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IMPROVING EDUCATIONAL EQUITY FOR GIRLS
THROUGH DISTANCE EDUCATION

by

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BACKGROUND

Universal education for girls is a principal goal of educational policy in developing countries. But despite dramatic growth in the numbers of schools and students in these countries, universal schooling for girls remains an elusive goal. Fewer girls go to school than boys, and girls tend to drop out earlier than their male peers. Gaps in enrolment and participation rates between males and females widen at the secondary and tertiary levels of education. The small number of females graduating from higher educational levels is reflected in their underrepresentation in technical and professional positions.

The economic and societal benefits of educating women have been well documented by research. ". . . there is a sizable literature that shows positive correlations between educational attainment and other desired outcomes such as increased earnings and productivity. . . Others show that educational attainment of women is positively related to reduced fertility, improved family health, and attributes of mothering".¹ Yet, few governments have special policies designed to directly enhance the provision of education for girls.

PURPOSE OF PAPER

The purpose of this paper is to discuss the role distance education programs can play in supporting governments' commitments to educational equity for girls, particularly at the secondary and tertiary levels. The paper begins by identifying critical factors

affecting girls' access to and perseverance in educational programs in the light of available research. Those factors which can be affected by a distance education program are then highlighted and discussed. Finally, attributes of an effective distance education program are presented which focus on incentives for girls' participation and completion of educational programs. While distance education programs and the specific incentives discussed in this paper will potentially improve both boys' and girls' educational opportunities, the emphasis is upon programs which specifically address the special needs of girls.

FACTORS INFLUENCING FEMALE EDUCATIONAL ACCESS AND PERSEVERANCE

Studies on female access and perseverance in educational systems in developing countries have identified a number of key factors which influence whether females attend school or not. The focus of this paper is on the factors that can be affected by educational policy. The factors fall into two broad categories: those directly related to the household or school itself and factors that are related to broader socio-cultural issues. While each of the factors may not be generalizable to the settings of every developing country, they have been found to be important in many countries, and therefore, merit serious attention by educational policy makers.

HOUSEHOLD AND SCHOOL FACTORS

SOCIO-CULTURAL FACTORS

Existence and Proximity of School
Economic Status of Family
School Schedule
Curriculum Relevance
Teacher Gender

Values and Attitudes
Towards the Role
of Women
Job Availability
Equitable Pay Scales

HOUSEHOLD AND SCHOOL FACTORS

Existence and Proximity of School

Evidence from studies in a group of African countries, Egypt and Nepal indicates that children are less likely to enroll and participate in schools which are far from their homes and girls are more likely to be affected by distance than boys.² The findings reflect the situation in many developing countries, particularly in rural areas, where it is more acceptable for boys to travel distances than girls.

Economic Status of Family

Poverty is another critical determinant of school enrolment and retention. Based in the data she collected, Anderson states, "In all countries, children of poorer families are less apt to attend or complete school than children of families who are better

off."³

The hidden costs of schooling can make even seemingly low-cost schools inaccessible to children. Research carried out in Kenya indicates that in the low-cost schools, which are primarily boarding schools due to low population densities, children are required to provide their own beds, bedding and eating utensils in addition to paying the boarding fee of approximately US\$20.00.⁴

When such "extra" costs are required, the effect of poverty often has differential effects on boys and girls. Poor families may be more likely to invest in education for their sons rather than their daughters, particularly when they are not convinced of the benefit of educating girls.

In addition to school costs, many parents cannot afford the opportunity cost of sending their daughters to school. Traditionally, girls are responsible for the bulk of daily household work including caring for siblings, fetching water, firewood and preparing meals. Research from Egypt and Somalia, reflecting the situation in many other countries, shows that most girls drop-out of school because of the cost of education and/or the need for their labor at home.⁵

School Schedule

Most schools operate during the daytime, a schedule which limits the opportunity to attend classes for students with household or outside work responsibilities. Supplementing or adjusting the school schedule to include split-shifts or additional

evening classes can have a great affect on attendance. In India, for example, Naik found that night classes held after girls complete work and clean up after the evening meal resulted in much higher attendance than expected by program planners. Further, the level of interest in girls' education increased in the community.⁶

Curriculum Relevance

Another factor limiting girl's school enrolment and attendance is that in many countries, formal education is not perceived as relevant to girls' lives and responsibilities. Often, curricula do not build on childrens' life experiences, and instead are overloaded with facts and new vocabulary words. In addition, the texts themselves are often gender biased, reinforcing the sexual stereotyping of females as mothers and homemakers.

Teacher Gender

Several studies indicate a positive relationship between the number of female teachers in schools and girls' attendance.⁷ This correlation may be due in part to the effect of teachers acting as role models for female students. Female teachers may also be more likely than male teachers to involve girls in classes and understand their special needs.

SOCIO-CULTURAL FACTORS

Household and school barriers to girls' full participation in educational systems are often compounded by restrictive values and cultural attitudes concerning the proper role of females in society. Potentially, such attitudes can be positively affected by government policy.

The barriers created by attitudes limiting women to sexually stereotyped work activities can potentially be affected, for example, if opportunities are created for employment upon school completion. Research from Chile, Malaysia and Tunisia shows that when employment is available to women, they go to school.⁸ Reducing discrimination in pay scales can further increase women's motivation to attend and complete school.

DISTANCE EDUCATION TO IMPROVE EDUCATIONAL EQUITY FOR GIRLS

Distance education programs can address in a comprehensive and relatively rapid way, each of the household and school related factors summarized above which traditionally limit the full participation of girls in schools.

Location

The most distinguishing feature of distance education is that it eliminates the need for an accessible school. Depending on the particular program, lessons are completed either individually in the student's home or in groups at the home of a student or facilitator.

Distance education can be an excellent option for expanding the reach of primary and secondary education as well as training and professional programs. A radio-based distance inservice course in Nepal, for example, offers a realistic alternative to attending month-long seminars for many women teachers in the country. Because the bulk of instruction is completed through radio-based instruction with supporting printed materials, trips to the training center - problematic for many women teachers because of family responsibilities - are significantly reduced.

Economic Status

Distance education programs can be an affordable and realistic alternative for girls who must combine school and work. Classes can be held in the evenings when girls are free from household responsibilities and costs are usually limited to the purchase of pencils and paper.

Schedule

A radio or television-based distance education program can be scheduled when the majority of targetted women are free from other responsibilities. Correspondence and audio-cassette-based programs, of course, allow the learner the greatest amount of freedom to decide when they want to study.

Relevance of Curriculum

The curriculum content of a distance education program, like any curriculum, can be written so that it is closely related to the specific skills and information needed by the majority of learners.

Teacher Gender

In many countries, the number of female teachers particularly at the secondary and tertiary levels of an educational system is very small. Radio, television and audio-cassette-based programs can easily ensure that females provide important teaching, leadership and professional role-models to students in each lesson.

ELEMENTS OF SUCCESSFUL DISTANCE EDUCATION PROGRAMS

Program experience and research indicate several elements that are critical to the success of distance education programs. Four of the most important elements are:

- (1) The appropriateness of the instructional delivery system;
- (2) The quality of the courseware used;
- (3) The cost of program development and implementation;
- (4) The presence of explicit incentives to ensure the participation and completion of the targetted population.

Delivery System

The range of modalities available to deliver distance instruction is enormous. Correspondance, radio, audio-cassettes and television are among the instructional delivery systems which have been used with varying degrees of success at all levels of education.

Quality of Courseware

Distance education programs allow for great scope and diversity in the way in which lesson content is presented. Careful thought and attention to modern pedagogical techniques can ensure that learner interest is maintained and lessons are clearly understood.

Methods such as interactive radio instruction (IRI) should be considered for audio-based distance education programs. IRI has a successful record in many countries for delivering instruction in a way which engages students in their own learning while fostering creativity and a spirit of inquiry. The IRI approach incorporates principals such as segmented lesson structure, active student participation and rigorous formative evaluation. These programs have been successful in raising the achievement of primary level students in formal and nonformal settings and in training inservice teachers.

Program Costs

Distance education programs have the potential to cost significantly less than traditional education or training programs. Low recurrent costs for governments are more likely to result in lower costs for students as well as improved chances for program institutionalization in the country.

Critical determinants of development and implementation costs for a distance education program include the level of capital-labor substitution taking place, program development requirements (a program adapted from another will cost less than one being newly developed), the level of infrastructure in the country (e.g., postal system or broadcasting facilities), and the amount and type of technical assistance needed.

One source of cost data is from a teacher education program in Tanzania. The program included an initial six-week residential course followed by radio program supplemented by correspondence materials to be completed while participants were working in the field. Further residential courses took place at (unspecified) intervals during the year. Costs for the project were about one-quarter the costs for more conventional training.⁹

In another study of two distance teacher training programs in southern Africa, Taylor noted the importance of considering opportunity costs when carrying out cost analysis.

"If estimates of the real costs of student time in full-time secondary or pre-service teacher education or full-time residential INSET (inservice teacher training) were included in the calculations, then the picture would be very different and teacher upgrading by distance teaching would clearly be

seen as cheaper than any realistic alternative strategy for replacing or upgrading unqualified teachers." ¹⁰

The RADECO project in the Dominican Republic is a radio-based basic education program targeted especially towards boys and girls who are unable to attend regular schools because they must work during the day. Recurrent costs have been estimated to be \$15.79 per pupil per year. This amount is approximately 50 percent of the cost per student in the formal student system.

Incentives

This paper focuses on the last element important to the success of distance education programs, incentives, because they are often overlooked by program planners. Too often, it is assumed that a good system will automatically draw students to participate and complete the program offered. Many excellent programs have failed, however, because explicit incentives were not built in to ensure that the targetted population participate in the entire course of study. The provision of special incentives is one way to address the socio-cultural factors which traditionally restrict womens' choices and opportunity in education and the professional world.

Formal recognition in the form of a degree or certificate of accomplishment is an important incentive which can be provided by policy makers. Without such formal recognition, a distance education program is unlikely to reach the students it targets.

Formal certification for distance programs is also important

if the programs are to have the same status as traditional programs. To avoid the perception of a distance education program being "second-rate" to a formal program even when it may offer excellent instruction, it is necessary that certification is offered which is comparable to that issued by the formal system. Indeed, a distance education program for girls that does not result in degrees or certification comparable to those available in the formal system runs the danger of reinforcing and deepening the gender disparities which the program seeks to dispell.

Distance education programs can also be linked to increased salary. Inservice teacher training programs, for example, can offer salary increases for graduates upon successful program completion.

Another incentive for program completion is linking program graduates with jobs. Program graduates, for example, could be offered job counselling, internships or preferential placement in selected jobs.

Offering better promotion prospects or increased professional responsibilities to graduates of distance-based professional programs are further incentives for program completion. If program completers are offered better opportunities for upward movement in their professions, they are likely to be more motivated to complete their program of study.

Disincentives can be more damaging to a distance education program than no incentives at all. Examples of disincentives to participation and completion of a program include the following:

- (1) Charging a fee which is unaffordable to the majority of

targetted students;

- (2) Programming unrelated to the actual needs of the students;
- (3) Requiring overnight or extended residential periods without provision of affordable childcare;
- (4) Asking students to pay for materials;
- (5) Asking students to pay for their own meals while attending a residential part of a course;
- (6) Use of unobtainable or unrelated support materials;
- (7) Use of unfamiliar language.

Further research is needed to more closely investigate how different incentives work in particular settings and why, in order to estimate their effects. It is clear from the experiences of distance education programs and available research, however, that unless students are provided with something tangible upon program completion, such as a certificate or increased pay, they are unlikely to be motivated to participate in and complete the entire course of study.

CONCLUSION

While research and development should be critical components of any educational policy, enough information is presently available to guide governments in creating policies to enhance educational equity for females. This paper has focussed on distance education as a policy option which can significantly expand and improve educational opportunities for girls. Such programs can

address in a comprehensive manner the most important obstacles to womens' participation in education - lack of access to schools, poverty, inflexible school schedules, irrevelant curricula and lack of female teachers.

Distance education programs can be designed for any level of education or training and a variety of instructional modalities have already been tested in countries throughout the world. Use of appropriate instructional modalities combined with quality programming and the provision of tangible rewards upon completion of distance programs are all elements which will make programs both accessible and acceptable to girls and their parents.

FOOTNOTES

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3. Anderson, 1988. p.9.

4. Nkinyangi, John. "Access to Primary Education in Kenya: The Contradictions of Public Policy", Comparative Education Review, June, 1982, pp.199-217.

5. Robinson, 1986.

6. Naik, Chitra. "An Action-Research Project on Universal Primary Education - The Plan and the Process" in Women's Education in the Third World: Comparative Perspectives, Gail Kelly and Carolyn Elliott eds. State University of New York Press, Albany N.Y., 1982, pp.152-172.

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10. Taylor, D.C. "The Cost-Effectiveness of Teacher Upgrading by Distance Teaching in Southern Africa". International Journal of Education Development, No.3, 1983, p.19.

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