

RHODES UNIVERSITY
DEPARTMENT OF EDUCATION

RESEARCH PORTFOLIO
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INTRODUCTION

This portfolio discusses various important aspects that affect teacher education. The portfolio has become an important tool for assessment in education. The research component of the masters' course that I attended is reflected in this portfolio. To complete this course several aspects were covered.

The educational reform process in the Namibian context requires the use of appropriate resources, an environment conducive to learning, active involvement of the learners and teachers who should have a better understanding of the system adopted. Teacher educators are seen as important in transforming Namibian education in the sense of breaking the cycle of authoritarianism and inequities that existed in schooling prior to independence in 1990, and that still continue to exist in many Namibian schools today.

Much effort has been devoted to creating conditions in colleges of education, where future teachers experience the same kind of teaching and learning that is envisioned for schools in the in the country. To accomplish this a great deal of effort has been devoted to the professional development of teacher educators. This masters' course was initiated to address the shortcomings of teacher education in Namibia. The preparation of teacher educators to be willing and able to prepare teachers in a manner that is consistent with national educational goals has been a neglected element of educational reform in Third World countries (Taylor and Peacock, 1997).

Nahas Angula defines teachers as critical agents in creating the reform in relation to several broad principals: access, equity, quality, and democracy. As Ebbutt and Elliot (1998) point out, these principles are defined in very broad terms and provide the opportunity for teachers, teacher educators, and administrators to translate the ideals in particular contexts through practical reflection and deliberation.

The Namibian reforms are underpinned by democratic ideals, the intention being to develop broad participation in defining and developing the reform tenets in specific contexts. In Namibia it has been recognized that qualitative changes in classroom practice will only occur when teachers understand them and accept them as their own.

It is also recognized that because many teachers have been educated under the authoritarian system of the past, conceptual changes are needed in the minds of the teachers for the reforms to be successful. These include a shift from the belief of teachers as civil servants who are merely to “deliver” a curriculum dictated from above, to one of teachers as reflective professionals who play important roles in interpreting and defining the reforms and in giving meaning to such values as learner-centered and democratic education, continuous assessment, and critical inquiry (Swarts 1998).

In the case of Namibia, we have a situation where there is an attempt to fundamentally transform an authoritarian education system that emphasized repetition and rote learning of received knowledge to one where learners are active participants in the learning process and where the curriculum is relevant to and respectful of different cultural traditions and communities. The learner-centered philosophy that guides post independence educational reforms in Namibia calls for breaking down the authoritarian teacher- student relationships of the past. It encourages teachers to begin instruction by gaining an understanding of their learners’ existing knowledge, skills, and understandings and to actively involve them in the learning process toward the goal of preparing citizens for a democratic society.

The background above will help the readers to understand the sections covered in this portfolio. In the first part, the portfolio looks at a case study that analyses pre- and post- independence teacher education in Namibia. This study focuses on the Rundu College of Education and investigates the implementation of the Basic Education Teacher Diploma (BETD) Broad Curriculum in relation to the History syllabus. This paper presents information on what led to post- independence teacher education reforms in Namibia and why the reform was necessary. The BETD Broad Curriculum advocates the principles underpinning teacher education reforms in Namibia. The analysis looks at whether the History syllabus applies the principles of teacher education reform in relation to practice in the classroom. This paper addresses the historical background of a History curriculum, which shows the importance of a contextual understanding of the theoretical framework.

The second paper looks at the theories underpinning the pre- and post- independence curriculum and the reform process in Namibia, how each theory views knowledge and why a decision was taken to apply them. The third paper is a literature review that links the epistemological ideals of reform to the classroom situation. This paper provides the basis for a small-scale empirical research. The research proposal included in the portfolio emerged from the earlier studies and identifies a key area for investigation within the domain of my particular area of teaching.

The identified research problem investigated is presented in the final paper of the portfolio. These research findings can be applied to different situations in different schools. The portfolio is completed by the presentation of a short reflection of the role of the portfolio in this masters' course.

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PERSONAL PROFILE

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Current professional position and responsibilities

I am serving as Head of Department of Social Sciences and Pre-vocational subjects. I supervise the department to see to it that subject specialists get appropriate assistant to do their work better. I am also responsible for recruitment and admission of the first year students for Rundu College of Education.

Academic background

I finished my standard ten and Education certificate for Primary education in 1985 at Rundu Secondary School. In 1996, I completed a diploma in Education with UNAM (Higher Education Diploma for Secondary Schools). In 2000, I completed B Ed with Rhodes University. In 2002, I joined Rhodes University to do M Ed in General Theory and Practice, which is still in progress.

Community and outreach interest

As a member of a community, I am also involve in the following:

- NANTU Regional Secretary for Gender Affairs
- Member of the Regional Committee for Collecting materials against Colonialism
- Vice-chairperson for the Regional AIDS Committee (RACE).

Leisure pursuits

I like reading newspaper and watching television concerning the current affairs. I enjoy playing netball.

The achievements of which you are most proud

I was proud when I was promoted to become a head of department at the college level. This was really an achievement, I was happy because I knew that they did not just give it to me because of affirmative action, but I felt that I deserved the position. I was also happy when my name was amongst those who were selected for masters' programme, because many did apply but they did not get the opportunity. My biggest achievement is the completion of the masters' course with Rhodes University. I am proud to associate myself with one of the powerful universities in Southern Africa.

Your hopes and expectations for your master course

I hope that at the end of the course I will make it. I am also expecting to work hard and get the necessary assistance from the tutors for me to do better. I believe that to succeed, you have to suffer and never give up even in hardship.

CONTEXTUAL ANALYSIS

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CONTEXTUAL ANALYSIS

1. INTRODUCTION

Education is seen as a cornerstone in each society. To have an educated society, is to have a weapon to defend the nation from unemployment and poverty (MEC, 1993). Formal schooling in Namibia was once the privilege of the few. Few children could go to school before independence. Those who did go to school did not go far, especially in the rural areas. Those who continued their education mostly attended training courses. Black Namibians' education was justified in terms of its vocational utility. This training prepared black Namibians for the specific tasks that the South African colonizers required. What the colonial rulers required were a few people trained as messengers and clerks to function in the administrative system, while the majority received basic literacy and (Amukugo, 1993).

Training in basic literacy and numeracy created an elitist class. This new elite class identified itself with the values of Christianity and the colonial system. Kallaway as cited in Angula (1984) captures education in this era saying: "Within the colonial context, schools became key institutions of control, whereby a new indigenous elite was created to replace the traditional groupings who represented a different cultural and political outlook that was often hostile to the culture and social practices of the conquered" (Kallaway in Angula, 1984:9).

The legacy of privileged elites, Christians, clerks, messengers and other subservient positions created by the colonial regime and racial segregation contextualises the study of post independence teacher education. This paper examines the socio-historical and economic context in which the BETD History syllabus was designed, it provides critical analysis of the BETD History syllabus, and an analysis of learners for whom the History syllabus is designed and lastly, an analysis of the learning environment in which the History syllabus is undertaken.

The scope of the study will be limited to Rundu College of Education with its teacher educators and student teachers as research colleagues.

2. METHODOLOGY

The methodology used in collecting data included interviews of teacher educators, questionnaires for student teachers, personal case studies and document analysis of the Broad Curriculum and History syllabuses.

2.1. Case Study

A case study approach was used (Bell, 1993). In this case one group of students in a class was selected, allowing for an in depth analysis of the phenomenon being researched. A dimension of the case study approach adopted included three students who were selected to write stories, which reflected their educational and cultural background. This was done in an attempt to add richness to the data about the students who will be involved in the teaching of History. The three students were selected on the basis of the different cultures they represent. The student teachers were free to express their personal experiences. According to McMillan and Schumacher (1993), an advantage of using this method is that the approach allows researchers to discover what the important questions are to ask of a topic as well as the important topics in education to pursue empirically.

The use of a qualitative orientation for this study draws on Campbell, as cited in McMillan and Schumacher (1993), who states that qualitative case study designs regularly contradict prior expectations, are convincing and informative, have a probing and testing power and validly pick up unanticipated effects missed by more structural approaches.

2.2. Semi-structured Interviews

The aim of this method of gathering data is to collect information face-to-face from Teacher Educators. Three teacher educators were interviewed. The Teacher Educators were directly involved in teaching History at the college level. I was interested in the responses of those educators that are involved practically with Social Sciences. Interviewing was easy to handle because it was face-to-face and as I was present at the interview I was able to minimize any misinterpretations of the questions that are associated with a questionnaire. According to Patton (2002) semi-

structured interviews reduce interviewer effects and bias when several interviews are used. The opportunity for the interviewer to influence the interviewee is limited. Semi-structured interviews were selected because they allow for both response to predetermined questions and free responses. Open-ended interview questionnaires were used that sought to look for the understanding of the curriculum of Teacher Educators and to seek information about the content of BETD History syllabus. Interview participants could rephrase questions when they did not understand. This helped to clarify certain issues. I had difficulties in making appointments with respective teacher educators. Compromises had to be made in rescheduling the time, this created delays in completing the task.

2.3. Questionnaires

Questionnaires were administered to the student teachers in History classes. Questionnaires were a good method to use with these student teachers because in an interview situation they would be hesitant to speak up. According to Bell (1993:75), questionnaires are a good way of collecting certain types of information quickly and relatively cheaply. Oppenheim, as cited in Bell (1993:75), writes about the shortcomings of using questionnaires as a tool to collect data. He writes, "The world is full of well meaning people who believe that anyone who can write plain English and has a modicum of common sense can produce a good questionnaire". He warns that care has to be taken in selecting question type, in the design, piloting, distribution and return of questionnaires. The disadvantage of using questionnaires, which was experienced in this study, was that some of the respondents did not answer as expected. This low response could cast doubt on the reliability of responses. Another weakness of the method could be the language competency of the students, but attempts were made to keep language simple and straightforward.

2.4. Document analysis using criteria

According to McMillan and Schumacher (1993:43), document are records of past events that are written or printed; they may be letters, diaries, journals, newspapers, official minutes, regulations, laws and the like. They further say that the researcher interprets these materials to provide explanations of the past and clarifies the collective educational meanings that may be underlying current practices and issues.

This method was used to collect data from the Basic Education Teacher Diploma (BETD) Broad Curriculum, the History syllabus and other relevant Namibian educational policy documents. A set of generic criteria was designed to analyse the documents (McMillan and Schumacher, 1993). Curriculum analysis was done to determine the curriculum literacy of Teacher Educators. The limitation of the study was the issue of seeing how values and attitudes were included in the syllabus. This was difficult because values and attitudes involve human behaviours and could be subjective or tagged as relative.

3. Broad Curriculum: Socio-historical and economic background of the Broad Curriculum

In colonial Namibia formal schooling was designed and implemented with the sole aim of converting the people into Christianity and spreading of European beliefs and culture (Cohen, 1994). This became the Christian National Educational policy.

Dahlstrom as cited in Angula (1999:10) :

“Bantu Education sought to create a ‘Culture of silence’ that protected the political interests of the ruling minority”. The colonial subjects were expected to reject their history and traditions. People were only taught basic skills of literacy and communication in the colonial language, to better serve the colonial economy. The segregation alienated the majority of black people. Their marginalization and subsequent exploitation and deprivations, implemented as a result of political decisions of Apartheid Policy, naturally disenchanted and de-franchised them. Many were motivated to write revolutionary comments, protests and so the birth of liberation war.

Education became a contested terrain. Education policy formulation became a battlefield for ideas and alternative policies. The political struggle in Namibia became closely linked to the interests of students and workers. Colonial and Bantu education were rejected (Cohen, 1994).

3.1. Origin of the modern Namibian System of Education

In the 1970s SWAPO established its own schools. Being one of the young Namibians who completed his undergraduate studies at the University of Zambia in 1973, Mr. Angula was assigned to establish a school for Namibian refugees near Lusaka, Zambia (Dahlstrom, 1999). Meanwhile, a programme of sending Namibians to

secondary, technical, vocational and higher education in independent African countries was developed with the assistance of the United Nations Council for Namibia. This was established in 1976 in Lusaka. The goal was to prepare Namibians to manage and administer Namibia after independence. When Angola became independent in 1974, SWAPO prepared to establish a Namibian exile school in Angola. Education centres were established in Kwanza- Sul Province and Lubango. Bantu education needed to undergo fundamental changes after independence if it was to serve the interests of the majority of the Namibian people. With this in mind, SWAPO prepared an alternative system while in exile. SWAPO's Department of Education and Culture in exile carried out four main educational programmes. These were "the basic education programme, the fellowship and scholarship programme, the adult education programme, and the special training programme and workers' education programme" (Amukugo, 1993: 235).

3.2. The Kwanza Sul Case: A Pilot Programme

The critical and transformative pedagogy for teacher education began at Kwanza. Kwanza, as it was known during that time, was a well-organised place considering the war in the surrounding mountains. Many children were without parents. The centre looked after the children and their basic needs. The liberation movement (SWAPO) evolved to become a political organization. As is usual politics design political systems, and entrenched in each political system are educational policies the politicians will use, should it obtain power.

The liberation movement's educational efforts were greatly enhanced by international solidarity and support. SWAPO forged contacts with donor agencies, governments, non- governmental organisations, and multilateral organizations. The United Nations Council for Namibia enhanced SWAPO's legitimacy by recognizing it as the authentic representative of the Namibian people. SWAPO's educational efforts were first aimed at providing educational opportunities to all Namibian exiles. However, it also took the opportunity to promote new ideas, which were to serve as a basis for education reform in a free Namibia.

SWAPO needed consultants to help in shaping the political ideology into educational policies. Because of solidarity that prevailed in African states and internationally,

Sweden became involved in conjunction with other Nordic Countries. This was easy because Swedish beliefs are based on social, democratic government as Dahlstrom stated: "We have a shared ideological and political vision that would be further developed and implemented in the field of teacher education" (Dahlstrom 1999: 48). Both countries had mutual trust based on the "common vision of transforming a society built on domination and inequality into one built on democracy and social justice" Dahlstrom (1999: 49). In the search for an educational alternative, the two organizations managed to create a foundation for a critical and transformative pedagogy for teacher education.

As education became an important area of ideological struggle under SWAPO, it was used as a vehicle to create awareness of the colonial situation and the people's role in the liberation struggle. These educational objectives were further developed when SWAPO adopted a socialist development program where there was "emphasis on technical education, Mathematics and Science, (areas that had been denied to the black majority by the colonial regimes); training teachers to enable free and universal education: integrating and accepting cultural creativity in the liberation struggle; and eliminating vestiges of tribal and feudal mentality" SWAPO 1976, as cited in Dahlstrom (1999:49).

In Namibia, as in many other countries education is considered a basic human right, available to all people, hence the notion "education for all" as advocated by SWAPO. Many countries over the world have recognised the fundamental importance of education. A group of educators and political leaders met in Jamtien, Thailand, in March 1990 to render their support for making education available to everyone on this planet. A "World Declaration on Education for All" and a "Framework for Action" was adopted. The declaration called for a renewed purpose, an expanded vision and commitment, and identified requirements for education for all.

SWAPO had a strong mandate from its electorate to push through its policies. A consensus on education was reached in the constituent Assembly, which was drafting the constitution. Article 20 of the Namibian constitution which plays an important role in Namibian education, was adopted and reads as follows:

- All persons shall have the right to education.

- Primary education shall be compulsory and the state shall provide reasonable facilities to render effective this right to every resident within Namibia, by establishing and maintaining state schools at which primary education will be provided free of charge.
- Children shall not be allowed to leave school until they have completed their primary education or have attained the age of sixteen (16) years, whichever is the soonest.
- All persons shall have the right at their own expenses to establish and maintain private school, or colleges or other institutions of tertiary education Angula as cited in Dahlstrom (1999:15).

The government used this strong constitutional mandate to articulate a comprehensive policy framework for education reform. The primary goal for this reform is access, equity, quality and democracy in education. The policy statements in *Towards Education for All* MEC (1993a) guide the Namibian educational reform. This new educational system is built on learner centred education, which aims at harnessing curiosity and excitement, and promotes democracy and responsibility in lifelong learning.

3.3. Post-Independence

Teacher education was recognised as critical to the improvement of quality education in Namibia. A curriculum coordinating committee on teacher education was established. This was achieved through the donor support offered to Teacher Education Reform Project (TERP) by Swedish International Development (SIDA). The project was placed at National Institute for Educational Development (NIED) but there were extensions at the four colleges of education.

NIED was created to be the professional wing of the Ministry of Education. Its strategic goal was to transform the pre-independence administrative culture still prevailing in the systems to that of an "innovative spearheading role (Dahlstrom, 1999: 56). The four colleges of education entered post independence from different positions. Each college had gained its experience from the previous dispensation in different ways. Ongwediva College of Education (OCE) was built as "a false front of homeland development," Rundu College of Education (RCE) was part of a secondary

school and students were treated as such by the "white clique" who governed it. Caprivi College of Education (CCE) was a glorified secondary school. It conducted its business far away from the centre of control in Windhoek, while Windhoek College of Education (WCE) was a place where white superiority, racism, and an enclosed ignorance flourished (Dahlstrom, 1999:57).

Given this situation, it was obvious that the first priority was to create a common basis on which these institutions could meet. This was to be the new national teacher education programme, the Basic Education Teacher Diploma (BETD), which the ministry mandated for all colleges in 1992. The BETD program aimed at preparing teachers for basic education. The BETD Broad Curriculum was adopted in June 1994.

3.4. The Broad Curriculum for the Basic Education Teacher Diploma [BETD].

As teacher education was seen as a vehicle that would bring transformation of the education system, this meant that the whole education system had to be re-organised. In this vision, Namibian teachers had to be seen as agents and implementers of change. New programs had to be developed to meet the demands of the post-independence education system. The role of the teacher was re-evaluated in light of the emerging worldview. Bernstein as cited in Swarts (1999:39) argued that: "For educational change to have any social significance, it has to restructure the way knowledge is organised". Salter and Tapper as cited in Swarts (1999:39) also supported this view, stating that: "the key to change, therefore, is to effect a re-organisation of those social forces which determine the authority patterns and the structure of knowledge" (Swarts, 1999: 33). This necessitated a complete overhaul of the education system to move away from the apartheid legacy of a content-based, examination-driven system for elites to a learner-centred, democratic system for all.

3.5. Themes of the Broad Curriculum

Swarts (1999:37) states:

The central focus of Basic education is on the learners' needs, potential, and abilities. Learner-centred education presupposes that teachers have a holistic view of the learner, valuing the life experience as a starting point for their studies. Teachers must therefore have sufficient knowledge and skills to be able to interpret syllabi and content in terms of the aims and objectives of Basic education and to relate these to the learner. Teachers should be

able to select content and methods on the basis of a shared analysis of the learners needs, use local and natural resources as an alternative or supplement to ready-made study materials and thus develop their own and the learner's creativity.

Therefore, teacher education in Namibia made the development of critical thinking and effective practice two of the important goals. It also strives to foster 'understanding and respect for cultural values and beliefs', social responsibility, gender awareness and equity" Ministry of Basic Education and Culture and Ministry of Higher Education 1998 as cited in Swarts (1999: 39). The BETD Broad Curriculum advocates the notion of Reflective Practice. This reflection-on-practice has to be understood within the broader view held by Zeichner (1996) who argued that reflective practice in teacher education should be seen within the broader context of social justice in schooling and the larger society. Reflective practice is therefore seen not as merely thinking about the teaching, but as a logical and analytical reflection where a real problem is solved. In other words, teachers engage in reflective thinking when they can describe, explain and identify what they might do differently.

Fullan as cited in Swarts (1999:39) writes:

The teacher as learner is central to transcending the dependency now faced by teachers as they attempt to cope with streams of innovations and reforms constantly coming at them. Educational reform will never amount to anything until teachers become simultaneously and seamlessly inquiry-oriented, skilled, reflective and collaborative professionals. This is the core agenda for teacher education, and the key to bringing about meaningful, effective reform (Swarts, 1999, 43).

Students who specialize in the Social Sciences, therefore, should be exposed to a variety of teaching and learning styles, strategies and techniques, which will equip them to become competent and professional teachers. Student teachers ought to be exposed to a variety of assessment strategies and techniques, which are formative, summative and diagnostic assessments.

3.6. School Based studies and Practical teaching

This is one of the most important themes in the Broad Curriculum on Teacher Education. It gives the student teachers an opportunity for trial practice during which

the micro teaching concept principles tried in real school settings. School based experience is an essential component of the study toward BETD, giving student teachers knowledge, awareness and practice of the range of duties of a teacher. Preparation and experimentation of teaching and learning for School Based Studies (SBS) is carried out in College Based Studies (CBS). During College Based Studies a variety of approaches, including demonstration teaching, microteachings, structured classroom observation and project work are integrated in each subject. During School Based Studies, students are assessed in terms of achievement of classroom skills and their ability to plan, monitor, critically reflect on, and evaluate their teaching and other related activities. However, these do not guarantee that the students we send to schools will deliver effective teaching, as some of the student teachers' reflections have indicated a variety of problems student teachers experience during SBS. They stated having difficulties teaching History according to a Learner Centred Approach. This prompted me to base my later research on this particular problem.

The challenges which teacher educators experience during SBS: Some of the challenges are; Transport, timetabling, distance and allocations of visits to schools. The structuring of SBS are the same where we have to teach the other groups, which is year two. Lecturers have to check their timetables to make arrangements for school visits. The consideration here is transport, which is one vehicle per cluster. The allocation of visits to schools is another challenge. Teacher educators are not allocated according to their expertise, but any lecturer can see any student. For example, we have lecturers who do not understand the mother tongue spoken at that school for the students specializing in Languages and Lower Primary. Another implication is that any lecturer can visit any student, whether he/she has the expertise in that subject area or not. As a result, proper guidance won't be given to the student. According to Prawat (1992), teachers are better able to assess student understanding when they are more knowledgeable about the topics they are teaching. Knowledge of subject matter entails an understanding of the substance of the discipline, of the ideas that are considered most central to those within the discipline.

Prawat (1992) further argued that teachers should draw on this knowledge to help students make sense out of their present life experience. The attempt to connect subject-matter knowledge to the child's experience is the hallmark approach to

education, contrasting with traditional approaches that often start with facts and concepts outside the youngster's range of experience.

Assessment and Promotion: Assessment in the BETD is learner centred and criterion referenced. This was designed to encourage a focus on progress and achievement, and to measure students' personal and professional developments towards the competencies. It is an integral part of the teaching and learning as it provides feedback to teachers and students. In this context, the Social Science department set-up guidelines for assessment and promotion of students. The aim is to have a unified assessment policy for Social Science in all four colleges. However, the reality at the institution dictates different phenomenon, because the teaching philosophies of lecturers are different.

Selection and Admission: The admission to the BETD presupposes that each student has the necessary maturity and competencies to be able to participate fully and has the potential for becoming a good teacher. It also accommodates students with different competencies, e.g. those who have more professional expertise, or other experience relevant to becoming a teacher (Broad Curriculum). The grade twelve students have mastered more content compared to those in grade ten and more professional experience or other experience relevant to becoming a teacher. Those with more professional experience will also show more confidence in class. This in itself is a challenge to the teacher, because, according to the principles of learner the centred approach, a teacher should be in authority and this means that a teacher should have mastered the subject knowledge sufficiently (Prawat, 1992).

4. THE ANALYSIS OF THE HISTORY SYLLABUS IN RELATION TO THE BROAD CURRICULUM

This section of the paper provides a comparison between the rationale of the BETD Broad Curriculum, the content in the BETD History syllabus for Junior Secondary and the assessment strategies used. To do this, generic criteria were selected, on which evaluation was based. The specific criteria covered three areas:

- Is the syllabus appropriate in terms of Educational Reform process-addressing issues related to democracy, equity, access, redress, quality and a safe environment?

- To what extent does the History syllabus provide opportunities for learner centred education from within constructivist epistemology?
- What is the extent to which the learning of History is developing the conceptual understanding, values and attitudes and skills that underpin History as a learning area?

This section includes part of a micro survey given to Teacher Educators and students of Rundu College to indicate how they perceived the strengths and weaknesses of the current curriculum as well as to assess the curriculum literacy of Teacher Educators (complete criteria see appendix 1).

4.1. Educational Reform and the History syllabus

The reform proposed that History be taught as an integrated subject along with Geography and Religious and Moral Education. The rationale used reflects the guideline contained in the BETD Broad Curriculum and therefore the intent on which the syllabus was based has been the potential for the development of sound knowledge. Although there appeared to be a rationale for this integrated Social Sciences, the spirit in which the notion of integration was intended was lost in translating the Broad curriculum ideals into the syllabus. This is most noticeable in the selection of various themes into which each topic was subdivided. Integration of the topics is not logical (Van Harmelen 1999). Teachers interviewed have no idea of the relevance of what they teach in relation to presenting a coherent understanding of History as a discipline, much less in relation to the areas subsumed in Social Studies

The History BETD syllabus is presented in three columns with one on factual knowledge. The second column is for objectives, where students develop their skills. The third column is for competencies, where students will demonstrate their abilities to apply subject knowledge to learning. According to van Harmelen (1999), the weakness of this structure is the lack of rationale for the selected Topics. The BETD History syllabus is also silent in making links between the various topics and there are no there mechanisms in place that would help student teachers make these links. Subject areas are broken into arbitrary compartments with no recognition of the interrelatedness of the subject areas, for example topic four is about “economy and society” and topic five is about the “rise and decline of early empires and kingdoms”.

The two topics have no obvious links to each other (History syllabi, 1998, 8-10:59iv-v).

Herein lies the first mismatch between the broad Curriculum goals and the actual syllabus.

Promoting democratic literacy: Democracy should be taught and experienced, and the aim should be to promote a democratic society. To teach about democracy our teachers and our education system as a whole must practice democracy. The syllabus was developed along democratic lines and the History syllabus accommodated different issues like: "repressive political systems in Africa for example South Africa and Uganda, strategies for economic development in Africa, towards democracy and unification in Europe and slavery and migrant labour" to mention just a few. This indicates how democracy was considered. Although students will learn about these concepts, when interviewed they revealed that they are unable to translate the ideals of democracy as an integral dimension of their teaching, despite this being one of the broad Curriculum goals (BETD History syllabus, 1998: 59, topics 10, 12, 13).

Equity: The rationale used reflects the guideline contained in the BETD Broad Curriculum and therefore the intent on which the syllabus was based has been the potential for the development of sound knowledge. Although there appeared to be a rationale for this integrated Social Sciences, the spirit in which the notion of integration was intended was lost in translating the Broad curriculum ideals into the syllabus. However, the syllabus encourages students to develop their Learner Centeredness through the use of different activities. This is noticeable through the indication of objectives and competencies to be achieved. At the same time teacher educators find it difficult to understand some of the competencies (History syllabus, 1998:59).

"Achieving equity in results is far more complex and difficult than achieving equality of access. But we shall have failed if we aim at anything else" (MEC, 1993:37).

Conceptual Coherence

The analysis of the History syllabus in relation to its developing conceptual coherence proved to be problematic on two counts. First, the syllabus does not create a sense of 'History' as a particular field of learning that has unique concepts, skill and values, as

there is no sense of the 'big picture'. The fragmentation of topics mentioned earlier exacerbates the problem.

Second, the BETD History syllabus did not show a conceptual framework that can provide Teacher Educators with an understanding of the integration of these subject areas (Geography, History and Religious and Moral Education). Social Sciences, of which History is a part part, is to be seen as an 'integrated' subject and then taught within an integrated framework This integration neither occurs in the syllabus nor does it occur in practice.

Bruner, as cited in Gross (1996:215), encourages educators to provide learners with the means of grasping the structure of a discipline, its underlying principles and concepts (rather than just mastering factual information); this enables learners to go beyond the information given and develop ideas of their own. Smith and Cowie, as cited in Gross (1996), agree and say that teachers also need to encourage learners to make links and to understand the relationships within and between subjects.

The development of Learner Centeredness in the syllabus: The BETD History syllabus tries to help students to develop a learner centred approach to teaching by allowing them to apply their knowledge in order to develop new skills. Learner centeredness is developed through the use of different activities. The syllabus encourages that students during and after in-class presentation be assessed, recorded, reported and evaluated after presenting their topics in order to make improvements for the next time. Students could design appropriate learning experiences and at the same time organise and manage appropriate learning environments. All these are features of learner centred education (History syllabi, 1998 8-10:59). The MEC (1993), indicates certain features of active learner involvement namely that a variety of techniques will be used, such as direct questioning, eliciting, explaining, demonstrating, challenging the learners' ideas, checking for understanding, helping and supporting, providing for active practice and problem solving. These points help teachers to distinguish between learners being actively involved in the learning process and merely being kept busy, not necessarily learning anything (van Graan 1998).

4.2 Conceptual understanding, values and attitudes, and skills.

The BETD History syllabus is designed to provide students with different skills. Students are expected to be introduced to these skills in various ways. The skills include the ability to communicate, explore, investigate, analyse, record, assess, report, plan, design learning experiences, organise the learning environment and evaluate learning. They are also learning to be good storytellers, good listeners, accommodative and judgmental (History syllabi 8-10, 1998:59). Although all these skills were mentioned in the syllabus, it lacked a focus on conceptual understanding. This hampers the understanding of the subject and negatively impacts on the ability to present the materials. According to the National Research Council report as cited in Southage (2000), conceptual understanding by whatever name, contributes to meaningful understanding and should be a major component of history education. This is especially true in world history classrooms where the volume of potential content to be assimilated can be overwhelming. Students need conceptual frameworks to make sense of history, to give it meaning.

Teaching and learning outcomes: The business of teaching is linked to learning. When Teacher Educators plan, they should know what they are expecting at the end of that teaching. The expected learning outcomes help Teacher Educators to determine and be aware of the outcomes. The syllabus therefore could have shown what the Teacher Educator would achieve at the end of the lesson. The History syllabus helped through the indication of objectives and competencies to be achieved. However, Teacher Educators find it difficult to understand some of the competencies like; "design appropriate learning experiences" and "organise and manage appropriate learning environment," because there are vague in achievement (History syllabus, 1998: 59). The National Research Council report as cited in Southage (2000) discusses understanding by design, which encourages teachers to begin by identifying big ideas, or essential understandings, that have enduring value beyond the classroom. Teachers then work backward to develop the assessments, lessons and materials that will effectively convey these meaningful understandings to students.

Values and attitudes: The development of values and attitudes are emphasised by the Broad Curriculum advocates and the History syllabus. However, the History

syllabus is not clear on how these concepts are to be addressed. It is difficult to see whether the syllabus has accommodated "values and attitudes" in some topics. The syllabus is clear on topics to be covered and the skills to be achieved; these are listed as the first priority in the syllabus but there is no clarity on values and attitudes.

The same applies to the development of professional competencies and on how to satisfy these competencies it seems to be cloudy, for example "design appropriate learning environment" History syllabus 8-10 (1998: 59). What are seen as appropriate learning experiences in History and how should an appropriate learning environment be organised? Appropriate is a subjective concept.

Opportunities for assessing: The syllabus advocates "assessment, recording and reporting" as important aspects in the BETD implementation process. On each topic that the student teachers teach, they are expected to create opportunities to assess their learners, after assessing them, marks should then be recorded in assessment books or continuous assessment form, and then feedback is given to the learners on how they have performed. As the National Research Council report (1996), indicates, "Practice makes perfect." The more times we rehearse information, the more likely we are to remember it.

The Broad Curriculum and the History syllabus recognize formative and summative form of assessment that is based on:

- Norm referencing for cumulative assessment;
- Criterion referencing for continuous assessment of the desired concepts, skills and values;
- Performance referencing of the desired competences (Broad Curriculum: 15).

All these forms of assessment provide a sound basis for the development of a teacher education programme that will equip teacher educators with sophisticated knowledge based on the relationship between the business of education and the teaching of History. However, assessing factual knowledge through performance has not been easy. In a NIED document, it was argued that student teachers are expected to be "exposed to a variety of experiences and teaching situations, methodologies and strategies" (NIED, 2000:31).

Allocation of time and space: The lack of integration has resulted in a mass of factual material that is almost impossible to cover in a three-year course given the time allocation (Van Harmelen, 1999). In a week one is expected to cover fourteen topics with many subtopics. Within that time student should get opportunities to practice those topics. Students also do School Based Studies for 13 weeks. In their first year, during foundation block, students concentrate on how History, Geography and Religious and Moral Education contribute to the development and teaching of Social Science Education as an integrated subject. The syllabus does not seem to provide the students with substantial understanding of any of the areas covered, thus creating a fragmented approach to learning that negates the learner centred theory, advocated by the Broad Curriculum. Van Harmelen (1999) emphasised that the structure and organisation of the specialist curriculum is developed in terms of discrete subject areas. This is problematic because the lack of integration has resulted in mass of factual material that provides the learner with no substantial understanding of any of the areas covered.

In summarising the analysis of the curriculum, the following points were noted.

- The BETD History syllabus has incorporated professional competencies guidelines in the rationale. However, there is no rationale under each subject area that could provide understanding for teacher educators of the role of these areas in the development of teacher education. According to van Harmelen (1999), the syllabus has indicated a lack of a conceptual framework from which topics structure is to develop, for example 'space', place and time in the historical and geographical context.
- There is a lack of cohesion and integration in subject areas and between subject areas. Topics are compartmentalized and have resulted in information and the interpretation of knowledge being based on facts rather than conceptual understanding.
- The content is overloaded with facts.
- While the BETD syllabus incorporates guidelines for competencies that teachers are expected to acquire, there is no explanation of how these competencies are to be acquired or how these are to be taught.
- The History curriculum lacks a conceptual framework for topic structure to be developed.

5. The participant responses

5.1. The results of interviews with teacher educators

The data below were collected from the two male Social Science teacher educators. One of the Social Science teacher educators responded to the question relating to the differences between the pre- and - post independence education systems by pointing out that teachers in the old system were expected to know the subjects, while in the current system there is less content. Student teachers only do selected subjects and it is only for two terms. Content covered was above Grade 12 level while the current system considers Grade 12 content as enough for teacher education. The teacher educator continued by saying that students had to do content and methodology for two years. Assessment in the past was based on a norm-referenced approach. Learners were assessed as a group where they had to compete. Therefore the results were based on quantitative measurements. In the current system, assessment is based on criterion referencing where learners are assessed individually against the criteria. The outcome is based on how well the student performed. This is qualitative judgment he said. The teaching methods in the past were teacher-centred where they applied class teaching and made sure that there was enough information for learners to receive. Learners could not think for themselves he added, while the current system allows students to be part of the lesson throughout.

Both teacher educators interviewed indicated that it was necessary to develop a new teacher education programme because of the past historical background e.g. war, colonial mentality imposed on the people, democracy, equality, lack of tolerance and people could exercise democracy, equality and tolerance in a new system. One teacher educator continued to elaborate on this necessity and said that the past system was imposed on the people and the system did not fit into the country's needs. The past system allowed people to feel inferior and accept authority. Student teachers, he said, were not taught as total human beings. The discrimination of the past prevented many of our students from taking certain subjects, these included Mathematics, Science subjects and Accounting. These factors forced people to bring about change in the system.

There was general agreement between both teacher educators that there are some factors that hamper reform. One added that both teacher educators and student teachers cause this. This is attributable to the language change from Afrikaans to English as the medium of instruction. The second teacher educator said that another reason that teacher educators find it difficult to implement the new system is the shortage of resources. The situation has changed through workshops offered by The University of Namibia (UNAM) and Polytechnic of Namibia. One said that change is always unwanted by many people, because they are uncertain, fearful and uneasy. This is observable among the old teachers he said. This is caused by different philosophies. He continued saying that many teachers believe that the child should only be seen not heard. This group of teachers regard learner centred approaches as giving the child "too much power." According to one, the change was always from above and was imposed on teachers, who were just there to implement instructions. One felt that the new system could have started with workshops first then implementation to avoid fear and uneasiness. When this did not happen, people developed negative feelings towards the system. This caused a decline in moral values, he said. People are therefore blaming the new system. One teacher educator mentioned the issue of lack of benefits attached to change. He said that some people felt, whether you do it or not, nothing will happen because change is not properly monitored, especially in the rural areas.

Both teacher educator interviewees felt the role of teacher educators has changed. One attributed the change to teaching strategies. One said that he sees himself as a guider, facilitator as he put it " I can now take students outside to observe things." The other educator said that his role had changed in that he is expected to change the old view system and create positive attitudes towards change among the teachers. He would like to explain the philosophy under which learner centred education is based. The teachers in the community should understand the need for change. This can be done he said if teacher educators go out to the grass root level to explain this and do research on "the limiting factors of reform or change". He would also like to encourage the link between the college and the Ministry of Basic Education to know what field of study to improve on in terms of methodology. During In- service programmes, teacher educators can advocate features of LCA and inquiry methods to their learners.

One teacher educator felt that the content of the syllabus is too much compared to the school syllabus, because the school syllabus helps the teacher to understand what to transfer to the learners. Content for this educator was an issue related to the available teaching time. For while it was agreed that teachers should know more than their learners it was felt that the timetable for social sciences needs to be looked at.

One felt that strength of the syllabus is that it is easy to follow and it required more practical knowledge than the past system. The other teacher educator felt methodologies mentioned in the syllabus are appropriate and go hand in hand with the learner centred approach. The weaknesses of the BETD History syllabus are that, it has involved fewer exercises in class and shallow topics. Lecturers give only a few activities that involve students; most of the time lecturers are dominating in class. In cases where they are given activities, the work does not challenge the students and the topics are not covered in depth.

Neither of the educators referred to problems that emerged from the syllabus analysis.

5.2. The results of questionnaires

The questionnaires, see appendix 3, were completed by the nine-second year student teachers from Rundu College of Education (RCE). Two respondents felt that students only use their grade 12 knowledge. This knowledge should be improved to tertiary level by one or two years. The syllabus deals with the topics that are already in grade 8-10. Therefore, this (Grade 8-10) content does not help them to expand their knowledge beyond Grade 12 level. One student teacher felt that the topics are too easy for students, this causes students to get bored, they should rather do in-depth study, he said.

Less than half of the student teachers felt that the syllabus does not have enough content. If there are problems then they can be attributed to the way the content is being followed and the way it is presented. On the other hand, four said that the content is limited, only in some grades does the content seem to be enough, for example Grade 8. Some believed that it only covers certain parts of subjected content in Grade 8-10. Some of the important topics in Grade 10 are not included. One believed that the content covers what learners are doing in school.

Responses from questionnaires of student teachers indicated that the previous teacher education programmes were totally different compared to the BETD Broad Curriculum. The old system's entry requirements for colleges did not consider academic records, maturity and suitability. The past system they said gave preference to the people who were academically better. Some of the skills that the past system did consider mastery of subject content, professionalism, and interpersonal and social skills were not satisfactorily done, they added. The previous system was based on a teacher centred approach to teaching and therefore the challenges of equity, equality, democracy and access as well as other aspects were theoretical rather than practical. One responded by saying that the past system was different but had similarities with the current system.

Of the seven students who responded, six answered that they do not see factors that hamper reform. Ten percent responded that there are some factors hampering the progress of the reform process, for example, the development of new teaching and learning materials that is slow. Many schools are still using old materials, the student teachers claimed. The majority of teachers are products of the old system and they were not well prepared for the new BETD system.

The students indicated that the strengths of the syllabus helped them to develop their own skills and how to apply them through LCA. Some students felt that the weaknesses of the History syllabus are that:

- History and Geography topics were not integrated.
- The syllabus did not clearly indicate activities for students; this prevented teacher educators from giving activities after lessons.
- It did not help students see how they should demonstrate and apply the subject knowledge and skills through a learner centred approach. Therefore it was more teacher-centred

How should the challenges be addressed?

Less than half of the student teachers felt that the syllabus need to be changed to address the latest information and to avoid confusion. This can be made possible if the Ministry of Basic Education and NIED could meet to address the quality of content. One student teacher felt that covering all topics at Junior Secondary level could do this. Another student teacher felt that integrating the themes and topics,

shortens the time spent on different subjects. The syllabus should indicate activities for students that will make the work of teacher educators easy.

An overview of teacher educators and student teachers' responses indicated the following:

- All recognised the weakness in the History syllabus of having too many facts and topics that are not integrated. This compartmentalise the topics.
- All recognised that the syllabus does not create opportunities for teacher educators and student teachers to demonstrate their skills through a learner centred approach.
- All agreed that the syllabus should be changed to avoid confusion.
- Topics need to be integrated to shorten the time spent on different subjects while doing in-depth study.
- All recognised that change is not well monitored to ensure effective teaching and learning.
- All interviewees recognised that the language change hampers the implementation of the reform.

6. The context in which the History syllabus is presented.

In this section the learning environment of the Rundu College of Education is considered, as are the learners.

6.1. The analysis of the learning environment

This section will look at how education Ministry's Policy statements are translated into reality at Rundu College especially in the subject area of Social Sciences. The BETD is a three-year full time study programme preparing for learner-centred education. It is structured in two time phases (block), the first two terms are the professional Foundation Block where Social Science Education starts.

Students in the Social Sciences are being prepared to formatively and summatively assess learners' progress and achievements as an integral part of the teaching and learning. Learning environments and learning experiences are being designed to promote the appropriate knowledge, skills and attitudes towards Basic education, by

applying cooperative learning, participatory methods and observation which leads to reflection in and on practice, as well as class visits, demonstration teaching, micro-teaching, team teaching, group work, individual study and tasks, seminars, tutorials and lectures are all designed to develop key skills related to assessment. The students are therefore expected to demonstrate progress in their abilities to apply these various approaches, methods, techniques and activities.

Students in year three are expected to do an action research project in which subject oriented and professional knowledge and skills will be exercised. The action research consists of a need identified by the student in relation to his or her own teaching. The student should plan an intervention to bring about change and then monitor the extent of change and do an evaluation of the effect of the action.

Facilities: Rundu College of Education, which is one of the colleges that reside under the Ministry of Higher Education Training and Employment Creation, occupied new buildings in 1996. The campus accommodates 360 students; from this number 280 students can be housed in the hostels, where two students share a room. The following facilities form physical features of Rundu College of Education; Administrative office, Multi-purpose hall (where indoor sports take place), eight classrooms and five laboratories, a computer centre and a library. However, these facilities can be meaningless if they do not contribute meaningfully towards the development of effective teaching and learning.

Library: The library was established to cater for students, staff and the community at large. The library receives books from donors, NIED and the Ministry. All these facilities contribute to the smooth running of the college. However, the library does not function effectively to respond to needs of the institution. The library does not have appropriate books that are required by different subjects. This is a reality because most of the shelves are empty. The library does not have a qualified staff to run it, and these have implications on the smooth running of a library. The National Research Council report, as cited in Southgate (2000), suggests that transfer appears to be enhanced if knowledge is presented in more than one context. With multiple contexts, students are more likely to abstract the relevant features of concepts and develop a more flexible representation of knowledge. Ryan and Cooper as cited in Southgate (2000) referred to humans as meaning makers, and humans rely heavily on

multiple sources of information in the process of learning. Success depends on hard work, which means that teachers cannot do less and expect more. Teachers should first try all alternatives and employ a variety of resources before complaining that learners cannot cope with other strategies. Problems with the accessibility of resources encourage teachers to revert to the traditional method of teaching where students memorise information; this is seen as ineffective learning.

6.2. The learners and analysis of individual case studies

Rundu College of Education caters for 360 students. From this number, at the time of the research, 280 were hostel students, which housed 200 males and 80 females. The most common languages represented are: Rukwangali, Rumanyo and Thimbukushu. Seventy percent of our students come from local rural and urban areas. While the other 30 percent are shared amongst other regions from which the majority come from regions such as Oshana, Ohangwena, Oshikoto and Omusati. There are a few students from regions such as Caprivi, Erongo and Otozodjupa. (Unlike in the past), all our students have to pass grade 12 with 23 points before being admitted into the college.

In my History class, there were five males and four females. The class represented a number of different language groupings. There was one Otjiherero speaker, one Damara speaker, one Rumanyo speaker, and seven Rukwangali speakers. One of the requirements of the department of Social Sciences is that a student must have History and Geography at grade 12 levels before being considered for selection. All of them had the two subjects mentioned before. Three students were purposively selected out of nine to present their stories. The students are from different cultures and traditions. The embedded case study approach was chosen because it allowed each student to freely write what he or she felt was relevant without any interference. The individual case studies presented by the three of the nine were constituted as follows: One represented the students from Kavango region, the second one represented students from Otjiherero culture, and the third student represented the Damara culture. This was done to indicate the diverse cultures of Rundu College of Education. All of them were students (Appendix 5). The following information was provided to students selected in order to provide insights for the information required:

Who are you? Students have to answer it in a form of a story by looking at the

following:

- Age;
- Place of birth (region, village, town) educational background.

The analysis of the students' stories revealed the following insights about our learners (Appendix 5

The Kavango students compared to other regions revealed the following:

- Students in the Kavango region are not free to interact with others because they attended segregated types of schooling that allowed only learners from the same tribe or region. Students from other regions interact easily and therefore have an advantage of learning other languages easily. As one student indicated “ I recalled that our school was the only school for the Herero and Oshivambo speaking children, this is where I learnt how to speak, write and read Oshivambo”.
- Students in the Kavango region have a strong belief in extended families. This is considered vital because they can jointly practice various activities. A student from Kavango stated that according to their culture, to have many children is a sign of manhood. While students from other regions have strong belief in religion, especially the Damara. This is linked with the belief in their ancestors that success and happiness depend on the extent to which their ancestors are satisfied. The Herero on the other hand held a strong belief in sacred fire. Unlike Kavango and Herero, Damara like singing and going to church (see appendix five). This does not mean that the two are not Christians the majority are Christians. Kavango people use culture to value, respect and trust one another. This is important for students to understand each other's culture in order to avoid misinterpretations.
- Students in the Kavango believe very strongly in sharing. A student from Kavango said that togetherness could make them strong. This sharing is linked with the belief in extended families. For them having many children symbolizes wealth. Damara beliefs restrict them from asking for salt, needles, and matches from other people's homes. These social conditions can create problems for students if they are not made to understand the purpose behind it. The implications are that one culture is used to sharing and asking while the other one cannot ask from someone you do not know.
- Kavango culture does not have strong restrictions on whom to get married to, as long as parents accept and provide their blessings. Among the Herero, on the other hand, is a taboo to marry someone who is not from your tribe. The Herero culture

further revealed that cousins could marry one another. This culture, if not well understood, can sound like discrimination against other tribes. This is one of the diverse cultures that the students could learn from one another in order to value and respect each other's cultures.

- Students in the Kavango are shy. This is attributed to the culture that does not allow the young one to speak to an elderly person. This affected their articulation of concepts and proper communication in foreign language like English. Students from other regions have the freedom of speaking in public and questioning elderly people. This contributed tremendously towards their improvement in communications.

Within these diverse cultures that the students presented, there are some similarities.

- All believe and practice religions.
- All believe in their ancestors, who can protect them in time of difficulties.
- All wanted better education to improve the living condition of their societies.

All displayed different skills in comparison with their counterparts from the old education system. These skills are constructive reasoning, analysing and practical skills. Therefore, the current students have the opportunities of mixing and learning about other cultures that will help them understand the diverse multicultural community of Rundu College of Education.

7. SYNTHESIS

This synthesis will help the reader to understand why the writer made these conclusions. Consolidating and linking sections together will do this. The synthesis focused on whether the BETD History syllabus reflects what the Broad Curriculum advocates; by looking at the possible responses offered by my colleagues, the students and syllabus analysis and how these relate to the analysis of the learners and the learning environment.

According to the results from the syllabus analysis, four main factors were revealed in the findings. The first factors indicated that the syllabus lacks rationale for the selection for various topics. The only rationale provided was at the beginning, which was used as a general one for all topics. In the absence of rationale for each topic,

teachers therefore have no idea of the relevance of what they should be teaching and learning. If the teachers do not have any idea of relevance, who determines the relevance of learning to the learners?

Secondly, the syllabus does not show a conceptual framework that provides teacher educators with an understanding of the integration of these subject areas. The lack of integration has resulted in a mass of factual material, as van Harmelen (1999) states: "that it is impossible to cover given the time allocation and on the other hand provides the learners with no substantial understanding of any of the area covered" Van Harmelen (1999:17). If the syllabus in an independent Namibia is still lacking conceptual understanding and an integrated approach, what are we educating for? To the writer it seems we are educating to make possible "creative responses" which go beyond what is available and help to develop and individualize it.

The syllabus should create opportunities for learners to become creative thinkers and provide answers, which go beyond what is available. If the syllabus does not do that, then education is seen as "an education which accepts technocratic managerial values and is undemocratic as it uncritically accepts existing social structures and hierarchies, may perpetuate elitism, injustice, class and gender inequalities (Fien as cited in Kristensen 1993:19).

Thirdly, the syllabus has a problem with compartmentalization as results show characteristic features of the old style syllabuses. This has been described as a "linear ends means" or "programming" not spiral as suggested by van Harmelen (1999) to fit the integrated approach. This, according to Stenhouse (1975), involves little critical thinking on the part of the learner and restricted opportunities for transfer of learning in that everything is to be predetermined.

Fourth, the issue of content in the BETD History syllabus and whether it is too much or too little invites many arguments. The findings revealed that there are different understanding of "content" from both student teachers and teacher educators. Content is viewed as a repetition of grade 8-10 topics in school syllabuses and the professional foundation is based on the grade 12 knowledge. Therefore, this content does not help students in future endeavours. According to the findings, change is always unwanted, especially if the new change is unknown. Because of the fear of the unknown, people tend to be uneasy with whatever is implemented. The findings revealed that most

teacher educators are products of the old system. Therefore, it seems the old system has heavily entrenched a behaviourists' philosophy of education. This influence of the old system made them blame the new system for bringing down the moral standard of students in terms of discipline.

I conclude that the behaviourists' philosophy has an effect on the implementation of the Broad Curriculum, because we are more driven by Objective curriculum model. This negates the intentions and stated policy of the educational reform, which is to reform educational systems into a democratic Learner Centred system and redress the legacy of apartheid advocated in the Broad Curriculum. The syllabus has not shed the "baggage of the past" as it has its roots in logical Empiricism and a Tylerian rationale. The predetermined objective model affects teaching within social constructivism, because the Broad Curriculum emphasizes the philosophy of social constructivism:

The constructivist model therefore requires a subtle shift in perspective for the individual who stands in front of the classroom. A shift from someone who teaches' to someone who tries to facilitate learning; a shift from teaching by imposition to teaching by negotiation"
(Bodner 1997:876).

The results of the interviews indicate that many people still do not want change, because of uncertainty, fear and uneasy. This was observable among old teachers, because they received training in the old teacher centred system. Some still hold onto the old system because it is where they feel secure, as one put it: "A child is not having knowledge, this should come from a teacher. The child is only seen not heard". The interview reveals that although many are familiar with the term "learner centred", few have a deeper understanding of the concept and its implications. Classroom practice still holds onto the old teacher centred approach. On the contrary, where the concept of learner centred education is properly understood and put into practice, there is substantial learning going on.

According to the analysis, although the college is new compared to the old system where secondary schools were also colleges, some facilities are insufficient and are not well utilized.

Classrooms: Classrooms and special classrooms and laboratories were built at the new institution, but the population has not been accommodated well. Other subjects use special laboratories. This, by implication, can cause danger to the students and teacher educator occupying the class for that moment. On the other hand, classes

meant for languages had deviated from their original purpose and are used for general lessons.

According to the analysis, school Based Studies is an essential component of the BETD, because it gives them knowledge awareness and practice of a wide range of duties of a teacher. This is done for 13 weeks, compared to the past teacher education system which considered practice less important and only did it for 2 weeks. The past system considered content more important than the current system, which is more focused on professional conduct. The new system emphasized action research as an important tool in education. This has been revealed during their School Based Studies. Teacher Educators should have a better understanding of this concept and assist the student teachers properly.

Analysis of the learners: According to the responses from cameo studies with student teachers, diverse cultures were revealed that represented the community of Rundu College of Education, showing that it is a multicultural institution. Their educational background indicated that three had experience of living within a diverse society, while one had only the experience of segregated life. This had an effect on their socialization at the college. Misunderstanding can exist because of different cultures. What impact do these cultures have on the teaching and learning at the college? Teacher educators should know the type of cultures their students represent in order to understand them better in class; failure to do that can easily result in misunderstandings created by differences. Where misunderstandings exist, interaction between students and teacher educators is affected. Cooperation among teacher educators and student teachers is important to strengthen quality education. For Vygotsky, as cited in Gross (1996), all is social in nature, it is about communication and human interaction. Our abilities to think and reason by ourselves and for ourselves are the result of a fundamentally social process. We begin life, he said, as social being, capable of interacting with others but able to do little by or for ourselves and gradually move towards self-sufficiency and independence. Through the participation in social activity, the individual's capabilities gradually become transformed: cognitive development involves an active internalisation of problem-solving processes that initially take place between people, usually the child and an adult.

8. CONCLUSION

In conclusion, doing the analysis of the History syllabus has helped me to gain insights in terms of understanding the History curriculum better. An understanding of the History Curriculum is important in order to help the teacher educator with the implementation process. The analysis enabled me to realise the strengths and shortcomings within the syllabus. The History syllabus does reflect what the Broad Curriculum advocates by looking at the possible responses offered by my colleagues, the students and syllabus analysis and how these relate to the analysis of the learners and the learning environment.

The History syllabus does reflect shortcomings that the History teacher educator has to be aware of: The History syllabus lacks rationale for the selection for various topics. It does not provide a conceptual framework that enables teacher educators to integrate subject areas. It has a problem with compartmentalization as results show characteristic features of the old style syllabus. The old system has heavily entrenched a behaviourists' philosophy of education.

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10. Appendixes

1. Interview questions for Teacher Educators
2. Questionnaires for student teachers
3. Student teachers individual case studies

INTERVIEW SCHEDULE FOR BETD BROAD CURRICULUM:

The aim of this interview is to find out what your views and interpretations are with regards to the BETD Broad Curriculum. The information required from you is for the Evaluation exercise of the BETD Broad Curriculum. The information provided by you will be treated in confidence. Thank you for your time, willingness to respond to questions and for your openness.

Date of Interview:

Name of Interviewer:

Name of Interviewee:.....

Venue:

Questions:

1. According to your view, is the BETD Broad Curriculum different from the previous teacher education programmes? Why?
2. Was it necessary to develop a new teacher education programmes? Why?
3. Are their factors which hampers/constrained the reform?
4. In the process of reforming teacher education external assistance in the form of projects (e.g.TERP) and Advisors (e.g. Reform facilitators) was provided. How do you perceive your role and functions in contributing towards the process of reform?
5. According to your view, does the BETD History syllabus have enough content?
6. What are the strengths and weaknesses of the BETD History syllabus?

Questions for students

1. According to your view, is the BETD Broad Curriculum different from previous teacher education programmes? Why?
2. Are there factors which hamper/constrain the reform?
3. According to your view, does the BETD History syllabus have enough content?
4. Does the BETD History syllabus address the needs of the students?
5. What are the strengths and weaknesses of the History syllabus in the BETD?
6. How do you want these challenges being addressed?

Student's biographies (contextual)

Cameos studies: I chose this method because it allows freedom of each student to freely write what she/he feels is relevant without any interference.

I selected only three/four students that I concentrated on out of nine. These three/four were chosen based on the different cultures and traditions they represented. One represented the students from Kavango region, the second one represented students from Otjiherero culture, and the third student represented the Damara culture. All of them are students in year three Social Science Junior Secondary. The following information was provided to them students selected to in order to provide insight and the background required:

1. Who are you? Students have to answer it in a form of a story by looking at the following:

- Your age
- Where you come from (region, village, town)
- Your education background

Student one: Christophine Uvatera Nunuhe

She is from Otjinene reserve in Omaheke region. Her home language is Otjiherero. Nunuhe can fluently speak the following languages: Oshivambo, Damara, Nama, English and Afrikaans. She enjoys reading, watching television and tennis. She attended her Primary school in her own home village. In 1985 to 1992, she was at Opawa Primary School. From 1993 -1997, she moved to Oshikoto Senior Secondary School, until she completed her grade 12. Uvatera grew up in Tsumeb where her mother immigrated from the village. She recalled that she failed ones while she was in grade 5. Uvatera recall that their school was only for the Herero and Oshivambo speaking children, that was where she learned how to speak, write and read Oshivambo.

However, her secondary school experience was mixture of all tribes as it was the only black school in Tsumeb. She ended up learning Damara Nam from friends. She belongs to " oruo ro Mbongora" meaning matrilineal descent group. As a young girl, her hair was always shave plain and wore beaded thongs until she was eleven years. Puberty ceremonies among Herero do not take as a group ceremony, but individually. At the age of 16 years, she was introduced to headdress. They believe in the sacred fire, its flame shows evidence of the headman's role as a link between the living and the dead. They believe that their ancestors take an active interest in their lives and well -being.

Keeping goat is very important according to their culture. This is their source of meat. The size of the herd symbolises wealth and status. Milk is their major source of food. Goat are slaughtered and eaten during vital occasions.

Inheritance: A man's herds go to his sister's children, while his own children inherit from their maternal uncle. However the eldest son inherits the sacred herd directly from his father together with the sacred fire stick.

Uvatera said that the traditional hairstyle and ornaments of the Herero are no longer worn by the Herero of central regions, but are used by Himbas and other Herero speaking people of Kaokoland.

The significant of the Herero women is to wear magnificent dresses and turbans. The wives of the missionaries who were anxious to make the local women cover their bodies introduced this style. In the past, women lowered their eyes as a sign of respect.

According to Herero tradition, a wedding is celebrated at the village in towns or city. It is a tradition for cousins to marry each other, but nowadays people can get married from other families, but not another tribe. If one does that you are cursed and forced to undergo "sacred fire". Boys are circumcised at a very young age.

Student two: Piet Toatago Arachab. He was born in 1978, July the fifth at Tsumeb in Oshikoto region. Most of his relatives are from the Southern part of Namibia. He has four brothers. His mother died in 1995 and his father is still alive. He started his primary schooling in Tsumeb up to secondary level. After completing his grade 12, he tried to apply at different places but it was unsuccessful, his luck came in 1999, when he was offered a temporary job of testing electricity meters at Net lab Company from South Africa. In the same year, he applied at RC and luckily he was successful accepted.

According to his culture, Damara strongly believe in leaves of the trees to use it as medicine. Their belief restrict them to ask salt, matches, needles after sunset at other people's homes. They also believe that snakes should not be mentioned at homes, if you do, the snake will then come to that specific house. Apart from the taboos that they believe in, generally Damara like singing and going to church. They have a strong belief in religious activities.

During funeral, they do mourn for a week and on Friday, the mourners overnight at the deceased's house until the day of the burial. Some apply this to a wedding celebration. The lady is then put in a dark room on Sunday after the church service. The whole week people will be dancing at the house of the bridegroom. On Friday, they slaughter animals and on Saturday, the lady is taken out of that dark room. After church service, friends and relatives come together to celebrate.

Student three: David Isekwa Mwandu, 21 years old, the son of Simon Mwandu and Eunike Mwandu from Kavango region. He was born on 20 December 1980 at Mpungu village, west of Rundu. He is the second born in his family. They are five in their family, two females and three males. His mother is a Kwangali speaker and his father is a Nyemba speaker.

He started his primary school at Mpungu village in 1988, but at the end of that same year, his mother moved to Sauyemwa, which is close to Rundu. He continued his schooling at Sauyemwa Junior Primary. In 1990, his mother migrated again back to the western part of Rundu, at the village called Kahenge. He continued with his schooling there. In mid June, he transferred to another village, east of Rundu at

Makambu. In 1992 he decided to go back to Kahenge. David recalls that at Kanjimi Murangi Secondary School he was one of the best learners. He remembered that the Minister of Basic Education, the Honourable Mutorwa, did the honour to hand over a certificate of best performance for the whole school to him.

According to the Kwangali culture, stated David, they belief in extended family. This is considered vital because they can jointly practice various activities. In this way they learn to value, respect and trust one another. Kwangali value polygamy most. Davis said, Kwangali belief in ancestors. People offer white chalk to their ancestors. They belief that their success and happiness depends on the extent to which our ancestors are satisfied.

Marriage: in the past the parents especially of a boy arranged the marriage. Some of the values in the bride's family are, friendly relationship between the tow families, diligence and they should associate with witchcrafts. Then the price used to be paid in a form of cattle. When a child is born, the father or grandparents name him. The names given sometimes identify the months, days of the week, say or night, which that person was born. David stated that according to their culture, to have many children is a sign of manhood.

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1. INTRODUCTION

The purpose of this paper is to critically discuss and provide an understanding of epistemology that has shaped Namibian education practice. The paper will, therefore, begin by investigating the theory of knowledge that underpins behaviourism and thereafter pay equal attention to the theory of knowledge that informs constructivism. The assignment will secondly look at the strengths and challenges of both behaviourism and constructivism as theories of knowledge.

2. BEHAVIOURISM AND ITS PHILOSOPHICAL ROOTS

Ozman & Craver (1986) indicate that behaviourism has its roots in several philosophical traditions. These include realism and materialism. Behaviourism is perceived as ‘a network of theoretical perspectives held together by the common belief that personal experience is understood and exhibited as behaviour or actions that results from our interaction with our physical and social environment’ (O’Neill 1981, as cited in Van Harmelen 1995:51).

Realist theory originated from the time of Aristotle (384-322 BC) who thought we reached our understanding of phenomena through the study of particulars. Aristotle felt that a human being encounters reality through his/her senses and through generalisation comes to knowledge of the essence of what has been observed. He felt that knowledge reaches man from the outside world through his senses and that knowledge can be learned only through experimentation and observation. Realists believe what is ‘real’ is external, factual observable and capable of being known (Ozman & Craver, 1986). The view of reality identified by the realists is closely aligned to those views held by behaviourism.

Behaviourism is also related to materialistic epistemology which holds the view that ‘reality is matter and motion, and that all behavioural phenomena are capable of being explained in matter and motion’ Ozman & Craver (1986:165). According to materialism,

human beings are not above nature, but rather they are part of nature and even though they are one of the more complex natural organisms, they are capable of being studied and are governed by natural laws just like any other natural creature. Thomas Hobbes (1588-1679), the greatest advocate of mechanistic materialism, rejected the elements of self-determination and free will.

The view materialists have of behaviour is that which is observable and therefore the behaviourists' emphasis on behaviour that is both shaped by the environment and that which shapes the environment is aligned to with this view held by materialists.

2.1. Early Behaviourists

Early Behaviourism is rooted in the philosophy of Pavlov (1849-1936), Thorndike (1874-1949) and Watson (1878-1958). These theorists were extremely influential in advocating the theories of stimulus and response. Thorndike, who was influenced by Darwin and whose theories were extremely influential, was one of the behaviourists who advocated the notion of stimulus and response. Stimulus according to his experiments has to be reinforced through practice and repetition for learning to occur.

Van Harmelen (1995) summarises the early work of Pavlov who established the foundations of behaviourism where he identified an automatic reaction to a particular phenomenon in the environment as 'reflex' or 'unconditioned' behaviour. Conditioned behaviour was identified as 'learned' behaviour. This provided the foundation for the behavioural approach to the epistemological question 'how do we come to learn?' And 'how do we know that what we have learned is true or an accurate representation of reality?' Pavlov suggested that learning occurs when a conditioned behaviour is substituted for an unconditioned one. He further said that any change in behaviour that is more or less permanent over-time and that is not the result of maturation is also knowledge (Brent as cited in Van Harmelen 1995:9).

Ozman & Craver (1986) suggest that early Behaviourism or classical Behaviourism as developed by Watson, reflected the thinking of Comte (1778-1857) who held the view that all social phenomena should be seen in the same way as physiological or biological laws and theories and be investigated empirically (Oldroyd as cited in Aspin 1995:27). Watson claimed that 'in reality nothing goes on in the mind other than neurological events' (Brent as cited in Van Harmelen 1995:27). These theorists considered inner states such as joy, feeling, intention and choice as nothing more than guesswork and speculation because they cannot be empirically observed and measured.

The most influential theory impacting a modern behaviourism is that of Logical Empiricism, which came to be the dominant philosophy of the west in the period between 1930-1960: Although it challenged the scientific methodology, positivism, from logical empiricism continues to be a powerful research approach.

2.2. Logical Empiricism

According to the Shorter Oxford English Dictionary (1973:43) logical empiricism is defined as 'the theory that regards experience as the only source of knowledge'. 'Experience' refers to the data one receives through the various sense organs, providing the recipients of such data with 'evidence' of the existence of a world of real objects outside themselves. Logical Empiricists held that all knowledge of the world is derived from sense experience and observation; they believed that science, with mathematics as its hand-maiden, is not only the best but the only way of bringing about knowledge, and that the particular branches of science could be integrated and unified and so be sufficient to provide a comprehensive picture of the world (Aspin 1995).

Aspin (1995) indicates that while Russell was developing his theory of logic, members of the Vienna Circle were theorising about the nature of science and focal areas were related to the nature of causation, induction and verification. These were to form the heart of the scientific methodology of positivism.

Aspin (1995) notes that in 1929, Feigl and Carnap published a manifesto “The Scientific-view: The Vienna Circle”, which purported to provide the only intellectually valid and respectable world view was based on explaining the importance, success and power of science and advocating its claims as providing a paradigm for all other forms of inquiry. They concentrated on knowledge and the ways in which scientific knowledge is established. They expressed it in propositional forms that attempted to be logically sound and philosophically meaningful.

The Vienna Circle believed that science is an exploration of experience which follows carefully designed procedures and was aimed at formulating theories, which can be tested and thus be shown to correspond to the facts of observation. It is tied to what can be perceived by sense, therefore it is an activity firmly grounded on the data of observation. These are strictly controlled by reference to fact and established general laws. This meant that any information should go through testing and observation several times for it to be taken as true (Aspin 1995). Sense experiences were regarded as absolute, objective, value-free and theory free (Aspin 1995:27). To qualify as scientific, concepts and statements had to be verifiable.

2.3. How behaviourist theory views knowledge

The view of knowledge as held by the behaviourists is that which is external to the mind, and as indicated earlier, was strongly influenced by the realists and empiricists’ position. This view was to impact powerfully on behaviourists’ view of learning and it is here where the greatest challenges to this theory have come. Behaviourists have identified key ideas about knowledge as van Harmelen (1999:10) summarises:

- Behaviourists advocated the belief that knowledge exists externally to the human mind. According to them, humans have to discover what is already there. This is what Aristotle referred to as *tabula rasa*. Behaviourists see the mind as an empty vessel that needs to be filled with reality through senses, the jug and mug approach.

- Knowledge according to behaviourism is discovered through the use of our senses, through observation and experimentation. Aristotle felt that knowledge reaches man from outside through his senses and that knowledge can be learned only through experimentation and observation.
- Knowledge discovered through the senses becomes truth when our observations and experiments are repeated often enough enable us to accurately predict what will happen. When that stage has been reached we can formulate the evidence into a universal principle that is truth.
- Knowledge, to be called such, must have a cause and effect relationship. Behaviourists believed that only true knowledge was seen to be the result of a particular method of investigation that involved observation and experimentation. Knowledge to be seen as truth should be explained by cause and effect.
- Art, theology and traditional forms of philosophy were seen as speculation and opinion, therefore having less worth than scientific knowledge.

Gergen (1985) states that behaviourism (along with neo-behaviourism) placed and continues to place the major factor of human activity in the environment. The focus is on the outside world. If the outside world could be manipulated and formed with behavioural objectives, then control could be established over the inside that was not knowable (McCarthy 1978; Carr & Kemmis 1991 as cited in Du Plessis 1997:14).

2.4. A behavioural theory of learning

The behavioural theory of knowledge is given validity by science, because people believe that science is measurable, quantifiable and observable. Scientific knowledge is measurable in terms of knowledge input and output. Watson, the founder of behaviourism, based his explanation of human learning on Pavlov's classical conditioning, where the learner is passively responding to environmental events. A much more active view of learning was proposed by Edward Thorndike, whose work was built upon by Skinner, who saw operant conditioning as the crucial form of both human and

animal learning. Skinner says that the role of reinforcement is central to the learning process itself for the stimulus learning, is important only in so far as it determines the likelihood of learned responses actually being demonstrated (Aspin, 1995).

According to Skinner, reinforcement works automatically; the strengthening of a response simply happens and the learner, human or animal, is not required to assess or evaluate the effects of their behaviour. However, Bandura (1977) maintains that reinforcement serves principally as an informative and motivational operation rather than as a mechanical response strengthener. By informative, Bandura means that the consequences of our behaviour tell us under what circumstances it would seem wise to try a particular behaviour in the future, that is, they improve our prediction of whether a given action will lead to a pleasant or unpleasant outcome in the future.

According to Gross (1996), behaviourists define learning as a hypothetical construct, that is, it cannot be directly observed but can only be inferred from observable behaviour. Learning, therefore, normally implies a fairly permanent change in a person's behavioural performance. This is another reason for taking permanence as a minimum requirement for saying that learning has taken place. Permanent changes can result from things that have nothing to do with learning, such as the effect of brain damage or changes associated with puberty or the process by which relatively permanent changes occur in behavioural potential as a result of experience (Anderson as cited in Gross 1996).

Howe, as cited in Gross (1996), defines learning as a biological device that functions to protect the human individual and to extend his capacities. In this context, learning is neither independent of nor entirely separates from several other abilities, in particular memory and perception. Howe also says that learning is cumulative, what we learn at any given time is influenced by our previous learning, so that development and learning processes are closely interlinked.

Thorndike, as cited in Gross (1996), proposed a connection between the stimulus and the

situation and a certain impulse to act or between the stimulus and the response. The stimulus response connection is stamped in when pleasure results from the act, and stamped out when it doesn't. The law of effect is crucially as a way of distinguishing classical and operant conditioning. It points out those what happens as a result of behaviour will influence that behaviour in the future, whereas in classical conditioning it is, in a sense, what happens before that is crucial and which determines the behaviour. It also points out, that the animal is not indifferent to the nature of those consequences; responses that bring about satisfaction or pleasure are likely to be repeated and those which bring about discomfort are likely not to be repeated.

2.5. Challenges to behavioural theory

Some of the critique of behavioural theory of learning is considered below. According to Held as cited in Du Plessis (1997:30), it is difficult to hold on to propositions of truth as universal. This means that Empiricism does not and cannot provide society with absolute information on all the spheres of life. So too, everything cannot be measured, there are certain skills that do not fall into this category because of their complexity (Held 1980; Stockman 1983 as cited in Du Plessis 1997:30).

Quine as cited in Van Harmelen (1995) argues that no theory can be separated from the values that underpin the 'conceptual schemes' in which researchers work. Quine, Wittgenstein, Kuhn, and Hanson and others have questioned the validity of a value-free scientific theory.

Seligman as cited in Gross (1996), observes that classically conditioned responses extinguish faster in humans than animals. According to Weiskrantz, as cited in Gross (1996), this is because the conditioned responses are modulated by more complex human memories. These findings raise further questions; what exactly is learned during conditioning and what the role is of cognitive factors in conditioning. According to Mackintosh as cited in Gross (1996), conditioning is not reducible to the strengthening of

stimulus response associations by the automatic action of a process called reinforcement. It is more appropriate to think of conditioning as a matter of detecting and learning about relations between events. Skinner's claim that reinforcements and punishments automatically strengthen and weaken behaviour has been challenged by many, including Bandura (1997) who maintained that they provide the learner with information about the likely consequences of certain behaviour under particular conditions only. Similarly, Tolman and Honzik as cited in Gross (1996) showed that learning can take place in the absence of reinforcement.

Can we say that knowledge is something out there that just needs to be discovered? To construct knowledge, a human being needs both the external and internal senses to make sense of the experience and arrive at meaning. Van Harmelen (1995) pointed out that the idea that knowledge is only based on the facts is questionable. Is it true that knowledge is only based on the acquisition of true facts? Can't we and don't we easily learn wrong facts? Do we only learn facts; don't we also learn concepts, skills, values and attitudes? Transmission and memorisation of facts will not provide a person with conceptual understanding. It is argued that a person needs to make meaning for him or herself of the social interactions that form a part of his/her daily life (Van Harmelen 1995:63).

3. CONSTRUCTIVISM AND ITS PHILOSOPHICAL ROOTS

Constructivism has emerged as a response to the dominant worldview of modernity. Logical empiricism made people believe that there is only one right way of experiencing knowledge, i.e. through observation and experimentation. To qualify as scientific, concepts and statements need to be verifiable. The constructivists argue that the world offers us variables of knowledge, which is the ability to apply information in one way or another. There are three main approaches within constructivist theory, that of, radical, critical and social constructivism.

Although these are the three approaches to this theory of knowledge, what holds them

together are what Lerman as cited in Matthews (1992:4) has identified as the core to epistemological thesis of constructivism. These include:

- The cognising subject not passively received from the environment actively constructs knowledge. For constructivists, it is meaning assigned to facts, rather than the facts themselves that matter when we talk about knowledge. The way that we construct knowledge and the use to which we put that knowledge is contextualised in time and it is dependent on the social forces (values) and political and economic conditions that prevail at the time of its construction.
- Coming to know is 'an adaptive process that organizes one's experiential world; it does not discover an independent, pre-existing world outside the mind of the knower' Lerman, as cited in Matthews (1992:4). Constructivism does not perceive knowledge as an external thing. It does not believe that knowledge is something one can simply hand over to students. Instead constructivists believe that a teacher's role is to design experiences that will give students an opportunity to develop their own understanding of the data at hand.

3.1. Radical constructivism

While behaviourism holds that certain types of external behaviour can be modified through response to external stimuli, radical constructivism rejects the idea that learning is a mere response to external stimuli. It has mostly focused on trying to explain learning in terms of how we actively construct understanding through inner mental processes. Piaget has been central in this school of thought.

Piaget viewed cognitive development as innate, sequential, invariant and dependent on maturity. All children are seen to pass through a series of distinct age-related stages of development before they construct the ability to reason and think rationally and logically (Wood 1988; Von Glaserseld 1989). Piaget's theory puts forward a view of the child making sense of his/her perceptual experiences of the world through structures of thought

related to the child's stage of development.

Piaget (1969) places action and self-directed problem solving at the heart of learning and intellectual stage development. This he identifies through the interlinked process of equilibrium, assimilation and accommodation (Bodner 1986). Equilibrium or adaptation has been described as an internal self-regulating mechanism that operates through two complementary biological processes: Accommodation and assimilation. Assimilation involves applying a pre-existing scheme or mental structure to interpret sensory data. Accommodation is the process by which existing structures are modified to fit newly assimilated data. Disequilibrium occurs when we cannot assimilate our experiences into pre-existing schemes, when we encounter a problem because we cannot achieve our goals. Piaget's ideas have had a significant impact on what is taught and when it is taught in schools. The way in which a child is seen to develop intellectually has been challenged. The cognitive and affective implications of an increased environmental experience, regardless of the child's age, have received greater consideration (Wood, 1988).

3.2. Social constructivism

Social constructivism recognizes that learning is an interaction between ourselves and our community through which we internalize our experiences and actively construct our knowledge and understanding, thereby changing our community and environment in turn Taylor (1993). Social constructivism regards the individual and the realm of the social as interconnected. Thus, social constructivist's underlying metaphor is that of conversation, involving persons in meaningful linguistic and extra-linguistic interaction. The mind is seen as part of a broader context, that of 'social construction of meaning' (Ernest 1993; Wood 1988; Bruner 1986; Bernstein 1971). Both theories view the individual as actively constructing meaning of experience through the use of language.

Matthews (1992) observes that individuals have a language, concepts and beliefs that are entirely dependent upon their social and historical circumstances. Some beliefs in a

culture may constitute knowledge that depends on ideology and falsehood. What is essential in this notion is how an individual may appropriate knowledge useful to understanding, but warns that such appropriation is dependent upon knowledge being available. It is by reflecting over what we have experienced that we internalise the outer world and actively digest it into inner understanding. Understanding will then be modified by previous experience and the new understanding, which we construct ourselves, will lead us into further exploration of the world around us.

Language is our most important means of communication. According to Vygotsky, language has the power to shape future mental development; it is not simply the product of the mind's structures but something, which can itself shape them. Certain ways of thinking are not simply natural products of the mind. Rather, these are seen as cultural interventions that have to be learned through social interaction with those who possess and practice them (Wood, 1988).

Like Vygotsky, Bruner (1986) argues that the basic principles of any subject can be effectively taught to any child at stage of development. Bruner rejected the notion that one must wait for maturation, instead emphasising the value of helping children to understand the conceptual structure of the subject. He suggested that some structures were so basic that some level of learning may be achieved at any stage. Bruner's ideas are of significance because of the emphasis placed on the role of instruction in the process of concept development.

Social constructivists with their emphasis on language, culture and social milieu, have compensated for what radical constructivism omitted. The metaphor of conversation emphasises the dialogical basis of knowing, learning and teaching. Since it provides the basis of democracy, social constructivism lends support to an emancipatory vision (Ernest, 1993).

3.3. Critical constructivism

Berry (1998) notes that all constructivists are not critical theorists, but all critical theorists are constructivists. Critical theorists set themselves apart from other constructivists, because of their unique way of not compromising in challenging the status quo. Critical theorists challenged the belief in scientific knowledge as the only way to seek knowledge. They argued that empiricism does not and cannot provide society with information on all the spheres of life (Stockman, 1983; Habermas, 1981 Held, 1980; as cited in Du Plessis 1997:42). Society provides us with variables of knowledge and opportunities that vary in scope. Teachers are expected to provide variety of opportunities for learners to experience their talents. Aristotle said, "Experience is the best teacher."

Berry (1998) states that critical constructivists are interested not only in different interpretations that might be made of data, but in the way one account of facts particular to one group privileges some people over other people, how it benefits some at the expense of others (Berry 1998; Nell 1995 as cited in Du Plessis 1997). Constructivists believe that 'every story is someone's story, every truth is someone's truth', therefore, it is dangerous to accept anything without asking 'whose story is this?' (Berry, 1998:59).

What is important is that we construct our own understanding of the world for ourselves, basing it on a variety of sources. In other words, we have to make sense of facts and rules. Only when we have personal understanding of data, are we able to implement it better.

3.4. The strengths of constructivism as theories of knowledge

Literature supporting constructivists' theories are considerable and a few key examples are given below. According to Gross (1996), there is a great deal of cross-cultural evidence to support Piaget's claim that the stages are invariant and universal, at least up to and including the concrete operational stage. Flavell, Fishbein, and Dasen as cited in Gross (1996), all conclude that the order of stages originally observed in Piaget's Swiss

sample also describe the course and content for children in hundreds of countries, cultures and subcultures. Aware of some of these shortcomings, Piaget did stress the need for a flexible methodology, one that enables investigators to probe the child's thinking without distorting it by imposing their own views on the child.

According to Ginsberg as cited in Gross (1996), Piaget's clinical method is deliberately overemphasised as a superior way to explore the subtleties of the child's cognitive structure; tapping the child's competence requires subtle and sensitive procedures, tailored to the peculiarities of each child. Dasen, however, claims that the clinical method provides a dynamic description of the child's thinking processes, as opposed to a simple, static IQ test score.

Vygotsky, as cited in Gross (1996), states that all is social in nature, life development is about communication and human interaction. Our abilities to think and reason by ourselves and for ourselves are the result of a fundamentally social process. We begin life, he said, as social being, capable of interacting with others but able to do little by or for ourselves and gradually move towards self-sufficiency and independence. Through the participation in social activity, the individual's capabilities gradually become transformed. Cognitive development involves an active internalization of problem-solving processes that initially take place between people, usually the child and an adult. This process of internalization differs in certain respects from how Piaget saw things. Like Vygotsky, Logoff as cited in Gross (1996) sees a child as apprentice, acquiring the knowledge and skills of the culture through guided collaboration with those who already possess them. The transformation of an interpersonal process into an intrapersonal one, the internalization of socially based and historically developed activities, represents the essential difference between human and animal.

Meadows as cited in Gross (1996), explains that the internalized cognitive skills remain social, both in the sense that as mature learners we can scaffold ourselves through difficult tasks by instructing ourselves as our teachers once scaffold our earlier attempts,

and in the sense that for most individuals the only cognitive skills practised to a high level of competence are those that their culture offers: cognitive potential may be universal, but cognitive expertise is culturally determined. Meadow further says that culturally given ways of thinking, remembering, categorising and reading, build on and may supersede the biologically based ways.

Also unlike Piaget's theory, Bruner's theory, as cited in Gross (1996), is not about stages of development but rather about three ways or modes of presenting the world, forms that our knowledge and understanding can take, and he is not concerned exclusively with cognitive growth but also with knowledge in general. The three modes are the inactive, iconic, and symbolic mode. Bruner's modes of representation lie at the heart of the spiral curriculum, according to which the principles of a subject come to be understood at increasingly more complex levels of difficulty. Like Vygotsky, Bruner was unhappy with Piaget's concept of readiness and proposed a much more active policy of intervention, based on the belief that any subject can be taught effectively in some intellectually honest form to any child at any stage of development. Bruner encourages educators to provide learners with the means of grasping the structure of a discipline, underlying principles and concepts (rather than just mastering factual information); this enables learners to go beyond the information given and develop ideas of their own. Smith and Cowie, as cited in Gross (1996), agree and say that teachers also need to encourage learners to make links and to understand the relationships within and between subjects.

The theory provides better understanding that knowledge involves conceptual understanding. Van Harmelen (1999) argues that facts on their own have limited use and need to be linked to conceptual understanding to make sense of the world. Therefore knowledge as understanding is neither static nor fixed as 'truth' nor is it value-free (Van Harmelen, 1995:63).

According to Taylor (1993) constructivist theory considers both the 'external' and 'internal' as important factors for the construction of the learner's knowledge. The theory

considers the existing knowledge of the learners as important and this is gained through the social interaction, which takes many forms in which knowledge occurs. Therefore knowledge cannot be seen to occur only through the transmission of information. It provides critical discourse that allows a balanced view for teachers and learners in the classroom (Taylor, 1993:9).

3.5. The weaknesses of constructivism as theory of knowledge

Although the theory looks promising, people are not sure whether it will work as promised, therefore many are careful not to advocate the abandonment of the technical curriculum interest in favour of 'utopian' and 'impractical' ideals (Taylor, 1993: 21).

According to Gross (1996), there is no doubt that the concept of stage implies a degree of consistency of thought and understanding across a range of different content areas. However, some inconsistency is to be expected, particularly while concrete or formal operations are in the process of developing. For example, some new ability usually appears first in the content areas most familiar to the child and only later in more unfamiliar, abstract areas. But the question then arises: how much consistency is needed to warrant categorising a child as, say, pre-operational or concrete operational? According to Meadows, as cited in Gross (1996), the research tends to show less consistency between different aspects of concrete operations than Piaget's theory would predict, he was rather more interested in how children manage the general principle underlying operational thought. Sternberg as cited in Gross (1996), wonders whether it might be better to abandon the idea of stages and to focus instead on the development of individual processes and strategies. He believes that we cannot just assume that there is only one strategy for solving a particular problem; what is needed is an analysis of the information-processing requirements of the task. Sternberg (ibid) believes that this reduces the value of Piaget's theory in explaining and predicting many aspects of performance.

Although Piaget acknowledged that the rate of progress through the stages does not vary

to some extent between individuals but Meadows as cited in Gross (1996), says that he was concerned with the idealized normal individual rather than with individual differences. Piaget has also been criticized for not offering an explanation but an elaborate description of cognitive development.

According to Brainerd, as cited in Gross (1996:642), there are three main implications of Piaget's theory for education, which should be seen not as explicit recommendations but as how others interpret his theory's relevance for education:

- The concept of readiness: limit set on learning by the child's current stage of development relates to the concept of readiness. The apparent attempts to train concepts suggest that this is not a helpful or valid concept.
- Curriculum (what to teach): teaching materials should comprise concrete objects of some sort that can be easily manipulated. However, Ginsberg, as cited in Gross (1996) believes that attempting to base education on the teaching of Piagetian stages is an unfortunate misapplication of the theory. A more useful approach is the modification of the curriculum in line with knowledge of the Piagetian stages, without placing undue emphasis on them and without allowing them to limit one's approach; yet Piaget's theory seems to suggest that certain concepts should be tackled in a definite sequence.
- Teaching methods (how to teach): children learn from actions rather than from passive observations; the teacher must recognise that each child needs to construct knowledge for itself and that active learning results in deeper understanding. However, Ginsberg, as cited in Gross (1996), believes that the two great deficiencies are; ignoring individual differences and the emphasis on discovery learning to the exclusion of academic or school knowledge. According to Gross (1996), additional criticisms are that Piaget often did not give details regarding the numbers and ages of his participants and usually did not present any kind of statistical analysis.

According to Gross (1996), Vygotsky did not actually spell out in detail how the more expert adult or peer assists the child's cognitive development. The term "scaffolding" was

coined by Bruner to flesh out the process of collaborative learning and refers to the ways that teachers organise their interactions around the child's progress, guiding its attention towards relevant aspects of the task.

It must be noted however that the strongest critics of constructivism have focused on radical constructivism. Perhaps we are too close to social constructivism in the Namibian context to criticise it more fully, this will no doubt emerge later.

4. CONCLUSION

This paper looked at how behaviourism views the theory of knowledge and how constructivism views the theory of knowledge. Behaviourism was seen as a dominant world view because many people feel comfortable working with this theory of knowledge, because they are in control, it is orderly and is not questioned. They argued that there is only one way of determining scientific knowledge; this is through observation, and experimentation that result in some truth. The result should be tested over and over for it to be true. They believed that the 'mind of the learner is empty. This empty mind gets filled by the outside world through experience when a learner grows older. Empirical knowledge, to which all scientific knowledge belongs, is thus not necessarily the most dependable kind of knowledge. It is only one avenue to understand reality.

Constructivists, who believe that the mind of a learner is not empty, opposed these notions but it does have less information that needs to be developed, as learners grow older through interaction with the environment. Vygotsky advocated the importance of language in the development and construction of the learners' knowledge. Constructivists believe that knowledge is presented as the interaction between information, concepts, and skills. The state of knowing is seen as being based on conceptual understanding rather than on the recall of facts.



Constructivists see knowledge as that which is socially constructed in an historical and socio-political context and is neither static nor value-free. The Radical and Social Constructivism frameworks tolerate Positivism, but question its hegemony. Critical constructivism strongly rejects Positivism. They believe that positivist approaches are not only unable to contribute to significant change, but actually perpetuate inequalities, through reductionism and determinist assumptions.

Although the Constructivist theory of knowledge is being preferred in the 21st century as the favourable epistemology, what is important therefore is what Quine said 'what is important in these matters is not to establish which analyses are 'true' or which facts are 'correct', but rather, our endeavour to identify and promote 'excellence', 'effectiveness', and equality in good educational institutions' (Aspin, 1995:44).

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RHODES UNIVERSITY
DEPARTMENT OF EDUCATION

LITERATURE REVIEW

Developed to inform and support a small-scale empirical study entitled:

An analysis of novice teachers' capacity to apply participatory learning strategies to achieve meaningful learning: A case study involving co-operative learning strategies in History teaching.

MASTER OF EDUCATION
(GENERAL EDUCATION THEORY AND PRACTICE)

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THEORY INFORMING THE STUDY

1. Introduction

During Year Three School Based Studies at Rundu College of Education, students majoring in History as a teaching subject experience problems in teaching the subject effectively using a Learner Centred approach. Students interviewed claimed that History is a 'dead' subject because it is difficult to design resources and come up with appropriate teaching strategies. The research question therefore is: can novice teachers (student teachers) apply participatory learning strategies effectively enough to bring about learning in History? To support the research relevant literature has been reviewed. The review in this paper will focus on:

- An analysis of teaching and learning in the context of reform.
- An analysis of co-operative learning strategies
- An analysis of teacher development
- An analysis of History as a particular form of knowledge

No studies currently exist that investigate how conceptual understanding can be enhanced through the use of co-operative learning in teaching History as a subject in Namibia. A study done by van Graan (1998), which looked at Learner Centred Education involving group work, found that for more active learning to take place, learners need to synthesise, analyse, infer, evaluate and apply information. The research revealed a dominance of procedural questions in the classroom sites investigated, and concluded that group work- as currently applied- does not involve learners in critical thinking and problem solving.

An early study by Katona (1940), demonstrated the relative ineffectiveness of 'memorising' and of the 'verbal principle of learning' when compared to what Katona refers to as 'understanding'. Although Katona's findings are old, they still carry a strong message that has been confirmed and amplified by other studies such as van Graan's (1998).

According to Katona (1940), the learning of 'senseless connections' is ineffective for the solution of new problems when compared with the learning through 'meaningful

organisation'. When learning involves comprehension of meaningful wholes, he considers it to be the sort that favours transfer to problem solving.

The prime interest of Namibian education system is to produce "...children [that] need to learn to think independently and critically. The identified need is to enable: "learners to master strategies for identifying, analysing, and solving problems" (MBEC, 1993:119).

This calls for teachers to demonstrate different roles as they guide students through the process of learning. Therefore teachers need to scaffold information so that through demonstration, modelling, transmission other strategies, the original construct is developed further and re-visited to ensure that the learners have internalised the new knowledge so that it becomes part of their lived experience (Vygotsky, 1978). This would involve gathering evidence of whether or not they understand the new knowledge through demonstrating their ability to apply it.

What goes beyond loose and unsystematic and undigested facts? Loose facts can be memorised without understanding, but then they are meaningless. Conceptual learning makes use of facts but goes further by including insight, understanding and abstractions in order to acquire new concepts. This requires appropriate teaching strategies that can accommodate conceptual learning.

The MBEC (1993), emphasised that teaching in Namibian schools must be learner centred and must aim towards a methodology that promotes learning through understanding and practice directed towards the autonomous mastery of learning conditions. The methods must introduce and encourage classroom practices that reflect and reinforce both the values and practices of democracy.

MBEC (1993) further emphasised that for teaching to be effective, curriculum should not treat knowledge as a burden. It must not treat concepts as ideas that are developed by people far away and imported into Namibia like automobiles or televisions. Students must not be treated by teacher educators as empty buckets into which teachers pour knowledge. Instead, learning should be seen as an active process that works best when the learners participate in developing, organising, implementing and managing it.

2. ANALYSIS OF TEACHING AND LEARNING IN THE CONTEXT OF REFORM

Prawat (1992) suggested that most of the problems associated with implementing a constructivist approach to teaching could be overcome if teachers are willing to rethink not only what it means to know subject matter, but also what it takes to foster this sort of understanding in students. Identifying what is problematic about existing beliefs, however, is an important first step in the change process.

Gergen (1985) argued that from the constructivist position the process of understanding is not automatically driven by the forces of nature, but is the result of an active, co-operative enterprise of persons in relationship. Learning is both an individual and collaborative experience. Therefore teaching which ignores and does not build on that experience and learning will limit the learner's thinking, and the learner will not see the connection between the world outside school and what is taught and learnt in school (Gergen, 1985).

This has wide implications for our thinking about curriculum, teaching and assessment, which are based on conventions, which assume that all children progress by learning the same content in similar ways at the same pace. It is by playing, discussing and working together in that we can share experiences, ideas, and reflections (Gergen, 1985). Better learning takes place in classes with a teacher who shows that s/he cares for the learners and is both enthusiastic about and confident in the subject matter.

Ben-Peretz (1990) argues that all teachers become 'curriculum choice makers' who apply their worldview and perspectives in making decisions about the particular content that they will apply. McDonald (1988) described this aspect of teaching as 'the teacher's voice'. The teacher's values are expressed in his or her own voice and permeate teaching methods, conception of learners, and the presentation of the subject matter. The student teachers' relationship and experiences with the subject matter are by no means personal or unmediated. Instead, the teachers should reveal their knowledge so that students have the opportunity to learn from the manner in which teachers approach their subject matter Brophy (1996). This has been implemented at Rundu College of Education, where teacher educators model their subject to student teachers.

Garcia (1991) extended this by saying that what occurs in a classroom on any given day is to some degree influenced by factors in the local community which impinge on the school, the teachers, and the curriculum. Therefore, when studying the process of schooling, the realities of teaching require that one develop an understanding of the dynamics of the school and its community. Garcia stated that 'what is taught and what is learned in any classroom is tremendously influenced by the community's beliefs and values' (Garcia, 1991:45).

Since a community's beliefs and values influence what is learnt in the classroom, Boyce (1996) suggested that teaching critically is important because it involves moving between critical perspectives that include one's teaching practices and evaluative reflection. The critically conscious person recognises connections between individual problems and the social context within which they are embedded. Shor (1992:129-130) summarised critical consciousness in four qualities: power awareness, critical literacy, permanent desocialization, and self-education. Brief descriptions of these four qualities follow:

- Power awareness is based on understanding that just as structures and systems are constructed with human effort, they can be transformed by collective human effort.
- Critical literacy includes 'habits of thought, reading, writing, and speaking which go beneath surface meaning...to understand the deep meaning, root causes, social context, ideology, and personal consequences'.
- Permanent desocialisation is 'questioning power and inequality in the status quo; examining socialised values in consciousness and in society which hold back democratic change in individuals and in the larger culture, and nurturing a passion for justice and a concern for the environment.
- Self-education means knowing how to learn critically and how to organise transformative educational projects with others (Shor, 1992:129-130).

Bourdieu and Passeron as cited in Brophy (1996), in their theory of cultural reproduction provide a theoretical framework that links the family with schools. They argue that students' thinking is a form of socialised knowledge that is conditioned by their surroundings. The students' knowledge and beliefs reflect their cultural history and social class background. Teachers are aware of these cultural history and they shape their teaching to accommodate their students (Brophy 1996). I believe if the way students think is formed by society and students' knowledge and beliefs reflect their

cultural history, then teachers should use a method that consider these factors. Although co-operative learning does have its disadvantages, it is the appropriate method to consider at this moment, because it allows learners to internalise information and interact with others.

Cherryholmes (1988) argued that teaching is a reading of the textbook, school and society. Instructional decisions require that teachers engage in a dialogue between their particular subject matter, their own belief systems and the climate and beliefs of the local community and society. Tyson and Bernstein (1988) argued that 'according to virtually all studies of matter, textbooks have become the de facto curriculum of the public schools as well as the machine to control teachers (Tyson & Bernstein 1988:11). Teachers are relying too much on textbooks as the only source of information and the only teaching aids.

When teachers rely too much on textbooks, the methods of teaching tend to be more teacher- centred while learners are passive receivers of information. I think this is what the Social Constructivist approach is trying to address, making co-operative learning one of the alternatives that will address the problem of passivity in class and of dependency on commercial textbooks.

Thornton, as cited in Brophy (1996), argues that although textbooks play a significant role in social studies instruction in terms of multiculturalism, pluralism and diversity have been commonplace in recent years. Presenting multiple viewpoints is considered by most as 'good' teaching and is a central point of multicultural education that is encouraging the development of multiple cultural perspectives (Bennett as cited in Brophy 1996:301). This means I conclude that, although teachers see and depend on textbooks, other sources are more important if we are to solve the issues of teaching multiculturalism.

2.1. Current trends and thinking in teaching conceptual understanding in History

Current trends and thinking in History teaching will help us to move away from teaching by presenting facts and seeing learners as passive receivers of those facts to the new approach of allowing learners to conceptually understand information. Brophy (1996:120), gives a broadened definition of 'conceptual learning' as the 'big ideas' and

the habits of mind of the disciplines. It also emphasises change in the students' growth in understanding and skills. It is not just students' conceptual understanding that changes, it is also the learners' ways of thinking and dispositions that change (Brophy, 1996:120).

Rogers (1986) distinguished two categories of learning; firstly 'incidental learning where automatic and voluntary responses to new information produce learning... [and] the learner has little control over the learning that takes place and secondly 'purposeful changes aimed at achieving mastery in the performance of particular skills which means it requires effort and active engagement by the learner' (Rogers, as cited in Shardlow 1996:55). This learning will occur in different areas or aspects of a student's abilities. Therefore, appropriate methods are required to develop mastery in the performance of a particular skill. Rogers defined the following different spheres of learning:

- Skills - ability to do things
- Knowledge - memorised information
- Understanding - relating to memorised information
- Attitudes; wisdom - to learn to apply our newly learned material to what we do and how we live, to carry out our new learning into changed ways of behaving (Rogers, as cited in Shardlow and Doel 1996: 55).

All these theorists emphasise the importance of active engagement by the learner in the learning activities. I agree therefore that active engagement of the learner cannot be achieved through one way of teaching; instead teachers should introduce learners to a variety of approaches to accommodate knowledge, skills and understanding of learners. Active engagement of the learner in the learning process is lacking in teacher educators' way of teaching.

Posner, et.al (1982), emphasised the importance of active engagement of the learner in the teaching by:

- Starting with students' ideas
- Challenging those ideas to create cognitive dissonance
- Presenting new concepts in ways that make sense given students' perspectives and
- Supporting students in finding the new ideas useful in a variety of different real-world contexts (Brophy 1996:121).

I totally agree with Brophy that the real world requires a committed teacher who is determined to take the approaches to accommodate the requirements of the current learning trends. This is what the History department at Rundu College of Education is trying to achieve.

White (1988) suggested that teachers should not worry about finding the single, perfect explanation or activity to teach particular concepts. Instead, they should plan and create multiple and varied situations that permit students to explore and re-explore the given concept, revisiting the concept regularly in a spiral curriculum. This would assist the learner in constructing multiple links, and thus having a richer understanding of the concept (Richardson 1997). I think therefore that lacking this understanding will put teachers in the dilemma that Richardson referred to below.

Richardson (1997) raised a problem concerning the role of formal knowledge and 'correct answers' for teaching from a constructivist view of learning. Her concern is directed at those who work in teacher education, who are often concerned about the ineffectiveness of transmissive teaching while realising that these views are not regarded as universally supported truths (Richardson 1997:133). In reality, I have observed this dilemma at Rundu College of Education. Teachers are required to implement the Learner Centred philosophy that includes varieties of activities for multiple intelligences while having to cope with considerably overloaded syllabuses.

3.2. Productive learning

What productive learning means is the kind of change in human behaviour that permits the individual to perform successfully on specific tasks within the class as a whole (Gagne 1962). It ensures the acquisition of capabilities and as Brophy (1999), points out, learners' ideas, values, beliefs and ways of thinking are seen as important. These are very important concepts in History as a subject.

Learners are not just important individually but also as a group, as a community of learners. It is not just the growth and change of each individual that is of concern but the growth and change of the community and its ability to support significant growth and change for each of its learners (Brophy 1999:120). When this does not happen, knowledge cannot occur. Peer interaction and teaching contribute a lot to individual learning. The History department at Rundu College of Education is trying to develop a

culture of being concerned about the growth and change of the community not only of the individual.

Gagne (1962) suggested that significant growth and change is achieved through a crucial component to successful co-operative learning which is the giving of clear instructions and thorough planning. Instructions are seen as taking the form of sentences that communicate information to the learner (Gagne, 1962:229).

Clear instructions are important in helping learners gain knowledge. Various aspects of co-operative learning demand that clear instructions be provided to learners. These instructions will help the individual learner and remind the group members of their expectations and responsibilities. Failure to satisfy this principle may result in co-operative learning being seen as a problematic approach. The next section will address the use of concepts in social sciences.

Brophy (1996), illustrated that intellectual issues cannot become powerful until the students can connect with the issues in personal ways that often involve powerful emotions. An inquiry-oriented, concept-focused conceptual change teaching could be helpful in teaching History. McIntosh and Noddings, as cited in Brophy (1996:159), emphasise inclusive curriculum in creating a classroom community in which teachers and learners learn together that knowledge is treated as 'problematic, changeable, and socially constructed', and all members of the learning community are responsible for each other's learning. This requires trust, taking risks, being willing to share ideas, and an ethic of caring.

The understanding and the use of social concepts are not observed at RCE, neither is it observed through School Based Studies. One alternative that can accommodate these factors is to use a co-operative learning approach. The next section will focus on how co-operative learning enhances conceptual understanding within social constructivism.

3. THE ANALYSIS OF CO-OPERATIVE LEARNING STRATEGIES

3.2. What is co-operative learning?

There are many definitions of co-operative learning. Johnson and Johnson (1998:1), define co-operative learning as the “instructional use of small groups so that student’s work together to maximise their own and each other’s learning.” I also view co-operative learning as where learners in small groups respect and honour each other’s opinion in the process of learning. A team member’s success in creating a multi-media presentation on saving the environment, for example, depends on both individual efforts and those of other group members who needed knowledge, skills, and resources. Slavin (1980:40), also defines co-operative learning as ‘a set of instructional methods in which students work in small mixed-ability learning groups’. The importance of providing these definitions is to see what the method can offer in terms of addressing the problem of passiveness of learners in class and how teachers can move away from simply presenting facts in the classroom.

3.2. Co-operative learning

The purpose of this section is to provide teachers with an overview of some of the co-operative learning models that they can make use of. The models of co-operative learning are provided to link to the development of conceptual understanding in History as a subject. How do we incorporate co-operative learning? There are a number of co-operative learning ideas that can be implemented. Wilmot and Euvrard (1998), provided five of the most commonly used models: jigsaw, team-assisted individualisation, number heads together, co-op and working in pairs.

According to Wilmot and Euvrard (1998), co-operative learning is not the same as traditional group work, although it overlaps with group work. When a teacher uses co-operative learning as one of the teaching approaches, s/he should emphasise the following four elements of co-operative learning: instructional use, small groups, working together and maximising learning. These make co-operative learning different from traditional group work. The method emphasises co-operation with peers, as Vygotsky described, 'What children can do together today, they can do alone tomorrow' (Vygotsky 1978).

Wilmot and Euvrard further elaborated that models of co-operative learning are seen as valuable teaching strategies because they provide learners with a range of skills and techniques in the History context. For Learner Centred education to succeed, learners need to acquire investigative and problem solving skills. This involves critical thinking, processing information and communicating effectively, skills which co-operative learning can develop. In reality co-operative learning is not used at the college level and our schoolteachers are not familiar with it.

On the other hand, for the models of co-operative learning to succeed, the teacher should thoroughly prepare the learners with the social skills needed in co-operative learning and plan to reduce factors that can make co-operative learning fail. For example, give clear and specific instructions, group size should be small, emphasise individual and group responsibility and accountability, plan and organise carefully throughout in terms of resources and time, assess the group and the individual and focussed short activities that are well structured can be valuable contributions towards effective co-operative learning. This is lacking in our teaching and this can seriously hamper the implementation of co-operative learning.

3.3. Why use co-operative learning?

One may ask, why choose co-operative learning, is it the best way of learning? Wilmot and Euvrard (1998) suggest there is no 'best way of learning'. It all depends on how one defines 'best' for one's particular situation according to what one considers to be the most important goals of the learning exercise. Different learning situations and methods offer different combinations of various kinds of learning and in differing degrees of intensity Wilmot & Euvrard (1998:11). Bearing this in mind, the next section will address the value of co-operative learning.

3.4. The value of using co-operative learning

The theory of learning underpinning co-operative learning is that of social constructivism. Social constructivism claims that learning is not an individual phenomenon, rather that it takes place through social interactions. It also claims that no learner comes to school with a mind that is a blank slate ('tabula rasa') waiting to be written upon and filled with knowledge through a process of transmission from an expert (teacher) to the learner. Instead, it is claimed that all learners actively construct

their own knowledge and that learning takes place when these constructs are challenged by new ideas. The link between co-operative learning strategies and social constructivism is that learners are required to interact socially through working in pairs and group work. While working in groups, students should actively construct their own knowledge and internalise the information.

As social beings we learn through our interactions with others. Language and the ability to communicate are seen to play an important role in the learning process because it is through language that we share ideas and negotiate meaning. The Namibian Reform Forum (1991), advocates learning through the principle of social constructivism. It is relevant to look at co-operative learning as one of the methods through which learners can interact socially.

Namibian schools are in a process of transformation from homogeneous classrooms to larger heterogeneous classrooms characterised by learners of different cultures, home languages and home backgrounds. The greatest challenge facing teachers is how to get a diverse student body to work together. A co-operative approach to learning is one way of breaking down barriers, of nurturing an atmosphere of respect and tolerance and of working together.

The research outcomes of Johnson and Johnson (1989), indicated that co-operation as opposed to competition, resulted in:

- a) Higher achievement and greater productivity
- b) More caring, supportive and committed relationships and
- c) Greater psychological health, social competence, and self-esteem.

The positive effects that co-operation has on many important outcomes make co-operative learning one of the most valuable tools educators have (Johnson and Johnson, 1989).

When students are working together towards a common goal, academic work becomes an activity valued by peers. When students have to organise their thoughts to explain ideas to team-mates, they must engage in cognitive elaboration that greatly enhances their own understanding (Dansereau, as cited in Slavin 1990). I have observed in the classroom with my students at the college that when they are working in a group the product is better compared to when an individual works alone. In a traditional classroom, students who do not understand what is going on can scrunch down in their

seats and hope the teacher won't call on them. In a co-operative team on the other hand, there is a helpful, non-threatening environment in which to try out ideas and ask for assistance.

3.5. What makes co-operative groups work?

Learning together to achieve a common goal has significant effects. Johnson and Johnson (1989) describe that structuring lessons students do work co-operatively requires an understanding of the components that make co-operation work. They further indicate that mastering the essential components of co-operation allows teachers to:

- Take existing lessons, curriculum, and courses and structure them co-operatively.
- Tailor co-operative learning lessons to meet the unique instructional circumstances and needs of the curricula, subject areas, and students.
- Diagnose the problems some students may have in working together and intervene to increase the effectiveness of the student learning groups.

Johnson, Johnson and Holubec (1993:2), further indicated that the essential components of co-operation are:

- **Positive interdependence:** This relates to learners realising and accepting that they need to rely on one another for the tasks to work. One cannot succeed unless every one succeeds. They sink or swim together. Each group member's effort is required and indispensable for group success and each group member has a unique contribution to make to the joint effort. Clear and specific instructions are crucial to prevent learner frustration.
- **Face-to-face:** It promotes face-to-face interaction to talk quietly to each other and to look at resources together. There are important cognitive activities that can only occur when students promote each other's learning. This includes orally explaining how to solve problems, teaching one's knowledge to others, checking for understanding, discussing concepts being learned, and connecting present with past learning. These need thorough planning from the side of the teacher.
- **Individual and group accountability:** The group must be accountable for achieving its goal and each member must be accountable for contributing his or her share of the

work. This refers to each learner accepting that his/her contribution is going to be assessed and that this will affect the performance of the group as a whole.

- Interpersonal and small group skills: Social skills must be taught to students' just as purposefully and precisely as academic skills.
- Group processing: For a group to be effective, it needs to reflect on the co-operative process. When group members discuss how well they are achieving their goals and maintaining effective working relationships, it contributes towards effective co-operation.

3.6. Learning co-operative skills

There are societal norms and values that are expected to be learnt. These norms and values have to be made known to that society for it to respond as required. The society has to learn about it and be given the opportunity to process the information and make judgements. When we make judgements, we are critically evaluating our historical conceptual understanding. The co-operative learning experience does not just happen. We need to learn how to work with it. The learners have already learnt some of these skills, in varying degrees. It will be up to the teacher to note the skills that are lacking amongst the learners.

While a strategy like co-operative learning is seen as being a very successful strategy to bring about learning in terms of understanding, these strategies are very sophisticated and require a degree of expertise. A disadvantage of co-operative work highlighted by Matthews (1992), is that high-ability students are often extremely frustrated and angered by having to work in heterogeneous groups, and prefer to co-operate in homogenous groups. This was observed during SBS with learners from disadvantaged backgrounds who were always passive in learning situations. One of the greatest challenges facing teachers in a global village is how to get diverse students to work together. This is where co-operative learning claims to break down barriers by nurturing an atmosphere of respect and tolerance and of working together.

Planning and organisation, however, must be thorough. Activities must be planned to make sure that learners know the procedures and are given clear instructions. While planning the lesson, teachers should have clear objectives; evaluation and assessment tasks should be clearly indicated. Not only should objectives be clear, they should also be precise and achievable. Such objectives help teachers to assess what has to be taught

and informs teachers on the ability to manoeuvre around their teaching methods and techniques. Normally co-operative learning fails not because learners cannot cope with the methods but because teachers did not plan well (Wilmot, 2003, pers.com.).

Assessment is also one of the aspects that teachers need to consider when applying co-operative learning. Marks have to be awarded for individual work and for the group product. The activity should be focused, short and well structured. The group size should be limited to a maximum of six learners. This group must have a common goal that is accepted by all individual members. The group cannot achieve the goal without each person doing their work. If all these are not considered and taken care of, co-operative learning is tantamount to failure.

Co-operative learning strategies are very sophisticated, if student teachers still do not have a deep understanding of their subject, the question is: Can they actually use such a strategy in a subject like History that is in itself demanding? This will be discussed in the following section.

4. THE ANALYSIS OF HISTORY

Learning is influenced by culture and social experience. History as part of the everyday culture has an influence on the formal basic curriculum. It is important, therefore, to know the role History plays in developing conceptual understanding in children in transforming culture into the new knowledge of the specific time. Garaizar et al. (1997), suggested that conceptual content in History starts at home where the students learn their local History and from the pre-conceptions that they have of familiar aspects of everyday life.

The contrast between family lives is supposed to improve their comprehension of the dialectical relationship between the past and present. In other words, History is conceived as a 'social science' that analyses the influence of the past on the present so that the knowledge of the past fulfils a social function (Garaizar et al. 1997:23). When learners are expected to analyse the influence of the past on the present in order to fulfil a social function, they are expected to make meaning of what has been taught. Memorization has little value because students forget what they memorized unless the knowledge is applied. Learners should spend much of their time engaged in historical analysis activities rather than memorization, thereby developing the historical habits of

mind that will better enable them to analyse the important issues they will face as adults.

National Research Council report (1999:3) sees knowledge meaningful when:

1) Knowledge occurs best when new knowledge is meaningful. Knowledge is meaningful when it

- Is connected to prior knowledge.
- Can be recognised as patterns, or chunks, of related information.
- Is organised around major concepts or “big ideas.”

2) The ability to acquire and retain knowledge is enhanced when it

- is acquired through multiple senses.
- Is practised over time.
- Is not obscured by superfluous elaborations.

3) Learning transfer is facilitated when

- Concepts are abstracted and generalised.
- Concepts are learned in multiple contexts.
- Students have time to absorb knowledge by focussing on essential learning.

Once teachers have decided on the meaningful understandings they want their student to learn, teachers could proceed with determining the factual content, creating assessments and deciding the methods that would best convey these understandings. The understandings teachers wish to teach may have a strong bearing on the choice of methods used to teach them.

Meaningful understandings also require “elaborations” which are supporting materials meant to enrich the meaning of the central information. However, Dempster (1993:15), reported that elaborations could be detrimental because they often divert attention from the crucial point of a lesson. If elaborations are to promote classroom learning, he said, they must meet several conditions which, even then, may not be sufficient:

- They must be personally meaningful. If the student does not have sufficient domain specific knowledge to comprehend an elaboration, s/he will not benefit from an elaboration indeed, it may hinder learning.
- The elaboration must be relevant and should not digress too far from the point that the teacher or textbook wishes to convey.

- The elaboration must be precise. It should be logically or causally connected to the main point, so that the learner can either reconstruct or infer the main idea from the elaboration.
- Elaborations do not facilitate learning if they help students focus on information that they would have processed easily in the first place.

Dempster (1993) argued that elaborations might hinder learning because they interfere with past knowledge or with concurrent acquisitions of knowledge. He encouraged teachers to look closely at the curriculum and separate the ‘wheat from the chaff, so that they can get on with serious business of effectively teaching the essentials.

4.1. The uses of history

Southgate (2000), noted that while progressive and postmodernist philosophers have questioned the value of history for over a century, history seems to be more popular than ever with the public. Freud, as cited in Southgate (2000), once said, “theory is good, but it doesn’t prevent things from existing.” Without History we would be largely ignorant of the workings of the world and of the human animal. The National Research Council report (1999), indicated the perceived uses of history that have managed to preserve it as a central feature of the school curriculum despite the misgivings of its critics.

4.1.1. History shows us what it means to be human.

Some of the greatest historians have seen self-awareness as the very essence of history. Toybee, as cited in Krug (1967) said history is a search for light on the nature and destiny of man. Collingwood, as cited in Krug (1967), wrote, history is for human self-knowledge; the only clue to what man can do is what man has done. The value of history, then, is that it teaches what humankind is. Bettelheim, as cited in Krug (1967), assert that human self-knowledge is the most important role of education. Krug (1967) wrote a historian is interested in the past because s/he is interested in life. The true historian’s interest in the past answers a deeply felt need to assure the continuity of human life and discover it’s meaning, even if the goal is never fully realised.

4.1.2. History improves judgement.

Jefferson, as cited in Southgate (2000), wrote, that schooling in new democracy should be chiefly historical. He said that people are the ultimate guardians of their own liberty. History by apprising them of the past will enable them to judge the future. It will avail them of the experience of other times and other nations; it will qualify them as judges of the actions and designs of men. Woodrow Wilson, as cited in Southgate (2000), later agreed that history endows us with the invaluable mental power, which we call judgement. Ravich, a contemporary education policy analyst as cited in Southgate (2000), affirms the continuing relevance of Jefferson's work, history does not tell us the answers to our questions, but it helps to inform us so that we might make better decisions in the future. The great philosopher of education, Dewey, as cited in Southgate (2000), wrote, that the achievements of the past provide the only means at command for understanding the present (Southgate, 2000).

4.1.3. History provides instructive examples.

Neitzche, as cited in Southgate (2000), said that people need models, and historical examples are especially powerful models because they actually existed. Joan of Arc demonstrated the power of individual belief and action. Galileo symbolised the fight against authority for freedom of thought. Thomas Becket and Thomas More, as cited in Southgate (2000), represent integrity in the face of deadly intimidation. While it is not the province of educators to tell students what their values should be, students can judge the actions of historical figures to be admirable or malevolent, and advance the construction of their own moral belief system. Hegel and Spengler, as cited in Southgate (2000), both saw history as a dynamic process of change. Certainly, history shows us that individuals and empires may rise, but eventually they will fall.

4.1.4. History makes us better thinkers.

Professor and education theorist Hirsch, Jr. as cited in Southgate (2000), reported that a broad grounding in specific facts and information of the kind supplied by history, science and other academic subjects promotes the development of general thinking skills. He views that there is a great deal of evidence, a consensus in cognitive psychology, that people who are able to think independently about unfamiliar problems and who are broad-gauged problem solvers, critical thinkers, and lifelong learners are, without exception, well-informed people. The National Research Council report, as cited in Southgate (2000), supported this view and states that it is not simply general abilities, such as memory or intelligence, nor the use of general strategies that

differentiate experts from novices. Instead, experts have acquired extensive knowledge that affects what they notice and how they organise, represent, and interpret information in their environments. This in turn, affects their abilities to remember, reason and solve problems.

4.1.5. History supports common cultural understanding and dialogue.

Jefferson, as cited in Southgate (2000), hope that historical knowledge gained in school would improve the decision-making capacity of free citizens in a democracy supposes that all citizens would be similarly informed and shared a common basis for evaluating and debating the issues of the day. Marzano as cited in Southgate (2000), terms this as the heritage model of schooling, which holds that it is the duty of the education community to help society maintain a common culture by passing on specific information to students. According to Hirsch, as cited in Southgate (2000), a citizenry cannot read and understand newspapers, much less participate effectively in a modern economy, without sharing the common intellectual capital that makes understanding and communication possible. This thought echo the words of Barzum, as cited in Southgate (2000), who wrote that the need for a body of common knowledge and common reference does not disappear when a society is largely pluralistic. On the contrary, it grows more necessary so that people of different origins and occupation may quickly find common ground and speak common language; it also ensures a kind of mutual confidence and good will.

4.1.6. History satisfies a need for identity.

Southgate (2000), argues that history, the memories of things past, is of supreme importance in maintaining a sense of identity. Becker (1931), said that everyman reaches out into the distant country of the past to inform his present and his future. Without this historical knowledge, this memory of things would be aimless and his tomorrow without significance. Furay and Salevouris, as cited in Southgate (2000), think of history as society's collective memory. Without that on it society would be as rootless and adrift as an individual with amnesia. Santayana, as cited in Southgate (2000), wrote that a country without a memory is a country of madmen.

4.1.7. History gives pleasure.

Southgate (2000), contends that part of the joy comes from visiting foreign mental landscapes; part from discovering new things about love of a good story. History supplies an endless source of fascination. Unfortunately, for many people, this fascination is not manifested until after high school. Teachers must do their best to lay a solid foundation for that longer view while the opportunity exists.

4.2. Conceptual frameworks in history teaching

According to Southgate (2000), conceptual frameworks connect and organise knowledge to make it more meaningful. These have different names such as cognitive frameworks, core concepts, mental structures, mental models, scaffolding, schemas or big ideas. They are artificial structures imposed on reality to help us more understand and manage reality effectively. Southgate further indicated that a review of literature from history education and cognitive research strongly suggests that conceptual frameworks, by whatever name, contribute to meaningful understanding and should be a major component of history education. Students need conceptual frameworks to make sense of history, to give it meaning and to make it valuable. The National Research Council report provides types of conceptual frameworks that have roles to play in history teaching:

- Themes
- Questions
- Chronological narrative
- Timelines
- Maps
- Graphic organisers
- Thinking strategies

Garaizar et al. (1997:23), emphasised the contributions History makes in developing an understanding of the past so as to be able to act on the present. History develops:

- Intellectual curiosity
- The attraction of finding out
- The discovery and exteriorisation of new realities.
- The dialectical comprehension of the relationship between past and present.
- An understanding of continuity and change

- An understanding of structure and trend
- Getting to know the 'other'
- Attitudes of empathy
- Tolerance and solidarity

Garaizar further emphasised the contributions History makes to understanding the past so as to be able to act on the present are important, especially where History can develop intellectual curiosity and the discovery of new realities. History cannot develop intellectual skills through the teaching of facts; it needs appropriate methods that should enhance conceptual understanding. Conceptual understanding can be enhanced through the use of co-operative learning. This method is not seen as the 'better' solution but it provides us with varieties of methods to develop different skills in learners (Garaizar, 1997:23).

Historical processes enable substantive concepts to develop. Substantive concepts fall into three main categories: Structural, organisational and specific. Nichol (1999:7), summarised seven structural concepts that provide the skeleton for historical thinking:

- Cause
- Consequence
- Continuity
- Situation
- Chronology
- Evidence
- Change

When we activate these concepts to develop historical understanding, they become part of the process of History. Organisational concepts define events and movements from different periods. Specific concepts relate to particular periods, and enable us to make sense of events. These concepts are important in History because they make what history is, therefore teachers are required to understand them and know how to develop them in teaching. Feuerstein, as cited in Nichol (1999:7), argued that skills are transferable across and between domains at a meta-cognitive level through the mediation of the teacher. History plays a role in a systematically applied set of cross-curricular transferable skills.

5. THE ANALYSIS OF TEACHER DEVELOPMENT

Learning is still heavily related to the subject knowledge of the teacher. Prawat (1992), suggested that teachers tend to focus a great deal on learners, but they seem more concerned with whether the message is being received than with what sense students are making of it once delivered. This has led to a de-emphasis on subject matter. As a result little attention is devoted to the difficult issues of content selection and understanding. Teachers are better able to assess student understanding when they are more knowledgeable about the topics they are teaching. Knowledge of subject matter entails an understanding of the substance of the discipline, of the ideas that are considered most central to those within the discipline.

Prawat further argued that teachers should draw on this knowledge to help students make sense out of their present life experience. The attempt to connect subject-matter knowledge to the child's experience is the hallmark approach to education, contrasting with traditional approaches that often start with facts and concepts outside the youngster's range of experience. Finding material for learning within experience is only the first step. The next step is the progressive development of what is already experienced into a fuller and richer and also more organised form, a form that gradually approximates that in which subject matter is presented to the skilled, mature person.

Towards Education for All (1993), talks about effective learning that is required in our new dispensation, and it says that learning is more than simply gathering and memorising information. Learners must become skilled at using information not only in school but also throughout their lives, often in ways that were not anticipated during their schooling. They must become skilled in determining what information they need to address a particular problem and in gathering that information. Effective learning requires teachers who are not only competent in their subjects but who can also respond creatively to new situations. For a country to change, so must its schools. And for schools to change, teachers must themselves become both agents and facilitators of change.

The use of co-operative learning often involves a change in teaching methods, which in turn, may involve a change in how a teacher believes children learn. Etchberger and Shaw (1992:412) suggested six interrelated requisites necessary for change to occur:

- Perturbation: This is dissatisfaction or uneasiness with the way things are. For example teachers may not be happy with their present teaching methods or with their students' understanding.
- Awareness of a need to change: This occurs when the teacher realises that for things to improve there will have to be a change.
- Commitment to change: When a teacher commits to change, s/he has made a firm decision to move beyond awareness and into action.
- Vision: With the decision to change, the teacher envisions what the change will actually involve.
- Projection into that vision: This occurs when the teacher visualises self and class becoming participants in the change.

Etchberger and Shaw (1992), described that when teachers become more reflective about their actions in the classroom, they begin to challenge the customs of the educational system on a broad scale and challenge their own traditions of teaching on an individual basis. I agree with the view because when teachers become more reflective they are empowered in terms of subjects and that make it easy for them to challenge their own traditional way of teaching. Here, I use my own experience where before the cause it was easy for me to just follow the textbooks, but when I went through the course, I can easily see mistake that I made in the past and I am able to make constructive criticism.

According to Bernstein, as cited in Zeichner (1999), for educational to have any social significance, it has to restructure the way knowledge is organised. Salter and Tapper, as cited in Zeichner (1999), support this view that the key to change is to effect a reorganisation of those social forces, which determine the authority patterns, and the structure of knowledge. This view is very important to me because the social forces that can bring change in our context are the teacher educators. Teacher educators have the authority to determine what knowledge to impart to student teachers. This can only be effected when teacher educators are empowered and have confidence in themselves.

6. CONCLUSION

This paper examined how student teachers apply participatory learning to bring about effective learning in History. The paper also examined the need to develop a more appropriate pedagogy, and strategy was that of cooperative learning. This has considerable implications for teacher development and has an impact on how teachers are trained in their subject areas. Learner Centred Education suggests active participation and learning through social interactions. One way of ensuring that students interact socially is to explore other methods such as co-operative learning strategies.

Participatory learning activities are only successful when the teacher is committed to organising and planning proper activities that involve learners participating actively. At the same time, learning is still related to the subject knowledge of the teacher. The teachers who master their subject knowledge are able to plan result in the learning activities that are worthwhile for their learners. While a strategy such as co-operative learning is seen as a very successful strategy to bring about learning in terms of understanding, these strategies are very sophisticated and require a degree of learning.

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**RHODES UNIVERSITY
DEPARTMENT OF EDUCATION**

RESEARCH PROPOSAL

Presented in partial fulfillment of the requirements for the degree

MASTER OF EDUCATION

(GENERAL EDUCATION THEORY AND PRACTICE)

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PROVISIONAL TITLE:

An analysis of novice teachers' capacity to apply participatory. learning strategies to achieve meaningful learning: A case study involving co-operative learning strategies in History teaching.

1. FIELD OF RESEACRH

General Education Theory and Practice

2. TITLE

An analysis of novice teachers' capacity to apply participatory learning strategies to achieve meaningful learning: A case study involving co-operative learning strategies in History teaching.

3. CONTENT

Educational Reform in Namibia (1990) was linked to the introduction of Social Constructivism as the epistemology underpinning education. Social Constructivist epistemology in Namibia is associated with Learner Centered Education (LCE). Learner Centered Education in the Namibian context emphasizes the placing of learners should at the center of learning activities. It maintains that learners should actively be involved for the purpose of effective learning. An important dimension of Learner Centered Education is the recognition that conceptual understanding is actively constructed through language in a social dialectic (Vygotsky, 1978).

The understanding of learning that underpins the curriculum presupposes a free and easy interaction between the teacher and learners in the teaching and learning environment. This has considerable implications for teacher development and has impact how teachers are educated and developed in both their subject areas in related to their subject areas.

The Broad Curriculum is a national policy established by the Ministry of Basic Education, Sports and Culture in 1993 to guide the training and development of teachers' education in Namibia. The training of teachers in Colleges of Education in Namibia is in two phases. Phase one is called College Based Studies (CBS). During (CBS) student teachers are required to fulfill certain requirements of their programmers while at college under the guidance and tutelage of college lecturers in the student teachers' classrooms. Phase two is called School Based Studies (SBS) where student teachers are expected to

implement the skills learnt during CBS in the schools. During SBS, student teachers are expected to reflect on their lessons presented.

A central feature of the Basic Education Teaching Diploma (BETD) is developing teachers' understanding of participatory education approaches, designed to facilitate meaning making and thus leading to learning. One of the most frequently used approaches is that of group work (van Graan, 1998). Van Graan suggests that traditional group work methods have a tenuous relationship to the acquisition of new knowledge. Given the problems of group work, co-operative learning strategies are suggested as an alternative approach to group work.

Johnson & Johnson (1998:1) defined co-operative learning as “the instructional use of small groups so that students work together to maximize their own and each other’s learning. Different situations help learners to develop different skills. The problem with this view is that different skills cannot be gained if the learner is alone.

Vygotsky (1978) suggested that learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his/her environment and in cooperation with his/her peers. For Vygotsky the foundation of learning and development is cooperatively achieved. Research shows that co-operative learning techniques can and do lead to:

- < Higher achievement in learning process
- < Caring, supportive and greater productivity
- < Greater psychological health, social competence and self-esteem (Johnson & Johnson, 1998:2).

Slavin (1990) indicated that two conditions must be fulfilled if co-operative learning is to enhance student achievement substantially. One, students must be working toward a group goal. Two, success in achieving this goal must depend on the individual learning of all group members. Co-operative learning makes learners to share responsibilities in the group. If one member misses the task, the rest of the group is affected. Slavin argued

that simply putting students into mixed-ability groups and encouraging them to work together are not enough to produce learning gains. Co-operative learning is more than group work, it is characterized by a common goal that must be reached and which cannot be reached without the input from all members of the group.

Co-operative learning has positive and negative effects that teachers have to be aware of. Matthews (1992) found that high-ability students are often extremely frustrated and angered by having to work in heterogeneous groups, and prefer co-operative learning in homogeneous groups. One of the greatest challenges facing teachers in our current Namibian situation is how to get diverse students to work together. This is where co-operative learning claims to break down barriers by encouraging an atmosphere of respect and tolerance and of working together.

Planning and organization however must be carefully and thoroughly thought of. Activities must be planned to make sure that learners know the procedures and give clear instructions. While planning the lesson, teachers should have clear objectives; evaluation and assessment tasks should be clearly indicated. Not only that objectives should be clear, precise and achievable. Such objectives help teachers to assess what has to be taught and informs teachers on the ability to maneuver around their teaching methods and techniques. Normally co-operative learning fails not because learners cannot cope with the methods but because teachers did not plan well (Wilmot, 2003, pers.com.).

Assessment is also one of the aspects that teachers need to consider when applying co-operative learning. Marks have to be awarded for individual work and for group product. The activity should be focused, short and well structured. The group size should be limited to a maximum of six learners. This group must have a common goal that has to be by all individual members. The group cannot achieve the goal without each person doing their work. If all these are not considered and taken care of, co-operative learning is tantamount to failure.

As a History lecturer, I have noticed during School Based Studies that student teachers experienced problems when teaching History in a Learner Centered approach. Therefore the research question is: Can the novice teacher (student teachers) apply participatory learning effectively enough to bring about effective learning in History?

4. GOAL

To analyze how student teachers apply the participatory learning strategies to achieve meaningful learning.

5. METHODOLOGY

A qualitative approach is to be used in collecting the data. In my research, I plan to adopt the following process:

- I will model co-operative learning strategies with student teachers during CBS.
- They will develop co-operative learning activities, which they will test at their schools.
- Students will be encouraged to keep journals in which they reflect on these activities as a means to enhance learning and develop conceptual understanding.
- I will observe their teaching of co-operative learning strategies they have planned.
- My observations and the students' journal reflections will form part of the data for the study.
- Finally, follow-up interviews will be held with the student teachers to assess their perception on the use of co-operative learning strategies.

Given the above, the research approach selected will be based on classroom action research and will incorporate elements related to Henry and McTagget's (1996) model of classroom action research. They believe that classroom action research involves the use

of qualitative modes of inquiry and data collection by teachers with a view to teachers making judgments about how to improve their own practices. The researcher's role in this research will be that of a facilitator and observer. Within this dimension the research is a case study. Cohen and Manion (1994:106) show that 'case study researcher typically observes the characteristics of an individual unit such as, a child, a class, a school or a community'. The purpose of such observation is to probe deeply and to analyze intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalizations about the wider population to which that unit belongs. The disadvantages of case study can be biased, subjective and lack in the precise quantifiable measures that are the hallmark of survey research.

The nature of the research is such that interpretation of the data is the focus. The research is therefore situated in a post-positivist paradigm that will allow the researcher to freely interpret the phenomena of the world in attempts to get shared meanings with others. Interpretation is a search for deep perspectives on particular events and for theoretical insights. The following data collecting tools will be used:

- Semi-structured interviews
- Classroom observations
- Journals of student teachers

Semi-structured interviews will be used. Patton (2002) suggests that semi-structured interviews reduce interviewer effects and bias when several interviews are used. The opportunity for the interviewer to influence the interviewee is limited.

Adler and Adler (1980) defined classroom observation as a study of social life. Patton (2002:203) refers to observational data as attractive as they afford the researcher the opportunity to gather 'live' data from 'live' situations. The researcher is given the opportunity to look at what is taking place (*in situ*) rather than at second hand. This will enable the researcher to enter and understand the situation that is being described. The type of observation that I will apply is unstructured observation because it is more hypotheses –generating rather than hypothesis-testing. The unstructured observation will

review observational data before suggesting an explanation for the phenomena being observed. Student teachers will be observed to see how learners in schools will cope with co-operative learning strategies. The researchers' classroom observation will help during the analysis of information to understand what students will reflect on in their journals.

Journals will add flavor to the source of information that the researcher is intending to collect, because student teachers will be expected to give their honest opinions on what they have experienced in the classrooms. Elliot (1991b, as cited in Lotz, 1996:92) recommends, "Journal contains personal accounts, of observations feelings, reactions, interpretations, reflections, hunches, hypothesis and explanations". Accounts should not only be facts of the situations, but convey a feeling of what it is like to be there participating in it.

The expectation is that student teachers should implement co-operative learning strategies within a constructivist philosophy. When one of the co-operative learning strategies is tested, they should than reflect in their journals problems encounter in using the strategy and what they can gain from using co-operative learning strategies. Meloy (1994, as cited in Lotz, 1996:93) views the research journal as..."a place to make explicit questions and concerns for later answering in organizing ...a away of imaging a stream that flows through and surrounds the territory of the research...a journal can hold your heart".

6. SAMPLING

The sample size could be more but due to lack of finances for transport and subsistence the study is limited to Rundu and its environment. The sample will be quotably done using two students doing History as a teaching subject. The number was taken considering gender where one female and one male will be included. This will accommodate different abilities of student teachers without having preconceptions.

7. DATA ANALYSIS

The researcher will collect data from interview transcripts, observation notes and student teacher's journal reflections. Data will be analyzed using the qualitative data analysis techniques by looking for naturally occurring units and reducing them to natural meaning units to check for regular patterns of events and themes (Cantrell, 1994; Stones, 1988).

8. ETHICAL CONSIDERATION

The researchers' relationship with the student teachers is that the researcher anticipates cooperation, openness and willingness to participate in the research in order to get reliable information. The purpose of the research will be revealed to the schools involve and the student teachers that will participate in the research. Agreement with student teachers will be reached for the publicizing of the research outcomes.

9. LIMITATIONS OF THE RESEARCH

The research is limited to student teachers doing Social Sciences at Rundu College of Education, especially History as a teaching subject and to learners around schools in Rundu. It is possible that if the research were done in Kavango or with different environment the results could be different. The research will be a short period of six months, because of constrains of other commitment, for example being a full time teaching post.

Research timetable

January 2003 - December 2003

1. January (13-17) contact session- present research proposal to tutors and peers in draft form
2. February- March: Researcher will negotiate with student teachers to involve them in the research. Implementations of co-operative learning models start.
3. March 17-21: contact session two

4. April- May: School Based Studies start
5. June-July: Fieldwork start- one-week visits one school. Second week visit school two. Third week second observation for school one. Second observation for school two.
6. Late July completion of data analysis
7. Early August: Complete first draft, send for comments

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**RHODES UNIVERSITY
DEPARTMENT OF EDUCATION**

RESEARCH PAPER

**MASTER OF EDUCATION
(GENERAL EDUCATION THEORY AND PRACTICE)**

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PROVISIONAL TITLE:

An analysis of novice teachers' capacity to apply participatory learning strategies to achieve meaningful learning: A case study involving co-operative learning strategies in History teaching.

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1. ABSTRACT

The research investigated problems student teachers at Rundu College of Education in Namibia encounter that will obviously be a key dimension of the analysis when attempting to apply the techniques of co-operative learning strategies to bring about effective learning in the History classroom. The purpose here is to analyse the use of co-operative learning strategies in History classes as a means to enhance learning. The Research involved an analysis of the implementation of co-operative learning strategies by student teachers in two schools in Rundu. A qualitative methodology was used that adopted a classroom action research approach. Data was collected using semi-structured interviews, classroom observation and journals of student teachers. When data was analysed it was revealed that learners found History interesting and that working co-operatively in small groups was seen to promote social interactions this is tricky rather look to the problems because that is what the investigation is about. The data revealed that by scaffolding the approach better with student teachers the learners found the history classes more interesting however; language was cited as a key barrier to learning.

2. INTRODUCTION

The traditional ways of teaching and learning History have ignored the integrated approach of teaching History, resulting in the subject being seen as 'dead', compartmentalised, and uninteresting. The Namibian Reform Process at independence 1990 adopted a Social Constructivist epistemology and pedagogy. The philosophy promotes Learner Centred Education (LCE) central to which is the notion that conceptual understanding is actively constructed through language in a social modality (Vygotsky, 1978; Bruner, 1986).

This understanding of learning that underpins much of curriculum presupposes a free and easy interaction between the teacher and learners in the teaching and learning environment. It therefore provides a route in curriculum development that the Ministry of Basic Education, Sports and Culture (MBESC) in the independent Republic of Namibia has decided to embark on when training teachers in the Colleges of Education in the country. However, as a teacher educator over the years I have noticed in schools that learners do not enjoy History, do not pay attention and eventually fail the subject.

My final year student teachers majoring in History as a teaching subject experience problems in teaching the subject effectively using a Learner Centred Approach. This study therefore focussed on changing the perception of seeing History as a 'dead' subject by applying co-operative learning strategies to enhance conceptual understanding in History and as a strategy to increase interest in the subject, while at the same time providing the student teachers with a viable strategy to apply LCE as a subject.

3. METHODOLOGY

3.1. The research orientation

The research is based on an interpretative orientation focussing on classroom action research. Classroom action research, according to Henry and McTaggart (1996), involves the use of qualitative modes of inquiry and data collection by teachers with a view to these teachers making judgements about how to improve their own practices. The reasons I have decided to use action research as a method of collecting data are as follows: to implement co-operative learning strategies that can help improve situations for student teachers; to experiment co-operative learning strategies in the class to determine whether the strategies can make a difference in teaching for understanding, to add knowledge to research; and to improve my own teaching and material design.

In using an interpretative approach I was aware of the possible effects of bias due to preconceptions and presuppositions on my part. However, I tried to minimise my bias by being conscious of it and by letting the data speak for itself.

3.2. Population and sampling

The sample size could have been larger but due to lack of time and finances for transport and subsistence the study was limited to Rundu and its environment. The sample will consist of two student teachers majoring in Social Sciences, especially History, as a teaching subject. This allowed a qualitative focus. Two student teachers were purposively

selected to represent the student population in the class. Their commitments and better understanding of the co-operative learning strategies, made them favourable for the selection. The two teachers in two different schools were selected, because they were responsible for the grades that the student teachers taught.

3.3. Tools

Data was collected using the following tools: Semi-structured interviews, personal classroom observations and journals of student teachers. Two student teachers of RCE majoring in History as a teaching subject were my research participants.

Semi-structured interviews

According to Patton (2002), semi-structured interviews reduce interviewer effects and bias when several interviews are used. The opportunity for the interviewer to influence the interviewee is limited. Semi-structured interviews were selected because it allowed for both responses to predetermined questions and free responses. Elliot as cited in Lotz (1996:96), recommended that a semi-structured interview begin with the unstructured part, as many of the pre-set questions may be asked without them having to be explicitly raised by the interviewer. This helps to establish a climate in which the interviewee will feel comfortable and will be able to respond more authentically to the questions raised. Measor as cited in Lotz (1996:97), noted that the quality of data in interview research depends upon the quality of the relationship between the researcher and the participants, and she recommended that researchers attempt to develop relationships of trust with interviewees through empathy, sensitivity to context, appearance management and the development of shared interests.

The interviews that I held were with the student teachers with which the researcher had built relationships of trust over two years thus reducing one of the criticisms of interviews that of awkwardness.

Observations

Adler and Adler (1980), defined classroom observation as a study of social life. Patton (1990), refers to observational data as attractive as they afford the researcher the opportunity to gather 'live' data from 'live' situations. The researcher is given the opportunity to look at what is taking place *in situ* rather than at second hand (Patton 1990:203). This enables the researcher to enter and understand the situation that is being described. The type of observation that I applied was unstructured observation because it is more hypotheses generating than hypothesis testing what does this mean? Either expand reference or cut out. The unstructured observation reviews observational data before suggesting an explanation for the phenomena being observed. Unstructured observation operates within the agenda of the participants and it is responsive to what it finds and, therefore, is honest to the situation that it finds.

Bell (1993:110), described unstructured observation as that in which the researcher does not start with preconceived ideas about what it is they want to observe. On the other hand, although the method is quicker to prepare, the data takes much longer to analyse. This approach is criticised that the observer will have their own particular focus and interpret significant events in their own way. Student teachers were observed to see how learners in schools coped with co-operative learning strategies. My classroom observation helped me during analysis of information to understand what students reflected on in their journals.

Journals of student teachers

Journals added flavour to the source of information that I collected, because student teachers were expected to give their honest opinions on what they had experienced in the classrooms. Elliot as cited in Lotz (1996:92), recommended, "Journals contain personal accounts of observations, feelings, reactions, interpretations, reflections, hunches, hypotheses and explanations." Accounts should not only be facts of the situation, but should convey a feeling of what it is like to be there participating in it. The expectation was that student teachers should implement co-operative learning methods within a constructivist philosophy. After one of the co-operative learning methods was tested, they

should then reflect in their journals problems encountered in using the strategies or what they can gain from using co-operative learning methods.

Meloy as cited in Lotz (1996:93), viewed the research journal as "...a place to make explicit questions and concerns for later answering in organising, a way of imaging a stream that flows through and surrounds the territory of the research. A journal can hold your heart". Student teachers were able to reflect on their presentation each week. The reflections indicated a fair view of their own feelings, although the researcher expected that the student teachers wouldn't give true accounts on their own feelings about the implementation of co-operative learning. The researcher found it to be a valuable research medium that provided rich information from which key themes emerged.

3.4. Outcomes of results

Data collected from observations, interviews and journals were analysed using the qualitative data analysis techniques such as bench marking and by looking for naturally occurring units and reducing them to natural meaning units to check for regular patterns of events and themes (Stones, 1988; Cantrell, 1993).

3.5. Presentation of findings

3.5.1. Purpose

This research attempted to examine the development of students' conceptual understanding in History as a teaching subject through the use of co-operative learning strategies within a constructivist philosophy with particular reference to students doing Social Sciences at RCE. The aim is for the student teachers to transfer the skills learnt into the schools. Further, the purpose is also to analyse the implementation of co-operative learning strategies in two different schools. This understanding and analysis are intended to inform the development of contextually appropriate approaches in teaching History.

The research was done in two phases, College Based Studies (CBS) and School Based Studies (SBS). During CBS the researcher modelled the strategies of co-operative learning to all student teachers majoring in Social Sciences. Activities were designed in which different cooperative teaching strategies were implemented. These included the use of the jigsaw model, where student teachers were given numbers for them to create new study groups. After the study, they were expected to back to their home groups. At the end, each 'expert' taught the other members in the group. Team Assisted Individuals on the other hand expected each student teacher to prepare a sub-topic, which s/he will present to the rest of the class. Coop is a model where student teachers wrote different tests on the work covered. A key feature of this strategy is that learners can only advance to the next test if they have passed the previous test.

After modelling, discussions were held to critically look at the advantages and disadvantages of each method. After CBS the student teachers were expected to implement the strategies in the two local schools in Rundu during their SBS.

3.5.2. Data collecting procedures

This research applied the following procedures in collecting data. Firstly, letters were sent to two different schools two weeks before the initial research started requesting their permission to carry out research at their schools. Data was then collected from teachers at the two local schools. The main data was collected through observations that the researcher conducted from two student teachers implementing the co-operative learning strategies, and also from two student teachers' journals. Four interviews were conducted as other sources of information. This was done between June and July 2003. There are similarities and differences in the ways that the two student teachers being studied responded. The results of such observations are as follow:

3.5.3. The result of Semi-structured interviews

Interviews were conducted with two student teachers at RCE and two teachers from two different local schools. These interviews were held before the cooperative approach was tried in the schools. The two student teachers were purposively selected in order to represent a sample of co-operative learning strategies in the population of a class. The two student teachers have shown a better understanding of co-operative learning strategies during CBS as a result of the approach taken to model the various strategies. The two teachers from two different schools were considered, because they were responsible for the grades that the student teachers taught during SBS. The key question of the interview looked at problems experienced when teaching History the responses were as follows:

- Two of the respondents said that the approach is more teacher centred and focus on story telling.
- One person responded that the subject lacks resources, but strengths of the subject were that learners are involved and they have opportunities to give their views.
- One indicated that it requires the teacher to master the subject content and that some teachers lack subject knowledge and experience.

Another key question explored things that should be done in order to improve the teaching of History as a subject. Two respondents said that teachers should use a variety of resources such as newspapers and videocassettes while one suggested using a variety of teaching methods and attending on conferences. One talked about helping learners get used to the system. This latter point is, I believe, one of the most important in terms of LCE. Few teachers in my experience appear to see the need to have learners understand either the rationale for participatory activities or to understand 'the rules' pertaining to activities of this nature.

On the question of whether co-operative learning can change History teaching for the better, all respondents agreed saying everybody will benefit as learners moved to an advanced level and there is room for team teaching. Lastly, in regard to the weaknesses of co-operative learning, respondents indicated that the methods are time consuming.

4. ANALYSIS OF RESULTS

The analysis of the results presented below is based on the classroom observations and the analysis of the students' journals. While it was noted from both sources that a number of problems were experienced by the students in applying cooperative learning strategies as novice teachers the experience of presenting these strategies in a scaffolded and structured environment after their CBS experience has considerable value in helping student teachers come to terms with a more participatory approach to the teaching of history. The insights gained from this study have helped me to better understand how best to prepare students for this type of teaching.

4.1. Co-operative learning processes

Analysis of the qualitative data provided some revealing insights into the impact that co-operative learning has on learners' understanding in History as a teaching subject. It became evident that in implementing co-operative learning models, the learners found the activities interesting, for example co-op, jigsaw and team assisted individuals. It was also clear that learners learned to share, to take individual responsibilities seriously and account for their own work. This became apparent during the observations when some learners commented that they preferred this type of method because they enjoyed the work and it was exciting. This was supported by the student teacher's journal reflection, which said: "This method is a good one. Learners enjoy learning when they are given time to share with others what they are learning." In most cases what the research found agrees with what the literature discusses.

For example, the study found that collaboration in small groups (Penlington and Soker, 1998; Wilmot and Euvrard, 1998; Johnson et al., 1999 as cited in Ngcoza 1998:5), enhanced the construction of understanding of knowledge. Garaizar (1997), stated that History develops intellectual curiosity and the discovery of new realities. This cannot be developed through the teaching of facts; it needs appropriate methods that should enhance conceptual understanding. The journal reflections of student teachers supported the

literature in that they have said that learners enjoyed working in smaller groups as this afforded them the opportunity to discuss and share ideas while which did not happen with their teachers. Student teachers also noted that using jigsaw and co-op models students finished the work faster.

Although some learners favoured working in smaller groups, it was evident from the study that this was not always the case. During observation some learners indicated that they preferred working individually as they were used to that method with their teacher. The observation also revealed that learners rely on group members. Interview results also indicated that there is room for team teaching when applying the co-operative learning strategies. This was supported by the reflection in a journal that a limitation of group work is 'copying of results from peers without really understanding the explanations' said one student teacher.

The reflections done by student teachers indicated that implementing co-operative learning models required extensive planning for a successful outcome and wasted a lot of time in terms of explaining instructions to learners. They also noted that more time was needed in order to complete the task fully. I confirmed this during observations at schools and the interview results expressed the same sentiments. Wilmot and Euvrard (1998), emphasise the need for careful and thorough planning because these strategies are very sophisticated and require a degree of learning. Therefore, teachers are expected to thoroughly plan the activities, make sure that they know the procedures, and give clear instructions (Wilmot, 2003, pers.com.). This should not discourage teachers from implementing the strategies; rather it is a reminder to teachers to always be well prepared and increase their commitments to teaching and learning. Van Harmelen as cited in Ngcoza (1998:6), talks of 'teacher talk' as opposed to 'teacher tells', as well as 'learner talk' as being vital in a community of learning. For constructivists, putting learners at the centre of activities is more important than listening to the teacher talk most of the time.

I observed that in planning for the initial jigsaw activity with the class the student teachers

~~failed~~

failed to provide clear instructions. Both teachers could also have improved on their selected resources. I observed that both student teachers lacked a deep understanding of the strategies despite the CBS modelling that was done. Consequently peer teaching was not successful because some learners lacked sufficient subject knowledge to teach their peers. My observation also revealed that both teachers experienced problems with time management. These problem areas alerted me to the need for preparing students to focus more closely on developing better understanding and utilisation of resources in cooperative strategies. Time management and the general management of these activities will also require greater focus in student teacher preparation. Modelling the activities with novice teachers is not enough what needs to be grounded in what may be described as a meta- level of understanding.

Both student teachers observed that co-operative learning models are not suitable for large classes because the teacher has to work with smaller groups while there are many learners in one class. This concern was observed especially with working in pairs as a model. The student teachers' journal reflection also indicated the same where one said that a teacher experiences a problem where he/she has a large number of learners to organise in groups. Here, the researcher will agree and in some cases disagree with the findings. Yes, some of the strategies such as working in pairs might not be suitable for large classes if the number of learners is too high, because the teacher can end up having too many groups giving feedback. Wilmot (2003), indicated that small group work is effective but its disadvantage is in large classes. On the other hand, the strategies will help the teacher to cover a lot in shorter time as one of the student teachers said that the scheme of work was completed at a faster rate. Strategies such as jigsaw, coop and team assisted individuals can cover a lot of content because you need many groups with different topics that have to be finished at the same time.

Students' involvement in the learning process was very high. The outcomes indicated of one student teacher reflected learners enjoyed most of the activities in class. Learning was also observed through the use of co-op as a strategy that tested learners' ability in knowing

what they have learnt. Three tests were written asking different levels of questions. The majority of learners scored high marks in these activities. Johnson and Johnson (1989), indicated that co-operation as opposed to competition, resulted in higher achievement and greater productivity. Although this strategy indicated success in learning, the use of other strategies does not guarantee the same outcomes. Other strategies are very sophisticated and require a good command of English, which some of these learners lacked. This was revealed in the student teachers' journal reflection where they said that learners were unable to express themselves in English and they could not explain their answers when asked to do so by the teacher.

Evidence from the observation indicated that some learners were able to give answers while others were only able to mention certain features of active learner involvement (MEC 1993), such as direct questioning, eliciting, explaining, demonstrating, challenging the learners' ideas, checking for understanding, helping and supporting, providing for active practice and problem solving. These points help teachers to distinguish between learners being actively involved in the learning process and merely being kept busy, not necessarily learning anything (van Graan 1998).

4.2. Language barrier

According to Spod 1995, as cited in Ngcoza (1998:5), constructivist research, particularly the notions of social constructivism, has sensitised educators to the importance of classroom discussion by learners for effective learning to take place. This was supported with the student teachers' reflections and the researcher's observations revealing that although all learners participated actively in activities, some learners had a problem expressing themselves well in English. This was observed when some learners failed to give proper answers to the whole class and when the teacher asked them to explain how they found their answers, they were unable to respond. This affected the effective learning of students in the classrooms. The literature also agreed that language barriers present a problem for learning. Vygotsky (1986), emphasised that language is vital to communication and social discourse. Vygotsky stated that thought starts with social interaction. He

regarded language as a tool for thought, and central to learning. Vygotsky further suggested that through language we internalise our experience and construct our own understanding of it, we try and make sense of our experience. Thus peers were useful in explaining to each other in Rukwangali. This is important in co-operative learning strategies as Vygotsky (1978), described that what children can do together today, they can do alone tomorrow. The experience of this study stressed that when learners experience communication problems; they will rather keep quiet than say anything. This will lead to passiveness in class and affect active participation.

4.3. Writing as a cognitive process

Co-operative learning models require learners to investigate and write their findings before giving the feedback to the others (Wilmot & Euvrard 1998). This was supported by student teachers' journal reflections that indicated activities that were perceived as beneficial to learners as they promoted their writing skills and helped to enhance conceptual understanding in History as a teaching subject. Furthermore, the learners found the activities, especially team-assisted individuals, very enjoyable because the questions encouraged them to think critically. This became apparent during observation when learners made comments after the lesson that the teacher should always give them this type of work.

The advantage of working with social groups, as Vygotsky argued, is that not only do students learn and internalise lessons about specific tasks when co-operating with more knowledgeable peers, but also they are exposed to and internalise the instructional process itself (Vygotsky, cited in Wood 1988:82). Bourdieu and Passeron, as cited in Brophy (1996), shared this view and stated that learners' thinking is a form of socialised knowledge that is conditioned by their surroundings. Teachers have to be aware of this and they should shape their teaching to accommodate their learners. Although this activity benefits learners, it requires proper organisation and planning by the teacher. The teacher has to consider different levels of questions to accommodate different abilities of learners and to help them

advance to the complexity of questions. These complex questions will help them to internalise the instructional process.

4.4. The role of the teacher

Student teachers during SBS expressed the sentiment that History is a boring and uninteresting subject since it is only the teacher who does the talking ('chalk and talk'). The interview results revealed that the approach is more teacher centred and story telling. However with the implementation of co-operative learning strategy, History was perceived differently and it made History lessons interesting. The activities focussed on understanding rather than mere completion of tasks. This was evidenced during observation when all learners did team-assisted individuals where individual learners wrote different tests to assess their understandings most learners achieved high marks.

The role of the teacher is to make sure that enough resources are available by improvising, using a variety of teaching strategies and showing knowledge of what they do. The student teachers' journal reflection supported this; one said that teachers should use variety of resources such as newspapers and videocassettes. The researcher suggests that teachers should break their own barriers of fear and of only trying to satisfy the syllabus rather than their learners. This was revealed in student teachers' journal reflections where one said that fear was a concern as was a lack of understanding in some of the methods.

What remains a challenge is to encourage some of these learners to break the language barriers to engage in discussions. Roth and Boyd, as cited in Ngcoza (1998:5), pointed out that it is no longer as important what the teachers have to say but what the learners have to contribute to the conversation as a whole during classes. Learners are expected to construct meaning of their own learning. For learners to do this, teachers should create opportunities for them to experiment. Posner, as cited in Brophy (1997:121), emphasised the importance of supporting learners in finding the new ideas useful in a variety of real world contexts.

Language is seen as a tool for effective communication that helps effective understanding for it to achieve effective learning in a classroom; however, guidelines for generating meaningful whole class discussions in History classrooms are missing. Co-operative learning strategies are not seen as the solution to our teaching dilemmas, but they provide alternatives that teachers can apply to bring about effective learning. Teachers should keep in mind that co-operative learning strategies are very sophisticated and require a degree of learning (Wilmot and Euvrard 1998). At the same time, White (1988), reminds teachers not to worry about finding the single, perfect explanation or activity to teach particular concepts. Instead, he argued they should plan and create multiple and varied situations that permit learners to explore and re-explore the given concepts.

4.5. Lack of resources

This study revealed during observations that student teachers were giving oral tasks and instructions to learners, which the teacher read once to the whole class. Although some learners carried out the instructions correctly, some learners failed and ended up answering wrong questions. The teacher did not provide written instructions and written questions and learners did not have enough textbooks. When this happens, teachers tend to see the learner as being wrong instead of being honest and doing the work properly. Here is where thorough organisation and planning is emphasised in implementing co-operative learning strategies. The interview results also indicated that teachers should use variety of resources for effective learning. These are some of the factors that can hamper the effective use of co-operative learning strategies and teachers tend to see the methods as difficult or impossible to implement. Ryan and Cooper (1995), referred to humans as meaning makers, and humans rely heavily on multiple sources of information in the process of learning. Success depends on hard work, which means that teachers cannot do less and expect more. Teachers should first try all alternatives and employ a variety of resources before complaining that learners cannot cope with other strategies.

The implication of teachers not giving written instructions will lead to learners being forced to memorise the learned content. When learners memorise, this is seen as ineffective

because information is learnt in a compartmentalised way that does not facilitate meaningful learning. .

5. REFLECTIONS

In conducting this research, the researcher learned that the assumptions couldn't always be proven correct; because theory lead me to believe that the methods are easy to implement. What I have learned from doing co-operative learning with my student teachers was 'never take things for granted.' There were some advantages and disadvantages in using the strategies. The advantages were that the methods allowed learners to actively participate in the lesson. The teaching methods created opportunities for learners to investigate information on their own. Learners enjoyed the methods because they were introduced to new strategies, apart from individual work and group work that they already knew. The methods also made learners provide answers with meanings, rather than providing facts only.

On the other hand I learned some shortcomings of using these strategies. Lack of experience in using the methods played a big role in student teachers having difficulty implementing the methods. This was attributed to lack of confidence in themselves. They had fears of failing to implement the strategies correctly. The methods taught us that if the learners have language problems, the methods would not work successfully. This can indicate that the problem is with the methods while it is actually with the learners. Thorough planning was as very important in implementing co-operative learning strategies. This required student teachers knowing the subject matter very well and having all the necessary resources ready for the lesson.

Time always plays an important role in human beings live, if I was given another chance, I would like to change the following:

To work as a full- time researcher is better than being a part-time researcher because the issue of transport becomes easier to arrange and I could have considered the urban and rural

schools. I would also have liked to change from using student teachers to implementing the strategies myself. This could have afforded me opportunities of working with learners, hearing their feelings and at the same time having enough time to talk to their teachers.

On the basis of this study I suggest the following for further research:

- This research did not cover the issue of the language barrier in History as a teaching subject. The research revealed that English as medium of instruction hampered the effective communication of learners in class. I therefore suggest doing research in this area to determine the reality in schools.
- Another interesting area for research is to develop History concepts, expand them and use them in historical contexts to enhance conceptual understanding in History as a teaching subject.
- The issue of teachers having a fear of the unknown can be an area for research. The question can be 'why are teachers in schools afraid to implement the learner centred principle of 'trial and error'?

6. CONCLUSION

The research focussed on changing the perception of seeing History as a 'dead' subject by applying co-operative learning strategies to bring about effective learning in History. The research participants were the student teachers at RCE, who were involved in implementing the co-operative learning strategies. It was revealed that the role of the teacher in the classroom is very important because it determines the success or failures of teaching and learning.

It is imperative for a teacher to develop an understanding of effective teaching by attempting to know more about the background of the learners and attempting to stimulate multiple situations of communication between the teacher and learner. This will promote

their own development of knowledge relevant to them and to their physical and social environment.

Participatory learning has advantages in terms of enhancing conceptual understanding in learners. It increases the reasoning, critical thinking and the ability to share with others and allows learners the opportunity to investigate issues. More importantly, the strategy suggests active participation and learning that puts emphasis on participatory and learning activities. While the strategy is seen as a very successful one to bring about learning in terms of understanding, these strategies are very sophisticated and require a degree of learning on the side of the teacher. Planning and organisation must be carefully and thoroughly thought through. Teachers are expected to thoroughly plan activities and make sure that they know the procedures and give clear instructions. Objectives should be clear, precise and achievable. Such objectives help teachers to assess what they have to teach and inform teachers on the ability to manoeuvre around their teaching methods and techniques. Planning, clear instructions and understanding the methods are important in participatory learning.

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CONCLUDING STATEMENT OF THE RESEARCH PROCESS

A Portfolio has become one of the important tools of assessment in education. The research experience that I went through in the masters' course was done through a portfolio. In this paper, I will reflect on my experience. Firstly, I look at what I have learnt from doing the portfolio in my professional context. Secondly, I will look at how the portfolio has deepened my understanding of education. Thirdly, how the research has influenced my ongoing development as a teacher educator. Lastly, I will show how I have grown in terms of confidence in doing research and the learning that I feel still needs further development after completing the portfolio.

Doing the portfolio has helped me to become a better reader. A better reader is seen in the sense that I am able to select relevant information and key ideas from the text and apply them appropriately. I have realised that through the use of the portfolio, I am able to distinguish between extensive reading and reading for fun. These skills were developed through reading widely. I had to read as widely as possible, because that helped me to know the supporting views and at the same time I learned to substantiate the argument by providing my personal opinion. I learned not to just take texts as read but to look for contrasting views and present both as comparisons, to show that although those ideas look good, there are always people who disagree, therefore those views need to be presented.

To distinguish two contrasting views lead me to become a critical thinker. The experience of a critical thinker is seen in the sense of looking at views with open eyes and mind. I have learnt that a critical thinker should question the ideals and challenge the taken for granted. The readings made me see that to accept someone' story as the 'right one', we have to know the context in which the story was written, the time and place as that can all contribute to whether the story is appropriate. However, there are still some gaps between what I have read and know as theory and what I can do in practice. In practice I am expected to implement what I know for my students. In wanting to do that is not a problem. Problems can come in designing activities.

Reading was an essential tool throughout the research process. The focus of my reading was linked to my professional context and I learnt to read general texts as well as those pertaining to my teaching area by asking myself how the materials related to my context and what I could learn from it.

The constant focus on epistemology in the course served both to inform our practice and to assess and to frame our research. I found the interrogation behaviourism and constructivism very useful if difficult to engage with critically. As a result of this focus I believe that I have not only gained a deeper understanding of the reform process but of the nature and role of constructivism in terms of my practice and my reflection on this practice through my research. The epistemological focus included a critical analysis of its interpretation in the Namibian context and has raised a number of questions that need to be addressed. I feel that I am better equipped to consider these in and through my teaching.

Writing in the Namibian context is not simply an issue related to communicating in a second language, in my case a third language, but is also linked to the fact that we do not have a tradition of expressing ourselves in a written form. Before embarking on my postgraduate work I had little experience of using a genre acceptable in academic terms. Most of the writing in which I had been engaged was descriptive and narrative rather than analytical. Moving into this genre has been extremely difficult and I have realized just how much of it is based on practice and the experience of writing. Through having to write I am better aware of how to help my students develop their writing skills. Included in this is that the students have improved very greatly in using quotations in their writings and acknowledging the sources. This was shown during their writing of their Action Research reports of 2003. The students used references very well by cross-referencing them. This was a very good example of how theory informed the practice and what impact theory and practice have on my professional context. However, they' still have a long way to go in keeping references up to standard. Students still need to be assisted in

making logical arguments that have to be supported with sources. Writing style is one of the important aspects of logical presentation.

The course has enabled me to differentiate between positivist research and non-positivist research. Through the experience of the portfolio, I was helped to understand research methods better. The process of research has also deepened my skills of analysing data and how one can link data to literature to support the arguments. My experience therefore was used to help the third year students in presenting research information. After a workshop we presented, we realised that students and our colleagues needed and still need help to improve their understanding and practice of the reform processes. This area played an important role in the sense that I was expected to implement what I have learnt in contextual analysis, theories and literature review. My understanding of the first three sections, determined the outcome of the research paper.

Doing the portfolio has deepened my sense of understanding behaviourism and constructivism. I have now become a better person in understanding the epistemological views of the two theories. After having better understanding of the two philosophies, these helped me to deliver teaching and learning better. Through this knowledge that possessed, I was helped to see other teaching strategies from our tutors and learn to implement them in my institution. One example of it was when my third year students implemented co-operative learning strategies in schools. Co-operative learning strategies as participatory learning methods were the main aspects that I have researched. The role of co-operative learning strategies was to model an alternative way of doing group work effectively. This has been difficult in the sense that the ideas were new to students. The implementation process made me understand the difficulties students have in implementing new ideas. I have realized the importance of good instructional methods in the education of teacher educators. Teacher educators have the responsibilities of ensuring that students are accorded the opportunities to practice new ideas for them to be able to analyse them and know the implications that go along with them. Action Research is one the important aspects in the education of Basic Education Teacher Diploma and this are done during School Based Studies (SBS). The deepening understanding of the

research portfolio has made me realize how complex the process of action research is. The complexity of the action research was made easier through the workshop that helped to refocus thinking about the SBS research.

The ability to analyse research papers and reports, including the policy documents has been one of the most important aspects in my development as a professional teacher educator. This experience made me see how policies are complex to understand and to implement. Sometimes people can misinterpret the policy that can lead to deliver different practice. The deepening understanding of the policy of the reform process has helped me to see and understand that although our policy wants all national goals to work effectively, these cannot be achieved at the same time. These will help me to guide my students appropriately in terms of recognising the misconceptions of Learner Centred Education. These will also help them in their teaching and learning in schools. I have realised through doing the portfolio that policies are documents that we teachers do not take seriously. We always take things for granted that we think we know but in reality we don't.

I started at a slow pace in this course, but gradually improved immensely. Doing a portfolio made me to go through some difficulties that I shall refer to as challenges. I call them challenges, because I was encouraged to overcome those challenges by creating a means of surviving them. I experienced challenges such as, inconsistency in writing, lack of logical arguments in presenting ideas in assignments, and lack of critique in arguments presented. However looking at some issues, frustrations and weaknesses that I have experienced, these helped me to change and grow professionally.

The development in my professional capacity, created strengths that I can develop further as a teacher educator. I am now able to look at a paper critically and able to advise my students and colleagues accordingly. Consistency and presenting logical arguments are two of the very important factors in writing academic papers. Writing in the Namibian context is not only an issue related to communicating in a second language, but in third language, and it is also linked to the fact that we do not have a tradition of expressing

ourselves in a written form. Lastly, I have grown tremendously in term of confidence in public presentation. The logical presentation of ideas that I have mentioned above is clearly shown when speaking in public.

In conclusion, what has emerged in this section is how the four main assignments were interlinked and assisted each other's in completing them. The historical background of a curriculum was important to determine an understanding of the theories applied in that context and why. After having the understanding of the history of curriculum, it was important to know the theories underpinning the curriculum and the reform process, how each theory views knowledge and why a decision was taken to apply them. The identified of a research problem led to a review of relevant literature. The literature review provided better ways of understanding the theories that needed to be investigated in order to inform the research.

Through the research I believe that I have far better understanding of the professional context in which I work, the pedagogy I am expected to model and the theoretical perspectives in which the reform process is located.

