

# An evaluation of the effectiveness of a programme aimed to develop the key skills capabilities of nursing students

**Wendy Moran**  
School of Health

## Background and Rationale

The University's Learning and Teaching Strategy (UoW 2000) recognises that the development of key skills and the diagnosis of key skills are central concerns. A Key Skills Strategy has been developed by the School of Health as a central theme in the School's draft Learning and Teaching Strategy. The key skills have been seen as a major part of the curriculum in Higher Education for some years. The emphasis upon key skills development has been underlined by the Dearing Enquiry (1997). The school has completed a 2 year research project funded by HEFCE under the Teaching and Learning Technology Programme (TLTP)3 initiative. The project sought to develop information technology (IT) and numeracy skills using technology support learning (TSL). This project identified that nursing and midwifery students had significant deficits in IT and numeracy skills. The project built upon work completed on the TLTP3 Project. A range of measures were devised to assist students in development all 6 key skills. Although there has been much work completed in order to raise the profile of key skills within the School, we have limited understanding of how students perceive the benefits of the Key Skills Strategy which has been adopted.

The project collected data from a range of sources in several phases. The data was collected in relation to 197 Pre-Registration Nursing Students in year 1 of RN/Dip.H.E. (Registered Nurse Diploma Higher Education) programme.

Participation notes were distributed to the students at the beginning of the project by a Project Team member, who was also a Module Leader for the Key Skills Module the students were undertaking.

## The Research

### Phase 1 Baseline Diagnostics

In accordance with usual policy for the Key Skills Module, a baseline self-assessment of student key skills performance was undertaken using Key Skills Diagnostics on WOLF (Wolverhampton Online Framework). Timetabled provision was made for this activity, which was completed by 154 (83%) students. The diagnostics covered three areas: IT, numeracy and communication.

A performance criteria was set to identify students whose achievement may place them at risk in relation to their performance and progression on the RN/Dip.H.E.

At Risk Criteria:

65% or less in 1 or more diagnostic test  
and/or

Did not attempt 1 or more diagnostic test

The results of the diagnostic tests indicated that 88 students (44%) were 'At Risk' and 76 students (38%) 'Not At Risk'.

## Phase 2 Questionnaire

At the end of Semester 1, Students were sent a postal questionnaire which sought data regarding their Pre and Post entry Key Skills development.

Questionnaires were sent to a random sample of students, excluding those who had wished not to participate. 150 questionnaires were distributed and 44 returned (29%). The relatively low compliance rate was likely to have been due to the use of a postal distribution system. Also the students were undertaking practice placement shortly after the questionnaire was distributed (and therefore unable to access the internal mail system). Questionnaire findings are detailed in Table 2.

**TABLE 2**

### QUESTIONNAIRE FINDINGS (n = 44)

|                                     |                 |
|-------------------------------------|-----------------|
| Have you studied Key Skills before? | Yes 29%         |
|                                     | No 59%          |
|                                     | No response 22% |

| Has the Key Skills Module helped you in: | Yes A Great Deal |  |  | Yes A Bit |  |  | No  |  |  |
|--|------------------|--|--|-----------|--|--|-----|--|--|
|  |                  |  |  |           |  |  |     |  |  |
| IT                                       | 26%              |  |  | 34%       |  |  | 19% |  |  |
| Numeracy                                 | 15%              |  |  | 34%       |  |  | 20% |  |  |
| Communication                            | 23%              |  |  | 26%       |  |  | 30% |  |  |

|  |                 |
|--|-----------------|
| Have you made any appointments to see Study Skills Advisors? | Yes 42%         |
| If yes, how many appointments have you attended?             | No. of students |
| One appointment  | 7               |
| Two appointments   | 1               |
| Three appointments   | 2               |
| Four appointments  | 1               |
| Five appointments  | 2               |
| Five plus  | 1               |
| Cancelled  | 3               |

|   |              |      |
|---|--------------|------|
| How would you rate the meetings with Study Skills Advisors? | Good         | 57%  |
|   | Satisfactory | 9.5% |
|   | Poor         | 9.5% |

|  |     |     |
|--|-----|-----|
| Have you met with your Personal Teacher? | Yes | 86% |
|  | No  | 14% |

|  |                 |    |
|--|-----------------|----|
| How many appointments have you attended? | No. of Students |    |
|  | One             | 24 |
|  | Two             | 8  |
|  | Three           | 5  |
|  | Four            | 0  |
|  | Five            | 1  |
|  | Six             | 0  |

|   |              |     |
|---|--------------|-----|
| How would you rate the meetings with your Personal Teacher? |              |     |
|   | Excellent    | 14% |
|   | Good         | 36% |
|   | Satisfactory | 20% |
|   | Poor         | 10% |

|  |     |    |
|--|-----|----|
| Have you sought any other support within the School or University? | Yes | 12 |
|  | No  | 24 |

|   |              |              |      |
|---|--------------|--------------|------|
| How do you regard your ability with Key Skills, in comparison with when you began the RN/Dip.HE.? |              |              |      |
|   | More Capable | Less Capable | Same |
| IT  | 59%          |              | 39%  |
| Numeracy  | 36%          | 2%           | 50%  |
| Communication   | 59%          |              | 29%  |

Do you feel the Key Skills support you have received has helped you in:

|                     | Yes, a great deal | Yes A bit | No  |
|---------------------|-------------------|-----------|-----|
| Assignments         | 18%               | 57%       | 9%  |
| Studying            | 27%               | 50%       | 12% |
| Practice placements | 18%               | 27%       | 22% |

Is there anything else you feel the SoH could do to help you develop Key Skills?

|  | Yes | No  |
|--|-----|-----|
|  | 50% | 36% |

3 main areas (5 + students responded)

|   |             |
|---|-------------|
| More numeracy   | 12 students |
| Better access to Study Skills Advisors                        | 7 students  |
| Stream students in groups for Key Skills according to ability | 7 students  |

## Phase 3 Focus Group Interviews

Themes were identified from questionnaire responses, for further exploration within Focus Groups. All of those students who participated in the questionnaire were contacted by letter and invited to attend a Focus Group. 2 Focus Groups were conducted, with a total of 20 students attending. Issues identified during the groups are presented thematically:

### Question 1

**How do you feel you have developed through using key skills, professionally and personally?**

- 6 Students had bought a computer at home, the other 7 already had computer access at home. All felt that having access to practice at home increased their ability and confidence.

### Question 2

**What support were you given in developing key skills?**

- Support was given by friends, peers and 3 Study Skills Advisors.

### Question 3

**Was this support effective?**

- All students felt the help they received from any source had been useful.

### Question 4

**What further support could you have benefited from?**

- 6 students felt they would have preferred teachers to ascertain what the students already knew, then use this information.

**Question 5 & 6****Did you utilise the support of Study Skills Advisors?****If so, was this effective? What could have improved this support?**

- 3 students used the Study Skills Advisors and found them to be invaluable.
- One student commenced 'I was useless and he made me feel like I wasn't, and used my previous life skills to make my feel special, I gained confidence in myself, then I could do it.
- Appointments were difficult to get as there was a waiting list.

**Question 7****Did you receive support from your personal teacher in relation to key skills? If so, was this effective?**

- 9 felt that they didn't need their personal teacher for this, they needed their support for personal issues and to keep them on track with their portfolio work.

**Question 8****Any other comment in reflection on key skills development and use?**

- Workbook was too big and confusing (10 students).
- All felt that students should be categorised related to ability at the onset of the key skills module, then taught in these groups with the group with the least ability taught by Study Skills Advisors.
- Life experience was not recognised. All agreed.
- When asked to reflect on key skills generally in retrospect all students agree; it's easier than you think.
- Students are fearful of asking questions, as they fear being made to feel stupid.
- All felt more confident in their ability.
- They felt their horizons had been broadened through the use of the internet
- They felt this broadening of access to information would make them a better nurse.

**Phase 4 Progression Data**

Students' progress in Term 1 of the Programme was tracked. Comparisons were made between progression data and WOLF Diagnostic Assessment.

**At Risk Students**

88 students diagnostic profile categorised them 'At risk'. Of this group, 21 were referred or failed to submit (FO) in Semester 1 and 67 students (76%) successfully completed Semester 1.

**Failure to Progress Profile**

If this data is examined as a profile *specifically* of students who were referred or FO'd, the following pattern emerges:

38 Students were referred / FO'd in Semester 1. This comprises 19% of this group.

21 Students (55%) were categorized 'At risk' following WOLF diagnostics.

5 Students (13%) were categorised as Not At Risk following WOLF diagnostics.

12 Students (32%) did not log on to diagnostics.

These findings suggest that there could be a link with 'at risk' status, poor performance (as defined by this Project) in WOLF diagnostics and progression in Semester 1 Year 1 of the RN/Dip.H.E. programme. Obviously these findings need to be repeated and subjected to statistical analysis to ensure reliability and validity. However there is a suggestion that diagnostic testing may be a useful predictor of student progression and therefore inform the targeting of support mechanisms required to improve achievement.

## **Student Perceptions**

Students generally felt that mixed ability grouping was detrimental. This was apparent in some questionnaires and a strong theme in focus group data.

The majority of students felt that Key Skills development had improved their ability in the 3 Key Skills cited. Questionnaire findings suggested that for many, this improvement was not necessarily massive. However, students in the focus groups all felt they had been enabled to overcome initial weaknesses and all felt more confident in their ability.

On the other hand, some students felt that sometimes teachers make things seem more critical, or more difficult than they really are and this can have a detrimental effect on students confidence. Approachability of academic staff and Study Skills Advisors was also considered important.

## **Support Available**

Students felt friends and peers provided an important source of support. An informal approach to buddying had occurred in some instances with students helping each other according to their capabilities. This is an area of potential support which could be developed further.

Most students who had accessed Study Skills Advisors, rated the support they had received highly. However, there was a degree of dissatisfaction relating to accessibility to this support. There was some lack of clarity regarding the nature of this. For example some students referred to a waiting time of several weeks (unsubstantiated). Others felt that the problem was due to the times of access being inconvenient to students, for example, when timetabled teaching was taking place, it is therefore unclear whether a problem exists with the level of resourcing for study skills support, or the pattern of provision. This requires further investigation.

Similar difficulties in gaining access, occurred with students and Personal Teachers. Students are allocated a Personal Teacher on commencing the programme and are required to undertake an initial meeting with their Personal Teacher in Semester 1, followed by Profiling each Semester. Some of the access problems appeared to be due to a delay in allocation of Personal Teachers. Where dissatisfaction existed following meetings, this often appeared to be due to time restraints, although a small, but worrying number of students felt their Personal Teacher appeared uninterested (16% n=7). It was not possible to establish whether this lack of interest was general or related to key skills. Certainly key skills were in a competing agenda with other issues during the initial meeting. (other issues raised which were discussed were initial getting to know each other, portfolio, profiling, support, assignments, other queries). Of the other sources of support sought, those cited by several students were Special Needs Tutor, Clinical Skills Facilitators, Learning Centres and Module Leaders.

## **Numeracy**

More students felt no more capable, or less capable, in numeracy, than in either IT or Communication Key Skills. Of the additional help the School could provide, more students cited help with numeracy than any other action. These findings suggest a level of dissatisfaction, specific to this area, that was greater than in relation to other aspects. Although not explored in depth, one explanation could be the occurrence of a summative

examination component in Semester 2, which tested numeracy skills in relation to drug calculations. There is evidence this exam caused a high anxiety rate in students. Certainly the referral rate well exceeded those for other components of the assessment of this module, or for other modules in the Semester (or in Year 1). A review of the assessment strategy has recently been undertaken and the component is now formatively assessed, with summative assessment occurring later in the course. It would be interesting to establish if this change will result in subsequent cohorts of students holding differing perceptions regarding key skills development.

## **Recommendations**

### **Diagnostic Testing**

Further evaluation of diagnostic testing would establish if it is a useful predictor of progression, as the findings of this report appear to suggest diagnostic testing would be useful in informing the streaming of students according to ability (some streaming is now taking place). It would also enable the most effective use of resources. Determining levels of support required could enable alternative approaches to support, (e.g. extra optional workshops, buddy systems, on-line resources). The timing of diagnostic testing is crucial. To be most effective it would need to occur immediately post entry or even pre-entry. This would allow optimum use of resources available and specifically, enable the Key Skills module to continue to tailor its content and delivery to meet students ability. The logistics of Pre-entry Testing would need careful exploration with regard to feasibility. However, the SoH already uses a Key Skills CD-Rom Package with NCVQ Health Cadet/ Access Students, (at the pre-entry stage) and scope exists to amend this package to include a greater component of diagnostic testing for wider use.

### **Individual Learning Profile (ILP)**

The introduction of ILPs as part of the University's Retention Strategy, occurred after the Key Skills Project had commenced. There is clear potential to link the two profiles more closely and to examine links between Individual Profiles, Key Skills capability and progression.

### **Student support**

The need to further investigate improving access to study skills advisors has been identified. Closer links between support systems (Key Skills Team, Study Skills Advisors, Personal Teachers, Learning Centres, Module Leaders), could be established in tandem with diagnostic testing. This would ensure students scoring 'At Risk' could be identified and targeted.

## **Acknowledgements**

To the Project Team:

To the Key Skills Module Leaders : Stuart Rushton, Lesley Killingworth, Pam Collins, Alex Burns.

To Study Skills Advisors in the School of Health during the Project: Dawn Gray, David Searle, Stephen Bull, Jo Wilkinson Alex Burns, Ruth Burns, Elizabeth Saunders.

To Lyn Swindlehurst for help with Focus Group interviews.