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ANTECEDENTS AND CONSEQUENCES OF INSTRUCTIONAL PRACTICE AND SCHOOLING EXPERIENCE - THE DETERMINANTS OF ACHIEVEMENT IN UGANDA PRIMARY SCHOOLS[1]

by
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[1] Shortened version of IEQ/ Uganda Phase II report

INTRODUCTION

1.1 Background.

Uganda, like several African countries, is undertaking systematic study related to educational reform. The need for current educational reform is as a result of the need to shift policy reforms from large education system needs directly to school needs (Heneveld and Craig, 1996). In Uganda, the purpose of research in educational reform is to enable the country to determine "the extent to which the quality of education we are giving has deteriorated and what interventions are needed to put in place to arrest the situation and put education back on course" (Ongom, 1995, p. iii). In effect, Uganda's education system has degenerated from one of the best to one of the worst in sub-Saharan Africa. For instance, 47% of practicing teachers are untrained while pupil participation is characterised by 19% repetition and 34% dropout rates (Kiganda, 1996). In its attempt to improve the quality of education, IEQ's
specific objectives are to:

- contribute to the baseline data on primary education in Uganda
- respond to the information needs expressed by key stakeholders in primary education
- illuminate the progress and impact of efforts to reform and rehabilitate primary education in Uganda
- provide formative information that can feed into the design and correction of interventions and validate policy reforms in primary education
- provide information on the impact of educational reforms and other efforts to improve educational quality as these efforts mature. (UNEB/IEQ, 1996 p 4).

Carasco, Munene, Kasente, and Odada (1996) under phase one of IEQ examined objectives one and two. They identified the following factors to be central in determining the effectiveness of primary schools in Uganda:

- Lack of basic facilities.
- Community involvement.
- Support from educational system.
- Leadership of the head teachers and
- Quality of teachers.

A correlation analysis of the data indicated the teacher factor to be the most important variable in explaining the performance of primary school pupils. This finding corroborates the 1989 Education Policy Review Report "Education for National Development and Integration" which stresses, **inter alia**, the importance of the teacher factor: "There is no educational system better than the quality of its teachers". In recognition of this, the 1992 **Government White Paper on Education** stresses the improvement of conditions and context of teachers' work as a priority area for improving the quality of education at the primary school level.

1.2 Research Problem

This study investigates the antecedents and consequences of the teacher work environment as correlates of achievement in Ugandan primary schools. The work environment is understood as the perception and the reality of the conditions in which teachers work. The antecedents of concern include **educational policies, parent and community supports, children' conditions and school culture.** The consequences of interest are **schooling experience, instructional practice** and **achievement.**

1.3 Research Objectives

The objectives of the study are to:

- collect data to inform primary education policy reform aimed at improving teaching and learning at the classroom and school level.
- identify teachers' problems on work environment
- study the relationship between the conditions and context of teachers' work and their effectiveness.
- focus on pupils' conditions which affect learning outcomes.

1.4 Research Questions

The study focussed on the following research questions to meet the research questions set.

- What problems do teachers find with school managers and the community?
- What teacher characteristics most impinge on achievement?
- What teacher conditions most correlate with achievement in Ugandan primary schools
- How do teachers perceive their work conditions?
- What problems do pupils find with their parents and the homes?
- What problems do pupils find with their school?
- How do the availability and use of instructional materials contribute to achievement?

How does delivery of instruction correlate with achievement?

1.5 Significance of the study

The data provided in this phase of the study will:

enable teacher educators to assess the effectiveness of reforms in per- and in-service courses. The effectiveness of the courses would be assessed at two levels

- The relevance of the changes in primary teachers' education
- The methods used in training teachers in the new changes in education.

- provide information for policy makers, managers of education, teachers and the communities in Uganda to achieve better quality education.
- provide a base for further research into quality primary education.

1.6 Scope of the Study

Theoretically, the study is limited to the context in which the primary teacher is operating, his or her perceived and actual experience of this context, and how these impinge on learning outcomes. In terms of the sample, the study used a representative sample determined in terms of the best and worst performing schools in a district in PLE as per the four geographical regions namely Central, East, North, and West.

1.7 The Conceptual Framework: Teacher Work Environment

The study used a three-factor model that focused on teacher work environment and instructional practice (the teacher factor). The environment is to be understood in terms of the reality and the perception of the conditions in which teachers work. Following the model Heneveld and Craig (1996), we refer to the first factor as **"supporting inputs"**. These supporting inputs include the perceived implemented educational policy at the district level and National level which directly impinge on the work environment of the teacher. They also include the parents and the community of the school where the focus is on the latter's value for formal education.

The second factor is referred to as the **"human factor"** and is composed of school culture, the perceived work environment and conditions of the teacher (Carasco et al, 1996) and children's conditions (Heneveld and Craig, 1996). School culture (Heneveld and Craig, 1996; Carasco et al, 1996) is defined to a large extent by the leadership of the headteacher and other senior staff. It is reflected by the relationship between staff and pupils and it is shaped by the perception of the leadership, the teachers, and the pupils about rewards and incentives or lack of these (Carasco et al. 1996). An interactive relationship is proposed between teacher work experience and the conditions of the children when they arrive at school and during school. Children's conditions are considered in terms of learning readiness, health, and nutritional status. The interactive relationship implies that the teachers perceive their kind of work in terms of the characteristics of the pupils and the pupils readiness is to some extent shaped by what they interpret the lifestyle of their teachers to be. School culture, teacher experience, and children's conditions individually and in combination influence instructional practice and the schooling experience of children. Under the third factor, **"Practice"**, schooling experience is akin to teacher work environment as defined in this study. It depicts the children's understanding of the school set-up, their evaluation of their role in the school, their overall evaluation of being a pupil with specific obligations such as doing home work, providing labour at school, and being able to play and learn at school (Carasco et al, 1996). Instructional practice includes the tasks of the teacher which are directly related to the planning and delivery of knowledge such as managing pupils in the classrooms, setting and marking assignments and evaluating pupils. Instructional practice and schooling experience influence the learning outcomes. See Fig.1.)

1.8 Literature Review

It is generally accepted that improvement of teaching and learning are the result of a combination of policy, professional culture and practice, as well as student and family educational resources and values (Furham, 1995; Cohen, 1995).

1.8.1 Educational Policy and School outcomes

Educational policy at both national and local/district is central in the improvement of educational quality (Gardner, 1985). Whitehead (1993) discusses how "the crisis of confidence in school effectiveness has pushed education to the top political agenda" . Kirst (1995) has reviewed the role of policy, through intergovernmental relations, in making improvement at school level. At the national/central level, planners and politicians set goals, control and fund manpower allocations. At the local level, agents of change such as district education officers, head teachers and teachers modify the policies set to suit local conditions including changing the curriculum. They may also influence the quality of education by failing to make the necessary local policy adjustment (Gardner, 1985).

Making or failing to make the necessary adjustment to policy at the local level may often have to do with the teacher factor as understood in this study. According to Gardener 1985), important local policy interpreters include experienced teachers in pivotal administrative posts who may be involved in the initial and in service training of teachers. At both national and local levels, therefore, both school culture and teacher work environments are directly related.

1.8.2 Parent/Community and School Achievement.

Another correlate of school outcomes is the role of the parents and the community (Heneveld and Craig, 1996; Carasco et al, 1996). The parents support the school achievement cognitively (Lockheed and Vespoor, 1991) by providing a mentally stimulating environment. Carasco et al, (1996) found that the best school was also the school where the community provided material support and valued formal education. Cohen (1995) has referred to this aspect of community support (value for education) as social resources of practice. He asserts that the performance of teachers will vary according to how they perceive the effort they put into instructional practice is valued by the community. If for instance teachers perceive that society does not value a highly accomplished learner, the teacher make little effort to produce proficient pupils.

1.8.3 School Culture and School Performance

School culture is to be understood simply "as the way things are done here" and is considered to be very much a relation of reflection of leadership quality and the school character (Schein, 1985). "It includes the use that is made of what resources are available- the classrooms, grounds, and instructional materials. It includes the quality of the teacher staff, the level of order and discipline in the school-as indicated by the observance of a daily schedule. It is also reflected by the

relationships between staff and pupils and the expectations that teachers have for the pupils. It is shaped by the perception of the leadership, the teachers, and the pupils about rewards and incentives. or lack of these" (Carasco et al, 1996 p.13). They found that a combination of aspects of school culture was the single most important correlate of school performance. These aspects included presence of the headteacher, headteacher time keeping, school starting on time. and whether timetables were followed.

1.8.4 Teacher Work Environment and School Effectiveness

While those findings confirm the importance of the school culture in performance, they, in addition. singled out the pivotal role of the teacher, whether headteacher or otherwise, in any reform. Cohen (1995) has been succinct regarding the centrality of the teacher factor. He asserts that the success of educational reform depends on:

- Teachers' awareness of new policy
- Teachers' attitudes toward the reforms
- Teachers' incorporation of reform ideas in daily conversation
- Teachers' professional values and commitment
- Teachers' knowledge of the subject matter

Carasco et al (1996) confirmed some of these assertions and, **what is more important, showed that such characteristics of teacher are directly influenced by the way the teacher perceives her/his working environment.** In effect, it is the teacher's experience of his or her working environment and conditions that determine those on which reform effort is dependent to increase school effectiveness.

1.8.5 Children Conditions

Heneveld and Craig's (1996) comprehends summary of school related literature for instance singles out children conditions but fail to discuss it as a measure of community involvement. A similar shortcoming was reflected in the priorities outlined by stakeholders in Jinja (see for instance Report on Uganda Improving Educational Quality, Project Launching Forum, (1995).

1.8.6 Instructional Practice and School Outcomes

A consensus exists in the literature that instructional practice or teacher classroom behaviour is a significant determinant of learning (Dradri, Aser, and Patry, 1990). The instructional practices that are found significant include quantity of instruction, orienting, teaching, assessing, and evaluating. and managing students (Anderson, 1987). These behaviours lead to what children actually do at school referred to here as "schooling experience"

1.8.7 Schooling Experience

Carasco et al. (1996) has implied that schooling experience is also related to the school outcomes

especially where girls are concerned. A general absence of studies regarding the role of children in school reforms hinders a critical analysis of the role of schooling experience.

1.9 Hypotheses

The study set out to test the following composite hypotheses.

- There is a relationship between teachers, work environment and school performance.
- There is a relationship between teacher characteristics and school performance.
- There is a relationship between schooling experience and pupil performance.

METHODOLOGY

2.1 Area of Study

The entire country was regionally covered to gain insights into the influence of the teacher factor in primary education throughout Uganda. This was by studying a representative sample of primary schools. Two districts were used in each of the four geographical regions (Central, Eastern, Northern, and Western). A total of nine districts including Kampala were used. The primary schools sampled were all Government aided schools with basic physical facilities and trained teachers.

2.2 Research Design

The study used a cross-sectional survey design flexibility along with Participatory Learning Analysis (PLA) giving opportunities for considering several aspects of the teacher factor in achievements in primary schools. The survey design was a 2 x 2 design (Best performing- Worst performing or Good-Poor divide by urban-rural divide) taking districts and primary schools as explained. Both qualitative and quantitative methods and techniques were used.

2.3 Sample Design and Selection

The districts in each region were selected on the basis of the best performing and worst performing districts in the PLE for the last four years (1995,1994,1993 and 1992).. Within each district, four schools were selected, one best performing urban school(urban good), one worst performing urban school(urban poor), one best performing rural school(rural good), and one worst performing school(rural poor). A total of 36 primary schools were selected from the districts of Apac, Bushenyi, Iganga, Kampala, Kasese, Kumi, Lira, Luwero and Mpigi.

The 36 schools were selected on a per-fieldwork visit by the principle researchers. In each of the districts, the schools were selected in conjunction with UNEB, District Education Officer, and District Inspector of Schools. In each school, the classes used in the study were: P2, P4 and P6.

For each school, in each of the three classes, six pupils were selected by the headteacher representing a range from high, medium and low performers with three boys and three girls. A total of 18 pupils per school were interviewed in PLA in two sets divided between the sexes; and were also tested in literacy and numeracy (648 pupils covered). Classroom observations were carried out twelve times for each of the four subjects (English, Mathematics, Science, and Social Studies) at P2, P4 and P6 (417 observations were done).

The teachers physically available in each school during the fieldwork were included in the study. A total of 511 teachers altogether filled out questionnaires and also participated in PLAN in two sets of teachers divided between the sexes. The 36 headteachers were also interviewed and given questionnaires to fill. Five adults from PTA and SMC executives for each school were interviewed (180 persons cover).

The sample used was considered to be sufficiently representative of the entire country.

2.4 Measurement

Several variables were measured using both qualitative and quantitative strategies but focusing on the following: Implemented Education Policy; Community Value of Education; School Culture; Teachers Characteristics; Teacher Work Environment; Teachers' copying Strategy in Work Environment; Children's Conditions; Schooling Experiences; Instructional Practice; PALE; and Literacy and Numeric Tests. Nevertheless, some indices were also developed in analysis and were used to understand teacher burn out and pupil performance. Teacher burn out covered teachers' work environment and teachers' copying strategy.

Under Teachers' Work Environment the indices are:

(1) PROFSAT INDEX: Professional Satisfaction Index refers to items showing that teachers are satisfied with professional resources such as presence of guides, textbooks, instructional materials, facilities, furniture etc.

(ii) WKSTRAIN INDEX: Work Strain Index refers items depicting the harsh leadership (dictatorial) style of headteachers.

(iii) WELFARE INDEX: Welfare Index refers to teachers' accommodation, salaries, incentives and medical care.

Under Teachers' coping strategy the indices are:

(I) RECYLEN INDEX: Recycling Notes Index is about teachers who rely on old notes such as those from their PTC days and those collected from other teachers.

(ii) HELPLESSNESS INDEX: Helplessness Index refers to the teachers' inability to deal with the

schedules. For instance although schools opened on time classes rarely started or ended when they should have done. This replicates the finding from an earlier study (see Carasco et al, 1996).

4.2 The school visited in this study were purposively selected to include only those with basic physical facilities such as offices, classrooms, staffrooms, stores and play fields. Nevertheless we found a marked shortage of libraries, general lack of water and a poor physical state of classrooms.

4.3 With regard to instructional materials, the situation varied from school to school, but the general picture is a general shortage in lower primary (P1-P4). By subject, only Science was found to be slightly above average, followed by English with SST as the least stocked subject (Tables 3,4,5,6). The schools were generally well stocked with teachers guide. However there were marked shortages in lower primary (P1 -P4).

4.4 The study confirmed the importance of PTA in primary schools. We found that there is consensus regarding what role it has been playing and what roles it should take on. Significantly the resource acquisition roles including mobilising funds, building school buildings as well as buying books were singled out as roles that the PTAs are not only playing but they should continue to perform.

4.5 Despite the PTA's high level of involvement in school management, the teachers and the pupils in the schools we visited reported that the community had a negative attitude towards education. Female teachers for instance indicated that they are particularly detested by the parents of children they teach, and the community they live in. The situation is aggravated by their own headteachers' attitudes. The PLA data both the male and female teachers agreed that their most important problem is that teachers are underrated by parents and the community.

4.6 The pupils reported that their parents do not cater for their basic needs. That they abuse them, that they overloaded them with domestic responsibilities. In many cases, pupils cited shortage of food and lack of basic requirements such as bedding and clothing. Their problems where in some cases aggravated by alcoholic and step parents.

4.7. While at school, the pupils were found to go through various experiences that tended to affect their performance. These included, amongst others, frequent beatings, shortage of textbooks, lack of furniture, poor physical state of classrooms and manual labour. The pupils also considered many of their teachers unfair, demanding, unkind, and disinterested in teaching.

From factor analysis we identified three constructs that summarise childrens' experience at school. Two of the experiences /constructs related to teachers. The other described relationship among children. The construct relating children with teachers were teacher

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