Recurriculating to a problem-based learning curriculum: The WITS experience

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OPSOMMING

Die rasionaal vir die verandering vanaf 'n tradisionele kurrikulum na 'n probleemgebaseerde kurrikulum word geskets. Die voorbereidings proses vir hierdie verandering word ook beskryf. Gedurende die beplanningsfase was gebruik gemaak van werkwinkels, kernkommittees, internasionale konferensies en besoeke. +Die voorbereiding van mense bronne en ander hulpbronne in geaffileerde departmente word kortliks beskryf. Die implementeringsfase beskryf sommige van die probleme wat ondervind was, asook die oplossings wat daarvoor gevind was. Ten slotte, 'n informele evaluasie van die eerste ondervindinge van probleem-gebaseerde leer, word aangebied.

The themes that we chose were:
nursing
health determinants
teaching\learning
health care systems
profession
communication

SUMMARY

The reasons for changing from a traditional curriculum to a problem-based learning curriculum are outlined. The process used in preparing for this change is described. The planning phase made use of workshops, core committees and international workshops and visits. Preparation of the necessary resources are enumerated, as are the preparation of the human resources with which the department is affiliated. The early implementation phase describes some of the problems which were encountered and the solutions which were ascribed. Finally an informal evaluation of the first experiences of problem-based learning is presented.

Report

The concept of this gestation was first raised in 1989 when a workshop for the Wits staff and its affiliated colleges was organised. As in nature, the concept was aborted for multi-factoral reasons; possibly the most significant factor being lack of clarity of our understanding of the meaning of the concept and its implementation, or should that read implantation?!

Whatever, in reflection, our understanding of problem based learning was very inadequate. However, in 1993 the need to reconsider the current curriculum and our teaching styles was once again felt.

1995 dawned with the staff of the Wits Department of Nursing Education feeling somewhat apprehensive, but at the same time excited about the new academic year. This, after all was to be the culmination of two years of planning, hard work, heart ache and many sleepless nights for the staff. The time had finally arrived for us to put our decisions and plans into action and introduce a community-based curriculum utilising problem-based learning as the method of teaching and learning.

BACKGROUND AND PLANNING.

In 1993 a curriculum review was begun. It was clear that given the knowledge explosion and the need to educate and adequately prepare practitioners for primary health care that the current curriculum did not meet these needs and that alternative teaching\learning strategies had to be sought. To prepare practitioners for primary health care, a community-based curriculum seemed the obvious solution.

We aim to have a 40:60% community:hospital based curriculum. In order to cope with the knowledge explosion and the need to produce self-directed learners and critical thinkers, but at the same time a health care worker who is able to work in a team, we chose to develop a problem based learning curriculum.

In 1993 we spent a total of 5 days in workshops discussing and debating the existing curriculum and the way forward.Two of these days were spent discussing the concept of community-based education in relation to what we were currently doing and in relation to what we all believed and the department's philosophy. For this workshop we made use of a facilitator, who is a medical practitioner with a keen interest in education and problem based learning in particular.

The fact that this person was not a nurse proved to have many advantages, e.g. he often saw our problems from a different perspective and was therefore able to offer solutions.Following this workshop the staff met on their own for a one day workshop to plan a curriculum based on a philosophy of health to illness and integration of the four nursing disciplines. To do this numerous concepts had to be debated, discussed and defined. The day ended with a broad outline of what we felt could be fitted into each year of study and how this content should be managed.

Later that year we had a two day workshop on problem based learning. We made use of the same facilitator. For most of the staff this was their first exposure to problem based learning - its philosophy and methodology. A lengthy debate followed along the lines of whether we should go this route, and if so, why?

It was agreed that this was the route that the department should follow and commitment and agreement was called for from each staff member because it was obvious that it would require team work. Planning continued in 1994.

In March we spent one day with a visiting lecturer\ obstetrician from Mc Master University in Canada. She was briefed on how far we had gone in our planning and gave guidance on the way forward, but essentially it was a question and answer day with many of the staff's fears, anxieties and queries being addressed.

At this stage it was clear that doubt was beginning to creep into the minds of some. This was probably because it was the beginning of the new academic year and like most university nursing departments a number of the staff were persuing their own studies. The thought of all that had to be done in readiness for a new curriculum, now less than a year away, appeared overwhelming.

In March two members of staff attended the community-based education and problem-based learning workshop at the University of Suez in Egypt. This was a valuable experience because it reinforced that our line of thinking and planning was on track. It also provided opportunity for discussion and clarification with people involved with the strategy.

In developing a problem-based learning curriculum, we identified two issues which needed to be given priority. These were: firstly, the need to develop an integrated curriculum, and secondly, to develop themes. As a result of this need two more two day workshops were held. Both were facilitated.

At the first, we developed our themes. We did this by taking the problem of teenage pregnancy and brain storming all the concepts with which it is associated. These were then clustered and appropriate names sought which fitted the philosophy.

The themes that we chose were:

nursing

health determinants

teaching\learning

health care systems

profession

communication

all within the context of values\ beliefs and skills. (Skills include those that refer to basic nursing, communication and emergency care.)

The time had finally arrived for us to put our decisions and plans into action and introduce a community-based curriculum...

Building on the foundation of a community-based curriculum, it was decided to use a health to illness continuum, focusing on the individual, family and the community. Thus the focus for the first year of study became the healthy individual, family and community and that for the second year of study the individual suffering from an illness and the disordered family and community.

At this stage it became obvious that the traditional terminology for the nursing courses was not suitable in an integrated curriculum. General nursing and community health nursing have evolved into Comprehensive Nursing; Midwifery into Women's Health and Psychiatric Nursing into Psycho-social nursing. This approach facilitates integration of the courses at both the theoretical and practical levels of learning.

The next step was to identify the concepts under each theme and which fitted the focus for the first year of study, viz. the healthy individual, family and community.

The second workshop focused on the preparation of facilitators. We used some of the problems that we had written and role-played small group work in a problem-based learning context.

In the planning phase it was also clear

that we had to sell the new curriculum to the faculty and the students. Getting the faculty to agree to the change was not problematic, as there was already a move to change the medical curriculum and there had been several international visitors who came from schools using a problem-based learning approach.

The occupational therapy department was also planning a change in this direction. In order to sell the curriculum to the students, a meeting of all students was called and the philosophy and meaning of problem-based learning was explained to them. As the new curriculum was to be introduced with the 1995 first year students,they were assured that the changes would not affect them.

During the last six months of 1994 a survey regarding the nursing students opinions of the curriculum was undertaken. The demographic data of the survey revealed that the profile of the student entering the programme was more likely to be a female aged 19-25 years. She was most likely to have entered the programme directly from school.

Two national school leaving certificates were identified as being the basis on which the entry requirements would be applied. The successful candidate into the programme was likely to have obtained a C symbol aggregate on her school leaving certificate. In addition, she will very likely come from an urban area and there is an above average chance that her home language will not be English.

During this period meetings were held on a weekly basis and lasted a minimum of three hours. The problems were discussed and refined; books and resource material had to be evaluated and orders placed; resource boxes and methods of control had to be decided upon and opportunities for, and links with, community-based facilities had to be forged.

In preparing for problem-based learning, factors that should be considered at this point are:

1. resource material - cost; orders take months to arrive, therefore, ordering needs to be done at least three months in advance.

2. administrative backup for typing, printing and copying of the problems and accompanying documentation.

3. identification of facilitators and their preparation and identification of resource or expert persons.

4. "sell" the curriculum to hospital and community personnel and to prospective students. With reference to the latter this was done at the interviews for the selection of the 1995 intake of students and was reinforced on their arrival in 1995.

Problems encountered in the planning phase.

Reflecting on this now, nearly three years later, I would say that the greatest problems revolved around the need to make the entire staff committed to the concept and the feelings of insecurity which we all felt at some stage or another. It was, and still is not, easy to prepare for such a changed curriculum whilst still teaching the traditional curriculum.

This is because we chose to institute the new curriculum with the 1995 intake of students, rather than to change those already in the programme on to the new curriculum. The fact that we are a small staff did not help the situation. The only solution to the problem was to free one full-time member of staff of her duties and buy in help for a period of five months.

A second member of staff was going on sabattical leave and was keen to be kept involved with the changes. Together, with the head of department, a core committee was formed and weekly meetings were held. During this period one needed to keep focused on the desired changes, and prevent oneself from falling into the trap of "patching" the old curriculum!

In preparing for the community-based aspects of the curriculum, it was necessary to identify, evaluate and gain access to community resources. Whilst there are a number of resources which one could access, transport and violence are major obstacles in determining their use. In addition, we found that many of these resources were not keen to have first year students.The attitude is that students must be useful and at first year level they are perceived as being wide-eyed observers!

Finally, we did not find writing problems for the first year all that easy! There were two reasons for this - firstly, we, the staff, were novices in this aspect and secondly, with the focus on health - how does one create problems!?

Problems encountered in the early implementation phase.

One of the greatest anxieties during this phase was the staff's insecurity in their new role of facilitation. We did make mistakes, e.g. in the first sessions in which the groups formulated their norms, we forgot to tell them that the groups would change mid-year. When we did this after they had set their norms they were angry. Mid-year when we did want to change them, they confronted the staff. The matter was discussed in a combined facilitator and group meeting and was solved to the satisfaction of all. We interpreted this incident as an indication that empowerment was taking place.

Soon after the commencement of the course, it became obvious to the facilitators that the second language students were reluctant to participate in the group discussions. A group was offered to all students who felt that they were struggling with the process. This group was run by a facilitator whose first language is not English.

Offering the support in this way had the desired effect in that although the first sessions were representative of the problem-based groups, they dwindled so that the second language students came to form the core group.

They shared with the facilitator the following difficulties:

- firstly, that because they are mentally translating from English into the vernacular and then back again, they appear slow and stupid;
- secondly, they perceived a lack of patience in the groups with the slow students.

Students were encouraged to share and take risks in this group. The intention being that as they became more self-confident and improved their language skills they would transfer this to their problem-based learning group.

The need was recognised to have a facilitators support group. This group provided opportunity for debriefing and for discussing insecurities about the role, as well as situations which may have caused concern in any problem-based group. This was done without violating group norms.

Other problems which students encountered in this phase related to the depth of study to which they should go; time management and the ability to discriminate what is essential information from the literature. Getting students to access information through the use of subject experts and organizations has also been a slow process.

Another concept with which they have had to come to terms is learning to give their opinions and share ideas.

The matter was discussed in a combined facilitator and group meeting and was solved to the satisfaction of all

Our schooling system is very competitive and does not prepare students for the sharing and group work which is so central to problem-based learning.

AN EVALUATION OF OUR EXPERIENCE

No formal scientific evaluation of our first year's experience has been done. However, we have done a small student evaluation of the problems and have noted a number of subjective incidences. Some of the more subjective incidences, which we the staff have perceived, relate to the following - in planning community experiences the intention was to provide learning opportunities which related to the problem.

Students were encouraged to participate in the process of choosing these opportunities. Entrenched in this, was the moral and ethical responsibility that they had to not only use the community for their purposes, but wherever possible to make a contribution.

One contribution that the students made was to a woman's shelter. They formulated inexpensive, but balanced menus using a food subsidy scheme. The menus were acceptable to the shelter and a link was forged between the shelter and the subsidy scheme.

A year later, this is still operational. The practical preceptors have noticed a different attitude in these students. They have found them to come better prepared to the practical demonstrations and to be more questioning and more willing to make greater use of their practical learning experiences.

Lastly, their written examinations have reflected individual thinking and a break from stereo-typed answers. The second language students appear to have benefitted from the group discussions and having to verbalise their thoughts.

With reference to the students' evaluation of the problems, students were given an evaluation form to complete at the beginning of the second semester. One of the questions asked related to which problem they had most enjoyed and why?

Eleven of 27 had most enjoyed "Rory" - a problem that deals with the adolescent, nutrition and communication.

Some of the reasons given were:

- these are problems in my age group;
- nutrition is interesting - could explore physiology;
- psychological aspects of nutrition;

  improved my nutrition.

Nine of 27 had most enjoyed "Mary-Jo" - a problem that relates to the health care system.

It begins with Mary-Jo being examined by the school nurse and scoliosis being detected. The main reason given for choosing this problem was its relatedness to nursing.

Generally students are positive about problem-based learning. During the first six months comments such as "I wouldn't like to go back to traditional methods" have been passed, and a repeat student views problem-based learning as a more exciting and superior methodology.

CONCLUSION

Overall, the staff does not regret having made such a change in the teaching\learning approach. Although not scientifically evaluated, it is fair to say that we have seen evidence of self-directed and critical thinking in the students.

Changing to a problem-based curriculum has not been without all the anxiety that goes with change and we recognise and accept that we still have a long road to travel!

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