

Community Based Education in Speech Pathology and Audiology at the University of Durban-Westville in an Under Served Community*

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ABSTRACT.

In South Africa there is increasing awareness both in academic and clinical domains of the inadequacy of education and training of health personnel, in preparing graduates to meet the service needs of the disadvantaged majority. A feasibility study is reported in which the regular curriculum of final year speech, language therapy/audiology students was adapted to provide a more relevant, more appropriate learning experience. This comprised a community based action research programme in a Zulu peri-rural community. A qualitative critical analysis of the project is presented, in an attempt to identify factors that could be likely to hinder and promote the greatly needed process of curriculum transformation within the university; and in the process of strengthening the role that the university can play in meeting the needs of the community it serves.

OPSOMMING

Daar is 'n toenemende bewuswording in Suid - Afrika, op beide die akademiese en kliniese gebied ten opsigte van die ontoereikende opvoedkundige en gesondheidspersoneel, om gegraduateerdes voor te berei om aan die diensverskaffings-eise van die minderbevoorregte meerderheid te voldoen. 'n Vatbaarheidsstudie word uiteengesit waarin die normale kurrikulum van finalejaar spraak- taaltherapie- en oudiologiestudente aangepas is om 'n meer relevante en toepaslike leersituasie daar te stel. Dit het 'n praktiese gemeenskapsgebaseerde navorsingsprogram in 'n peri-landelike Zulugemeenskap behels. 'n Kwalitatiewe kritiese analise van die projek is voorgestel, in 'n poging om faktore te identifiseer wat aanduidings verskaf om die nodige prosesveranderings van die kurrikulum in die universiteit te bewerkstellig, asook die beklemtoning van die rol wat die universiteit kan speel om te voldoen aan die gemeenskapseise.

The development of health personnel able and willing to serve the community by providing health care, promoting health, preventing disease and caring for those in need is a major and formidable task for educators.

H. Mahler, Director-General of the World Health Organisation (WHO),
(cited by Lipkin, 1989a).

1 INTRODUCTION

In South Africa, in both academic and clinical domains, there is increasing awareness of the inadequacy of education and training of health personnel in preparing graduates to meet the service needs of the disadvantaged majority. This is reflective not only of the current political changes but also of progressive thinking in education; in international trends towards inno-

vative community based, problem based medical education; in current thinking about the role of the university in the community it serves; and in increasing commitment to the principles of Primary Health Care (PHC) as defined in the World Health Organisation Report on the International Conference on Primary Health Care at Alma-Ata (1978).

2 BACKGROUND

In order to contextualise this growing concern with the inadequacies of the status quo in health personnel education, the paradigms, to which dynamic influences can be attributed, must be expanded.

2.1 EDUCATIONAL BACKGROUND

The educational concepts of a participatory, interactive, problem solving, teaching/learning paradigm are

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not new, nor are they restricted to the discipline of education. Since classical times, following the thinking of Socrates, there has been an acknowledgement of the significance of self discovery. This has formed the basis for theorists such as Bruner (1966), and Rogers (1969) (Lipkin, 1989b). The problem based learning approach, which is based upon the case study method (Fraser 1931) used at the Harvard Law School and the discovery learning approach, was developed at the McMaster University (Schmidt, 1989), to provide students with the skills and attitudes that would foster in them an ethos of life long learning. For at least two decades, some medical educators have been exploring and developing this methodology as a means of addressing the challenges of the information explosion and the deficiencies of traditional health personnel training, which foster an attitude of passive, examination driven learning, which ceases upon graduation with the end of examinations (Lipkin, 1989b). Around the world, more than twenty medical schools from diverse political and social systems, have participated in the common experiment of implementing this approach, since it was pioneered at McMaster University (Lipkin 1989b). Nonetheless, contingent upon the paradoxical context of the traditional assumption that teachers in tertiary institutions need no training in teaching skills and methodologies, the impact of such ideas on other disciplines is only recently being felt in any significant way in South African Universities.

At the University of Durban-Westville (UDW) changing policies, which are dynamically impacting on progressive thinking, are producing a rigorous demand not only for maximally effective teaching methodologies, but also for a radical review of curricula. The university has committed itself to a creative, social redress programme to address the inequity of the past, in relation to student selection policies. In order to reflect a representative ethnic distribution across the student population, it has been necessary to abandon traditional entry criteria, based solely upon matriculation results, to ensure that educationally disadvantaged people have access to tertiary education. Academics are thus challenged to develop effective and relevant teaching and learning strategies.

2.2 HEALTH SERVICE BACKGROUND

In South Africa it is not only educationally that the majority of people have been disadvantaged, but it is also in terms of basic needs and health care. It has been acknowledged that the WHO goal of *Health for All by 2000*, is beyond reach (CSD/SWO Report, 1992). Health and health care, therefore, are central issues in the critical demands of the present climate in the country. Over the past decades, health care in South Africa, has reflected the principles of the biomedical model, in which health is perceived as the absence of disease (Cápra, 1983). This has resulted in a hospital and clinic based, curative service delivery system. The interaction of this system with the reality concerning inequitable resource allocation that has favoured urban facilities (Medical Research Council, 1991), has led to a situation where vast numbers of rural people have had little or no access to health care. The only possible option for developing a strategy to pursue the goal of

Health for All, is to implement the principles of PHC. Based as it is on a biopsychosocial model of health, PHC, encompasses social, psychological as well as physical dimensions of well-being. A fully comprehensive approach to health care is thus implied, and focuses, inter alia, on the attainment of basic needs. People, and their right to choose and to decide about their own health, need to be respected and accounted to by sensitive, compassionate service providers. They need to take control of their health; they need relevant, appropriate, acceptable, accountable health services, accessible to them where they live (WHO, 1978).

2.3 THE ROLE OF THE UNIVERSITY IN TRANSFORMATION OF THE HEALTH SERVICE

South African policy makers and health personnel are faced with the challenge of meeting the people's needs by redistribution of resources; different models of service; and by new and relevant skills and technologies. To achieve these goals, awareness of and sensitivity to the diversity of cultures, and the needs of the ethnically rich South African population, are essential. It is at this level that the dynamic role of the university in the transformation process becomes apparent. Not only should relevant skills be identified and taught; appropriate, new technologies developed; and attitudes modified; but also new and appropriate models of service must be developed and validated. Furthermore, the university has a critical role to play in the development of appropriate policies. Without policy change, transformation at other levels remains superficial and ineffective. Supported and informed by appropriate research, which is a major goal of a university, transformation, through development of appropriate models and policies, becomes a viable reality.

2.4 BACKGROUND TO THE PROJECT

It was within this framework that the Interdisciplinary Health Group at the University of Durban-Westville (UDW), together with concerned academics from other health related tertiary academic institutions in the region, established the Natal Institute of Community Health Education (NICHE). This is a tripartite partnership between communities, service organisations and tertiary academic institutions, which is primarily aimed at changing the training of health personnel. Socialisation is a critical part of health personnel education (Friedman, 1991; Lipkin, 1989b; Schmidt, 1989). The aims, therefore, are to expose the providers of the service to appropriate models of care, and acceptable role models at a stage early enough to ensure socialisation to appropriate models of service. Participants collaborate in an interdisciplinary, community based, problem based, integrated teaching, research and service initiative, in which the teaching methodologies are participatory, self directed student centred learning with an emphasis on process, and skill development, rather than on content based, lecture centred learning.

A second, smaller initiative, specific to UDW, is an interdisciplinary research project, designed to investigate the implications of components of the same community based initiative; to use the findings to impact upon curriculum and institutional transformation in the

Faculty of Health Sciences and health related departments.

The feasibility study that is presented here, was located in the context of the above. In 1992, in the Department of Speech and Hearing Therapy, it was not possible to alter the curriculum in any significant manner, but in acknowledging the principles and aims described, the staff agreed that the need for more appropriate educational experiences was urgent, and relevant to present students as well as to future groups. It was considered to be of critical importance to evaluate the feasibility of implementing such a programme. The current timetable and the speech pathology curriculum were adapted, therefore, to allow for the introduction of an integrated, community based component that would, as far as possible, reflect the principles of both PHC and an emancipatory (Grundy, 1987), student centred teaching strategy.

One day a week during the academic year (i.e., 20% of the final year curriculum), the final year class and a lecturer spent the day in a peri-rural community of approximately 67 000 people at Kwa Dedangendlale in the Valley of a Thousand Hills, 40 kilometres from Durban. It is situated in Kwa Zulu-Natal, on the eastern seaboard of South Africa. The black population is Zulu speaking and mainly poor. It is served by a socio-medical PHC project, The Valley Trust, established in 1951. So great are the needs of disadvantaged communities in South Africa, however, that even in the context of a highly successful PHC project such as this, the reality is that basic needs are still inadequately met, and that there is virtually no paramedical service.

3 DESCRIPTION OF THE PROGRAMME

The programme comprised a number of components from both the theoretical and practical courses which were co-ordinated to provide a cohesive programme.

3.1 PURPOSE OF THE PROGRAMME

There were two major goals of the programme:

- 1) to investigate the feasibility of decentralised community based student centred learning, that reflects the aims of NICHE (described above), by reviewing the extent to which academic standards can be maintained
- ii) to sensitise students to, and to facilitate the development of appropriate skills for community based service, by exposure to Third World conditions.

3.2 COMPONENTS OF THE PROGRAMME

1) **Research design module.** The programme commenced with a ten hour course on practical aspects of designing and implementing a research project. Evaluation of this module was based upon the written report of research projects undertaken by the students.

2) **Seminar module.** In the 20 hour seminar module, students presented topics¹ that had been selected to develop familiarity with the literature; to stimulate their own thinking; and to provide them with a relevant theoretical background. The starting point of this module was a global, First World profile of the profession of

speech, language pathology and audiology (SLP&A). The purpose of this was to identify paradigms and international, current trends, including PHC, that would provide them with a framework for analyzing, applying and understanding professional issues when operating in Third World conditions; and to facilitate understanding from the outset, that the implementation of PHC principles in no way implies a lowering of standards nor a "second class" service. Other topics related to theoretical aspects of social issues such as poverty; to discipline specific and methodological issues; and to the implementation of PHC. The purpose of this module was to allow the students to identify within themselves, insights and resources that they would be bringing to the programme from their three years' experience of a traditional First World, Eurocentric curriculum; and to obtain an initial recognition of the limits and inadequacies of such a curriculum for the conditions they were about to experience.

3) **Field visits.** Upon completion of the seminar module, visits to Kwa Dedangendlale commenced. The PHC manager of the service organisation of the Valley Trust project, a medical doctor with an epidemiological background and vast PHC experience, worked closely with the departmental lecturer and the students throughout the programme. As students from many disciplines visit this area, the programme was planned to involve as many disciplines as possible, e.g. Nursing, Medicine, Occupational Therapy. Students from other disciplines moved in and out of the programme for short periods of either one or six weeks. These were involved as much as possible in the programme to allow students of different disciplines the opportunity of working together on common projects; to learn to understand each other; and to recognise common difficulties and constraints.

The objectives were few, and simply formulated to provide maximum flexibility that would allow students and staff to develop the programme in response to the needs of the community, and to negotiate the course of the programme in collaboration with them. Through experiential, participatory, reflective learning methods, appropriate insights and skills were targeted. Both small group and plenary workshops were utilised for preparing students who could not speak Zulu, for communicating with the Zulu speaking community people; for the development of research projects; and for planning intervention and service. Contacts took place at schools; in the local court house, in a first aid station and in people's homes.

3.3 THE FIELD VISIT PROGRAMME

1) **Orientation.** In order to ensure that the community people were protected as much as possible from blunders by inexperienced students, the orientation was focused upon the following :

- the community, through interview and focus groups with community health workers; teachers; and with key members of the Valley Trust staff
- living conditions and the work of community health workers through home visits with them
- the socio-medical project through input from the Val-

ley Trust staff

methodological and cultural issues relating to cross cultural, people centred, facilitative communication through workshops and role play.

2) **Input concerning SLP&A.** Contact with the CHWs and the teachers commenced by discussion concerning their conceptualisation of the discipline and the services available:

- people were asked to provide input concerning their understanding of SLP&A
- students then interacted with them to provide more accurate information.

3) **Identification of community needs.** Using the shared framework concerning the nature of the discipline of SLP&A, community members were asked to identify their needs relative to this. (As there is a long established socio medical project working on basic needs, these were not the focus of the current programme.)

4) **Negotiation of a research topic.** Based upon the identification of needs, students were required to negotiate a research topic, with either the CHWs or the teachers, that would be of relevance in some way, in addressing an expressed need. As the students' final year research project was integrated into the community practicum, it was required to be of benefit to the community. It was therefore required to include an action phase that would provide a service to the community, thus integrating the goals of research and service with those of teaching. They were permitted to develop topics of their own interest, on condition that they were agreed by either the teachers or the CHWs. They were encouraged, however, to choose the simplest topics possible, due to the challenging complexities of the task, viz.: that an entire class was required to run their projects in a particular community; that they would therefore be obliged to be working in the context of a language not known to them; and that there were no available precedents of linking the research project to teaching and service in this way.

5) **Preparation for visits.** Workshops were used to enhance cultural sensitivity; cross cultural, cross linguistic communication; and facilitative methods to ensure dialogue and participation. Methods used were experiential and participatory learning; brainstorming; role play; and reflective review techniques.

6) **Planning.** All aspects of the programme were carefully planned by both staff members and the students.

- i) The ten **research proposals** (Appendix 1) were discussed in a group, so that the students were exposed to, and participated actively in the development of all the projects, thus expanding their practical research experience. The planning for these was detailed, and included discussion of relevance, accountability, acceptability, participation and action, as well as logistical factors, and academic and design issues.
- ii) **Group data collection** was used in order to maximise the research experience for the students and the

CHWs; and to use the research experience for providing hands-on community work. For this, the projects were grouped together in themes. Very careful planning, therefore, was critical to achieve this in the time available. Three days were targeted across three weeks, but due to unforeseen difficulties data collection was extended to five days.

iii) After individual analysis of the data, **action programmes** were designed to be of some benefit to the community. Although these focused to a large extent on the transfer of information and skills, identified needs of individuals were met as far as possible.

iv) **Implementation of the intervention programmes** was planned together, by the students. This was a major challenge because of constraints in terms of available resources.

7) **Staff and student responsibilities.** Initially the staff took a directive role, taking responsibility for introducing the students to relevant concepts and issues; they initiated and modelled the methods and techniques used. Supervisory and monitoring functions became their primary responsibilities as the programme progressed. The students gradually assumed the responsibility for directing the planning and implementation of the programme after the first six weeks. Their responsibilities involved identifying and effectively utilising the minimal human and service resources available; identifying human contact chains to overcome the lack of the telephone service; time management; and meeting the needs of all parties in so far as possible, in a relevant, appropriate manner.

4 EVALUATION

In an integrated, problem based, experiential teaching initiative such as the above, traditional student evaluation methods are inappropriate. As this was primarily a feasibility study, implying the need for programme evaluation, it was critical that the evaluation procedure should be sensitive to the nature of the experience. This was discussed by staff and students, both informally and in a workshop session. A procedure that would reflect as far as possible, all aspects of the discussion, was then designed by the departmental lecturer. This was presented to and accepted by the students and the Valley Trust staff member. It was agreed that the feasibility of the study would be determined to a great extent by the evaluation of the students: both by their own self-evaluation of the initiative as a learning experience, and by external evaluation of their performance. It was therefore necessary to determine the students' subjective perceptions of both the experience and their performance; and to identify indicators of performance that could be used in a more objective evaluation protocol.

4.1 THE EVALUATION PROCEDURE

1) **Significance of the experience to students.** As the students believed strongly that their experience should be shared, they agreed as a group, that the programme should be documented and published. They agreed to write personal descriptions of the significance of the experience to them (Appendix 3), and they man-

dated the departmental lecturer to write the paper. The need for open, frank disclosures was stressed, but the students indicated that this would not be a problem, as the nature of the experience had made them feel quite comfortable about this. The descriptions were written without consultation, in order to identify individual, personal perceptions. It was left to them to identify themselves or not as preferred.

2) **Evaluation of students' participation and input to the project.** As the students had been responsible as a group for a large part of the activities of the programme, it was agreed that it would be necessary to obtain an evaluation of the contribution made by each student, on dimensions of responsibility (List 3) and leadership (List 4) to his/her own project (List 1); to the other students' projects and to the programme as a whole (List 2). This was done by means of a rating scale (1-5) with categories agreed by the students and staff (Appendix 2). Both staff members also rated each student.

3) **Questionnaire: student's evaluation of the programme.** Anonymously, students completed detailed questionnaires that provided information concerning the nature of their perceptions, evaluations and recommendations; and concerning the strength of their opinions. They were requested to provide as much negative information as possible, as this would be the most valuable part of the exercise for developing the programme.

4) **Interviews: Assessment of student performance.** In lieu of a traditional, formal final assessment of performance within the context of the placement, the departmental lecturer interviewed each student for approximately twenty minutes, at the end of which a negotiated percentage mark was given. The following format was used.

i) **Initial presentation by students.** The students were asked in advance to review the experience and to identify significant issues and indicators of insight and performance. They were asked to present whatever they believed would demonstrate their insight and ability; and to evaluate the experience, their input, their development and their performance.

ii) **Students' recommendations.** Recommendations and motivations for improving the programme were sought, to provide another dimension to the evaluation procedure and to provide input into the development of the programme.

iii) **Marking overall performance.** Students then provided and motivated a percentage mark. At this point I assigned (but did not disclose), a mark based upon my observations and evaluation of the student's role and performance in relation to the entire process; the general trend of his/her profile as indicated on the class rating matrix; and based upon the student's performance in the above interview. After the student's motivation, I facilitated discussion to substantiate and to probe further, to allow the student to reformulate or reiterate the evaluation. At this point, both the student and I reflected further on our marks, to permit us

to modify them, after which the student discussed his/her final mark. I then gave input concerning my mark and my evaluation, after which a final mark was agreed.

5) **Research projects : Academic evaluation of written research report.** Students' performance on these projects would be a particularly clear indicator of success. Although they were required to be accountable; to have an action phase; and to be participatory if at all possible, they would nonetheless, have to meet required academic standards. This aspect was measured by the usual practice of evaluation by two departmental internal examiners not immediately involved in the programme, and an external examiner from a university with a strong academic focus.

6) **Final examination: Academic evaluation of performance in course major.** Departmental examinations in speech pathology in the final year reflect the full course of four years of study, with three, three-hour written papers and a 30 minute clinical interview with evaluation by a panel of all the departmental academic and clinical staff and an external examiner. A similar examination schedule applies to audiology, but as this component of the curriculum was not altered it will not be discussed.

7) **Career: Programme impact on choice.** The medical education literature (e.g., Schmidt, 1989) suggests that one reliable indicator of success of a problem based, community based approach to education, is the chosen career path of the student after graduation. Students whose attitudes have been positively altered by conscientisation and whose skills for Third World models of service delivery have developed, are more likely to choose PHC types of posts than those who have not received positive benefits from the exposure. In order to tap this source of information therefore, students were asked before and after exposure to the programme to provide information about their preferred career choices, given that all things would be equal.

4.2 EVALUATION RESULTS

1) The **written descriptions** were all extremely positive. The only negative comments related to initial reservations and anxieties.

2) The **ratings** providing information concerning students' perceptions to the programme indicated diverse levels of evaluation. Seven students (n=13) used a narrow rating band, at the higher end of the scale, for all students for *responsibility for own projects*. Five used this high, narrow rating band for *contribution to total project*; four for *responsibility for total project*; and three for *leadership role for total project*. Two of the students consistently used this narrow band on all four lists, and two did so on three lists. Others made use of the full range of ratings, all of which reflected the ratings of the two staff members involved, indicating consensus and the ability of students to evaluate their own and other's work.

3) The **questionnaires** were extremely positive in favour of the experience, in that no responses fell below

the second highest category, and most were at the highest level. Such strong positive results raise the question that students might not have felt free to provide negative information. This, however, was not the case, as the students provided detailed critiques as well as detailed motivations for their opinions. In the former, all students provided clearly negative comments, together with constructive recommendations for modification.

4) The *student interview* corroborated and developed the conclusions reached, concerning the questionnaire information. Although some students lower in the range tended to reflect inadequate insight, which led to an inflated mark, and some appeared to underestimate their performance, the general pattern was one of maturity and insight. The negotiated marks ranged from 53% to 78% with a median of 67% and a mean of 66.5%. Only two of the students were led to lower their marks and three were led to raise them. For the others, which differed from mine by only two or three points, a compromise was agreed halfway between the two marks.

5) The *research projects* were passed by all students, and the departmental staff received a congratulatory letter on the success of the programme from the external examiner. The marks ranged from 54% to 76% with a median of 64.4% and a mean of 64%.

6) In the *final examinations* all students except one, passed. The unsuccessful student was one who had consistent difficulties, and one of two students who had received student ratings of *making little contribution to the total project* and of *some reliance on the efforts of others for own project*. The external examiner commented favourably on the quality of the answers on the examination paper that specifically related to, and reflected the principles of the programme.

7) *Career choices* differed markedly before and after the programme, with changes from 9 to 2 for hospital based posts, and from 1 to 3 for community clinics, in favour of a shift from 0 to 6 for community based posts (Figure 1). These reflect the students' comments that they felt able to deal with the challenges of community based experience and that they perceived the need for and significance of providing services at this level of care.

5 DISCUSSION

Both the major goals of the programme were achieved. A clear answer was obtained to the question of feasibility of decentralised student learning. Academic standards are imminently maintainable as evidenced by the 100% pass rate on the research projects; by the sensitivity and range of the negotiated marks which reflected evaluation of performance levels on other, more traditional evaluation procedures; and by indications derived from the comments of the external examiner concerning a pattern of positive qualitative differences in the component of the written examination based upon the programme. The other goal of sensitising students by exposure to Third World conditions

and of facilitating the development of appropriate skills was also clearly achieved as reflected by evaluations by students and staff and by the changes of attitudes and self-confidence reflected in the shifts in career choices.

The reality of the students' competence was affirmed by subsequent clinical events, such as a highly successful screening initiative in a school in an entirely different, First World context. For the first time in the history of the department, the organisation and planning of such an initiative was left entirely to the students: the role of the staff being one of observation and monitoring only. The screening proceeded smoothly and efficiently while the students remained calm and competent throughout. Clearly they had been able to extrapolate and apply the lessons of the Valley Programme to the new context, thus substantiating their comments on the value of the experience not only to service delivery in a PHC model, but also to First World service delivery.

From the programme in Kwa Dedangendlale it was also possible to identify the potential role of speech, language pathology and audiology in a PHC model of service delivery. Although in the limited exposure we could do little more than touch upon such issues, it was very clearly possible to work in a language and culture different from our own, and to have a place in PHC service delivery. We were not able to develop relevant models of service delivery. This will be a continuous process that must take place over a number of years. There were strong indications, however, of the importance of an interdisciplinary context and of developing skills and delivery models appropriate to, and relevant, to service needs. The benefit to the community of an ad hoc service was indicative of the future role that could be played by speech, language and hearing therapists in such a context.

Although the programme reported was little more than a feasibility study, its impact on those involved was significant. The community people we worked with have reported that they have gained both knowledge

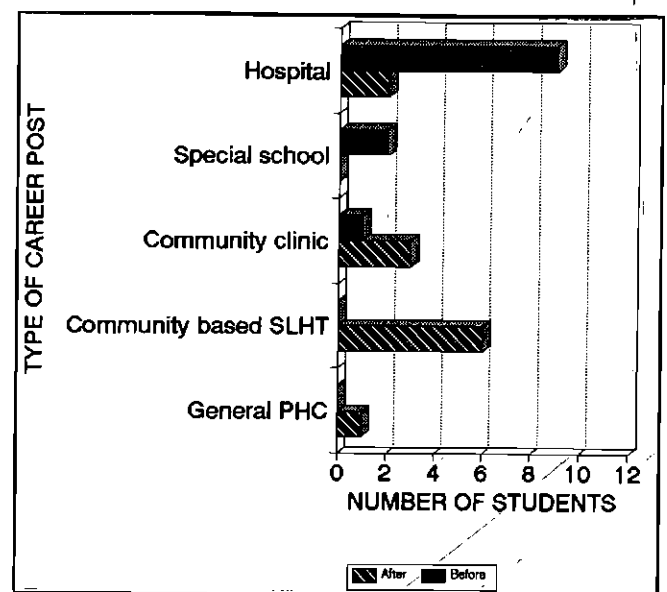


Figure 1. Student career choice before and after programme

and some skill relating to a broader range of health problems; but most of all they have rated as most significant, their role in teaching future health professionals about the reality of life and the lack of health care in their community. They too are aware of the inadequacies and points of failure, but they are convinced of the value of the programme, and are committed to working towards strengthening it. The ownership of the user community for this programme has grown, so that more and more, they are directing the programme by the ever increasing clarity of the articulation of their needs and expectations. People in neighbouring communities are urging us to expand our activities to them. Students who have now graduated, continue to seek forums for the presentation of the initiative. They are convinced of their role in sharing their experience and their insights, in contributing to transformation, and in recruiting colleagues. They believe they should continue to work for a service that will meet the needs of all people; and to agitate for relevant changes in the infrastructure of the health system. Academics are committed to developing the programme and involving all disciplines, despite the enormous challenges of collaborating with and working with so many academics and professionals who have been accustomed to working independently.

5.1 LESSONS LEARNT

It has been possible to identify factors that could be likely to hinder and promote the greatly needed process of curriculum transformation within the university. Such factors are thus critical in the process of strengthening the role that the university can play in meeting the needs of the community it serves.

1) **The challenge.** It became very clear that the nature of community work, that is based upon the principles of the WHO definition of comprehensive PHC, is both slow moving and demanding. Integral components of participation and development imply dimensions that are new to many health personnel and academics, whose training was based on the mechanistic paradigm of the medical model (Capra 1993). The contingent service delivery model demands an urgency for action directed towards a curative outcome for individuals. The PHC approach, on the other hand, demands a more equal, facilitative, participatory model of service, based on the principles of identification of needs and resources and on the provision of options. Inherent in this approach is the development of capacity to facilitate the active participation of the "client". The challenges of re-orientation, conscientisation and skill development in both students and staff, result in anxiety and insecurity, as they venture out of the safety of the hospital and the clinic to risk (a) failing to meet the academic and educational needs of the students and (b) exposing disadvantaged community people to inexperienced students.

2) **The need for time.** One lesson that emerged from the programme in 1992 and that has been reinforced subsequently, is that the process is slow initially. While students continue to experience a sense of impatience, there must be sufficient time to plan, to develop skills, to reflect and negotiate. In this time, while

the relationship with the community is being developed, and the direction of the programme is being negotiated to meet the needs of all concerned, time must be spent on developing students' skills. They need to learn, inter alia, how to communicate in a language most of them do not speak, with people from a different culture, who are mainly uneducated.² They must learn to negotiate, **not** inform; they must learn to abandon professional jargon; they must learn to facilitate client participation, not act "upon" their clients. All this takes time, humility, sensitivity and respect; and while students continue to feel a sense of impatience, they need to continue to prepare and plan, for they have not yet learnt the necessary lessons and skills!

3) **The potential for success.** Another critical lesson from the experience is the reassurance that if undertaken carefully, this period of skill development, planning, and negotiation, is richly rewarded. Suddenly the process speeds up and the anxiety gives way to a sense of the richness of the experience, which continues to grow throughout the year. In the feasibility study, inadvertently, inadequate time was scheduled for planning in the action phase. Although impatient and anxious initially, the students themselves recognised the inadequacy of the first contact during the action phase, and immediately requested additional time from the staff members, as they acknowledged that the need for careful planning was as great as in the early preparation phase. This time, however, although severely constrained by time, there was no impatience and certainly no frustration. Instead a note of cautionary admonishment towards the staff could be detected.

4) **Factors hindering and promoting the formative programme.** Promotive factors identified are the following:

- the clear indications that academic standards could be maintained while adding new dimensions of accountability, relevance and capacity development
- the strong positive conviction concerning the feasibility and value of the programme which replaced initial scepticism, anxiety and frustration.

Hindering factors identified are the following:

- lack of human resources, which impacts upon all other hindering factors, presents as the most significant single obstacle
- lack of adequate, thorough preparation and planning, action concerning goals, methods, co-ordination, development of skills and utilisation of resources
- attempts to hasten the process and to take short cuts
- time tabling difficulties that prevented common starting and ending dates for students from different departments

5.2 REFLECTIONS ON THE ROLE OF THE UNIVERSITY IN DISADVANTAGED COMMUNITIES

After initiating an integrated interdisciplinary programme in a disadvantaged community, it appears that the university's role could realistically be to impact upon

change directly within the community. By the sharing of skills and resources and by strengthening the initiatives of the community, it is possible for the university to contribute directly to development. Indirectly too, by transforming the curriculum for educating health personnel, the university can facilitate the development of appropriately trained health personnel who, in the long term, will contribute to transformation of the health system and health service delivery in the country by their sensitivity and accountability to all the people of the country.

In South Africa, however, the role that the university can play is even more significant than this, for it can, and should be at the vanguard of profound change. It is not enough to provide a community service, even one that is enabling; nor is it enough to alter the attitudes and skills of health personnel and other professionals of the future. Changes in health personnel education must be paralleled by policy change. Not one of the students who would prefer a community based post has been able to find one. The infrastructure of the health services have remained unchanged. The threats of further privatisation and elitism continue to flourish. The significance of the university's role in health, therefore, is not only the development and validation of appropriate models of service delivery, but the development and implementation of policy informed by relevant accountable research. It is only through informed policy change and the development of appropriate models of service that profound transformation can occur. It is imperative therefore, that the university has a comprehensive, well co-ordinated, integrated programme of teaching research and service that will inform policy change and implementation, to address the challenge of development, with a strong focus on a meaningful programme of social redress.

Paralleling the inequities in the health service, are the inequities in education which continue to deny university access to the historically disadvantaged people of the country. It is not enough that the disadvantaged communities are served by sensitised health personnel from other communities: they are rightly demanding that their own people have easy access to university education and that they are served by adequately educated health personnel from their own communities. For this to become a reality, universities must be proactive in impacting upon education of disadvantaged communities at every possible level, from pre-school to adult education. To do this, every aspect of life must be addressed, including socio-economic conditions. The university with the richness of a multiplicity of departments, is well placed to lead in sensitisation to the need, and in addressing the challenges. By adopting and implementing the principles of the multi-sectoral approach to PHC, the university will become accountable to the community it serves, and integral to the process of transformation and so will meet its social and moral obligations of contributing to development of the communities it serves.

Although education cannot transform the world, the world cannot be transformed without education.
Prof. J. Reddy, Vice Chancellor and Rector, University of Durban-Westville (1991). Installation address.

6 CONCLUSION

In this paper, an integrated teaching, research and service programme has been described. The aims of the study which were to provide alternative skills and to sensitise students to Third World conditions; and to investigate the feasibility of final year speech, language, hearing therapy students working in a disadvantaged community with people of a different culture, in a language not known to the students, were both achieved. By linking an academic module and a research commitment to a clinical service practicum, it was possible to provide an experiential learning component, introducing an alternative model of service delivery of relevance, not only to people living in Third World conditions. A qualitative analysis of the programme indicated that lack of resources and lack of co-ordinated and adequate planning could seriously compromise such a programme, which is challenged by the need for profound attitude change. Potentially promotive factors relate to the indicators of success which suggest that academic standards are imminently maintainable; and to the strong positive impact on those involved. Reflections relating to the role of the university focused on the development of appropriate models of health care and policy in transforming not only the Health Service, but also education and socio-economic conditions of community life. The multi-sectoral perspective of PHC was cited as providing the integrative cohesion that will render the university accountable to the community and integral to the processes of transformation and development.

NOTES

- 1 The list of topics, materials used and other information are available from the author.
- 2 According to the government census of 1985, 50% of South Africans over the age of 20, and 79% in rural areas, are functionally illiterate. (Medical Research Council, 1991, p.18.)

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APPENDIX 1: RESEARCH PROJECTS

- 1 Screening for loss and middle ear disease among black, rural infants and pre-nursery children in the 4-36 months age group.
- 2 Feasibility of an alternative hearing screening protocol for pre-schoolers in a black rural community.
- 3 Hearing screening of rural black schoolchildren 6-14 years old in the Inkazimulo Lower Primary School, at the Valley of a Thousand Hills.
- 4 Prevalence of hearing impairment in black Class I underachievers in Inkazimulo Lower Primary School.
- 5 Communication disorders: Beliefs and practices in a Zulu community.
- 6 Teacher attitudes and knowledge of stuttering held by primary school and high school teachers in the Kwa Nyuswa community.
- 7 Acquired neurogenic communication disorders service need identification using community health workers in the Kwa Nyuswa area.
- 8 Prevalence of hearing impairments and the feasibility of selected hearing screening tools for the elderly, black Zulu speaking population of Nyuswa.
- 9 The applicability of the Draw a Man Test as used by speech-language therapists, to black children in a rural area.
- 10 The use of communicative intents by a group of black South African preschool children in the Valley of a Thousand Hills.

APPENDIX 2 : STUDENT RATING INFORMATION

CLASS EVALUATION OF INDIVIDUAL STUDENTS' CONTRIBUTION TO THE VALLEY TRUST EXPERIENCE

INSTRUCTIONS:

- 1 On the attached form, against each student's name, including your own, give your rating using the scale given below, to signify your perception of the following:
LIST 1: responsibility taken for OWN project
LIST 2: contribution made to TOTAL project
LIST 3: responsibility taken for TOTAL project
LIST 4: leadership role taken for TOTAL project
- 2 Please do not identify yourself in any way
- 3 Please complete independently and honestly

NOTES

- to be completed by one student only
- each student will get a separate form
- I will collate all responses on to separate LISTS i.e., 1-4, so please ensure accuracy

SCALE:

- | | |
|-----------------|--------------------------------|
| 1 = MINIMAL | - mainly depends on others |
| 2 = LITTLE | - frequently depends on others |
| 3 = MEANINGFUL | - but does not undertake extra |
| 4 = SIGNIFICANT | - input is above average |
| 5 = OUTSTANDING | - input is outstanding |

APPENDIX 3 : EXAMPLES OF STUDENTS' DESCRIPTIONS

1 "The man who has never had to face adversity has yet to learn what he is made of" (Anon). I believed that each day at campus was a day of facing adversity; of rising to the challenge and meeting the stresses of Speech and Hearing Therapy. I guess I still believe this; however, from a changed perspective. When I'm on the brink of a nervous breakdown I just cast my mind back to my experiences in the Valley of a Thousand Hills. This is written more from a personal level than an academic level, since it was my personal self that was so deeply affected by what I've observed and learnt over the year. To hear about poverty, to read about poverty - has no real impact until you stare it straight in the face. The ongoing, painful adversity these people have to face leaves one totally shaken. This has been the first shocking awakening I've experienced in my short life - a life previously so safe and cocooned! Reality struck and left its mark.

I've taken so many things for granted - my three hot meals a day, a switch that will give me light, a tap that provides water - people in the Valley of a Thousand Hills are deprived of these basic needs - needs which I believe are a RIGHT not a privilege.

I have learnt such valuable lessons over these few months. For example, when we visited one home, walking over one hill to the next, the rugged terrain would leave me out of breath and dying for a thirst quencher - and then I saw a young girl of approximately 11 years carrying a crate of cold drinks on her head - 12 heavy bottles! She also had to walk over those hills! I've had to learn about mothers and fathers - unemployed - trying desperately to provide for their numerous children... However, a striking feature was the hospitality and friendliness of these people to us strangers, together with their sense of pride! There was no sign of (rightly placed) bitterness or hostility! - another important lesson!

I had no idea of the extent of poverty and its effects! There are so many other ignorant people out there - people who may have the power to help in their own little way! People need to become aware of the poor socio-economic situation in these rural communities! Awareness can lead to action!

One way of action is through Primary Health Care - a topic I've become quite familiar with - thanks to my experiences in the Valley of a Thousand Hills, where I learnt about the dedicated work of the community health workers; and also thanks to Valley Trust and Dr. Irwin Friedman for broadening my horizons!

This year we were pioneers in conducting research in the Valley! It was a starting point! It has also made me realize that may be through our profession we'd be

able to ease the burden of these people! - if only a little. I've also learnt of the importance of multi-disciplinary work - there is no way we can work in isolation and be effective - there has to be input from all sides! In addition, we as professionals/academics have to get rid of this "big chip on the shoulder" called arrogance! As Paulo Freire said "Transformation is only valid if it is carried out with the people, not for them..."

In essence, from: Martin Luther King:

I have the audacity to believe that people everywhere can have three meals a day for their bodies, education and culture for their minds, and dignity, equality and freedom for their spirits. I believe that what self-centred men have torn down, other-centred people can build up. I still believe that one day humanity will bow before the altars of God and be termed triumphant over war and bloodshed and non-violent redemptive goodwill proclaim the rule of the land and the lion and the lamb shall lie down together and every man shall sit under his own vine, and fig tree, and none shall be afraid. I still believe that we shall overcome.

Nobel Peace Prize acceptance speech.

If the ignorant are educated,

If the powerful act,

If those who are status-bound lose their arrogance...

.....Maybe we will overcome.

2 The Valley Trust Experience... Whew!... How do I begin to describe it?! A roller-coaster ride: where I learnt about life, values, prejudice, politics, morals and about myself - up every hill, down every dip and around every hairpin bend on the route. I've learnt about community: the concept; and PHC - what that term does and does not compass; I've acquired - to a certain extent - cultural sensitivity and tolerance of others' values, life styles and practices. I've learnt about the essence and value of communication, and being an effective communicator.

Most importantly - I've been forced to "see" what I've been "looking at" ... a great many people in South Africa have been deprived of essential services. A vast amount of work needs to be done. It is extremely encouraging to witness the community projects that are operating in the Valley of a Thousand Hills knowing that each small step that is taken here, is a great step for the rest of South Africa.

Thank you for the experience! The feeling has been incredible!

Research: "It was never easy, but together we made it!"