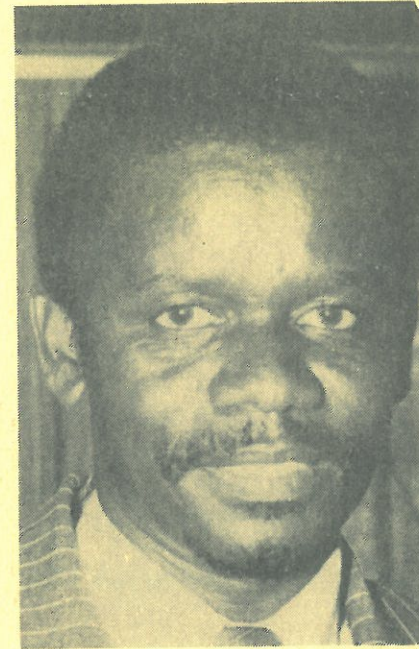


INAUGURAL ADDRESS



PROF D M D MAHLANGU

"Towards a methodology in empirical educational research"

4 November 1987



**UNIVERSITY OF THE NORTH
UNIVERSITEIT VAN DIE NOORDE**

PROGRAMME

10h30

The Vice-Chancellor constitutes the congregation

INTRODUCTION

Chairman of Senate

Prof P C Mokgokong

M.A., D.Litt. et Phil. (S.A.), U.E.D

WELCOME ON BEHALF OF THE FACULTY OF EDUCATION

Prof M C J Mphahlele

B A, B Ed (SA), DEd (Unin), U E D

INAUGURAL ADDRESS

Prof D M D Mahlangu

BA, B Ed (Unin), D Ed (SA), UED

The Vice-Chancellor dissolves the congregation

*The audience is requested to stand while the academic
procession is entering and leaving the hall*

TOWARDS A METHODOLOGY IN EMPIRICAL-EDUCATIONAL RESEARCH

1. PRELUDE

Mr Vice-Chancellor, Senators, Ladies and gentlemen, Empirical Education, commonly known as Educational Psychology in the U.S.A. and United Kingdom, and as Psychology of Education in the rest of European continent, is a very significant part-perspective of Pedagogics, a science of education better known as Education. In fact it is so significant that in many world areas today it forms the nervum rerum around which nearly all other part-disciplines of Education, namely Philosophy of Education, History of Education, Comparative Education, Physical Education and lately even Didactics revolve. In these parts of the world and even in some Universities in South Africa most of these part-disciplines are giving way to Empirical Education and are either classified as auxiliary or supportive services, or just simply discarded.

Ladies and gentlemen, according to Merleau-Ponty (Bekker, 1965) man, and therefore also the child, is a lived-body. Phenomenologically, he reveals himself unto the world through his body. He is part and parcel of his world, an incarnated world, as it were, who can never be wished away from his situatedness. According to Frankl (Ghysbrecht, 1971) man, unlike any other species, has, in addition, a mind or psyche which is the central zone that cuts across consciousness and unconsciousness. Consciousness is, of course, only consciousness when it directs itself to an object. Meyer (1967) calls this directedness, this purposiveness, this intentional tendency of the consciousness intentionality. Rollo May (1975) regards intentionality as a dimension which cuts across and includes both

consciousness and unconsciousness, both cognition and conation. Wentzel and Mahlangu (1985) summarily regards the child as a somatic-psychical-noetic being. Yes, a child is a human being, a person, an openness, a subject an existential self, a unique individual who cannot take on or appropriate another self.

Contemporary education today rejects the rationalistic faith of Alfred Adler and Jean Jacques Rousseau that man, and therefore also the child, if unobstructed, will grow naturally towards a state of perfection. It is quite axiomatic in educational circles today that the very genesis of the self of an individual is to be found in the process of communicative interaction with other human beings (Gordon, 1968). On his own, the child cannot actualise his potential so as to become the human adult self he is destined to be. Hence, according to Oberholzer (1968), the child has an inborn existential need for an adult. Maslow (1971) indicates very strongly that it is nevertheless still the child who must take an active role in his own self-actualisation, that is, developing to the fullest height that the human species can stand up to. Vrey (1984) warns that if the self-actualising child wants to realise future possibilities, he must transcend himself or rise above the apparent limitations of time and space, as well as physical and mental abilities. Such an action, naturally, presupposes a realistic self-concept incorporating objective self-knowledge and evaluation of the self-identity. In the light of this, education may be regarded as a support-seeking-and support-giving relationship between the child and the adult.

Thus the education phenomenon manifests itself as an event that takes place among people, and among people only and particularly where there is already some association between an adult and a child. Empirical Education becomes

the core of the whole exercise since it concerns itself primarily with who the participants are, namely the adult and the child. Further it concerns itself with the what of the persons involved as well as the when of education, namely describing facts concerning the adult as an educator and the child as a self-actualising educand through learning - a process that takes place throughout the developmental stages of the child until maturity.

2. THE SCOPE OF EMPIRICAL EDUCATION

Accordingly the following are the main aspects that make up the field of Empirical Education.

- 2.1 Firstly, the Psychology of becoming or development of the child through learning known as General Empirical Education. This area includes the study of the cognitive, affective, conative and physical development of the child from birth to maturity; the course of the learning act, namely ways of learning, theories of learning, motivation, problem analysis, solution, fixing, retention, knowing and transfer or application of learning results. This area also includes such dimensions as the educator's intellect, affective stability, interests, motivation, attitudes and values as well as his frustration and problems.
- 2.2 Secondly, the social life of the child. The educand unfolds towards adulthood through intentionally directed dialogue with himself, things and others in instances such as the family, the church, the school, the community and the state. This aspect of Empirical Education is known as Sociology of Education.
- 2.3 There is the Psychological Pedagogics of the special child also known as Special Empirical Education. This aspect studies the gifted, retarded and physically handi=

capped children and their education. It also pays attention to measurement of intelligence and special abilities and appraisal and evaluation of the activity of learning.

- 2.4 Then there is the study of pedodiagnosics and pedotherapy generally known as Orthopedagogics and Remedial Education. This area covers personality adjustment and development, the technique of diagnosis and remediation of maladjustment, the problems of handicapped pupils and the mental hygiene of the pupil and the teacher.
- 2.5 There is also school-psychological pedagogics, also known as School Guidance and Counselling. For a normal child to unfold optimally but advantageously towards adulthood, he is given comprehensive guidance and counselling. This includes, inter alia, school maturity and school readiness, the problem of reading for beginners, the problem of vocational orientation, and the problem of design and employment of various methods or pedagogical exploratory media as aids in the pedagogical study of children.
- 2.6 Lastly, Empirical Education is thus concerned with the perceptible, factual, descriptive, experimental and the measurable aspects of the pedagogic situation. This is only possible through empirical-educational research also known as Educational Research Methodology which aims at making a scientific study of the education phenomenon by experience, observation, experimentation, description, analysis and interpretation of results.

Empirical Education is thus not an arm-chair philosophy, but rather it is a practical subject whose practitioners are registered with the Medical and Dental Council as educational psychologists throughout the world. As such Empirical Education helps in the determination, compilation and maintenance of progressive teaching procedures, child guidance programmes and functional forms of organisation and administration. It seeks to cultivate

a growing realisation of the extent to which one may encourage and direct development, impart learning, improve social behaviour and generally develop human potentiality as well as the individual. Consequently it aims at contributing to an understanding of the child and his total education situation in order to enhance the effectiveness of the help and support given him so that he will ultimately be able to give a satisfactory account of himself to himself, his fellowmen and to his Creator. Indeed "... all education is aimed at guiding man towards the realisation of his full potential as a human being and to full development of his talents" (SAPSE 116, pp. 1-2). This is what education as a science is all about and should aim at. It is imperative therefore, that the rationale behind any empirical-educational research, commonly known as its methodology, be in keeping with this aim if education is to be meaningful, worthwhile and true to type.

3. THE CONCEPTS : RESEARCH AND RESEARCH METHODOLOGY IN EDUCATION

Research is a word which came into the English language usage in 1577 from the Old French word "cerchier", meaning to search or seek carefully after a specific thing or person, and the prefix re- meaning again. By the early 17th century, the general sense familiar today had come into use, namely : "An investigation directed to the discovery of some fact by careful consideration, a course of critical or scientific enquiry" (Brink, 1983, p. 4). Scientific enquiry implies the formal application of systematic logical procedures.

When analyzing this definition the following elements of research can be identified. Research is logical and objective, applying every possible test to verify the data collected and the procedures employed. The researcher constantly strives to eliminate personal feeling and preference. He resists the temptation to seek only the data that supports his hypothesis. There is no attempt to persuade or to prove. The emphasis is on testing rather than on proving the hypothesis. The researcher

elevates clear thinking and logic. He suppresses feeling and emotion in his analysis.

In the light of this, research can be regarded as the acquisition of objective, reliable and valid knowledge of all facets of human existence. The scientific nature of research forms the point of departure for a study of methodological research.

According to Garbers (1983, p. 1) the aim of research methodology is to stress the qualitative dimensions of research by identifying strategies and methods by means of which the scientific character and credibility of the results of research may be enhanced. Mouton (1983, p. 10), writing in more or less the similar vein, defines research methodology in the sense of a discipline as "... the study of the logic or rationale underlying the implementation of the scientific approach to the study of reality." Accordingly empirical-educational research methodology may be regarded as the planning, structuring and execution of research to fulfil the demands of education as a science and the identification of important assumptions, concerning education and and research, which play a role (compare Mahlangu, 1987).

4. DEVELOPMENT OF EDUCATIONAL RESEARCH METHODOLOGY IN SOUTH AFRICA

Empirical-educational research in South Africa, as in the rest of Aglophone Africa, was strongly influenced by methodological trends in Europe and the U.S.A. In 1901 Binet, the French physician, was commissioned by the Paris authorities to devise a means of ascertaining mental defect in children at the earliest age possible, so that those children could be given special educational treatment. Binet eventually postulated the concept Mental Age, which he was able to calculate by means of his batteries of tests. Up to this time very little thought was given to practical measurement and first hand study and observation of the child. Literature (compare Ferron, 1984, p. 6) indicates that Aristotle, the Greek philosopher, was

probably the first to attempt to study the mind in a scientific way.

During the second and the third decade of this century, Terman and his colleagues at Stanford University, California, U.S.A. further developed the Binet-Simone Tests by providing the concept Intelligence Quotient (I.Q.) which is basically the ratio of the child's mental age to his chronological age, multiplied by 100. Two very important tests were developed during this time called the Army Alpha and the Army Beta tests. They were later used to allocate appropriately large numbers of illiterate and semi-illiterate European immigrants to various jobs in the armed services during the Second World War.

In the early forties many more psychological tests were being developed in both the U.S.A. and U.K. and used to select students for University entrance, assessment of personality, interests, attitudes, maladjustment, social competence and so on. Researchers in the U.S.A. postulated during this period a hypothesis that the various races of mankind could be arranged in an intellectual hierarchy with the Anglo-Saxon and Nordic races at the top, followed by the South European races, then the orientals and the Negroes at the bottom. Whereas the whole climate of empirical-educational research methodology in Europe from its inception fostered and encouraged school and classroom based research, psychological tests in the U.S.A. were used inter alia to demonstrate the intellectual inferiority of the Blackman, thus subconsciously justifying prejudice and discrimination against the Negroes.

The first notable contribution in the field of empirical-educational research in South Africa was by Dr Fick who compared the scholastic performance of Zulu children and White children using the American Army Beta tests and concluded that :

"... around the ages of 13 and 14 years, native children are from 4 to 5 years inferior to European children in educability as gauged by the results of Intelligence

Tests ... The inferiority occurring in certain tests in which learning or environmental conditions are equalised for the native and European groups does not appear to be of temporary nature ..."

Several other investigations from prominent South African empirical educationists like Biescheuvel, C J van den Berg, F.M. Banks, G.R. Dent, J.C. Ridder and M.J. Goldstein supported this hypothesis. The evidence thus produced during the fifties, the sixties and the early seventies clearly pointed to the intellectual inferiority of the Blackman, and his relative apparent inability to benefit from Western type of education to the same extent as his European counterpart. Whereas there was seemingly no problem in the education of the Blacks in the U.K. and the rest of continent, research (compare Ferron, 1984, p. 18) indicated that in S.Africa as in the U.S.A. there may have been a subconscious need to justify colour prejudice or the need to produced evidence to support unjustice practices especially because it was during this time that the Bantu Education Act was passed to provide a brand of education that was presumably within the intellectual capacity of the Black South African.

During the mid-seventies the tendency has been concentrated on school and classroom based research. This was of great significance to Black education. Several factors could have contributed to this reorientation in methodology. Firstly this change coincides with the 1976 school boycotts which put a very strong national and international spotlight on the Black classroom. Secondly, by this time subsequent research in the U.S.A. and Europe which was dominated by the nature-nurture controversy, the study of twins, foster children, institutionalised children and so on had indicated that the Negros apparent intellectual inferiority was attributed to relative poor environmental influence in home and school, and to the fact that the instruments were not designed and standardised for them. The Human Sciences Research Council made a tremendous contribution in the standardisation of psychological tests for the Black child during this period.

The overall impression of the educational research carried out in South African Universities today is that it has a sound empirical base and is making valuable contributions to practice within the present structures. However it must be indicated that in most non-English speaking Universities in the country there is a tendency to overlook the wider social and political contexts of education especially in Black education. Black states in Africa have inherited foreign educational systems which have been superimposed upon indogenous cultures and their education. The De Lange Report indicates a strong need to overhaul the existing educational system in South Africa and suggests that the soundest basis for change must be matrixed in first hand empirical education research generated locally and the setting up of machinery to implement research findings in the local educational system at all levels.

5. DEPARTMENT OF EMPIRICAL EDUCATION : UNIVERSITY OF THE NORTH

The task of the Department of Empirical Education at the University of the North is challenging, but clear cut. In the light of the discussion so far, it is pretty obvious to conclude that teacher education is a very important item in the proper provision of the education for the Black child. But the whole set of ecological interactions and complex patterns of connection make this case very difficult to handle in a simple straightforward manner imported from Britain or America. The operative premise for teaching is the organisation of both the physical and psychologocal environment within which learning will take place effectively and efficiently. Only teachers of a very high calibre can create and organise a learning environment from which the pupils' potential will blossom. The days of subject teachers and at times even University lecturers who can only enable their pupils to pass examinations whilst sometimes showing a frightening lack of understanding why and how the subjects should be taught, have long gone by.

Today, teachers are expected to possess a deep understanding of the dynamics of social, economic and political life of the peoples of South Africa. They are also expected to know and to use all instruments (tests, questionnaires, audiometers etc) for identifying gifted children, retarded children, visually and auditory dyslexic children, children with behaviour difficulties and so on, and be appropriately equipped to deal with the problematic child in a classroom situation at any time. Over and above these attributes today's teacher should be able to diagnose and remedy such problems. The urgent need for remedial educators, school psychologists (which includes A-test users, B-test users and C-test users) as well as counsellors and pedotherapists cannot be over-emphasized. In fact up till recently we have had representations several times from the immediate homelands addressing these very issues.

This is the kind of teacher society needs today - a teacher who can read research reports intelligently and who can undertake classroom based research in a small scale at least. This is the kind of teacher a university together with the colleges of education in its sphere of influence should produce. Our respective departmental research and that of our M- and D- students as well as our publications in the form of books and articles should follow the same line and we as educationists should stop writing stories about "Dedeya wa deya" or "Nku ena le mamina". Certainly other interested people will definitely take care of that. We need to introduce in our teacher training programme a Diploma in Tertiary Education for local consumption, and who knows, perhaps even an Institute for Educational Research in the long run. This is, of course, the responsibility of the Department of Empirical Education whose chair I now publicly accept. Consequently I wish to align myself with the following four-year teacher-education programme presently implemented in various universities in the country :

- First Year : the politics, philosophy and economics of education (PPE)
 Second Year : the sociology, general psychology and history

- of education (SPH)
 Third Year : the curriculum, technology and special psychology of education (CTS)
 Fourth Year : the management, administration and methodology of education (including research skills) (MAM)

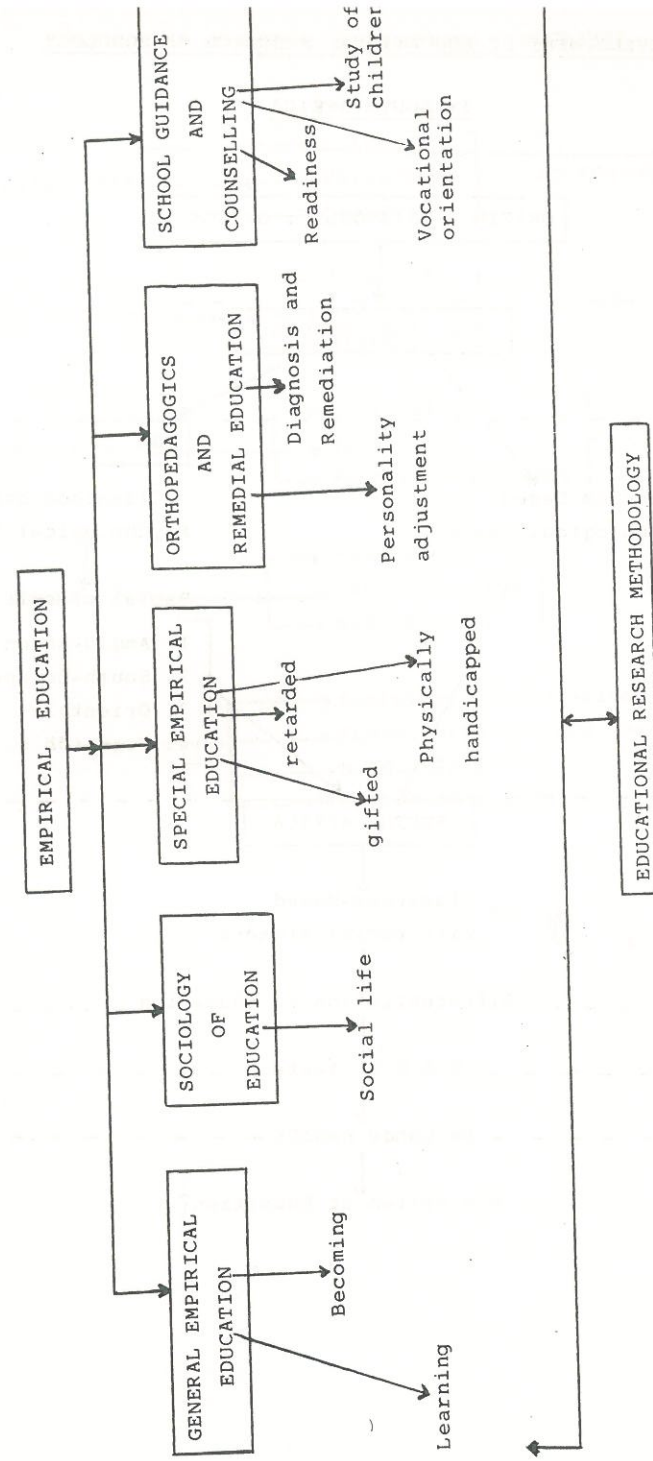
- B.Ed - introduction of Sociology of Education as a course
 - introduction of School Guidance and Remedial Education as an option
 - introduction of B.Ed.(Primary Education) as an option with special reference on the pre-school educational programmes
 - introduction of Gifted Education as an option

Lastly, a well-planned methodology of research should aim at searching for information to elucidate incongruities that history has embedded in the educational arrangement in South Africa and to explore in a searching manner the possibility of one system of education for all. The Faculty of Education as an arm of this University cannot afford to be non-chalant about the national educational crisis problem or pretend that it does not exist or view it with some degree of trepidation. We need to be constantly and consistently in contact with other officially recognised bodies presently involved in this national obligation. We need to replan our methodological strategies and rethink and reorientate our focus so as to produce the desperately needed, useful and relevant research publications. Above all we should also realise that it is the creation of a macro-socio-political climate to provide the context within which the right micro-atmosphere can be established in schools, Universities and communities that will enable education to take place.

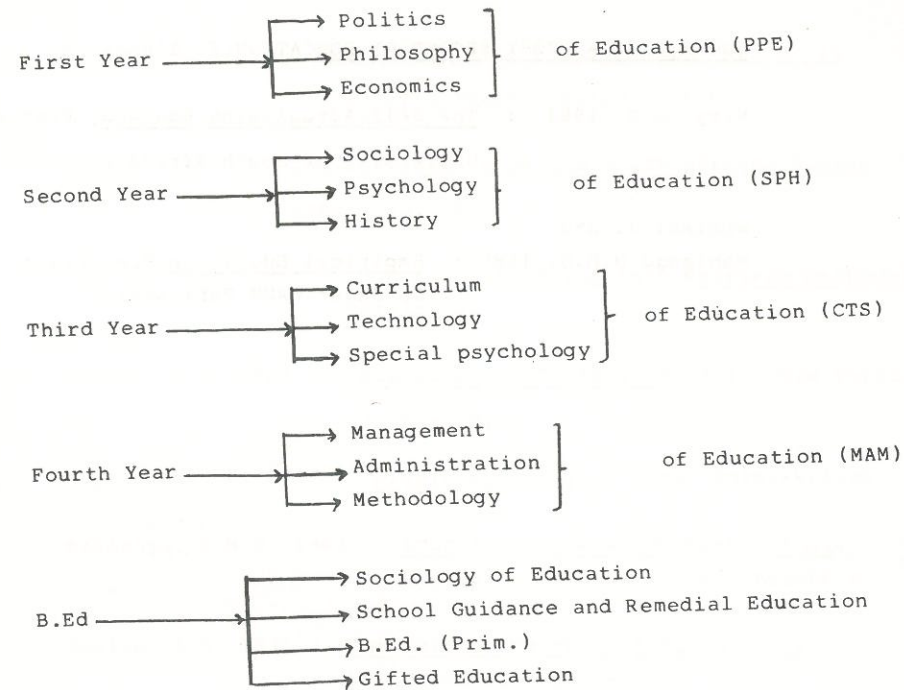
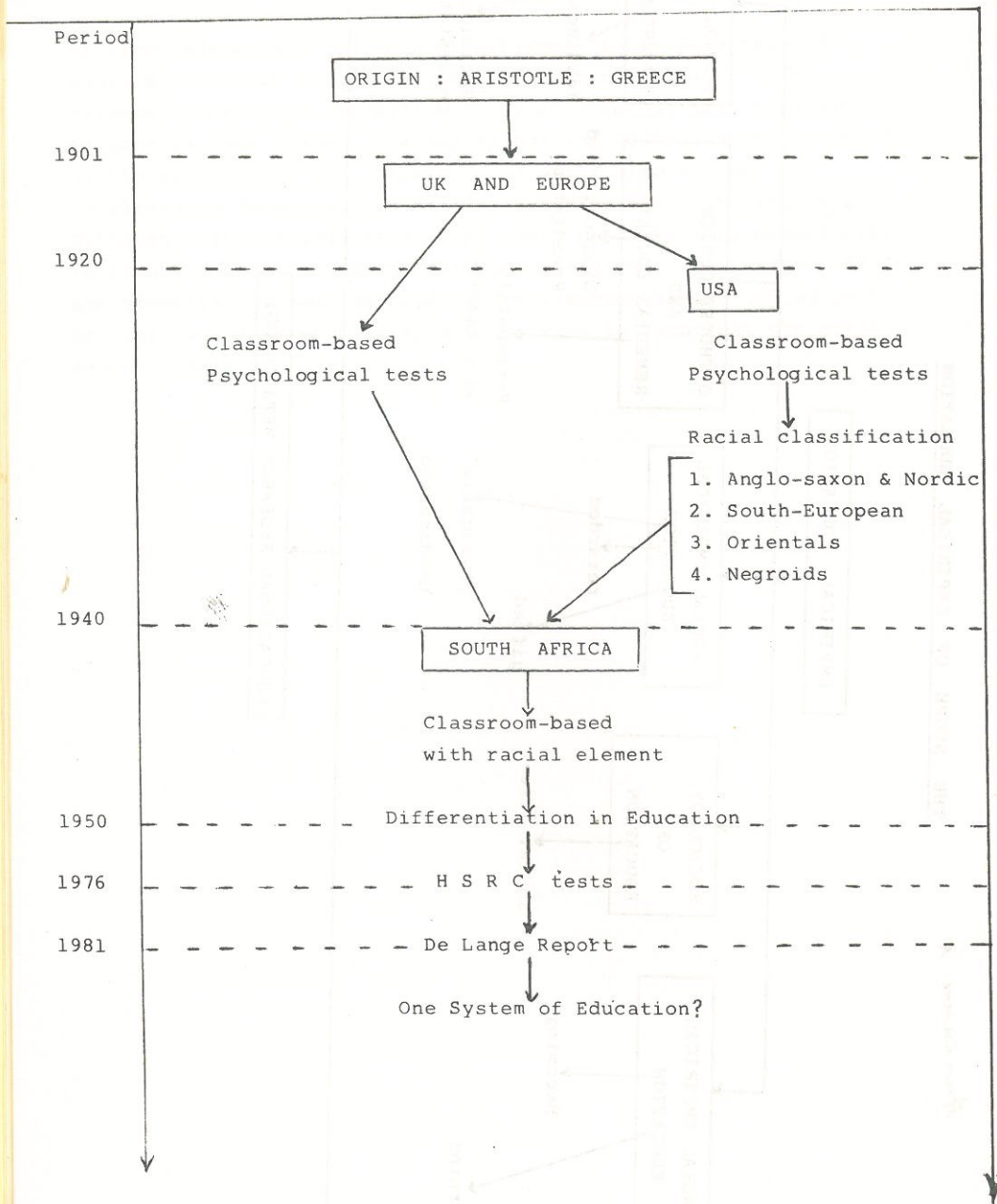
Mr Vice-Chancellor, ladies and gentlemen, in my Department I shall strive with all my ability to train my students to be relevant indigenous research workers of international standard on aspects that concern *the* psychology and education of the child within and without the classroom. I shall also attempt to inculcate in *them* learning skills, teaching and lecturing skills, authorship skills and leadership. Let me take this opportunity to thank my wife, children, parents, management, colleagues and students for your unyielding love, encouragement and support. And let my involvement at this University be such that the world may know Him.

Annexure A.

THE SCOPE OF EMPIRICAL EDUCATION



IN SOUTH AFRICA



SOUTH AFRICAN POST SECONDARY EDUCATION f. 116

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CURRICULUM VITAE

DONALD MAHLEBO DANSON MAHLANGU was born at Arthurseat Nazarene Mission Station on 31 October 1948. He was educated at Arthurseat Primary School and Maripi High School. He proceeded to the University of the North where he obtained his B.A. in 1970, his U.E.D. in 1971 and his B.Ed. with distinction in Comparative Education and History of Education in 1972.

He taught at Orhovelani High School in 1973, but transferred the following year to Hoyohoyo High School where he was a senior teacher in 1974, vice-principal in 1976 and principal between 1977 and 1981. He studied for his M.Ed. degree in Empirical Education with the University of South Africa between 1979 and 1980, his research topic being: "An investigation into the role of second languages on the becoming of the Tsonga child with special reference to the cognitive domain."

He joined the University of the North as a lecturer in May 1981. He studied for his D.Ed. degree in Empirical Education at the University of South Africa between 1981 and 1982. The title of his thesis was: "The influence of reading ability in English on the scholastic achievement of Tsonga children"

He was appointed Senior Lecturer in 1983, Associate Professor in January 1985, Acting Head of the Department of Empirical Education in November 1985 and Professor and Head of the Department of Empirical Education on 1st July 1987.

He has published five articles in educational journals and read eight papers at educational conferences. He is co-author of *Empirical Education* and author of *Educational Research Methodology*. His third book, *Educating the special child*, will soon be published.

He is a member of the General Board of the Church of the Nazarene and represents the Africa Region.

Prof Mahlangu is married to Sinah Nchabele Mahlangu (nee Chiloane) and the couple have two boys and one girl.