues to draw on the work of Tinto (1993). Tinto's "Model of Institutional Departure" (1993) is based on the idea of 'integration' both academically and socially and he suggests that integration is a predictor of whether a student will stay or leave a programme of study. Tinto's theory aligns with the core concepts of this study namely belongingness, continuity, continuous support and clinical learning environment. We propose that effective placements must display these qualities.

### *Evaluation – Phase 2*

Phase 2 involved the completion of the Clinical Learning Environment Inventory (CLEI), and the Short Support Questionnaire at the end of semesters 4 (11/2010), 5 (5/2011) and 6 (9/2011).

Students, who might have been on distant placements from their campus base, were given the option of returning these questionnaires after each placement experience or of submitting them on completion of the phase 2 year. The project team provided this choice to facilitate higher return rates of the forms by students and this decision while well-intentioned may have influenced the findings that flowed from this part of the data gathering process. A limited discussion of this effect is provided later in the section entitled limitations.

In addition a focus group was held on each of the 3 campuses at the end of semester 6 (10/2011).

Key findings from Phase 1 of the project were further explored in the Focus groups and student perceptions of their Year 2 experience of a traditional placement model compared and reported.

*Findings*

Students related that most of the memorable experience and educationally valued clinical recollections from Phase 1 originated from their elongated hub placements where spokes were tolerated at least and seen as complementary at best.

In contrast to Year 1 and the strong sense of belonging reported by students, there is a marked difference and variation in achieving a sense of belonging within the traditional model.

Students identified their heightened anxiety prior to going to each new placement mostly associated with what their mentor would be like and would they 'fit in' or belong to the environment.

Students perceived that the knowledge and skills which they had developed in 1st year were not recognised nor advanced further whilst on the traditional placement model.

Students reported sources of support they accessed whilst on placement as being similar across both phases of the project with a noticeable difference in Year 2 respondents securing more levels of support from their peers and family than in Phase 1. The high levels of mentor and academic support sought in year 1 participants fell in year 2 to be replaced by peer and family support in traditional allocation placements

Students believed the experiences of Year 1 placements had raised their faith in their ability to cope with the placement and educational demands of nursing. They saw themselves as being better prepared for Year 2 allocations as a result of their exposure to hubs and spokes.

Students identified key elements in mentor attitude to nursing and teaching students such as mutual respect building, seeing teaching as a legitimate part of the registered nurse role and providing challenging learning opportunities.

Students identified placement arrangements as posing doubts about the validity of assessment judgements in the Year 2 shorter mentor relationship placements.

Students reported a lack of understanding of the aims of care being provided in the traditional allocation model.

Students reported 'dips' in their commitment to the programme, re considering nurse education as a viable career choice but were sustained by their experience of hub and spoke.

Students have a very positive view on future placements but still feel less positive about having a more individualised experience on their current placement.

Students reported their preferred Practice Learning model would be a 'mixed model'; Years 1 and 3 'Hub and Spoke' as this would afford all the benefits previously reported in Phase 1 with Year 2 to be more akin with the traditional model.


### *Recommendations*
*Nationally*
Mentor influence on clinical learning is pivotal. A national review of 'how' mentors 'practically' undertake their role should be conducted.

Practice Learning must be seen as an academic endeavour that promotes deep, meaningful, person-centred learning rather than superficial, compartmentalised placement-centred learning - Further investigation is warranted in relation to how a 'good' clinical experience promotes deeper, meaningful student learning. The developing collaboration between the three Higher Education Institutions that grew over the life of the project enabled the sharing of ideas and perspectives, discussion and debate around the findings emerging from the evaluations and exploration of the similarities and differences between the models. This collaboration should be maintained and encouraged.

*Policy*
The funders should develop a 'guiding principles' document based upon the lessons learned from the 3 demonstration sites findings for a practice learning model based upon 'hub and spoke'.

*Locally*

'Traditional' classification of placements should cease.

A review of the local mentor preparation programme should be conducted.

Continue to work towards the implementation of a 'variation' of the hub and spoke model.

Further examination of the sophomore slump effect on clinical learning should be carried out.

**Introduction**

Phase 1 of the study reported on the findings from an 18 month project which aimed to develop, implement and evaluate new approaches to providing practice placements in one pre-registration nursing programme in Scotland (Roxburgh et al 2011, SGHD 2007). Issues that may impact on student retention and attrition are multifactorial but a number of key areas have been highlighted, including the quality of support and learning experiences in practice settings. The first phase of the project allowed for some discussion of these issues and the funders, Scottish Government Health Department, Recruitment and Retention Delivery Group, were sufficiently intrigued to commission further study of this cohort through Year 2 of the programme, when the hub and spoke allocation model was not used to inform their clinical placement allocation.

Following the original pilot students through Year 2 of their programme, wherein they experienced a 'traditional' placement model, provided an opportunity to compare perceptions of both models and to build on and further explore the issues of belongingness, continuity, continuous support and quality of practice learning which had emerged from Phase 1 of the study.

***Synopsis of our Phase 1 Pilot Hub and Spoke Model***

For the purposes of the pilot a working definition of hub and spoke was devised by the project team: Hubs and spokes are contrasting but complementary learning experiences (Roxburgh et al 2011).

A Hub is defined as the main base for practice learning and student attainment of NMC competencies and essential skills (NMC 2004). Crucially in allocating students whilst on the pilot we operated a concept of a hub as being geographic in location but also defined by consistency of and continual access to a named mentor / mentor team.

Students returned to the same hub placement in subsequent periods of clinical learning to, facilitate a higher level of learning and development, and deepen assessment validity and increase independent supervised practice. The return to the hub area allowed guaranteed access to the same mentor and mentor team.

Spoke placements are secondary learning opportunities, derived from and related to Hubs through the provision of additional learning experiences not offered in the hub placement. Spoke placements can be in health or social care settings but all such placements emphasise the patient journey and allow experience of models of local care delivery / integrated care pathways.

While spoke placements can be assessed or non-assessed for the purposes of this study spoke mentors communicated with the hub mentor of each student to allow the hub mentor to carry out assessment of student performance. Additional documentation was devised to ensure consistency of approach in the spoke placements used.

### Hub & Spoke Model for Clinical Practice Placement

A Hub and Spoke model of placement allocation is where the student is allocated to their Mentor (Hub) and allocated by that mentor to other areas / mentors (Spoke) to ensure the student achieves a variety of experiences and skills that allows them to achieve the NMC Standards of Proficiency. The (Spoke) mentors provide feedback and assessments to the main Mentor (Hub). This aimed to allow for continuity of mentorship for the student and, we believe, a sense of belongingness. It was proposed that this model will provide community based / family care pathway focussed provision of practice placement to nursing students.

This model incorporates NHS acute hospital facilities with GP clinics and community hospitals in community health partnerships, and in some instances includes innovative mobile units and telemedicine facilities.

The essential features of the allocation model used in this pilot were;

The practice arrangements to be utilised provided a unique opportunity for consistency of mentorship with an overview of the student journey. The Hub Mentor was able to see the student development throughout the programme. Such a model allowed the pre-registration nursing programme to be community based and locally accessed by students and patients alike.

To provide for student insight into patient care pathways and care options. Value is added to student experiences by exposure to coordinated care experiences around the needs of a particular client / patient in a locale.

### *Local Enactment of the Phase 1 Model*

The original conception of the Phase 1 pilot was to allocate students to hubs and spokes based upon an awareness of the notional care pathways used by the patients and service users of the hub area. We believed that registered nurses working in a particular clinical area would know intuitively where their patients were admitted from and also where they discharged them to. In addition as primary care givers nursing staff would also be familiar with the peripatetic and complementary care personnel who delivered services to the patient group whilst they were resident in the hub area. As previously indicated due to existing and imminent pressures within the local NHS boards this model was more difficult to guarantee (Roxburgh et al 2011).

As such, after discussions with local Senior nurses and placement coordinators three models of hub and spoke allocation were developed for use within the pilot study. All variations of the allocation model met the requirements of the NMC Standards for pre-registration nurse education (NMC, 2008).

The allocation model closest to the original intention that was operated in the study can be called the *"internal spoke model".* Within this model the responsibility for planning arranging and reporting on student progress was accepted and discharged by the hub mentor. This required the hub mentor to have a good knowledge of the care pathways experienced by patients and to have or to develop working relationships with the spoke areas. The student had input into the planning and hub mentor contact was on a weekly basis when in spoke placement. (Roxburgh et al 2011).

A second allocation system operated by a shared responsibility for spoke placement arrangements. The responsibility for planning and communicating with spoke placements in assessment of student learning was shared between the Practice Education Facilitators for the hub clinical area, both hub and spoke mentors and the student.

This *"facilitated spoke model"* was devised to help place students being supported by mentors with limited knowledge of, or disadvantaged by an absence of proximal care pathway resources. Hub mentors might feel this model is indicated for use if they think they might be hindered in arranging spoke placements by pressures of time and volume of work.

The responsibility for planning and arranging the spoke placement time was accepted by the PEF who consulted with both hub and spoke mentors in making the arrangements. Reporting on student progress was agreed as the responsibility of, and was discharged by, the hub mentor. Student autonomy and influence in this model was less than that enjoyed by the internal spoke students but they did manage to maintain contact with hub mentors whilst on spoke placement. (Roxburgh et al 2011).

The final model of student placement used in the project can be called the *"fixed spoke model"* of allocation. In this model the responsibility for planning, arranging and reporting on student progress was accepted and discharged by the University campus placement coordinator at the outset of the year's clinical learning experience. This did not require the mentor to have direct knowledge of the care pathways experienced by patients nor to have fostered specific relationships with the spoke areas, although in a few cases these relationships existed on a professional or personal level. The student had no input into the planning or sequence of clinical allocation and hub mentor contact was arranged on an informal basis when in the spoke clinical placement. The spoke mentor communicated with the hub placement by various means but concentrated on written communication mainly in the spoke booklets. The students engaged in this model accepted a high degree of responsibility for maintaining contact with the hub mentor and placements were effected in a fairly rigid and planned way. (Roxburgh et al 2011).

In all models the spoke mentors communication with the hub mentor was facilitated by face to face contact, telephone conversation or by use of the spoke documentation devised by the PEF team. Similarly, in all models, a focus on the notional care pathway accessed by users of the hub service was maintained by all participants in the pilot and connections with care and treatment possibilities made explicit.

### *Overview of the Traditional Placement Model*

University of Stirling's traditional placement model use for second year student nurses means that students will experience one long 9 week placement, then two linked short 4 week placements interrupted by a holiday entitlement of two weeks and finally one elongated 9 week placement which spans 4 weeks of year 2 time and 5 weeks of the year 3 programme over phase 2 of the study. This means that in contrast to the hub and spoke model whereby one mentor supported and facilitated student learning for the whole of the first year, the traditional model means that a student has a minimum of 3 mentors over three placements, in the second year of study. (See diagrammatic representation below).

In exceptional circumstances such as periods of high levels of registered nurse holiday or sickness, or as occurred at the time of both phases of this study, in the commissioning of a new replacement hospital, students may have exposure to more than the standard amount of mentors over a more segmented clinical attachment.

In the traditional allocation model students are placed in practice based upon availability of practice placements and those placement options are streamed by a typology of traditional nursing clinical specialisms that reflects the provision of health care.  In this fashion mentors welcome students to their clinical area with perceptions of being asked to provide a surgical, medical or management experience.  This perceptive framework influences assessment of competence for that nursing specialism rather than stage of student education and experience.

In devising phase 2 of the study a return to a traditional placement model for the Phase 1 cohort was planned.  This change in the process of allocation had the potential to pose qualitative differences to individual students in relation to their perception of consistency of support, planning of learning opportunities, continuity and belongingness for both the student and mentor.  This was to be the evaluative focus of the second stage of study.

## Project Design Phase 2

The initial Phase 1 project aimed to develop, implement and evaluate the impact of a hub and spoke model of clinical practice placement across 3 geographically diverse locations, with a particular focus on enhancing the 1st year student experience.

Three variations of the hub and spoke model were developed and used, the internal, fixed and facilitated versions (Roxburgh et al 2011; 2012).

Evidence from the first phase suggests that for the student, mentors and NHS managers this is a model that works.  It was seen to have real educational merit in orientating students to clinical learning and restated the primacy of the mentor relationship in producing competent and confident nurses.

Mentors and students saw the pilot as allowing feelings of belongingness to the team / clinical area and in promoting ease of mentoring continuity, student skill development and facilitating more meaningful student assessment.  Through this continuous support, self-efficacy developed earlier in the student.

More extended placement time builds integration to the ward team and allows perceptions of student competence to be widely held by that team.

Further study in a non hub and spoke clinical placement year would allow the evaluation time an opportunity to compare and contrast student experiences of the two allocation models and `allow comment on the relative merits and shortcomings of both systems.

In Phase 2 we followed the student nurses from the pilot who were hub and spoke participants to traditional placement areas and in traditional placement arrangements in three clinical placement periods during Year 2 of their programme.

### Phase 2 Aim

The aim of Phase 2 was to provide an opportunity for a direct comparison of both models; hub and spoke versus the traditional placement model from the student perspective and to build on and further explore issues of belongingness, continuity, continuous support and quality of practice learning.

The theoretical framework for Phase 2 of the project continued to draw on the work of Tinto (1993). Tinto's "Model of Institutional Departure" (1993) is based on the idea of 'integration' both academically and socially.  He suggests that integration is a predictor of whether a student will stay or leave a programme of study.  Tinto's theory aligns with the core concepts of this study namely belongingness, continuity, continuous support and clinical learning environment.  We propose effective placements must display these qualities.  Maintenance of this theoretical framework in the second stage of the study allows the researchers to more directly compare the experiences of the participating students as similar measures of the quality of their reports can be made throughout the entire length of the two years of study.

***Phase 2 Evaluation Methods***

Following each clinical placement (in November 2010, May 2011 and September 2011) students were asked to complete two measures:

*Clinical Learning Environment Inventory (CLEI)*

The Clinical Learning Environment Inventory (CLEI) (Chan 2002) was used to measure the quality of the learning environment. This rating scale is well used in assessment and quantification of learning opportunities in nursing practice and is seen to be valid and reliable.

The CLEI has subscales with each sub-scale measuring actual and future dimensions. The sub-scales are individualisation, innovation, involvement, personalisation, task orientation and satisfaction. Each sub-scale contains 7 items with responses strongly agree, agree, disagree and strongly disagree and scores on each sub-scale range from 3-35.

*Short Support Questionnaire*

This tool was developed for use by Lauder et al 2008 and is intended to allow students to identify and quantify the sources and levels of support they derive whilst in clinical placement.

Student reporting of support was analysed as four variables (range 0-9) reflecting the source of support and also as an `all source support` variable (Range 0-36). The `all source support' variable was developed by combining raw scores from all four individual sources of support.

One additional data collection measure was operated at the end of Year 2 (10/2011); a focus group that allowed students to respond in detail with their experiences and perceptions from clinical practice` that may not have been easily communicated in the survey tools.

*Focus Groups*

Focus group interviews were conducted for student participants on a campus by campus basis and were arranged on days when students were already on campus (either before classes commenced or at the end of the day). The findings were digitally recorded and transcribed.

Key findings from Phase 1 of the project were further explored in the focus groups and student perceptions of their Year 2 experience of a traditional placement model compared.

The key findings detailed below informed the basis of the focus group schedule.

- Hub and Spoke allocation models provide a sense of belongingness to the clinical team and to the clinical area;

Trigger: *did the traditional model of allocation provide this same sense of belonging?*

- Hub and Spoke allocation models provide a good sense of continuity in mentorship;

Trigger: *did the traditional model of allocation provide for a sense of continuity in mentorship?*

- Hub and Spoke allocation models foster continuity in the assessment of practice;

Trigger: *did the traditional model of allocation foster continuity in assessment of practice?*

- Hub and Spoke allocation models demonstrated greater perceived innovation in practice learning;

Trigger: *did the traditional model of allocation provide for innovation in practice learning?*

- Higher levels of support were reported in Phase 1 of this study than those reported in the benchmark National Evaluation of Pre-Registration Programmes in Scotland (Lauder et al 2008);

Trigger: *did the traditional model of allocation provide high levels of support?*

- Do both hub and spoke components of the allocation model compare favourably with traditional placement allocation?

- Hub and spoke placement students reported less positive feelings around the clinical learning environment at the end of year one;

Trigger: *at the end of year 2 how positive or negative do students feel about the clinical learning environment?*

## Ethical Approval

Students who participated in Phase 1 of the evaluation were contacted via e-mail and face to face and asked to participate in the second phase. Students were provided with information and the rationale behind continuing to follow their placement journey through Year 2. Participant consent was maintained in Phase 2 from the original declarations made by participants in Phase 1 of the project following approval by the Chair of Research Ethics Committee.

Appendix 1 shows in a diagram how the two phases of fieldwork were used across the life of the evaluation.

**Access, Recruitment and Consent – Phase 2**

*Sample*

In Phase 2 we opted not to conduct data collection with mentors, senior nurses and personal tutors as our intention was to extend the study to focus on the benefits and limitations of each model as perceived by the students and strengthen the evidence base for future models of practice learning that focus on the student.

Of the original sample some students had taken leave of absence, progressed to sick or maternity leave or had withdrawn from the programme in the transition period from Common Foundation to Branch (Field Specific) Programme. In essence our sample had been reduced from 44 students to 35 students for Phase 2.

As such the participant group at the beginning of Year 2 comprised of;

Table 1: *Breakdown of student participation by location and programme – Phase 2*

| Location | Mental Health Programme Pilot numbers | Adult Programme Pilot numbers | Learning Disability Programme Pilot numbers | Total Participants |
|---|---|---|---|---|
| Campus A | 8 students | 11 students | 4 students | 23 students |
| Campus B | 1 student | 6 students | 1 student | 8 students |
| Campus C | | 4 students | | 4 students |
| | 9 students | 21 students | 5 students | 35 students |

Table 2: *Breakdown of students lost to the project from beginning of year 2 to end of year 2 and reason*

| Location | Mental Health Programme Pilot numbers | Adult Programme Pilot numbers | Learning Disability Programme Pilot numbers | Total Participants |
|---|---|---|---|---|
| Campus A | 1 = (v) (sem 5) | 1 = (i) + (ii) (sem 4)<br>1 = (iv) (sem 4)<br>1= (iv) (sem 4)<br>1 = (iii) (sem 5) | | 5 |
| Campus B | 1= (ii) (sem 4) | 1= (ii ) (sem 4)<br>1 = (viii) (sem 5) | 1 = (vi) (sem 4) | 4 |
| Campus C | 0 | 0 | 0 | 0 |

*\*Key: (i) Cause for Concern, (ii) Personal issues, (iii) Academic Fail, (iv) Student request (v) Poor attendance (vi) Transfer to other HEI as part of the national pilot of disseminated nurse education in Learning Disability; (vii) Transferred to different Branch (viii) Maternity Leave*

Table 3 provides demographic details of the students who completed data in Phase 2

Table 3: *Demographics*

| Gender | Marital Status | Age Range | Highest Entry Qualification |
|---|---|---|---|
| Male (N=3) 8.5%<br><br>Female (N=32) 91.5% | Married (N=10) 28.5%%<br><br>Single (N=25) 71.5% | 18-52 Years<br><br>median age 31 years | Wider access (N=12) 34.25%<br><br>HNC/HND (N=12) 34.25%<br><br>5+Standard/GCSEs/Intermediate Level 2 (N=7) 20%<br><br>2+Highers (N=4) 11.5% |

In comparing this demographic profile of the pilot intake with the larger total cohort of the 2008 intake there is no substantive qualitative difference in terms of gender, marital status age and educational profile. In keeping with the pilot study group the intake is predominantly female, single and within the 17- 54 year age range. Educational qualifications at the point of entry are broadly comparable in terms of wider access entrants but with a noticeable increase in highest entry qualification tariff found in the cohort as a whole (5+ Standard grades accounts for 31.5% of the intake) in comparison to the pilot study. Table 3 is included as a record of the composition of the study population and to allow readers to draw comparisons with other studies.

**Data Collection**

In Phase 2 we have adopted a mixed methods approach to data collection in order to provide a rich and robust picture for comparison with our Phase 1 findings.

Students were issued with both the CLEI and Short Support questionnaires, coded by participant and Semester, at commencement of Year 2. Students were asked to complete each questionnaire at the end of each Semester of clinical placement and either return the questionnaire to the project team or retain in a safe place until completion of Year 2 when they could be returned at the Focus group.

Table 4 details the responses received for the CLEI and Short Support questionnaires.

Table 4: *CLEI & Short Support returns rates*

| Location | Mental Health Programme Pilot numbers | Adult Programme Pilot numbers | Learning Disability Programme Pilot numbers | Total Participants / % Response |
|---|---|---|---|---|
| Campus A | | | | |
| *Sem 4* | 6 | 7 | 1 | 14/23 (61%) |
| *Sem 5* | 6 | 7 | 1 | 14/23 (61%) |
| *Sem6/7* | 3 | 7 | 0 | 10/23 (43%) |
| Campus B | | | | |
| *Sem 4* | 0 | 2 | 0 | 2/8 (25%) |
| *Sem 5* | 0 | 2 | 0 | 2/8 (25%) |
| *Sem6/7* | 0 | 2 | 0 | 2/8 (25%) |
| Campus C | | | | |
| *Sem 4* | 0 | 4 | 0 | 4/4 (100%) |
| *Sem 5* | 0 | 4 | 0 | 4/4 (100% |
| *Sem6/7* | 0 | 3 | 0 | 3/4 (75%) |

In addition Table 5 provides attendance rates at the Focus groups.

Table 5: *Focus Group attendance rates*

| Location | Mental Health Programme Pilot numbers | Adult Programme Pilot numbers | Learning Disability Programme Pilot numbers | Total Participants/ % Response |
|---|---|---|---|---|
| Campus A | N=0 | N=4 | N=0 | 4/23 = (17%) |
| Campus B | N=0 | N=2 | N=0 | 2/8 = (25%) |
| Campus C | | N= 4 | | 4/4 = (100%) |

The varied participation rates and generally small numbers mean that some caution is required in relation to the representativeness of the findings and any associated generalisations.

Of note is the relatively high completion rate by Mental Health (MH) Student Nurses of the Short Support questionnaire and CLEI. This is in contrast to no MH students attending the focus groups. It is an interesting observation given the particular focus for this group of students is around communication skills and formation of therapeutic relationships. We can offer no real reason for this but perhaps this may be an artefact of our staggered elongated return time for the questionnaires versus the fixed point in time focus group attendance.

## Data Analysis
*Clinical Learning Environment Inventory (CLEI)*
The CLEI has subscales with each sub-scale measuring actual and future dimensions. The sub-scales are individualisation, innovation, involvement, personalisation, task orientation and satisfaction. Each sub-scale contains 7 items with responses strongly agree, agree, disagree and strongly disagree and scores on each sub-scale range from 3-35.

*Short Support Questionnaire*
Support was analysed as four variables (range 0-9) reflecting the source of support and also as an `all source support` variable (Range 0-36). The `all source support` variable was developed by combining raw scores from all four individual sources of support.

*Focus Groups*

All focus group interviews in the study were recorded and transcribed. Data analysis involved an iterative process, whereby coding categories were continuously revised. Patterning in the data was systematically identified and interrogated using the constant comparative method.


## Findings

In reporting the findings of Phase 2 we have drawn comparisons with our key Phase 1 findings.


*Clinical Learning Environment Inventory (CLEI)*

In phase one of the study analyses of the CLEI returns suggested two notable findings.


The hub-and spoke model students reported higher scores for actual innovation. This points to the possibility that innovation can be maintained for a sustained period and supports the value of new and innovative educational practice being developed.


In other studies which used the CLEI instrument the Innovation sub-scale has often reported lowest scores (Chan 2004, Chan and Ip 2007).


The second notable finding was the downward trend in all sub-scales evident in both groups. There are a number of possible explanations for this. The technical explanation in this work may relate to the loss of students from the study. A more educationally concerning explanation might have been the tendency for all students to feel less positive about their clinical experience in general at the one year point. It may be that this group of second year students were suffering from the phenomenon known as sophomore slump.


The observation of this slump is first recorded by Freedman (1956) relates difficulties of an academic and personal nature experienced by second year students in US Universities. One major reason sophomores experience a slump results from diminution of attention and time being dedicated to them in year 1 studies. They can feel cut loose from support networks and disconnected from a larger purpose of their work (Valdosta State University 2008).

Further research is indicated in nursing cohorts and if this is a phenomenon that occurs across the sector educational interventions aimed at students at this point in time may be necessary.

The data from this element of the evaluation gave support for the hub and spoke model being seen by students as more innovative than traditional placements. It was however noted at that time that numbers of students were relatively small in the study and this phase may have been underpowered and thus less likely to detect differences between groups.

*Phase 2 results*

**Table 6: Descriptives for CLEI for Semester Four**

|  | group | N | Mean | Std. Deviation |
|---|---|---|---|---|
| Actual personalisation | Pilot | 14 | 24.14 | 4.28 |
| Future personalisation | Pilot | 14 | 25.29 | 3.00 |
| Actual Student Involvement | Pilot | 16 | 23.69 | 2.98 |
| Future Student Involvement | Pilot | 13 | 24.70 | 2.75 |
| Actual Satisfaction | Pilot | 16 | 23.69 | 4.30 |
| Future Satisfaction | Pilot | 14 | 26.07 | 2.16 |
| Actual Task Orientation | Pilot | 15 | 22.73 | 3.95 |
| Future Task Orientation | Pilot | 14 | 24.79 | 2.52 |
| Actual Innovation | Pilot | 14 | 20.36 | 3.69 |
| Future Innovation | Pilot | 14 | 21.79 | 2.61 |
| Actual Individualisation | Pilot | 16 | 19.94 | 3.19 |
| Future Individualisation | Pilot | 14 | 21.21 | 2.12 |
|  |  |  |  |  |

**Table 7:  Descriptives for CLEI for Semester Five/Six**

| | group | N | Mean | Std. Deviation |
|---|---|---|---|---|
| Actual personalisation | Pilot | 12 | 24.67 | 3.52 |
| Future personalisation | Pilot | 10 | 25.80 | 2.30 |
| Actual Student Involvement | Pilot | 13 | 21.38 | 3.71 |
| Future Student Involvement | Pilot | 10 | 23.00 | 2.49 |
| Actual Satisfaction | Pilot | 12 | 24.67 | 3.94 |
| Future Satisfaction | Pilot | 10 | 26.70 | 1.57 |
| Actual Task Orientation | Pilot | 12 | 22.67 | 3.23 |
| Future Task Orientation | Pilot | 12 | 24.58 | 2.50 |
| Actual Innovation | Pilot | 13 | 20.38 | 3.71 |
| Future Innovation | Pilot | 11 | 21.91 | 3.88 |
| Actual Individualisation | Pilot | 13 | 20.46 | 3.36 |
| Future Individualisation | Pilot | 9 | 23.33 | 2.12 |

At the end of the joint semester 5/6 hub and spoke students reported highest scores for future satisfaction (26.70, SD 1.58) and lowest scores for actual individualisation (20.46, SD 3.36) (Table 2).

The highest and lowest scoring aspects of the clinical learning environment have remained consistent over the course of phase 1 and in phase 2 of hub and spoke students during their second year.  Respondent Hub and Spoke students have a very positive view on their future placements but still feel less positive about having a more individualised experience on their current placement.  Generally scores from the phase 1 group who were followed on the second year of the study are higher than those reported during year one in both hub and spoke and traditional placement groups.

The drop in scores at the end of year one seen in both groups was not evident in year two with the exception of task orientation. In fact the scores showed a small increase at the end of year two. Year two seems to have a different pattern of placement evaluations in year one with higher evaluations of placements and higher expectations of future placement experiences.

Interestingly the predicted Innovation sub-scale lowest score finding did not materialise in the second phase reports. While it is only speculation it may be the experience of hub and `spoke resilience building and confidence strengthening may have contributed to the innovative qualities of students within this cohort.

Whilst not an aim in this study the drop in student evaluations at the end of year one and subsequent rise in year two is worth future investigation.

Small numbers participating in this phase should give rise to caution in interpreting this data.

*Short Support Questionnaire*
Administration and analysis of the short support questionnaire in phase 1 suggested were no significant differences in all support dimensions between hub and spoke and traditional placement students.

There were significant correlations between mentor support and university support ($r = .296$, $p = .006$), mentor support and peer support ($r = .325$, $p = .002$), mentor support and family and friends support ($r = .213$, p - .050), university support and peer support ($r = .302$, $p = .005$) and peer support and family and friends support ($r = .491$, $p = .001$).

In summary the short support questionnaire findings from Phase 1 demonstrated that levels of support reported in this study are notably higher than those previously reported in the National Evaluation of Pre-registration programmes in Scotland (Lauder et al 2008a). High levels of support were reported by both groups (pilot and non-pilot) and there was no significant difference between groups. Although not statistically significant it is interesting to note that the only type of support in which hub and spoke scored higher than traditional placements was university support.

Consequently there are no advantages or disadvantages in terms of support for students from adopting either placement model. Similarly there appeared no major differences in support provided by the three hub and spoke models.

In year two responses students reported sources of support they accessed whilst on placement as being broadly similar across both phases of the project. Year 2 respondents reported securing more support from their peers and family than in Phase 1. The high levels of mentor and academic support sought in year 1 participants fell in year 2 to be replaced by peer and family support in traditional allocation placements.

Small numbers of students participating in this phase should give rise to caution in interpreting this data and limit both the level of analysis that could be made and the subsequent generalisability of the findings. Again further study may provide deeper understanding of where students seek support from whilst in clinical placement.

*Focus Groups*

Analysing the focus group data for Phase 2 has allowed further insight in to the key domains previously reported in Phase 1 of the project and identified further concepts not previously reported by the students during the earlier fieldwork.

Nine concepts arose when exploring the traditional placement model and how it impacts on the domains of *belongingness, support, continuity in mentorship, and continuity in assessment of practice.*

These concepts can be arranged and examined within the four main domains that relate to the Phase 1 findings.

Two further concepts, related to retention and preferred placement model, were also identified in the focus groups, and are reported under the heading 'additional finding'. These further insights cannot easily be compared to Phase 1 findings as it was only possible for students to articulate them after year 2 experiences allowed for contrast of the two allocation models.

> **Belongingness** - *'provoking anxiety', 'going backwards' 'starting over'*
>
> **Support** – *'self-confidence', 'resilience'*
>
> **Continuity of Mentorship –** *'mentor attitudes', 'assessment attainment' 'team mentoring'*
>
> **Continuity in Practice –** *'making sense of placement flow',*
>
> **Additional Findings - '***retention', 'Practice Learning Environment'*

Before detailing the specific findings from this phase of the evaluation an issue that was not clearly identified in the first report on hub and spoke experiences can be clarified further after completion of Phase 2 fieldworks. Despite operating 3 differing models of hub and spoke allocation, a consensus on how students reported their experiences of the pilot was not uncovered in terms of what experience constituted their recall of the CFP years placement. When relating their opinions to the project team it was not possible then to discern if students were only thinking about hub experiences, spoke placements or were responding from an integrated perspective of both hub and spoke attachments.

When asked to be specific about the impact of hubs and spokes on their first year recollections students who were placed on the internal and facilitated models responded quite differently from their peers on the fixed model.

When asked in Year 2 contact with the project researchers to clarify how they responded in CFP reports students related that most of the memorable experience and educationally valued clinical recollections from Phase 1 findings seem to have originated from their elongated hub placements where spokes were tolerated at least and seen as complementary at best from students who were able to exert more influence on their year long experience.

> *I'm talking about the hubs really, I mean on my spokes I got a good review and I said to my mentor "read these" and she did and she marked me on what she thought of me and not what these other reports said (Internal model)*

> *I think definitely Hub and Spoke, probably a bit of both (Facilitated model)*

Students engaged on the prearranged less flexible *fixed model* of allocation seemed to respond more generically about year 1 placement outcomes and were less aware of any effect on their learning.

> *It's been easier in the second year….but then I didn't notice much change from year 1 to year 2 (Fixed model)*

### *Belongingness*

Levett-Jones & Lathleans (2007) work with nursing students suggests that belongingness is context specific. They detail how this sense of belonging develops as a result of feeling secure and valued within a group and that the individual's professional values and behaviours complement the group and facilitate group cohesion.

In Phase 1 students detailed strongly how being in a hub placement for a year made this sense of belongingness possible. In Phase 2 we explored whether a sense of belonging occurred for students in a traditional placement model. Students were asked to compare and contrast how they felt in each Semester in relation to the concept of belongingness within the traditional placement model. Specifically the students were asked to reflect upon belonging to the team.

Mixed responses were provided by respondents from all three variants of the model.

*There's certainly not that familiarity in that kind of comfort and kind of safety net where you were used to, even just the orientation of the environment you are in, the staffing so people know you and you know them. They know what your limitations are and what your strengths and things are so that they know what you are able to cope with a lot more, whereas there is still very much when you go into a new placement, they are still assessing you and you are still assessing them, so to try and get to know them (Internal Model).*

*Because my semester four placement was in (Location) at the (name of hospital) and I have to say from my own personal experience I didn't see any difference from Hub and Spoke to going to (name of hospital), they seemed to encompass that whole idea where you didn't just spend time within the ward setting but you were put out on different training days, you went out with the ambulance service, you could go to theatres, outpatients. They were happy to involve you in the whole setting within that was related to the hospital care there as well. They really encouraged students that did a lot of training, extra training whilst you were there specifically for students in various things as well (Fixed Model).*

For the following student her experience was a stark contrast to that of her peer

*It was awful, but that was more to do with the mentor, she was a bit of a horror and that's being polite. So as far as belonging because she didn't have the particularly positive attitude to mentoring, she didn't see why she had to do it, she didn't want to be a nurse anymore and it showed and was constantly being repeated (Fixed Model)*

For both fixed model students their placements were within hospital environments however the notable difference was that one was a Community Hospital and the other a District General Hospital. These differences of experiences by the students were put forward as an artefact of the number of students on placement at the same time vying for learning opportunities. This is supported when we explore the experience of another student who was the only student on placement in this particular clinical area.

*The very first day that you spent is an induction day from nine to five induction day meant to be with your mentor but mine's was with the charge nurse and I was petrified, who takes you around the building and introduces to as many staff that there are on shift, introduces to you the housekeepers, the kitchen staff, tells you the routine, even about ordering your lunch, show's you where to get changed, give's you your own locker, then in the afternoon you sit and you plan where you are going to go. You can go out with the Macmillan team if you want to, you can go to the day hospice if you want to, you can go with the stoma nurse if you want to, the pain nurse if you want to, you can go with the consultants up to the hospital.*

*You can go anywhere and that was all mapped out in accordance with your learning plan that you had come already written and hoped to achieve and the two would mirror each other and whatever was written on your plan then on reflected what you had gone on with in mind. I can't praise the place highly enough, it was just the most amazing, fantastic place because you really did, I would say from half way through your first shift you were part of the team. Never once was I called "the student" and even if I was referred to, like if my mentor was trying to organise a trip out with the Macmillan team for example she would say "I got my student .N.........here" it was always followed up with my name and they were just great, if there were any matters, she would say "why don't you go through and get that pain pack" and we will go through and talk through the things that crop up that maybe are a bit more challenging that we have seen in our patients that we have been looking at today (Fixed Model)*

In contrast to Year 1 and the strong sense of belonging reported by students, there is a marked difference and variation in achieving a sense of belonging within the traditional model when we compare the verbatim quotes made earlier with those previously reported in Phase 1.

*Made to feel welcome within multidisciplinary teams – as I′m on the hub for a year you get to know the staff you are working with. I felt part of the team because of all the information given to me (Internal Model).*

*Really enjoying being back, feel a sense of belonging and attachment – the way you get from a job you enjoy. What I have found interesting about the hub and spoke is the way it can give you a real sense of belonging on return to ward. However some of the spokes have been equally as supportive (Facilitated Model).*

*Provoking Anxiety*

In Phase 2 a recurring concept identified which was not previously acknowledged in Phase 1 was that of 'Anxiety'. Students spoke of their heightened anxiety prior to going to each new placement mostly associated with what their mentor would be like and would they 'fit in' or belong to the environment.

Our findings in this respect concur with Campbell (2008) who identified that a student experience within a rotational (traditional) placement model often leads to students lacking confidence and feeling anxious about the complexities of the care environment.

> *I think the first few weeks you are just trying to get settled in and find your way in the way that the ward works and where things are and you have got to think about that every single time you go to a new placement you have got some kind of level of anxiety you know when you are thinking how are people going to be, what's the hours and all this kind of stuff and where's that going to be (Fixed Model)*

> *Just generally how you going to get on with your mentor, are you going to get a good mentor, because you hear that some people do not get a good mentor, and that would definitely have a detrimental effect on your learning, if you don't have a good mentor at all you do have those worries. Obviously as you are saying you do not have a big period of time on your placement so if you are trying to take a few weeks just to get to know the place and get to know the kind of way how the land lies sort of thing you are wasting that time which could be used. If you've got the familiarity and you know what you are going into and the way the environment is and everything like that and you know the staff you know exactly what you are going into and you are just that a wee bit more prepared it's just a case of picking up where you have left off (Internal Model).*

In contrast another student from who experienced the Internal Model expressed the view that each new placement was a new learning opportunity for them

> *I feel differently I felt excited every time I got a new placement. I felt anxiety but felt great new experience, that's how I felt. Didn't feel I had to reinvent myself felt it was more opportunities, building new relationships (Internal Model).*

Of note is how students on one Campus expressed their opinion that they actually felt they had to re-invent themselves whilst on the Hub and Spoke model rather than the traditional. This was linked to the 'spoking' they experienced as can be noted in these phase two excerpts where students reflect on the total placement experience.

> *Because they (mentors) saw that you were only there for a week or two and a couple of days, you had to work so much harder on the Spoke placements, you were just constantly having to prove yourself, prove who you were and what you could do (Campus C – Yr 2).*

> *The amount of Spokes that you go to, it's like the first day of the new job every time you go in and whereas within year two you have got three placements, only three times do you have to go in and have that whole first day experience*

We would suggest this is an artefact of the model developed for a particular Campus who operated the *"fixed spoke model"* with the responsibility for planning, arranging and reporting on student progress was accepted and discharged by the University campus placement coordinator at the outset of the year's clinical learning experience. This is very much in contrast to the other two models; *"internal spoke model"* and the "*facilitated spoke model"* whereby the student had an input into when and where to 'spoke' to. This is an aspect that in the future when 'modelling' new practice learning approaches will require careful consideration in programmes where there are difficulties in expanding placement capacity due to remoteness or lack of health services in comparison to placement demand.

However these students on that specific campus could also demonstrate how this re-inventing themselves whilst on spoke had prepared and increased their sense of confidence and resilience whilst on traditional placement

> *For me and I think it's the same for most of the guys, it's the experience in the hospital was definitely enriched by kind of like the confidence that we gained in first year and the diversity that we got in first year, being thrown in at the deep end and having to kind of like keep yourself afloat going into second year you really did feel going into the hospital you knew a bit more than had you gone through the traditional route (Facilitated Model).*

A further aspect of being on the traditional placement model which provoked anxiety was in relation to their clinical assessments and attaining signatures in their On-going Achievement Record (OAR). This theme will be examined more thoroughly in the section Continuity of Mentorship – Assessment Attainment findings.

*Going backwards*

The concept 'going backwards' reflects how the students perceived that the knowledge and skills which they had developed in 1st year were not recognised nor advanced further whilst on the traditional placement model. Responding to a trigger question *"What were the main differences you found in Year 2 placements compared to first year clinical placements?"* elicited these responses

> *I think my mentor stretched me a lot in my first year by the time I came out of my first year we were doing the patient management which is basically what the third years are meant to be doing just now, so from that prospective I think I came a long way in one year and then it was almost like when I got into starting my second year I was going back the way and I wasn't getting to use all the skills that I had been taught from the hub experience (Internal Model).*

*I definitely think for comparison, I can compare more with my last placement which was my six and seven with Hub and Spoke and I can see that there is a great difference and in that last placement I felt I definitely went backwards, I wasn't given responsibility, I wasn't even allowed to write the nursing notes and I just feel at the end of year two, when I did write the notes I was told I shouldn't have done that, because I just thought well I am just going to start and write these because I know I can (Fixed Model).*

*For me, because you are only given three placements in second year, one of mine was over at (name of hospital) but it was in theatres and you know I absolutely loved it, but for eight weeks it's maybe too long because I came home with hardly anything signed off in my book, because you know it's a completely different area all together. I am feeling I have to chase up a lot of my domains and things because I missed that whole placement for getting things signed off (Facilitated Model).*

These Phase 2 findings are in contrast to students reporting whilst on the hub and spoke model of how mentors (or the team) worked with them to ensure they progressed and planned for this progression over the duration of that 1st year.

*It was good to be back in my hub again - I was encouraged to carry on from where I was last time I was on the ward (Fixed Model).*

*It was reassuring to be back on Ward (number) – knew all the nurses so I felt confident going back. Enjoy being at work now and feel much more confident and able. I am beginning to have my own routine and feel I don′t need to ask every time I do something (Facilitated Model).*

A further observation in relation to the concept of 'going backwards' is the issue of placements who appear to hold back students due to the notion of 'seniority' as can be seen below.

*My placement in semester six was in Intensive Care and I was constantly told "You are only year two you shouldn't be doing that yet". I just felt we had been given so much responsibility and I just expected it maybe wrongly when I carry that through and I felt in my last placement that I was told so many times "No you shouldn't be doing that you are only year two, you don't need to know that you are only year two". I found that difficult, I didn't spend an awful lot of time with that mentor, but I feel she was not aware of what I was capable of and I am not sure that she was interested to read through my OAR to see what I had gained previously (Fixed Model).*

This was an aspect highlighted in Phase 1, whereby some clinical areas rather than reflecting on the learning opportunities they can provide for students no matter what level in their undergraduate programme students are at, hold onto a 'traditional' view that the nursing care being delivered is out with the level of skill and competence of a student nurse.

A strong link with the concept of 'going backwards' was assigned by the students to their mentor and the relationships built between the two parties.

*Starting over*

Barriers to relationships being built between mentor and student may have been uncovered by students when on multiple placement allocations be they short spoke placements within the pilot model or the cumulative effect of restarting traditional placements in year 2.

Students' responses to this concept were elicited by asking the question *"What were the main differences you found in Year 2 placements compared to first year clinical placements?"*

> *I found that going into separate placements the very first time I did it was quite daunting for me, because one I was going into a completely different area that I had never been before and didn't know what it was going to be like but I had actually had a few other things a few hiccups that had happened that made that flow a little bit more difficult, I only had two days notice. That way I would agree with you I like the consistency of one placement for a set amount of time and I went out to other smaller placements I found it better (*Internal Model*).*

> *It's like the first day of a new job every time you go in (Facilitated Model).*

These beliefs of continually restarting their learning relationships influenced students' feelings of belonging and their perceptions of the type of educational opportunity available to them.

> *Each placement you had to reinvent yourself to show them who you were and what you were capable of each time. Every time you are going into see somebody different, it's a totally different area yet again, it wasn't within what you had being doing in first year, you are trying to build this relationship to say we can do this also and please accept us. You can build it up it just takes time, but you don't have all this time as when you are in hub and spoke you had the full year and build up your relationship with the main ones and other people were more accepting of you when you went out with it. I thought that was a good thing (Internal Model)*

*Support*

A main domain to emerge from the initial report of the hub and spoke allocation approach was the development of confidence in the student pilot cohort. Two main concepts were reported upon by students in response to the question "*Did the traditional model or the hub and spoke model offer you higher levels of support?*" In the follow up study respondents supplied more insight in to their confidence levels.

*Self confidence*

Students responded in ways that indicate they believed the experiences of Year 1 placements had raised their faith in their ability to cope with the placement and educational demands of nursing.  They saw themselves as being better prepared for Year 2 allocations as a result of their exposure to hubs and spokes.

> *What I will say is …personally I find it (hub and spoke) has given me more confidence, when you go into your placements now and you've got that wee bit extra knowledge where you have been in an area that students don't normally go, you've got that extra confidence to go "well I have seen this and I have done that, I can do this" (Facilitated Model)*
>
> *I think having a good grounding, is good for confidence, been built up and you are really actually doing a good job (Internal Model)*

Students further disclosed that these experiences made them different to colleagues in Year 2 in how they responded to the pressures of placement demands and the opportunities they accessed in traditional placement periods.

> *We were given care management and delegation duties for that first term in our second year, which I don't know if we would have been able to do if we had not been on Hub and Spoke, because we had given that opportunity on the ward as well. …. but I think it gave you the confidence in your own abilities because you got to develop your capabilities that little bit more each time (Fixed Model).*

A follow up question "Where did you get your support from when in clinical practice?" gave some more insight into both student self-confidence and the development of resilience.

This reported improvement in confidence levels led students to seek support from each other as well as the clinical mentor.

> *In theatres as students we all supported one another, we all stuck together, we kind of knew the kind of staff that would put the time in with you and were approachable to ask questions and there were certain staff that you would just not got near, you just think they are not going to be very good for my learning at all (Internal Model).*

*Developing Resilience*

Linked to self-confidence and receiving support from sources other than a named mentor is the idea that students were sustained in times of stress and impetus by their own reserves of resilience. Knowing what was expected of them in Year 1 seems to have provided a sense of direction for students in learning environments that they considered less than optimal.

> *She never took the time to introduce you to the rest of the team, so the onus was on you to try and become familiar with people as and when you were in on the same shifts (Internal Model)*

> *Year one gave me the grounding to just be able to, basically I had to go off on my tod and find things to do, it was in a nursing home, so there was loads of things to do, but the attitude of my mentor was, "oh don't mind about that, the carers will do that" Well no I am not sitting in a nursing office all day, so I would just go and attach myself to whoever was doing anything or find if anything or something that needed doing. I don't know if I would have had that confidence had I not been on the Hub and Spoke (Fixed Model)*

> *Through that project (hub and spoke) you did have to take, I find that you were responsible for your own experiences there, it wasn't just happening to you; you made it happen (Facilitated Model)*

Furthermore, a student identified how resilience also maintained them on the programme when they had a negative placement experience

> *It (Hub and spoke) boosts your self-esteem, builds your confidence and encourages you to actually keep going and to keep learning. A bit what I say, I think going from the end of first year and then into semester four, I didn't have a really good placement to be truthful, and I thought do I want to be here. You can have one bad placement like that, that just makes you think, part of me thinks if I had that in my first year how would that have influenced where I am now, I don't know, but do I keep going?..... Whereas now you are just another face, another student, bye hello, that isn't nice. I think for me personally in my first year that would not have been a good experience, but it gives you a lot more confidence (Internal Model)*

### *Continuity in Mentorship*

*Mentor Attributes*

Students have already commented in previous sections on how mentors can influence the 'fitting in' aspects of belongingness, but mentors personal and professional characteristics and traits were seen to have an impact on student's perceptions of how well they are continuously mentored.

The expectations of the NMC (2006) with regards to mentors, both in terms of their own learning and that of students are very clear. There is a clear statement that recognises the primary role of practitioners is to 'provide care for patients and clients'. However they also state that 'being a mentor requires commitment' and that 'whilst giving direct care in the practice setting at least 40% of a student's time must be spent being supervised (directly or indirectly) by a mentor /practice teacher'.
The impact of good and bad mentoring on student learning is well documented (Lauder et al 2008).

From a mentor's perspective being a good mentor appears very much about commitment and support for the students, also about mutual trust, (Lauder et al 2008).

Kilcullen (2007) reported that 'the ideal mentor as perceived by students offered support in learning by negotiating learning objectives, setting objectives at an appropriate level and giving constructive feedback'. From a student viewpoint being a good mentor involves being able to spend time with students as well as being interested in their learning whereas being perceived as a bad mentor as indicated in some of the above examples appears to be the opposite and linked to lack of interest in teaching and helping the student (Lauder et al 2008).

Students identified key elements in this study in regard to mentor's attitudes to nursing and teaching students that impacted upon the student's perceptions of being mentored. Elements such as building mutual respect, mentors demonstrating that they see teaching as a legitimate part of the registered nurse role and the providing challenging learning opportunities form how students perceive mentor ability

> *On the Hub and Spoke you build up that trust and respect with student and mentor, you definitely don't get that to a degree on traditional placements (Internal Model)*

> *I asked if I could go on some training because there was new tracheotomy tubing that they had started using up in Hospital X and I asked if I could have some training on that because other members of staff were going on the training but I was told that students didn't need to know that (Fixed Model)*

However, when the clinical environment is right students are enthused and learning is promoted, despite periodic mentor absences.

> *My semester six placement was an absolute dream, … and there were mentor problems, the mentor I had been assigned to initially was signed off work…..but I never came across anywhere that is so geared towards student learning, they have online learning packs, resource packs in the library on pain on everything you will come across when you are there (Fixed Model).*

### Assessment Attainment

In Phase 1, students reported that continual exposure to the same mentor led them to believe more in the accuracy and validity of placement achievements as feedback was consistent and constant.

Experiences from the traditional model, where mentors were responsible for confirming learning had taken place in placements of a time frame shorter than the hub and spoke year, was more variably reported.

When pressed on the importance of being supported and encouraged in placement and having faith in the confirmation of progressing towards being a competent nurse, students identified some differences that were associated with the different allocation processes.

> *As I say the first two placements it was excellent and there was that continuity, but in my final placement there was absolutely none. My midterm review was done on the second last day. Even though I had asked on many occasions if we could maybe just do that, if there was anything that I could maybe then do in my final weeks (Fixed Model).*

> *Mine (mentor) went on holiday and not getting x been signed off, they would not sign it off, because it says you were allocating me a mentor from recovery and you are in doing anaesthetics somewhere else or doing scrubs somewhere else with someone else and both of them went away on holiday, so therefore lack of communication so therefore things weren't getting signed off (Internal Model)*

*When I was in my first year I was able to go to her (mentor) and say look can we have a review at some point, go through where I am what I need to do, it was like yes no problem that's fine. Whereas in the second year I felt it was more small wee tiny bits here there and everywhere if you know what I mean, you were getting ten to fifteen minutes maybe at the most scattered about here there and everywhere to have a quick look at it, which was fine you still managed, but I felt it was a bit more rushed (Internal Model).*

Students also identified placement arrangements as increasing their perception of doubts about validity of assessment judgements made in the Year 2 shorter mentor relationship placements

*I don't feel as if I was (fairly assessed). At the end of my first placement semester four, I felt okay I scored alright but still got marked down for communication. To me communication is a two way thing, if you are completely communicating with someone and the other person is not communicating back to you, then if you are doing all that you can, the fault probably lies on someone else as well, obviously you have to step back and reflect on it, but I can say with honesty that I did everything I could have and communicated effectively with that team and yet I still got marked down for it (Internal Model)*

*It's like you are building on what you have done for your last block and then again and you are building on that again, so your mentor is building you up and you are building up your knowledge and your skills at the same time…. it's not been like that in the traditional year placements because you are taking one set of skills and then going for another set of skills because you are going to a completely different setting all the time. You might be built up in the field that you are in but not as a whole nurse. It's not an all rounded kind of experience (Internal Model).*

*Different mentors wanted you to redo things over again, maybe something to do with the time they were actually how long they were in the area, or it might also have been maybe your mentor not being there to build a relationship (Fixed Model)*

Mentor perceptions about stage of training of the student being linked to expectations of student ability, perhaps shaped by mentors past experiences of a hierarchy of traditional placement allocation, impacted too.

*It was interesting because when we did our reviews at the end of the semester four and final placement review my mentor, my initial original mentor, had actually had heard the same about you, we were being held and assessed by the same standards they would the third years would do, that was for our first placement in second year (Fixed Model)*

> *I found year two okay, in fact in year one I felt like, especially at the end of the first semester one, the mentor assessed me but I don't know she did as maybe as thoroughly if she would have if she had of known that I was coming back, "Oh well I will give you whatever and we will see how you get". I felt like no you have got to assess me for this time period in my year of training but I don't think she did that (Internal Model)*

Some students however seemed to be better disposed to having judgements made within the context of traditional placement arrangements

> *I felt like I should have been assessed on what I had done for that year as opposed to saying "Oh well you have got more time with us so you probably will get better" do you know what I mean that kind of thing. By the end of it she did assess me really well and I was pleased but I really felt like I only got one assessment for the whole year as opposed to three, because really she said the same in two that she did in one and it wasn't until the end that she could submit all. Whereas at the end of each placement in year two I felt like they really looked into everything that I had done from day one and marked me on that (Internal Model)*

### Team Mentoring

Commencing new placements brought an unease to students and this was experienced more in year 2 that in the hub and spoke year.

> *I think both the traditional and Hub and Spoke model depend hugely (on the staff) I would say predominantly on the quality of area that you are going to, the approach of how many students of the place you are going to and the actual mentor, because if you have someone that is not interested in facilitating days away, weeks away, it's really hard as a student to pick up and go to places and say "hi would you mind having me for a wee while?", because there is not that authority (Fixed Model).*

> *Semester four was "special" for me and yet again, took a little while I think initially for me because the circumstances of the hospital and what the ward was going to be itself maybe, it was kind of like an unsettlement there and I kind of sensed that in my placement that things were quite fragmented, you know. So I don't think that was because of the team themselves, think it was just circumstances that surrounded it (Facilitated Model).*

This unease seemed to be abated by placement areas either purposely using team mentoring to support students and/or students manipulating the ward registered staff into providing the type of team mentoring they encountered in Phase 1 of the study.

It was not possible to infer in student responses whether the use of team mentoring was a conscious decision taken by the clinical team or indeed whether the team where aware that they operated in this way

> *I was in a surgical ward (in Semester 4) and I had an absolute brilliant time. My mentor was absolutely fantastic and even when she wasn't there everybody else made me feel very welcome and they were very good at putting you back down to theatre or the pre op nurse, you were getting the whole picture, the whole patient's journey (Facilitated Model).*

> *I think it was more like a team based support in year one, because you were in that ward and everybody supported you really (Internal Model)*

### Continuity in Practice

*Making sense of placement flow*

Regardless of the intention to support students, either by team mentoring or by allocation to an individual named mentor, the security that derived to students from following a notional care pathway in Year 1 evaporated for some students in Year 2. The perceived lack of continuity of mentor coupled with individual students' lack of understanding of the aims of care being provided in the placement confused some participant students in the traditional allocation model.

In contrast, there is an emerging claim made by students that seems to equate learning with knowing what comes next in terms of the care pathway and in understanding the nursing skills and knowledge that progress patient care.

> *I think because we had done Hub and Spoke and I know for me personally I was always looking out with the setting I was going to do, I was like what's connected with that, what could I go to and when I did my community placement I was very interested about continence and I knew there was loads of continence training related and links continence meetings, and so I had all these suggestions when I went for the meeting that these were things I was interested in (Fixed Model)*

> *Because you have got the continuity you can advance plan basically what you are wanting to achieve. As you only have five weeks, if the opportunity arises by all means let's take it. We did see the full pathway. One of my plans was doing an ECG clinic at my last placement but unfortunately there was quite a bit of time constraints that were involved with that, which meant that they didn't get the time given to them to run the clinic, which meant I did not get the experience that I was hoping to get with that so for me that meant for my learning it wasn't as good as what it could have been. We still went through the theory of it and everything else but did not get the practical as well as I would have liked which was a bit of a shame (Internal Model)*

*In my last placement at theatres it was three different areas, you had one mentor for the three areas, I just felt that did not work great. Breakdown in communication, there was no continuity, they had too many people over in recovery, and you were in a different area every day (Internal Model).*

### Additional Findings

Two further domains were uncovered by students in responses to Phase 2 focus groups.

*Retention*

In Phase 1 of the project we referred to findings that indicated a modest retention effect of being allocated on a hub and spoke placement model when compared to the non-pilot student cohort over that year.

However students did report dips in their commitment to the programme and told of their thoughts about how to react to an environment that was not as enjoyable as their Year 1 hub and spoke experience. This could be linked to the phenomenon known as the "sophomore slump".

This aspect of the findings may be worthy of further study within the recruitment and retention delivery group framework and  evaluation of interventions and strategies used by students that go some way towards alleviating the issues further examined.

Some students "re-considered nurse education" as a viable career choice at particular times but were sustained by their experience of hub and spoke opportunities and all completed year 2 studies.

*Don't think I would be where I am now if I didn't have a really good first year .......on the hub and spoke (Internal Model)*

*I think if I hadn't had such a good first year you know, a good mentor seeing you doing well and that I would not be here. Seeing so many that have not done the hub and spoke that have actually left because they have not had such a good experience (Facilitated Model)*

*The Practice Learning Environment*

Students were asked to provide their preferred approach to placement allocation models. They were asked to consider the strengths and weaknesses of both models as they had now experienced.

Across all three campuses the students preferred option was to have a mixed model; Years 1 and 3 'Hub and Spoke' as this would afford all the benefits previously reported in Phase 1 and Students expressed a liking for Year 2 to be more akin with the traditional model.

> *I think what a great idea it would be for year one, you do something in the community with a little bit of acute and then year three you do acute and you get your big busy wards and you get signed off, that would be great, and year two could be a little bit whatever, because you will have time on your hands and you need the experience (Internal Model).*

> *The hub and spoke for me personally for year one was great, it gave me all the confidence and the courage I needed to go onto year two. As I say I think in year two I might have felt a little bit restricted if I thought I was going to be in the community for a year (Internal Model).*

> *If you were able to pick your placement, I would choose Hub and Spoke (Fixed Model)*

Year 3 was viewed as being fit for 'Hub and Spoke' as this would further assist in building confidence and competence in preparation for nearing registration and in assisting 'sign off' mentors to achieve a fully informed assessment of their capabilities.

> *I am the same as (Name of student). If you could be guaranteed of the value of that placement, because it's such an important year for you, somewhere it would give you management opportunities, somewhere you can ensure you would get everything you need to get in your final year, because you can't waste that year (Fixed Model)*

> *I think when you look at all your proficiencies and your care domains that you have got in your OAR especially in second and third year, I think it's a lot better to have a hub in that respect, because you have got the advantage of planning ahead and you've got the continuity as well ( Facilitated Model)*

*Discussion*

At a time when the value and nature of clinical learning time in nurse education is continually being examined this work, when coupled with the Phase 1 report and the complementary work being commissioned by the funders of this report, it is perhaps a good point to pause and place the findings in the preceding chapter of this report within a wider nursing debate.

It is apparent to the authors that a simplistic debate about adoption of either hub and spoke allocation or traditional approaches to securing placement experience for nursing students needs to be wider than merely a consideration of these two options. In our evaluation project alone we identified three variations on the hub and spoke approach.

Colleagues at Robert Gordon University and Edinburgh Napier University provided another two variations on the hub and spoke theme, so a recommendation that hub and spoke allocation should be adopted as the clinical allocation standard requires more serious study to identify the advantages and disadvantages of the approaches taken to placing students in clinical practice. Furthermore an appreciation of the local logistics of placement is a major consideration to be factored in to decisions about the composition of a preferred model of clinical allocation to more fully assess the educational advantages that placement provision can bring to undergraduate nursing preparation.

The funders and the Scottish Government's Recruitment and Retention delivery group for nursing have provided the environment within which the debate about how best to provide clinically valued learning experiences has commenced. This climate can be maintained in the quest to identify a philosophy of clinical learning for nursing students in Scottish institutions. It is hoped that this process can be further supported by the clinical learning sub group participants.

Nurse education is placing an ever increasing value on learning in practice and it is crucial to monitor the learning opportunities offered to students to ensure they can meet their required competencies (Burns & Patterson 2004, page 5). Burns & Patterson suggest that:

> *"Providing adequate support and supervision for learners can be challenging however and managing patients' and students' needs can lead to role conflict for mentors. While it is important that students receive appropriate supervision throughout their placements moreover, support for ever increasing numbers of students has implications for the quality of practice placement learning".*

The literature refers to the significance of this 'being in practice' as part of the socialisation process of becoming a nurse or midwife (Melia 1987, Levett-Jones & Lathlean 2007) and that students acknowledge the importance of 'fitting in' to the environment in which they are allocated as significant to their actual experience and their success in becoming a qualified nurse (May & Veitch 1998).

Lauder et al (2008) identified that whilst it is apparent that student nurses, in their various branch programmes, and student midwives will be prepared for their practice experience (practice being used here to mean any placement the student is allocated to) through the same theoretical curriculum in each university, it is not the same situation with regards to their clinical curriculum. Although there are prescribed NMC standards (NMC 2010) and outcomes to be achieved, the pathway to achieving them will differ for each student.

Each student will experience clinical practice in an individual way, and will be involved in varied and unique interactions with a range of patients, clients, service users, families, health and social care professionals. A constant for every student however may be their senses of belongingness, support and continuity in both placement and mentor. Various approaches to improving the quality of the students experience in practice settings have been described. Most are under evaluated and often rely on small scale projects in one institution, evaluated by those who have developed the approach. Issues considered include the role of the academic (Brown et al 2005), mentors, structure and management of placements and learning opportunities.

The 'traditional' placement model is diverse and complex in nature. Students identified challenges in respect of integrating into (belonging), and being accepted by, a wide range of clinical teams when placements are short and varied. Mentoring of students within practice is viewed as a fundamental aspect of nursing (NMC 2008); with Holland et al (2011) reporting that lack of time and pressure of other clinical commitments on mentors can impact on their ability to support students.

In this study, in common with the initial findings of the Robert Gordon University team (Banks et al 2011), we have added to the rather limited range of evidence on hub and spoke allocation impact. Both the aforementioned studies chime with the suggested benefits of this approach suggested by Campbell (2008). Students were in general found to be stimulated and motivated through the hub experience promoting familiarity, belongingness and continuity and were reported as being better able to form connections between education and practice.

Students described a range of experiences of mentor support, with supportive mentors having a positive impact on students' perceptions of their learning experiences. Conversely issues around students being 'held back' due to their lack of 'seniority' were reported.

Further study may be warranted in traditionally allocated student populations to investigate the incidence and nature of "going backwards" felt by students in those cohorts.

Supporting learning in the clinical setting and the many mechanisms proposed to facilitate this is one of the oldest and most written about aspects of pre-registration curricula over the last 45-50 years. However, there is little consensus in the literature on the appropriate support that facilitates deep learning (Andrews & Roberts 2003). A study by Last and Fullbrook (2003) found that the qualities of placements as well as the poor support received from some mentors and tutors, together with not being supernumerary and not being valued, were contributing factors to students leaving nursing and midwifery.

Our finding related to the drop in student evaluations of clinical learning quality at the end of year one and subsequent rise in year two is worth future investigation. Freidman's (1956) theory of a sophomore slump appears to be a possible rationale for the falloff in participation rates. The slump is a two faceted concept relating to students experiencing difficulties of an academic and personal nature and subsequently presenting as demotivated.

In this study students reported no diminution of support levels and their relatively satisfactory performance in year 2 studies, all passed the assessed work components relating to theory and practice, detract from this simplistic conclusion being absolutely relevant unless the sense of resilience and belongingness derived from year 1 allocation served in some way to sustain the students through a mild version of the slump.

Small numbers participating in this phase should give the researchers pause in making subsequent recommendations in this area without increasing the scale of the study.

Levett-Jones & Lathleans (2007) work with nursing students looking at belongingness is both informative and useful. Their description of developing a sense of belonging is linked to the provision of a secure environment in which students can be valued within a group, and that an individual's professional values and behaviours complement the group and facilitate group cohesion. This two stage pilot has to a large degree found sympathetic results in our hub and spoke cohort in phase 1 but also extended the concept of where students align their belongingness to in phase 2 interviews.

They can clearly align themselves; it seems to the research team, to three main aspects of belonging; geographic locations, role models who mentor them personally and professionally and a larger clinical pathway ideal that allows them to match their work to a greater good of delivering holistic care.

Even when that alignment is lost temporarily or permanently when "once and for all" placement blocks end the students develop coping skills to try to realign their perceptions of belongingness to one of those aspects of belongingness.

These three aspects of belonging might usefully be further studied to fully understand how students mediate their belongingness and more importantly how that belongingness promotes quality clinical learning.

In their study of 458 associate degree students, Shelton and Sellers (2003) identified two forms of support: psychological support, directed at promoting a sense of competency and self-worth; and functional support, directed at the achievement of tasks to reach the goals of persistence and academic success.

Support levels in this phase of the evaluation were generally perceived to be either very good or not good at all.  This concurs with findings from the Lauder et al (2008) study whereby being a 'good' mentor involved being able to spend time with students as well as being interested in their learning and being a 'bad' mentor was linked to lack of interest in teaching and helping the student.

Placement experiences also formed the basis of a study by Andrews et al (2005), in which it was concluded that 'in particular the absence or presence of a supportive and positive learning environment, are seminal for many students in shaping their first destination employment decisions' and also that 'experiences of one ward can impact upon the perception of the entire institution and consequently the decision to apply for work there'.

Over the two phases of this study it is recognised that for this group of students placements are less likely to be seen as being 'within' a physical building, location or team, but as something more open.  New student strategies have emerged as part of the process of negotiating Spokes from Hubs, for example 'managing' mentors where resistance is anticipated, being assertive in order to enhance learning experiences, controlling and managing own learning, engaging in 'path-making' and 'path-finding' and 'strategic spoking' to achieve certain learning outcomes or to avoid an aspect of Hub experience.  Such skills reflect the core graduate attributes (Nicol 2010) that have more emphasise in pre-registration nurse education for the future (NMC 2010).

Student responses that related to the concept of assessment are interesting in possibly identifying a preliminary indication of the existence of an optimal timeframe for placements that both promotes valid and reliable assessment of clinical attainment by the student but negates the sense of having too long in the clinical area to formally commit to providing constructive summative evidence and clear feedback to the student.

However, the data in this phase of the study suggests it is imperative mentors are also enthusiastic and committed to supporting students.  To some extent this supports one of our Phase 1 recommendation that the profession should seriously consider the issue of should all registered nurses be mentors?

A majority of students in this phase of the pilot study emphasised that the focus of learning for students in a 'traditional' placement model was primarily on completion of the clinical assessment documentation and in ensuring as many learning outcomes and skills are 'signed' of.  The rationale offered for such a focus has been illuminated by students where they have perceived some clinical areas as being limited in learning opportunities i.e. theatres, ITU.  This is in contrast to Phase 1 whereby a strong element which came through all 3 demonstration project sites was evidence of students developing deeper and wider learning and not simply focusing on the 'tasks' of nursing.  This is further supported by the concept of 'going backwards' whereby a majority of students detailed how in some clinical areas they experienced their mentors would not accept the levels of attainment they had achieved in Year 1as being valid, wanting students to demonstrate further their existing level of attainment.  Linked to these findings are the 'traditional' classification systems which define placements according to either population group ('older people'), setting ('community' or 'in patient') or nature of the intervention ('medical' 'surgical').  This immediately confines the learning experience, narrowing the student's perception of the learning experience.

By virtue of the 1st year experience of these students and the strong and continuous support provided to them by their hub mentor assisted in developing not only confidence but also resilience.  Students have articulated clearly how 'resilience' has assisted them through the programme in times of difficulty.

Having completed Year 2 of their programme, students were in a position to compare and contrast the benefits and limitations of each placement model.  In doing so all students suggested that consideration be given to developing a 'mixed' model based on the strengths and attributes that each affords.  They suggest Years 1 & 3 being based on Hub and Spoke and that Year 2 should be a more varied experience based on the traditional model.

Our theoretical framework that informed both phases of the pilot was reliant upon Tinto's "Model of Institutional Departure" (1993).  The central concept within this paradigm is based on the idea of academic and social 'integration' as a predictor of student retention.  While phase one of the project saw a modest retention effect when compared to non 'hub and spoke' peers there is insufficient findings to claim a universal effect will be seen in other populations.

What did emerge however a suggestion of a developing robustness and resilience within individual students, and throughout the student group who began as hub and spoke placed clinical learners, which points towards an emerging integration story in this approach to managing placements.

Tinto's theory aligns also with the core concepts of this study namely belongingness, continuity, continuous support and clinical learning environment.  This study when taken in conjunction with phase 1 of the pilot adds to our understanding of the nature of student's perceptions and experiences of belongingness, continuity, continuous support and clinical learning environment.

The research team developed awareness of the use of language when talking and writing about practice learning.  The nature and purpose of practice learning is in part conveyed through the language that is used to describe it.  The typical use of the term 'placement' creates an image of a physical location or professional team which the student goes to and remains for a period of time.  It suggests student learning is about and within the boundaries of that location or team.

Contemporary practice learning should be an open and flexible system within which the student pursues meaningful learning experiences that are person-centred and span health and social care services and beyond in ways that reflect the service-users' experience.  It is suggested, that the term 'practice learning experience' reflects a different perspective and ultimately a different type of learning experience for the student than the term 'placement'.

When taken in isolation this phase 2 report adds to our knowledge of how students perceive clinical allocation model impacts on their learning capacity.  As a two phase study the researchers believe that we have identified traits of resilience, continued belongingness and self-confidence in orientation to learning in clinical practice in hub and spoke experienced students when compared to their traditionally determined placement colleagues.

Perhaps, though, it is when placed beside the two sister projects (Banks et al 2011, Gray et al 2011) sponsored by our funders that the insights generated in to practice placement learning can best be understood and used to begin the steps towards developing a comprehensive philosophy of clinical learning for nursing students.

It is for pre-registration nurse education providers now to devise methods of delivering allocation models that offer these advantages in learning to subsequent student cohorts and address some of the deficiencies in clinical experience that this small scale study suggests exist.

***Recommendations***

*Nationally*

Mentor influence on clinical learning is pivotal. A national review of 'how' mentors 'practically' undertake their role should be conducted.

Practice Learning must be seen as an academic endeavour that promotes deep, meaningful, person-centred learning rather than superficial, compartmentalised placement-centred learning - Further investigation is warranted in relation to how a 'good' clinical experience promotes deeper, meaningful student learning. The developing collaboration between the three Higher Education Institutions that grew over the life of the project enabled the sharing of ideas and perspectives, discussion and debate around the findings emerging from the evaluations and exploration of the similarities and differences between the models. This collaboration should be maintained and encouraged.

*Policy*

The funders should develop a 'guiding principles' document based upon the lessons learned from the 3 demonstration sites findings for a practice learning model based upon 'hub and spoke'.

*Locally*

'Traditional' classification of placements should cease.

A review of the local mentor preparation programme should be conducted.

Continue to work towards the implementation of a 'variation' of the hub and spoke model.

Further examination of the sophomore slump effect on clinical learning should be carried out.

*Limitations*

Our most notable limitation in Phase 2 has been the loss of students to the study and the low response rate of returns to the CLEI, Short Support Questionnaire and Focus groups.

The loss of students from the study and reasons for these losses has been detailed earlier in the report.

The student body who participated in the pilot seems to have no unique demographic characteristics that set them outside the usual parameters of most nursing student cohorts.

Perhaps the most significant distinctive quality of the pilot group is their self-selecting nature. All participants elected to opt in to the study but what is unknown by the team is if that choice to participate marked them as unique responders (individually and as a group) and colours their descriptions of their experiences or if opting in signifies that in some way their motivation and commitment to nursing as a career influenced their reports whilst participating in the study.

The low response rate to returns of the questionnaires and attendance at focus groups can only be surmised by the research team to be a result of the students experiencing 'evaluation fatigue'. Our rationale for this assumption is based upon our inside knowledge of the number of evaluations our students are requested to complete; end of placement evaluations, end of module evaluations, end of year evaluations and completion of National Student Surveys. We can offer no other significant reason.

As intimated earlier in the design description passages students, who might have been on distant placements from their campus base, were given the option of either returning the CLEI and Short support questionnaires after each placement experience or of submitting them on completion of the entire phase 2 year. While the researchers intended this choice to facilitate higher return rates of the forms by students, it did allow for the possibility that semester by semester returns were not completed contemporaneously with the placement experience but possibly completed retrospectively.

The students who returned the forms by hand and those who attended the focus groups did assure us that forms were reflective of each separate placement experience completed as close to that experience as possible and we have no reason to question these assertions.  Not all participants were able to be contacted to allow them to record similar declarations.

On its own, the small numbers in this study make it difficult to generalise findings, however when reviewed alongside the two further commissioned pilot projects (Robert Gordon University and Edinburgh Napier University) the findings collectively go someway to strengthening our evidence base of what makes for supportive quality clinical learning environments for our nursing students in Scotland.

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## Risk Assessment and Management Plan

| Risk | Outcome/ consequence | Category[1] | Likelihood (Pre) | Impact (Pre) | Quant- ification (Pre) | Measures of Mitigation | Likelihood (Post) | Impact (Post) | Quant- ification (Post) | Action[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Lack of recruitment to Phase 2 focus groups | Lack of comparative data | People | *3* | *3* | | ▪ Frequent reminders in class and on VLP ▪ E mail students direct. ▪ Letter sent to students home address | | | | PI Oct 2011 |
| 2. Sickness to Project Investigators | Delay in planed timetable | People | 2 | 2 | | ▪ Additional staff identified to replace project team ▪ Head of School under takes commitment to replacement staff costs | | | | PI Oct 2011 |
| 3. Lack of returns of Phase 2 survey tools | Not meeting Scottish Government Contract Lack of comparative data | People | 3 | 4 | | ▪ Frequent reminders in class and on VLP ▪ E mail students direct. ▪ Letter sent to students home address | | | | PI Nov 2011 |

[1] Strategic, Operational, Finance, People
[2] For each action identified to achieve measure of mitigation, responsibility should be attached to an individual and a date should be identified (either to be achieved by or when achieved)
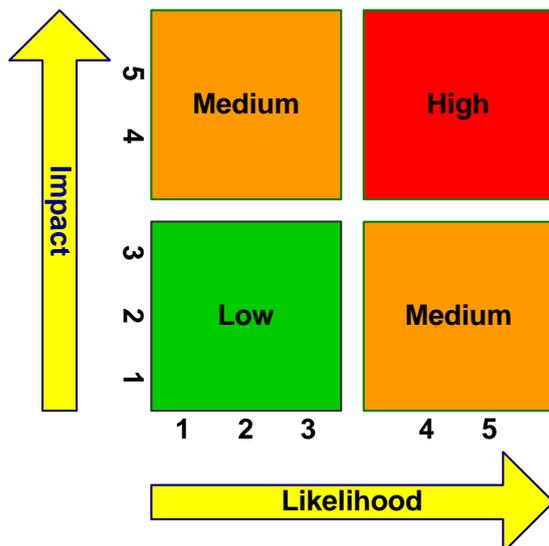
### *Risk Quantification Guidance*

The following provides information on the tools used to assist in the quantification of risks:

| Likelihood | Score | Aids to assessment[3] |
|---|---|---|
| Almost Certain | 5 | Risk will materialise on average once every 6 months |
| Probable | 4 | Risk will materialise on average once within each year |
| Possible | 3 | Risk will materialise on average once every 3 – 5 years |
| Unusual | 2 | Risk will materialise on average once every 5 – 10 years |
| Remote | 1 | Risk will not materialise more regularly than every 10 years |

| Impact | Score | Aids to assessment |
|---|---|---|
| Catastrophic | 5 | Severe impact on successful project delivery |
| Major | 4 | Substantial impact on successful project delivery |
| Moderate | 3 | Noticeable impact on successful project delivery |
| Minor | 2 | Minimal impact on successful project delivery |
| Negligible | 1 | Negligible impact on successful project delivery |

## Overall Risk Quantification[4]



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[3] Each risk should be assessed out with the timeframe of individual projects and as a standalone risk

[4] Overall risk quantification to NES not to project or Directorate

**Next Steps**

*Gantt chart*

| Task | Sept 2010 | Dec | April 2011 | Sept | Oct | Nov | Dec | Jan 2012 | Feb | Mar | April |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Prepare & submit application for continuation of ethical approval | ■ | | | | | | | | | | |
| Semester 4 placement ends First submission of survey returns possible (1/2011) | | ■ | | | | | | | | | |
| Semester 5 placement ends Second submission of survey returns possible (5/2011) | | | ■ | | | | | | | | |
| Draft Interim report submitted | | | | ■ | | | | | | | |
| Semester 6/7 placement ends Third submission of survey returns possible (9/2011) | | | | | ■ | | | | | | |
| Data Collection And Focus Groups begins | | | | | ■ | ■ | | | | | |
| Submit interim report | | | | | | ■ | | | | | |
| Steering Group Meeting | | | | | | ■ | | | | | |
| Data Analysis | | | | | | ■ | ■ | ■ | | | |
| Draft Final Report | | | | | | | | | ■ | | |
| Review Meeting | | | | | | | | | | ■ | |
| Submit final report | | | | | | | | | | | ■ |

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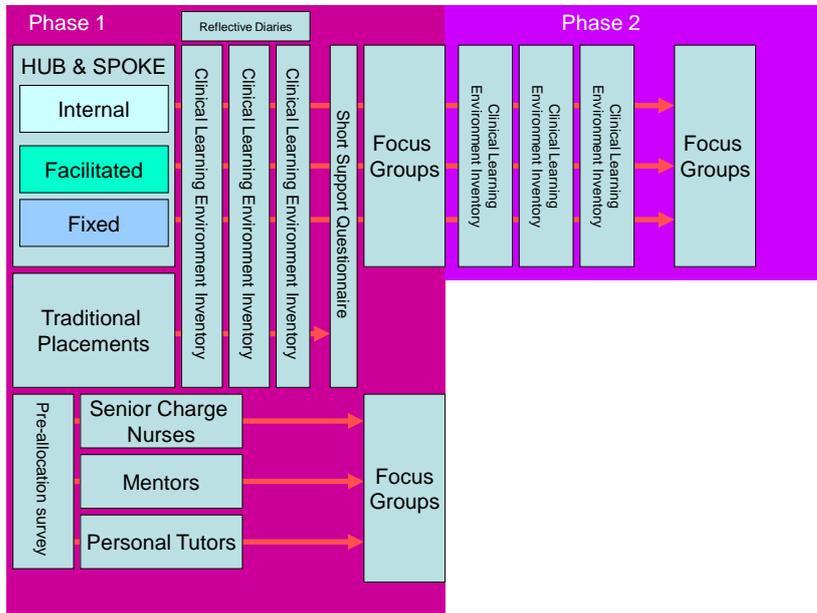
**Appendix 1**



Diagram showing how phase 1 fieldwork relates to Phase 2 data collation.