

# Fit for practice: Project 2000 student nurses' views on how well the curriculum prepares them for clinical practice

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This paper presents the findings from a small study, which compared student nurses' views on how well they felt the Project 2000 curriculum had prepared them for their first clinical placements. The views of two student nurse cohorts were obtained using a questionnaire developed for the purpose. The curriculum for the 'old' cohort allowed very little clinical time during the first 18 months and focused on academic classroom-based learning. The curriculum was subsequently restructured so that students on the 'new' curriculum experienced greater emphasis on practice and theory to practice links, and undertook their first clinical placement much earlier on in their course. Although statistical analysis of difference between the two cohorts suggests that students from the 'new' cohort felt they were better prepared, the actual differences in scores was small. The findings of this study provide only modest evidence of improvement in 'new' student nurses' views of how well they felt they had been prepared for their first placement. © 2000 Harcourt Publishers Ltd

## Introduction

### Project 2000

The introduction of Project 2000 radically transformed the way student nurses were prepared and educated. Its aim was to provide a workforce of autonomous 'knowledgeable doers' who could effectively respond to the complex demands of a changing health system, whether in hospital or community care settings (UKCC 1986). More than a decade later, the conclusions drawn by the United Kingdom Central Council's (UKCC) Commission on Nurse and Midwifery Education (UKCC 1999) suggest that the decisions taken to implement Project 2000 reforms were the right solution (Peach 1999, cited in Walters 1999). It is argued that at present newly registered nurses and midwives possess a number of desirable qualities including communication skills and research awareness and 'are better able to adapt to change and

implement evidence-based practice than those trained under the apprenticeship-style model' (UKCC 1999, p. 4). The report also noted that there are problem areas that impact upon fitness for practice at the point of registration. Thus the commission has made a number of key recommendations that involve structural changes to existing pre-registration curricula, lengthier clinical placements with appropriate supervision and improvements in the relationships between the higher education sector and the health service.

### Historical context

During the mid-Eighties, the need for a policy review and nurse education reform resulted from a number of factors. Educationally, it was acknowledged that existing curricula content and clinical experiences were failing to meet learners' needs (Nolan 1993). For example, it was common

practice for students to be used as an extra pair of hands. Thus their clinical development became secondary to the priorities of the service. Not surprisingly, many newly registered nurses felt ill equipped to cope with the demands of an evolving health care system. In reaction to this, high levels of stress and low morale experienced while on placements, a large number of students failed to complete their courses or left the profession upon qualification (Lindop 1989, Kendrick & Simpson 1992). Evidence of attrition rates since the introduction of Project 2000 is currently unavailable to make a detailed and comparable assessment between pre- and post-reform periods, however recommendations have been made to monitor future trends (UKCC 1999).

From a demographic viewpoint, it was speculated that the proportion of 18-year-old female recruits available to enter nursing would fall by the mid-Nineties, and that the shortfall would be insufficient to sustain staffing levels (Kendrick & Simpson 1992, Nolan 1993). Potential entrants would require an attractive package of educational experiences, which would reverse the rates of attrition and resolve the nurse shortage predictions. It was also anticipated that the number of elderly people in the population would rise which, in turn, would have an impact on the organization and provision of health care (Macleod-Clark et al. 1996). Finally, the reforms were also influenced by a realization that the delivery of nurse education should be cost-effective and value for money (Nolan 1993); thus the need for retaining student nurses to graduation and beyond was in part driven by financial imperatives.

Much of the movement towards reforming the pre-registration courses was prompted by the Royal College of Nursing (RCN), which had been critical about the standards of education and practice, and through its *Commission on Nurse Education* document (RCN 1985) offered detailed proposals for the training of nurses. The following year, the UKCC published *Project 2000 – A new preparation for practice* (UKCC 1986), which endorsed many of the RCN's (1985) suggestions. Following extensive consultation, the Council's recommendations received government approval and were announced in 1988 (Nolan 1993).

One of the central changes behind Project 2000 was that students should have supernumerary

status and would be under educational control (UKCC 1986). The drive for this was to ensure that future student nurses would not be viewed as apprentices but supported by appropriate clinical supervision, which was to coincide with classroom-based learning. Their introduction to the practice areas would also be staggered and placements would be shorter. According to the RCN (1985) nurse recruits needed protecting early on from aspects 'such as pain, fear, anguish emotional trauma and death ... which can result in a harrowing experience for the student' (Kendrick & Simpson 1992, p. 94). The recommendations also stipulated that traditional educational programmes should be converted from certificate level to diploma standard and incorporate a Common Foundation Programme (CFP), with progression after 18 months to one of four branch programmes. The content of the syllabus should also shift away from a cure-orientated model towards an emphasis on health education and preventative care, delivered in higher education institutions (UKCC 1986).

### Implementation issues

Despite the changes, analysis from various Project 2000 demonstration sites revealed some problems. For instance, during CFP the time spent on theoretical studies increased, was notably disproportionate to the amount devoted to skill acquisition and was regarded as less important (Goad 1992, Elkan & Robinson 1993, Macleod-Clark et al. 1996). As a result of a prolonged period of academic learning without direct patient contact, students became frustrated and disappointed about their preparation during CFP, whereas ward staff interpreted the delay into the clinical environment as evidence of reinforcing the theory-practice gap (Allen 1990, Blackburn 1992, Elkan & Robinson 1993).

A number of Project 2000 reports went on to suggest that, as a result of poor acquisition of practical skills, students felt unconfident and incompetent in their CFP placements when compared to pre-Project 2000 cohorts (Elkan et al. 1993, Macleod-Clark 1996, White 1996). Moreover, the demands generated by the educational reforms meant that nurse teachers were neither able to supervise the students whilst on the wards (Elkan & Robinson 1995) nor to familiarize practitioners with educational

changes (Twinn & Davies 1996). This led to confusion over a range of issues, including placement outcomes, assessment documentation and in particular, whether the students were 'safe' to perform patient care without direct observation (Elkan et al. 1993, Macleod-Clark et al. 1996). Many of the above themes were endorsed by the Education Commission's findings, whose survey gathered evidence from 84,000 registered nurses and final year students, and from 450 organizations (UKCC 1999).

Criticisms about short placements also emerged. These centred on the lack of opportunity that students now had for refining their hands-on skills and achieving other clinical learning outcomes, particularly in the absence of their mentor, who may have been rostered on night duty or inaccessible because of ward pressures (White 1996, Willis 1996). As a result, Project 2000 students experienced stress either due to a fear of failure or of making mistakes as well as due to the negative attitudes of staff (Cuthbertson 1996, Power 1996). This included being regarded as 'burdensome' or a hindrance, as it was perceived that Project 2000 students could not be relied on to perform unsupervised when staffing levels were low nor to assume responsibility for practical aspects of care (Macleod-Clark et al. 1996, White 1996).

It seems that intentions set out in Project 2000 of developing confident, critical thinking and autonomous knowledgeable doers have materialised although some issues remain unresolved. It may be suggested that this can be partly attributed to the rapid planning, designing, internal validation and implementation of Project 2000 curricula at a time when health service reforms were also being introduced (Elkan & Robinson 1995, Jowett et al. 1994).

## Background

The School of Health Studies, Portsmouth, was one of the first nursing schools to deliver the Project 2000 curriculum. The first cohort began their programme in September 1989, which led to the award of Diploma in Higher Education in Nursing Studies with Nurse Registration.

Although the UKCC had set out the framework and guidelines, specific curricular details were devised by nurse teachers. The interpretation of Project 2000 programmes, particularly in relation

to practice, has differed from college to college (White 1996, Willis 1996). As a pilot centre for Project 2000, the school was monitored by Kings Fund researchers. Their findings following feedback from teachers, students and service staff were similar to those of other centres, chiefly related to skills acquisition and a disquiet among service providers that students were inadequately prepared to undertake autonomous practice on completion of the course. It was sensed that nursing practice was failing to tie in with class content and was also assuming a secondary role to academia, thus widening the 'theory-practice gap'. These views were reinforced by other students' experiences (Elkan & Robinson 1995, Twinn & Davies 1996).

The Portsmouth course was revalidated in 1994, following a restructuring of the curriculum to meet University policies related to semesterisation and unitisation, and to overcome the problems of skills acquisition. The new curriculum saw some radical changes in course delivery and structure with a clearer emphasis on meeting practice at an early stage in the programme, plus detailed practice competencies that must be met in order to ensure adequate skills preparation.

In the light of the very distinct differences between the 1989 and 1994 curricula, it was felt to be worthwhile to test the assumption that the students would be better prepared for practice under the revised programme. This research involves students who followed the original 1989 training programme and those who followed the 1994 programme.

## Methods

### Purpose of the study

The purpose of this study was to examine the perceived effectiveness, from the student nurses' point of view, of two different Project 2000 curricula in preparing them for their first clinical placement.

### Hypothesis

The null hypothesis that was tested was that there would be no significant difference in student nurses' views on how well they were prepared for their first clinical placement.

## Subjects

The subjects were all student nurses drawn from a convenience sample in their final year of training. Two Project 2000 cohorts were selected: the last cohort of the 'old' curriculum and the first cohort of the 'new' curriculum (described above). These students were chosen because it was felt that having commenced training within six months of each other any differences between the two groups would most likely be attributable to the curriculum changes.

## Procedure

In the first instance open-ended questionnaires were distributed to a random sample of student nurses from each cohort. Five questions were posed (Fig. 1). Following content analysis of these questions, five themes emerged: preparation for clinical practice; expectations of clinical practice; application of theory to clinical practice; acquisition of practical nursing skills; and feeling like a nurse.

Using issues raised by students under the five themes and following peer review with the research team, a 25-statement questionnaire was devised, comprising five statements under each of the themes.\* Students were asked to indicate their strength of agreement with the statements using a four point rating scale: *very; quite; not very; not at all*. These points were subsequently converted into numerical data for statistical analysis, whereby a score of 4 indicated strong agreement with a positively worded statement. An additional set of five questions were devised asking students to summarize their agreement/disagreement (yes/no) in relation to each of the five themes (Fig. 2).

## Statistical analysis

Initially, the five questions relating to each theme were collapsed into single variables and mean scores were calculated. These new variables were examined for kurtosis and skewness to determine normal distribution. Since the raw data were of an ordinal level and the above variables were

\* A copy of the questionnaire may be obtained from the authors on request.

found to be abnormally distributed, non-parametric statistical tests were used to analyse differences between the two cohorts of student nurses. The Mann-Whitney U test was used to analyze differences between the five themes, and the chi-square test was used to analyse differences between the summary questions (Fig. 2). Because  $2 \times 2$  tables may overestimate chi-square values, Yates Correction for Continuity was employed (Bryman & Cramer 1999). Since the findings were unlikely to be of clinical significance and differences between the two cohorts could go in either direction, the two-tailed significance level was set at  $p < 0.05$ . Data were analysed by computer using the Statistical Package for Social Scientists (SPSS).

## Results

### Subjects

Ninety-four students completed the questionnaires: 55 from the 'old' cohort; 39 from the 'new'. Not all questionnaires were fully completed.

### Theme 1: Preparation for clinical practice

The mean score for all subjects was 2.33 ( $n = 92$ )

- ▶ What were the main POSITIVE aspects of your first clinical placement?
- ▶ What were the main NEGATIVE aspects of your first clinical placement?
- ▶ What factors helped you prepare for your first clinical placement?
- ▶ What factors hindered the success/failure of your first clinical placement?
- ▶ How could your preparations for your first clinical placement have been improved?

Fig. 1 Open-ended questions.

- ▶ Were you adequately prepared for your first clinical placement?
- ▶ Were your expectations of your first clinical placement met?
- ▶ Were you able to apply theory learnt in school to clinical practice?
- ▶ Did you have adequate practical skills to cope with your first clinical placement?
- ▶ Did you feel like a 'nurse'?

Fig. 2 Summary questions.

indicating an overall positive response. The mean score for the 'old' cohort was 2.22 (SD 0.53; n = 54) with a higher mean score of 2.48 (SD 0.55; n = 38) for the 'new' cohort. The difference between these two scores was significant ( $p < 0.05$ ;  $U = 750$ ).

Comparing the data from the summary question: 78% (n = 43) of the 'old' cohort felt they were not adequately prepared for clinical practice whereas 50% (n = 19) of the 'new' cohort felt they were. These differences were significant ( $p < 0.01$ ;  $\chi^2 = 6.81$ ;  $df = 1$ ; n = 93).

### Theme 2: Expectations of clinical practice

The mean score for all subjects was 2.51 (n = 93) indicating an overall positive response. The mean score for the 'old' cohort was 2.39 (SD 0.40; n = 55) with a higher mean score of 2.70 (SD 0.44; n = 38) for the 'new' cohort. The difference between these two scores was significant ( $p < 0.001$ ;  $U = 628$ ).

Comparing the data from the summary question: 69% (n = 38) of the 'old' cohort felt their expectations of clinical practice were met compared to 84% of the 'new' cohort (n = 32). Although this represents an important finding it was not statistically significant.

### Theme 3: Application of theory to practice

The mean score for all subjects was 2.74 (n = 91) indicating an overall positive response. The mean score for the 'old' cohort was 2.75 (SD 0.45; n = 53) with a slightly lower mean score of 2.71 (SD 0.50; n = 38) for the 'new' cohort. The difference between these two scores was not statistically significant.

Comparing the data from the summary question: 65% (n = 35) of the 'old' cohort felt they were able to relate theory to clinical practice whereas 72% of the 'new' cohort (n = 26) felt they were. These differences were not statistically significant.

It is noted that although the 'old' cohort scored slightly higher on their opinion of their ability to relate theory to practice, a greater percentage of the 'new' cohort stated positively that they were able to relate theory to practice.

### Theme 4: Acquisition of practical nursing skills

The mean score for all subjects was 2.82 (n = 91) indicating an overall positive response. The mean

score for the 'old' cohort was 2.70 (SD 0.35; n = 54) and 2.98 (SD 0.49; n = 37) for the 'new' cohort. The difference between these two scores was significant ( $p < 0.001$ ;  $U = 564.5$ ).

Comparing the data from the summary question: 55% (n = 30) of the 'old' cohort felt they had inadequate practical skills in preparation for clinical practice whereas 61% (n = 22) of the 'new' cohort felt they did have adequate practical skills. Although this difference is educationally and clinically significant it was not found to have statistical significance.

### Theme 5: Feeling like a nurse

The mean score for all subjects was 2.68 (n = 94) indicating an overall positive response. The mean score for the 'old' cohort was 2.59 (SD 0.48; n = 55) and 2.81 (SD 0.58; n = 39) for the 'new' cohort. The difference between these two scores was significant ( $p < 0.05$ ;  $U = 761$ ).

Comparing the data from the summary question: 69% (n = 38) of the 'old' cohort stated that they did not 'feel like a nurse' on their first clinical placement whereas 54% (n = 20) of the 'new' cohort stated that they did. These differences were significant ( $p < 0.05$ ;  $\chi^2 = 4.01$ ;  $df = 1$ ; n = 92).

## Discussion

In order to make sense of the findings it is important to consider first the limitations of the questionnaire design. Although most of the differences between the groups were found to be statistically significant, the actual numerical differences between the 'new' and 'old' groups were fairly small. The mean scores for all five themes fell within 0.48 of the mid-point of 2.5 on the Likert-type scale (that is, between 2.22 and 2.98), indicating that the mean scores for both groups for all five themes lay somewhere between the *not very* and the *quite* levels of agreement. The greatest standard deviation for any of the themes was 0.58, suggesting that the scores were tightly grouped around the mid-point of the scale. Arguably this can be seen as a function of the design of the Likert-type scale, which permits a choice of two levels of agreement only, either for or against the statement. Furthermore, the four-point rating scale of *very*; *quite*; *not very*; *not at all* is itself ambiguous, since *not very*, the weakest form of disagreement, is

arguably the opposite of *very*, the strongest form of agreement, while the opposite of *not at all* should perhaps be *completely*. This, of course, leads to debate about where the true mid-point of the scale actually lies, and in particular, whether it is mid-way between the *very* and *not very* ratings (i.e., a score of 3, which equates to a rating of *quite*), or whether it is the numerical mean of 2.5, which is mid-way between *quite* and *not very*. While this might lead to some confusion over the absolute interpretations of the scores (whether, for example, a mean score of 2.75 represents an overall positive or a negative attitude), comparisons between the groups are still possible.

Theme 1 attempted to measure the degree to which the students felt prepared for their first clinical placements, with the finding that the 'new' cohort felt significantly more prepared than the old. However, the mean scores for both groups fell below the mid-point(s) of the scale, suggesting that the improvement, whilst statistically significant, still left a great deal of work to be done. Furthermore, only half of the 'new' group felt that they were adequately prepared, and it is questionable whether this degree of preparedness was yet back to the pre-Project 2000 level reported by Elkan et al. (1993), Macleod-Clark (1996) and White (1996).

This finding is consistent with the conclusion drawn by the UKCC Education Commission (UKCC 1999). The commission found 'disturbing anecdotal and empirical evidence indicating that newly-qualified nurses and midwives have a need for constant support and may lack practical skills literacy' (p. 34). It would appear that this lack of preparedness for practice is evident from the very first placement. It is unclear why the curricular reforms did not have the desired effect, but some clues are present in the findings of the other four themes.

The second theme explored the students' attitudes towards their expectations of their first placement, and found the mean for the 'new' group to be significantly higher than that for the 'old' group, with 84% of the 'new' group indicating that their expectations had been met. Although the difference between the groups was significant, a comparison is difficult, since the radical changes to the curriculum might well have led to different expectations from students. It is possible, then, that the difference between the two groups reflects a lowering of expectations

about being competent to deal with the clinical demands of the first placement rather than an actual improvement in preparation for the placement. In other words, it is not fully apparent whether the 'new' cohort was performing better, or merely expecting less. This uncertainty is highlighted by comparing the figure of 50% of the new cohort who felt prepared for their first placement, with the figure of 84% who felt that their expectations had been met. Clearly, the expectations of some of the students did not include being prepared for their placement.

The third theme highlighted the most worrying aspect of the findings, where the 'new' group felt less (although not significantly less) able to apply theory learnt in school to clinical practice. Bearing in mind that one of the implicit aims of Project 2000 was to increase the research awareness of nurses so that they might be more willing and able to apply research-based theory to practice (Chapman 1991), this would appear to be one area where it has, perhaps, failed to deliver. This difficulty was highlighted soon after the introduction of Project 2000, and one of the concerns with the original syllabus was that students felt that practice was taking a secondary role to theory (Elkan & Robinson 1995 Twinn & Davies 1996). It is perhaps worrying that, ten years on from the first Project 2000 course, the problem has yet to be resolved, at least in this particular school. Perhaps reassuringly, this finding was to some extent contradicted by the result of the summary question from this theme, where 72% of the 'new' cohort felt able to relate theory to practice, compared with only 65% of the 'old' cohort. Such contradictions are, however, to be expected, particularly in first year students, given the complexity of the issue (Rafferty et al. 1996) and the multifactorial nature of the theory-practice gap (Hunt 1981).

The fourth theme is linked to the previous one, and relates to the acquisition of practical nursing skills. Clearly, the ability to relate theory to practice is of little benefit if students do not possess the requisite practical skills, and the findings from this theme are a little more reassuring, suggesting that the 'new' cohort felt significantly more confident about their practical skills than the 'old' cohort. The mean score of 2.98 for the 'new' cohort was the highest score of any of the themes, and almost reached the *quite* level of agreement. The summary question indicated that 61% of the 'new' cohort felt that they had

adequate practical skills for their first placement, but of course this still leaves well over one third of students feeling inadequately prepared in terms of practical skills. This issue of the acquisition of practical skills has now been recognized by the UKCC, which has recommended the introduction of practice skills and clinical placements earlier in the CFP (UKCC 1999, Recommendation 5).

The final theme brought together elements from all of the others, and was concerned with the issue of feeling part of the professional culture of the ward. This has often been associated with the supernumerary status of Project 2000 students and their absence from the clinical area at key times of the day. Once again, the UKCC Commission has attempted to address this problem by recommending longer placements, which give experience of the 24 hours per day, seven days per week nature of nursing.

Reassuringly, it was found that the 'new' cohort felt significantly more part of that culture than the 'old' cohort did, possibly due to feeling more prepared in terms of their practical skills. What is less clear, however, is the role within the team which the students felt that they were (or should be) playing, since the questions which made up this theme interspersed issues of feeling like a professional, being a student, and the potential conflict between them. It is not clear from the findings, then, whether students thought that they ought to feel like professionals, or even whether they felt positive about their perceived professional status, especially this early in their training and particularly in light of their supernumerary role. It could be argued that 'feeling like a professional', which was scored positively in this study, is dangerously premature and could lead either to stress or to complacency in students on their first placement. Indeed, in the light of the RCN (1985) recommendations that students needed protection early in their training from aspects 'such as pain, fear, anguish, emotional trauma and death' (Kendrick & Simpson 1992), it is of some concern that, as early as their first clinical placement, 54% of the 'new' cohort of students 'feel like a nurse'.

## Conclusions

The aim of this small-scale study was to provide some local and specific information about the

effects of changes to a particular course. The findings provided some evidence for a modest improvement in the students' attitudes towards their first clinical placement, although there is still clearly room for improvement.

However, the findings also raise some more general issues about the Project 2000 curriculum and the difficulties of providing an increasingly academic education for what is first and foremost a practice-based discipline, particularly on the issue of the application of theoretical knowledge to practice. These issues are finally being addressed by the UKCC (1999), but ironically, whilst many colleges throughout the country are attempting to make the Project 2000 curriculum more practice-based, there is a growing condemnation in the popular press of what is seen as a move away from the education of nurses for their work at 'bedpan' level (Sewell 1999), with Project 2000 recently being described as a ludicrous proposition (Lawson 1999, cited in Payne 1999).

Some of the uncertainty expressed by the students in this study about whether or not they were prepared for practice is possibly due to the continuing confusion about theory and practice which pervades not only the popular press, but also the profession itself. Many academic writers lay the cause of the theory-practice gap firmly at the feet of practitioners and their unwillingness or inability to put research findings into practice. Chapman (1991), for example, bemoaned the fact that most nurses do not read academic journals, and accused them of unwillingness to accept research findings, which directly challenge traditionally held beliefs and practices. This attitude of some academics appears to have changed little in the past 20 years (Hunt 1981, Phillips 1994, Hicks 1995, Nolan et al. 1998; and many others) and, for these writers, the solution to the problem of the theory-practice gap lies with practice moving closer to their own theoretical ideals.

Others recognize that a gap exists, but see it as inevitable and even as a positive sign, arguing that if practice is not lagging behind theory, then the profession is no longer progressing (Lindsay 1990, Cook 1991, Rafferty et al. 1996). Yet others see the gap not in terms of research-based theory being one step ahead of practice, but rather as being largely irrelevant to practice (Rolfe 1996). Thus, the reason for the gap is not that research-based theory is failing to be implemented by

practitioners, but rather that it is impossible to implement. Rolfe (1996) added that one of the dangers of seeing nursing mainly in terms of the application of research findings to practice is that a false sense of security is often engendered. In the words of Lawrence Stenhouse, 'it suggests that we may make wise judgements without understanding what we are doing' (Stenhouse 1978, p. 31).

The question to be asked is whether a more academic education necessarily produces better practitioners. The answer to this question is clearly linked to the issue of the relationship between theory and practice, and as yet there is little evidence to suggest that there is any benefit to patients as a result of Project 2000. While many nurse academics are condemning nursing practice based on folklore (Phillips 1994) rather than on the findings from research, they should perhaps look to their own practice of education, where the philosophy underpinning Project 2000 is itself arguably no more than an unsubstantiated assumption about the benefits of technocratic education (Bines 1992) and the 'yearning for the rigor of science-based knowledge and the power of science-based technique' (Schön 1997, p. 9).

## References

- Allen C 1990 P 2000 problems. *Nursing Standard* 5(6):43–44
- Bines H 1992 Issues in course design. In: Bines H, Watson D (eds) *Developing professional education*. Open University Press, Buckingham
- Blackburn M 1992 Be proud of the project. *Nursing Standard* 6(36):44–45
- Bryman A, Cramer D 1999 *Quantitative data analysis with SPSS Release 8 for Windows*. Routledge, London; 164–203.
- Chapman J 1991 Research – what it is and what it is not. In: Perry A, Jolley M (eds) *Nursing: a knowledge base for practice*. Edward Arnold, London
- Cook S 1991 Mind the theory-practice gap in nursing. *Journal of Advanced Nursing* 16(12):1462–1469
- Cuthbertson P 1996 Attitudes to project 2000: a survey of qualified nurses. *Nursing Standard* 11(11):38–41
- Dolan B 1993 Reflection and celebration. In: Dolan B (ed.) *Project 2000: Reflection and celebration*. Scutari Press, London
- Elkan R, Robinson J 1993 Project 2000: the gap between theory and practice. *Nurse Education Today* 13(4):295–298
- Elkan R, Hillman R, Robinson J 1993 The implementation of Project 2000 in a District Health Authority: the effects on the nursing service (a second interim report). Department of Nursing and Midwifery Studies, University of Nottingham
- Elkan R, Robinson J 1995 Project 2000: a review of published research. *Journal of Advanced Nursing* 22(2):386–392
- Goad N 1992 Growing pains and gains. *Nursing Standard* 6(36):46–47
- Hicks C 1995 The shortfall in published research: a study of nurses research and publication activities. *Journal of Advanced Nursing* 21(3):594–604
- Hunt J 1981 Indicators for nursing practice: the use of research findings. *Journal of Advanced Nursing* 6(3):189–194
- Jowett S, Walton I, Payne S 1994 Challenges and change in nurse education – a study of the implementation of project 2000. National Foundation for Educational Research, Slough
- Kendrick K, Simpson A 1992 The nurses' reformation: philosophy and pragmatics of project 2000. In: Soothill K, Henry C, Kendrick K (eds) *Themes and perspectives in nursing*. Chapman & Hall, London
- Lindsay B 1990 The gap between theory and practice. *Nursing Standard* 5(4):34–35
- Lindop E 1989 Individual stress and its relationship to termination of nurse training. *Nurse Education Today* 9(3):172–179
- Macleod-Clark J, Maben J, Jones K 1996 Project 2000: perceptions of the philosophy and practice of nursing. English National Board, London
- Nolan M, Morgan L, Curran M, Clayton J, Gerrish K, Parker K 1998 Evidence-based care: can we overcome the barriers? *British Journal of Nursing* 7(20):1273–1278
- Payne D 1999 The knives are out for P2000. *Nursing Times* 95(4):14–15
- Phillips R 1994 The need for research-based midwifery practice. *British Journal of Midwifery* 2(7):335–338
- Power P 1996 High anxiety. *Nursing Times* 92(5):58
- Rafferty AM, Allcock N, Lathlean J 1996 The theory/practice 'gap': taking issue with the issue. *Journal of Advanced Nursing* 23(4):685–691
- Rolfe G 1996 Closing the theory-practice gap: a new paradigm for nursing. Butterworth-Heinemann, Oxford
- Royal College of Nursing 1985 *The Education of Nurses: A new dispensation, (The Judge report)*. RCN, London
- Schön D 1987 *Educating the reflective practitioner*. Jossey-Bass, San Francisco
- Stenhouse L 1978 Case study and case records. *British Educational Research Journal*, 4(2):21–39
- Twinn S, Davies S 1996 The supervision of Project 2000 students in the clinical setting: issues and implications for practitioners. *Journal of Clinical Nursing* 5(3):177–183
- United Kingdom Central Council 1986 *Project 2000: A new preparation for practice*. UKCC, London
- United Kingdom Central Council 1999 *Fitness for practice*. UKCC, London
- Walters A 1999 UKCC Education review supports project 2000. *Nursing Standard* 15(13):4
- White E 1996. Clinical supervision and project 2000: The identification of some substantive issues. *NT Research* 1(2):102–110
- Willis J 1996 The placement dilemma. *Nursing Times* 92(5):55–58