Education in Tanzania with a Gender Perspective

Summary Report

Editors

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Patricia Mbughuni

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SIDA -RESA

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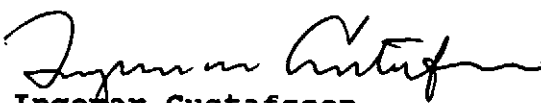
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S I D A

PREFACE

Sweden has supported education in Tanzania since
Tanzania's the mid 1960's, the support being
directed to the primary, adult and vocational
education subsectors. By 1990, over 580 million
Swedish crowns have been disbursed and the support
is continuing.

Over the same period, with strong political
leadership and massive support at local level,,
impressive progress has been made in building up
the education system with an emphasis on basic
education. By the mid-1980s, over 80 per cent of
children were provided with primary school places,
and the majority of adults had acquired basic
literacy skills. These results have been
negatively effected by the current economic crisis
in Africa, but a substantial part of the progress
has been maintained and the basic structures are
in place for the provision of education for all in
in the coming decades.

In this report, education in Tanzania is looked at
with a gender perspective. With financial support
from SIDA's Women in Development department, a
group of Tanzanian researchers has made a
comprehensive review of the position of women and
girls in the education system. The first full
length report from the research group has been
distributed in a limited number of copies mainly
in Tanzania. This summary report is given a wider
distribution in SIDA's Education Division Document
series. It is the first report in the series to
concentrate exclusively on the gender aspects of
education. This reflects the increased importance
given by SIDA to women and girls as a target group
for education support.

The report is intended not only to be read as a
study of women in education in Tanzania, but also
as an input into a more general debate on the
gender aspects of education. In this connection it
should be noted that the opinions expressed in
this report are those of the authors and do not
necessarily reflect those of SIDA.

Ingemar Gustafsson
Head, Education Division.

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ACKNOWLEDGEMENTS

THE PRODUCTION PROCESS

As the production process for this work was innovative and unorthodox, it is worthwhile to point out procedures, methodology and responsibilities.

The work was produced in two stages. During Stage 1, from February to August 1990, the team produced the first two drafts of the manuscript, under the leadership of Coordinator Marjorie Mbilinyi, who also edited the manuscript. During Stage 2, from December 1990 to May 1991, the team produced the Summary Edition of the manuscript under the coordination of Patricia Mbughuni, who also edited that edition.

The study was constructed on 2 levels: a general discussion of gender issues in education, and studies of 4 sub-sectors. A series of team workshops were the core of the collective production of the first draft. References were exchanged, ideas aired, discussed and debated, sections added or deleted according to team views. During this first stage, the team shifted its focus from the documentation of gender-typing in education to a concern for the transformational potential of education. This concern informed the Resource Persons' Workshop held in July 1990, where the

first draft of the report presented preliminary findings for discussion. The experience and insights of participating transformative teachers, intellectuals and academicians, as well as the personal testimonies presented for each sub-sector, were incorporated to form the second draft entitled Education in Tanzania with a Gender Perspective. This second draft in turn became the basis of the Summary Edition.

The editors are now preparing for a third stage to revise the full study for publication in book form.

ABOUT THE AUTHORS

Marjorie Mbilinyi is a Professor of Research at the Institute of Development Studies, University of Dar es Salaam. She has published books and articles extensively on gender-related issues and on education and employment.

Patricia Mbughuni is a Senior Research Fellow now on leave from the University of Dar es Salaam to work as an Advisor to the Women's Desk of the Small Industries Development Organization. She has published on gender aspects of culture and small scale enterprises.

Ruth Meena is a Senior Lecturer in the Political Science Department of the University of Dar es Salaam. She has published work on gender issues as well as international relations.

Priscilla Olekambaine is Assistant to the Commissioner of Education, Ministry of Education. She has served in various capacities to promote women and has written on and presented gender issues in a number of forums.

ABBREVIATIONS

BOS	Bureau of Statistics
BWBRALUP	Workshop on Women's Studies and Development, UDM, September 24/29 1979
BRALUP	Bureau of Resource Assessment and Land Use Planning, UDM, now Chama cha Mapinduzi, Tanzania's National Party
ERP	Economic Recovery Programme
ESARUP	Eastern and Southern African Universities Research Project
ESR	Education for Self-Reliance policy
EVAWWAP	Evaluation Workshop on Women's Advancement Programme by Ford Foundation, 14-16 December 1981
FDC	Folk Development College
IDS	Institute of Development Studies, UDM
IDM	Institute of Development Management (Mzumbe)
IIEP	International Institute of Educational Planning
ILO	International Labour Organization
IMF	International Monetary Fund
MoE	Ministry of Education
MoL	Ministry of Labour, Cooperatives and Community Development
NGO	Non-governmental organization
NVTD	National Vocational Training Division
PPTC	Post Primary Technical Center
PSL	Primary School Leaver
PSLE	Primary School Leaving Examination
RPW	Resource Person's Workshop
SIDA	Swedish International Development Authority
SIDO	Small Industries Development Organization
SUA	Sokoine University of Agriculture
TAMWA	Tanzanian Media Women's Association
UDM	University of Dar es Salaam
UPE	Universal Primary Education
WEG	Women Expert Group
WRDP	Women's Research and Documentation Project

EXECUTIVE SUMMARY

The objectives of this review were to summarize and assess critically the available knowledge on women in the educational system, specifically primary, secondary, adult, vocational and technical education, and to map out implications for support policy such as orientation of support, areas of emphasis, needed research and appropriate methodologies. This Summary Edition has focused on highlighting issues, rather than documenting or summarizing the debates. A fuller discussion can be found in the Original Report.

The review has approached its evaluation of the educational system with three yardsticks. Equity participation is a traditional yardstick which can utilize numerical or quantitative indicators such as access, enrolment, and performance. A second yardstick expands equity considerations to include qualitative aspects of the curriculum, gender-streaming, and pedagogy to measure the extent to which education has contributed to alleviating basic societal constraints hindering women, specifically the oppressive gender relations seen in the gender division of labour, the unequal access to resources, and women's subordinate status within patriarchy. Related to this, the team placed increasing emphasis on evaluating the educational system from the point of view of its transformative potential, its effectiveness in changing or encouraging change in oppressive gender relations both within and without the school environment.

The review team found that the principles of education for adaptation have tended to dominate the education reform process ever since the colonial period: the success of the Tanzanian education system is measured by the scaling down of expectations of students, and their willingness to adapt productively to the world of work, whether as waged labour or improved farmer. Such adaptive policies have meant the further entrenchment of women in the status quo of oppressive gender relations. In contrast, the principles of liberating or transformative education aim to raise peoples expectations and consciousness, their ability to engage in critical and creative thought, and to increase their capacity to directly control the economy, the government and all other institutions. For women as well as other oppressed groups, such transformative or liberating education is a tool for empowerment. It is in womens interest to become critical of reality, to imagine the possible and to struggle achieve transformation and equity.

The failure to bring true transformative education has affected women in particular. Gender discrimimination and differentiation persists at all levels of the formal education system, in spite of government efforts to promote equity in its social policies. Women have had less access to education in terms of quantity of enrolment, they tend to be concentrated in gender stereotyped subjects, and they continue to have less access to higher positions in the labour market and household economy, as well as decision-making at all levels, including the educational hierarchy. The school learning and teaching process, including pedagogy, continues rely on authoritarian methods and the school environment is marked by macho elements of rough competition and physical punishment.

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ENGENDERING CHARACTERISTICS OF THE SCHOOL SYSTEM

Characteristics which are a result of oppressive gender relations or which further entrench women in them are called "engendering" characteristics (see Duncan 1989). The former refers to those characteristics which reflect the past or present status quo, the latter to those characteristics which further that status. As such, both past and present interlock to preserve a continuum of gender bias.

Primary Education

As girls' enrolment in primary school reached a par with boys by 1986 due to the UPE programme, major emphasis needs to be placed on qualitative aspects of this level of schooling. Girls' performance, as measured by the final examinations in Std 7, has continued to be lower than boys' in all subjects, including language. This is an alarming state, as girls commonly perform better than boys in primary school, especially in language skills.

The curriculum structure and content has still not been able to become truly transformative, despite radical rhetoric of the post-Arusha Declaration Education for Self-Reliance policy. ESR called for a curriculum reform reintroducing manual and agricultural content and was to equip students with basic skills needed for a terminal education as well as skills in critical thinking and analysis. The curriculum has been unable to achieve these goals. Theory and practice remain un-integrated, and popular demands for non-terminal academic education which is a gatepost to further education led to unpopularity. With the introduction of UPE, expansion of primary school enrolment augmented problems already incipient. National examinations and national curriculum coupled with parent and student expectations for further education, meant that the point of school was to pass the examinations. This state encouraged copycopy or rote pedagogy which, in combination with the large classrooms and lack of teaching materials, led teachers to adapt an authoritarian style of management and teacher-centered pedagogy.

The transformative thrust of ESR did not include efforts to transform existing oppressive gender relations. Gender was not identified as a problem nor as a priority, and major elements of schooling process continue to reinforce these oppressive relations. Primary schools have not been able to encourage the critical thinking and analysis crucial to transformation of gender relations. This is partially because of long syllabus, as well as classroom size and lack of materials, and emphasis on passing examinations. Teaching materials continue to portray men and women in stereotyped roles, and the real contributions of women in stereotyped roles and the real contributions of women in such areas as the economy and history are not included in texts. Subjects of particular benefit to women such as family life education are not taught. A classroom observation study showed that teachers tend to favor boys with more attention. The authoritarian school management system, use of corporal punishment, teacher-centered rote pedagogy and the competitive basis of classroom relations combine to make a macho environment unfriendly to girls.

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Secondary and Tertiary Education

The review identified major problems in secondary and tertiary education as: the lower access and enrolment of women, the lower performance of girls at Form 4 and 6 levels, gender-typing of academic content and streaming, authoritarian pedagogy and a punitive attitude to adolescent sexuality.

The expansion of primary schools in UPE meant that the path to secondary school was open to many more girls. Although more girls are now entering secondary schools, the expansion in their enrolment has been achieved through increased enrolment in the expanding private sector, where nearly 2/3 of secondary school girls are enrolled. Access differentials can also seen according to region, ethnicity and class.

The fact that girls are depending on the private sector for secondary schooling has repercussions on their performance, as private day schools have the worst student performance record in contrast to single-sex boarding schools. This lower exam performance is especially noticeable in science, technology and math subjects, to the extent that soon very few girls will qualify to enter the University in science streams.

The Diversification Vocationalisation Bias programme introduced to secondary schools in order to channel students into the immediate 'world of work' has reinforced gender-streaming of women into domestic science, a 'dead end' subject with little employment or further educational opportunity. As in primary school, little has been done to revise texts or curriculum to encourage real change in gender relations.

The movement of women into post-secondary education, University and other tertiary institutions, is extremely limited in number as well as scope of subject choices. The limited number of girls and poor quality education received means the transformation process is held up.

Authoritarian or teacher-centered pedagogy continues throughout the secondary school system as in the primary schools, for many of the same reasons. This creates a conflict-filled environment all students, but particularly girls, who must juggle contradictory models of behavior.

Sexuality plays a central role in the lives of youth, but the school system defines and handles sexuality in a negative and punitive manner.

Adult Education

Adult education, like primary education, is a form of mass education which holds a great potential for transformation. Original policy meant adult education to aim at liberation, but in implementation this education again adapted the population to existing relations. Reasons for this may be found in the roots of functional literacy, which adapted education to the existing relations, and the fact that gender was not

clearly articulated as a problem nor as a target for transformation. Major obstacles hindering transformative potential of adult education for women are the continued gender-streaming of women and lack of progressive, transformative content in educational materials and programmes. Thus the gap between a liberating, radical policy and implementation geared to adaptation has been a loss for women and other oppressed groups in society.

Pedagogical practices of adult education are still based on primary theschool authoritarian system. An adult-oriented pedagogy has not been developed fully. The national based curriculum does not allow enough space for local initiatives and content. Participatory methods, suited for transformative approach, are beginning to make an appearance in some programmes and should be further encouraged.

Folk Development Colleges also continue to reinforce gender-typing. Women are streamed into domestic science, and many women are unable to take part in short or long term courses due to family commitments.

The curriculum reform undertaken by the Women's Expert Group can be taken as a model for future curriculum change. The group achieved a reorientation of the post-literacy materials to address basic constraints resulting from oppressive gender relations. Not only were curriculum and texts rewritten, but teachers and administrators were sensitized to a gender-positive framework in the process.

Other adult education campaigns such as radio and rural newspapers and libraries, can be effective tools if the delivery system and content is re-oriented to benefit women.

Despite drawbacks, adult education campaigns have benefitted women in many ways. These include the beginnings of a reading culture, the seeking out of news, information and points of view. The programme also equipped women with literacy and numeric skills which facilitated the formation of women's groups which are a proving ground for further organizational, economic and political skills. This process can be further encouraged among women by continued production of relevant materials with emancipating content.

Vocational Training and Technical Education

Vocational and technical training for women can open up alternatives to gender-stereotyped roles. The fact that the technical and vocational world is traditionally dominated by men makes women's entry all the more important, as well as difficult.

Engendered characteristics of this type of training have been low enrolment, gender-streaming and difficult absorption of women into the labour market.

Girls' enrolment in the NVTD vocational training centers has levelled off at just under 20% despite a quota selection pool. Girls are streamed into 'soft' trades such as tailoring and office machine repair, and some trades such as painting/sign-writing

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and printing/bookbinding are apparently earmarked for girls. Aside from this gender-streaming, girls are concentrated in smaller centers offering few trades. Their enrolment in 'modern' skills offered in the larger centers is comparatively less. This combination of concentration in soft skills and smaller centers signals the danger than women may well be streamed out of higher level, modern and more diversified trade skills.

Arguments have been put forward to limit girls' participation in vocational training, particularly in traditionally male dominated fields. For instance, although women's academic performance is generally on par with boys, the opinion is often given that they are harder to place for in-plant training and subsequent employment. Lack of relevant data makes it difficult to prove this, and statistics indicate that placement depends more on type of trade learned and the socio-economic environment of the particular centre than on gender. Similarly, much has been made of the slightly higher dropout rate for girls, but deeper analysis indicates that other variables are also influencing dropouts. For girls in particular, dropouts result not from academic, but social problems.

The Post Primary Technical Centers under the Ministry of Education have many of the gender-negative biases present in other post-primary institutions, particularly adult education, i.e. gender-streaming. The difficulties with the PPTCs are augmented by the low enrolment and poor performance levels of all students. This situation is indicative of the centers' inability to provide educational programmes which are considered relevant and worthwhile to the local community and fulfill their expectations of employment. Their future remains a big question-mark, but if they are to benefit women they should undergo a complete overhaul, including curriculum reform similar to that undertaken by the Women's Expert Group in adult education.

Technical Colleges are marked by declining female enrolment and gender-streaming into 'soft' subjects, despite the fact that girls' performance is currently outranking boys'.

Reasons for Engendered Characteristics

One major set or reasons for continued engendered characteristics derives from socio-economic and cultural factors. These factors have influenced girls' access, performance and reinforced gender-streaming of women into traditional subject fields. Women's workload is such that both as adults and as students, they are expected to undertake a multiplicity of tasks at home as well as on the farm. This workload constrains schoolgirls' time for homework, and women's time for effective participation in adult education, and contributes to poor performance at all levels. Another factor is the cultural stereotypes which present girls in school with conflicting role models. On the one hand, school is to be a democratic, free, critical-thinking arena where individual competence and aggressive efforts are rewarded. On the other hand, girls have to a large extent internalized the image of woman as mother, nurturer of support and service activities, basically inferior, less critical, less intel

ligent than men. These conflicting role models can not only lower girls' aspirations and expectations, but also influence their performance and choices for further education. The gender relations relating to sexuality, particularly marriage and bride-wealth, also lead parents and students to devalue education, especially higher education, for girls.

Another set of factors relates to the educational system itself. Some factors are gender specific, such as built-in inequities in the structure, particularly in post-primary education. These include lack of places for girls, particularly in certain subject combinations and in the optimal performing schools (boarding and single-sex boarding). Other factors affect all students but are more crucial for girls. The copycopy and authoritarian pedagogy with large classroom size, lack of teaching materials and the omnipotence of the examination system, does not allow space for the creative and critical thinking needed for gender transformation. The macho environment of schooling almost eliminates the possible role of the school as an alternative arena for girls' development.

Policy, or the lack of policy, has also affected gender transformation negatively. The lack of specific gender-positive government policy in relation to education renders women's constraints invisible, thus hindering effective support mechanisms. Although this was discussed mainly in relation to adult education, it holds true as well for other forms. Such policies would put into motion the curriculum and pedagogical reforms as well as support for transformative teachers needed for real transformation. Various donor policies have also slowed the transformative thrust by pushing instrumentalist or adaptive policies as well as prioritising basic education.

The fiscal and economic crises of the late 1970s and 1980s has had a devastating impact on the formal education system. Reduced supplies of books, equipment and other teaching aids, the decline in real teacher's salaries and other changes led to a severe decline in school environment and examination performance. The decline affects girls more critically, not only because they need more attention to 'catch up', but also as real reform or transformative efforts are shelved for the need to get by. The government became increasingly dependent on external finance for both capital and recurrent expenditure, which strengthened donor influence on education policy. The tendency for more cost-sharing and community finance of education has real implications for women's advancement in both education and employment.

Many of the educational problems noted reflect a global tendency in formal education during the last two decades: the emphasis on examinations and rote memory learning, the growing vocational content of primary and secondary schooling, the devaluing of a liberal arts university education, the priority given to technical education and the decline in student ability to engage in creative, analytical thought (Aronowitz and Giroux 1986). Tanzanian education also reflects its place in the international division of labour: for example, the extremely low expenditure on students in real terms and the dependence on non-graduate teachers.

SOLUTIONS

The recommendations in the following section suggest a range of measures to promote transformation of gender relations and strategic implementers within and without the schooling system.

These include establishing a strengthened form of Women and Development focal points supported by an Equal Opportunity Policy, laws and/or regulations effectively hindering sexual harassment of all forms. This would include abolishing punitive measures against school girl pregnancy.

In relation to education, recommendations include curriculum reform, including reviews of the structure and content and timetable of curriculum, the possibility of localizing curriculum, the relation of course and content to the employment market, reduced levels of specialization (including eliminating the diversified system and domestic science streaming), the inclusion of guidance and counselling and gender analysis and issues. Texts and other materials need to be rewritten with a gender-positive orientation.

Teacher rehabilitation is given priority, particularly the motivation and support of transformative teachers. The adoption of new pedagogy and management skills, in-service training which includes gender sensitization and the creation of teacher's associations are also emphasized.

Affirmative action in relation to access are needed, including a new system of selection procedures which de-emphasizes or replaces the importance of national final examinations, along with a quota system, differential cut-off marks and remedial courses.

Government financial investment in educational sector needs to be increased absolutely and in relation to donor share. Measures for cost-sharing need to be analysed in terms of repercussions on women, and safeguards will be needed to ensure their continued participation.

In order to formulate effective strategies for transformation, we need to support more research and statistical data collection, particularly by transformative intellectuals and educators of all levels. Such research should utilize gender-sensitive approaches, methodologies and analysis and include gender issue in terms of reference and reporting.

RECOMMENDATIONS

GENERAL RECOMMENDATIONS

A. EQUAL OPPORTUNITY POLICY AND WOMEN AND DEVELOPMENT FOCAL POINTS

A.1 Enact an Equal Opportunity Policy (EOP) for education at all levels, which specifically addresses gender discrimination in education and employment.

A.2 The EOP should be backed up by legal reforms:

(1) Change the Constitutional provisions concerning human and civil rights and discrimination to make specific mention of women/gender.

(2) Enact a law against discrimination on grounds of gender in places of education, employment, politics and elsewhere, with procedures for enforcement and legal sanctions.

A.3 The EOP to be administered and monitored by an Equal Opportunity Com mission (EOC) located in the Office of the President, attached to the Planning Commission, empowered to:

(1) Initiate and coordinate strategies designed to achieve greater gender equality in education, training and employment;

(2) Monitor the effects of attempts to implement EOP;

(3) Initiate and coordinate research into discriminatory practices and their practitioners;

(4) Act as an advocacy pressure group against discriminatory practices in all spheres of society and the state.

A.4 The EOC to be staffed by strong, capable officers:

(1) The present cadre of the Women in Development Focal Points as an initial core, WID headquarters should therefore be shifted from Com munity Development to EOC at the Planning Commission;

(2) The present cadre must be upgraded and additional personnel sought with high level qualifications backed up by a strong background in gender- related studies and practical work; the Head(s) should be senior person(s) at par in status and authority with Directors and Commissioners;

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(3)· The focal points system should be renamed Women and Development (WAD) in recognition of the central place women already have in development;

(4) Community Development officers would continue to provide grass roots extension support in both urban and rural areas, and efforts should be made to incorporate other extension agents in e.g. agriculture, forestry, water, health, veterinary, and small scale industries into EOC programmes.

B. INCREASED ACCESS AND REDUCED HARASSMENT IN EDUCATION

B.1 Adopt quota systems by sex to ensure minimum participation rates in education; 50% quotas in most institutions, with the possible exception of tertiary institutions; in the latter case, a 35% quota should be adapted for a three year period followed by 50%.

B.2 The quota system should be combined with:

(1) separate selection mechanisms;

(2) women's guidance and counseling services;

(3) remedial education programmes for all disadvantaged students, men as well as women, conducted by top professionals.

B.3 Special steps will be necessary to abolish all forms of harassment of girls and women, including sexual harassment, in educational institutions, including:

(1) a series of national campaigns against sexual abuse and harassment in schools and the community;

(2) special legislation providing for stronger legal sanctions against sexual abuse and harassment;

(3) add sexual harassment and abuse to misconduct in the Standing Orders of the civil service and SCOPO with appropriate disciplinary action;

(4) educate girls and women (and boys and men) to be able to recognize various forms of sexual harassment and how to protect themselves.

C. CURRICULUM REFORM

C.1 Take immediate steps to design a curriculum which develops the full potential of all pupils regardless of gender, class, or ethnicity in the following steps:

(1) Evaluate the curriculum in all sub-sectors from a gender perspective, with special attention to gender-typing in the official and hidden curriculum and gender bias in social relations of school and classroom and in teacher pedagogy.

(2) Abolish the Diversification Vocational Bias system and replace it with a strong liberal arts and science and technology foundation in the following steps:

a. make Science, Math and Technology (SMT) compulsory core subjects in all schooling and adult education and vocational/ technical education;

b. except in vocational training, this core set of compulsory subjects should also include languages, history and some form of social science foundations;

c. reduce the present level of specialization in post primary education; all students should take the same core requirements, which increase in variety and number at higher education levels;

d. provide a system of 'majors' in post-primary schools in different subject areas which complements the core courses but does not replace them.

(3) Adopt systematic and clearly defined procedures for selecting students for subject specializations which provide both for student preferences and aptitudes and encouragement of gender-barrier breaking, and backed up by a trained system of guidance and counselling.

(4) The major system should be flexible and broad based to allow student mobility, thus complementing occupational mobility in the labour market.

C.2 Introduce gender issues and analysis into all subjects at all levels of education, and encourage the development of separate women's/gender studies courses in all post-primary and adult education institutions.

C.3 Reduce the extraneous material and number of subjects taken to allow focus on key concepts and principles and allow teachers and students more time and space to develop a creative and critical approach to content.

D. PEDAGOGY AND TEACHER AND SCHOOL ADMINISTRATOR WORKING CONDITIONS

D.1 Concerning teacher training, pedagogy and management skills, adopt the principle that rehabilitation of teachers has first priority. This means:

(1) Teacher training and regular in-service training should give priority to pedagogical process goals and objectives and gender issues to:

    a. promote critical thinking, problem-solving ability, creativity and self-confidence;

    b. raise awareness of the constraints that gender-stereotyping imposes on the development of young people and the society;

    c. develop skills to combat gender-typing;

    d. develop skills of guidance an counselling with special emphasis on gender issues, for the discriminators as well as the 'victims'.

(2) Increase the quality of teachers and teacher education (in and pre-service) by raising the general education requirements for admission to teacher training colleges, increasing the proportion of graduate tutors, and increasing the funding to all kinds of teacher education, especially in-service at the primary level.

(3) Provide a supportive environment in which teachers and teacher educators can question gender-stereotyped attitudes, beliefs and expectations by the following steps:

    a. Increase financial and other support for institutions providing the above in-service training, with emphasis on the rehabilitation and strengthening the relevant faculties of the UDM and the Colleges of Education; ensure that there are women-friendly facilities and timetables so women with infants can participate.

    b. Support the establishment and strengthening of regional Teacher Centers which provide facilities for lifelong education programmes, seminars and workshops that are also women-friendly;

    c. Encourage extracurricular activities for both students and teachers by providing the necessary space and funding for activities such as clubs, book fairs, science fairs and history workshops, and encourage the involvement of parents and the local community.

D.2 Adopting the same principle that rehabilitation of teachers has first priority, support an improved incentive package of salaries and fringe benefits which includes:

(1) A viable living wage which is pegged to the inflation rate and paid on a regular, monthly basis, at a location at or near the school;

(2) Specific monetary and other rewards for achievement in teaching, linked to transformative, creative or gender-positive teaching or production of teaching materials;

(3) Specific rewards for school administrators (Heads, Assistant Heads and Heads of Departments) who have successfully introduced innovative programmes of curriculum and pedagogy, with special focus on gender sensitivity in pedagogy, classroom organization and books/ teaching materials used;

(4) Ensure that wages, fringe benefits and rewards are provided to women equally as men, regardless of marital status.

D.3 Support teachers' efforts to improve the teaching profession and their working conditions. Measures include:

(1) Develop more systematic and professional procedures of hiring and promotions, selection for staff development programmes and other activities, that are more open and increase the accountability of decision-makers to teachers and the public;

(2) Increase the participation of teachers in the process of assessment of work performance at school level, and of school administrators and teacher representatives at wider level, with participation of women on a par with men;

(3) Fund and support teachers' efforts to create their own professional organizations at national and regional level, such as subject associations, and provide space for women teachers to create separate women's groups within them, as well as their own professional organizations.

E. PRODUCTION OF BOOKS, TEACHING AIDS AND EQUIPMENT AND ALL FORMS OF COMMUNICATIONS PERTAINING TO GENDER

(1) Support the production of more books, other written and teaching materials, equipment and audio-visual aids within Tanzania. Production should use local resources including authors and enterprises and involve teachers as much as possible, with the proviso that materials are free of gender-typing;

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(2) This support should extend to other forms of communications like popular theatre, news-sheets (like _Mwenzangu_ produced by WRDP), magazines like _Sauti ya Siti_ (TAMWA), radio programmes and video;

(3) Support more academic work and basic research on gender issues in both English and Kiswahili;

(4) Support should begin with adequate remuneration for authors, artists, translators and others involved in the production process on an equal basis according to gender;

(5) Increase financial investment in and encouragement of Tanzania-based industries in book publishing, printing, programmes by giving first priority to support through direct funding and import support programmes which provide equipment, raw materials and machinery needed for local industry, with special encouragement to gender-positive industries;

(6) Support the activities of women's groups in the NGO sector like TAMWA, WRDP, IDS Women Study Group and WEG which are oriented towards the production of gender positive materials;

(7) Revive the School Equipment Development Unit so as to produce low cost equipment and support initiatives such as the Njombe Book Production Unit within the education system itself.

F. PUBLIC AND PRIVATE INVESTMENT IN CAPITAL AND RECURRENT COSTS

F.1 Increase the real value of recurrent and capital expenditures per student at all levels of the education system.

F.2 Increase the value of direct public (government and donor) funding at all levels, and increase the government's share relative to donors.

F.3 Policies of cost-sharing need to provide safeguards to ensure that girls/ women as well as other disadvantaged groups (low income households, disadvantaged districts) do not lose the progress they have made in education; these could include:

    a.   half-fees for tuition and boarding costs for all female students at all levels;

    b.   special subsidies to schools and colleges which have successfully adopted affirmative action programmes in support of women;

c.   waivers for tuition/boarding costs for low income male and female students at all levels;

d.   reduce the portion of total costs charged to parents/students, and increase the share covered by private and public employers at local and national level through education taxes paid by formal and informal enterprises, which are pegged according to scale and income of enterprise and include parastatals.

G. EXAMINATIONS AND SELECTION PROCEDURES

G.1 Evaluate and reform the entire system of national final examinations, including Primary School Leaving Examination (PSLE), Form 4 and 6 and the exam systems used in universities and other tertiary institutions, in order to:

(1)   Strengthen the component which measures achievement in subject matter as well as competence in critical thinking, creativity and active problem solving;

(2)   Reduce the rote memory items;

(3)   Encourage cooperative group work as well as individual measures of achievement which tended to promote competitive behavior.

G.2 The results of the PLSE should be communicated to schools, teachers and pupils/parents, like all other national examinations.

G.3 Adopt systematic and clearly defined procedures for selecting students to all post-primary education institutions, with safeguards against patronage systems and extraction of bribes and sexual favors.

G.4 Provide second-chance reentry programmes for girls/women including those who dropped out due to pregnancy, this includes mature age entry schemes at the university.

G.5 Selection committees/boards should have equal numbers of men and women until such time as parity has been achieved in student enrollments at each institution.

H. ALTERNATIVE EDUCATION STRUCTURE

H.1 Reform the education structure after appropriate evaluation involving a wide segment of the public with the aim of increased access at all levels and equity development of students' full potential.

H.2 Test the following possible structure in the above evaluation:

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Figure I   Alternative Education Cycle
(for girls' separate and coed)

TERTIARY INSTITUTIONS: UNIVERSITIES, COLLEGES, INSTITUTES

Selection of increasing % of St 12 leavers from Sr. S/S girls, coed - core + academic/vocational streams
(2 Years)
|

SECONDARY SCHOOL

automatic promotion from Junior S/S girls, coed - core + academic/vocational streams
(2 Years)
|

JUNIOR SECONDARY SCHOOL
selection of an increasing % of St 8 leavers girls, coed - core curriculum
(2 Years)
|

UNIVERSAL MIDDLE SCHOOL
compulsory coed - core curriculum
(2 Years)
|

UNIVERSAL ELEMENTARY SCHOOL
compulsory coed - core curriculum
(6 Years)

I.   FAMILY LIFE EDUCATION AND PREGNANCY AT SCHOOL

1.1   Support the introduction of an integrated family life curriculum into upper primary and higher levels of education, which projects a positive approach to sexuality, and promotes a responsible attitude to oneself and others.

1.2   Remove the negative and punitive treatment of sexuality among students in schools and colleges.

1.3   Abolish forced medical examinations of girls/women in secondary schools (Forms 1-6) and teacher training colleges.

1.4   Establish special schools and other institutions for pregnant students and those with newborn infants within the state sector and provide public funding to NGOs providing similar services.

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J. GUIDANCE AND COUNSELING

J.1 Provide special counseling services in assertiveness training for female students and teachers to help cope with and learn to contest and resist gender typing and discrimination.

J.2 Encourage career days, guest speakers, and books, pamphlets, radio shows, live drama and popular theatre, songs and poetry, paintings and other communications which project a positive image of women, including those in unusual occupations and in high-level decision-making positions, with substantive financial support to those engaged in producing/organizing them.

J.3 Provide widely publicized information about the variety of work opportunities and academic paths, the education credentials and prerequisites needed.

K. RESEARCH AND COMMUNICATIONS

K.1 Strengthen the research and analytical capacities and activities of the Planning Divisions and all other Departments and Directorates in MoE, NVTD, the National Examinations Council and the Institute of Curriculum Development, and ensure gender equity in appointments of researchers and funding of research projects on a 50:50 basis.

K.2 Ensure that a gender-sensitive approach is adopted in all research, evaluation, analysis and reporting.

K.3 Incorporate teachers, adult educators and administrators in research and promote a participatory approach in research and evaluation.

K.4 Prioritise the allocation of research grants and consultancies to Tanzanian women on an individual basis or though women's groups and other NGOs, as well as institutions capable of carrying out gender-positive research. Women should be paid on equal terms with men and with foreign experts.

K.5 Provide special funding for translation of gender-sensitive research/evaluation reports or creative works into Kiswahili/English also utilizing popular media like radio and drama so as to reach a wider audience.

K.6 Ensure that sex breakdowns and gender sensitive analysis are provided for in all statistical data (student enrolment, staffing, employment, etc).

K.7 Support special research grants and competitions for research on gender and education/employment and other areas, to be channeled through women's research groups and other NGOs, educational institutions or individuals.

SPECIFIC SUB-SECTORAL RECOMMENDATIONS

1. Primary Education

1.1 (1) Introduce a system of specialized teachers at upper primary level to teach core subjects.

(2) Transform domestic science by creating a compulsory basic life skills course for girls and boys (including basic household repairs; food preservation, storage and preparation; laundry and house-keeping).

1.2 Increase media coverage of events concerning primary schools and teachers, especially gender positive developments, partly by training teachers in journalism skills so they can produce their own communications media.

1.3 Reform the present administration of primary schools, after suitable evaluation of the present set-up, and place them under Local School Boards attached to but autonomous from Local Government Institutions or return them to central MoE management.

1.4 Primary Schools and teachers must be allowed to concentrate on teaching and other education activities; alternative sources of labour must be used for census, political rallies and other state activities, partly by increasing the cadre engaged in extension activities under local government institutions.

2. Secondary and Higher Education

2.1 Make all boys' secondary schools (Forms 1-6) coeducational with immediate effect, by adding girls' hostels in the case of boarding schools, and return those girls' streams which have been closed (eg Tambaza Forms 5/6);

2.2 Increase girls' boarding schools so that there is a minimum of one high quality government school in each district by the year 2000.

2.3 Adopt the goal of Universal Secondary Education by the year 2010 on the basis of government and nongovernmental schools and adult education reentry systems using correspondence education, evening schools and other programmes.

2.4 (1) Create a compulsory basic life skills course which includes components from domestic science, agriculture, household repairs and maintenance, car and machine repair and maintenance, typing and bookkeeping.

(2) At Forms 3-4 level, allow students to specialize in academic and vocational courses in addition to taking a compulsory liberal arts core course package; all academic streams would fill the necessary prerequisites for Form 5 and university education.

(3) Strengthen vocational/technical courses at Forms 3-4 level by increasing the proportion of full diploma and graduate teachers.

(4) Drop Domestic Science and create a set of courses in Food Technology and Food Science, Garment Design and Tailoring, in Child Development and Early Childhood Education - all of which lead to further training at SUA, teacher training, community development, to Form 5/6, and/or to immediate employment in a tested trade (create appropriate trade tests).

2.5 Encourage more coordinated team teaching to cover different topics and activities in each course in one school or a group of neighboring schools,, by providing financial and other supports necessary and teacher incentives, using the practices adopted in at least two girls' secondary schools in science subjects (Jangwani, Songea Girls) as models.

2.6 Create compulsory study periods for girls after school in day schools with a subsidized lunch programme, to compensate for time lost in household work, and give wide publicity to the way the sexual division of labour retards the progress of female students.

2.7 (1) At post-secondary institutions, provide appropriate accommodation for students with children and spouses, if possible, and creches and all-day child care facilities for students and staff.

(2) Provide female students with access to all-female halls of residence with separate halls administration and separate dining facilities.

2.8 (1) Support higher education for women by means of special women's scholarships for under-and postgraduate studies within Tanzanian institutions as first preference, and remove all funding provisions which discriminate against married women.

(2) Provide special dissertation research grants for women to carry out gender-related research at post graduate level.

(3) Increase financial support for universities, especially in the Arts and Social Sciences and Commerce, which have been neglected during the last ten years, with the condition that affirmative action programmes in support of women's increased enrolment

and remedial action have been implemented (EOP).

2.9 (1) Given their minority status, support efforts by women to create their own women students' organization.

(2) Given their minority status, support efforts by women academicians to create their own women's academic staff organization.

3. Adult Education

3.1 The government and donors should give increased priority to adult education of all kinds, by increasing its share of funding.

3.2 Support the preparation of teaching material which challenges patriarchal ideology and sensitizes adults on gender issues, including the need to share responsibilities in reproduction and production, and the negative impact of the existing sexual division of labour on women's progress and the welfare of families and communities.

3.3 Support a mass campaign to promote gender-sensitization, with specific attention to equity access to quality education, using procedures for mass mobilization such as radio mass campaigns, popular theatre and national press, supported by the production of books pamphlets, pictures as well as contests and exhibitions on gender-related themes for students, artists, writers, ngoma groups, bands and others. This campaign to be followed by related ones.

3.4 Develop youth education and recreation programmes for primary and secondary school leavers which are gender-positive and attractive to youth, and include courses like popular music, aerobics, creative writing, self-defense, desk-top publishing and leadership skills.

3.5 Increase female enrollment in follow-up literacy programmes while adapting the curriculum and pedagogy to be more attractive and meaningful to women, following the example provided by the Women's Expert Group and the Directorate of Adult Education.

3.6 Use women's groups and other organizations as entry points for literacy and post-literacy programmes, including organizing and teaching courses, producing relevant books and teaching materials and conducting popular theatre and other activities.

3.7 At the community level, strengthen the community-based cadre of women teachers, agriculture, health and other extension agents to promote adult education activities among women.

3.8 Support efforts to reorganize the training of adult educators to improve pedagogy and styles of classroom management, and to promote a gender-positive outlook.

3.9 Develop curriculum for follow-up literacy programmes and post-primary and -secondary lifelong education programmes which teach skills based in the interests and needs identified by women, as in the post-literacy evaluation.

4. Vocational Training and Technical Education

4.1 Concerning vocational training:

(1) Continue affirmative action enrolment for girls in all trades, especially the 'modern' trades.

(2) Given the low percentage of women employed in the formal industrial sector, institution-based training is preferable to employer based training.

(3) Given the need for high skill levels to ensure ease of entry into employment and labour market flexibility, promote the broad based two year basic training.

(4) Facilitate women's absorption to the labour market through
a. segmented market studies and
b. employer sensitization.

(5) Establish counseling services to help girls cope with social as well as academic problems.

(6) Instructors should be given counseling skills and gender sensitization.

(7) NVTD should undertake a specific needs assessment analysis in conjunction with employers to seek areas of potential employment growth for women.

(8) There should be an assessment of the feasibility, need and potential impact of different streams in vocational training on women such as high tech versus craft-artisan skill levels, self- or factory employment, rural or urban employment.

4.2 Concerning Post Primary Technical Centers (PPTCs):

(1) Given the failure of PPTCs to effect a transformative approach to rural development, especially in gender relations, a thorough reexamination is needed with reference to the placement, number and scope

of centers; procedures for establishing localized curricula, testing and certification, and some form of self-employment facilitation such as loans.

(2) Focus on the transformative approach in conducting a local feasibility/ needs assessment study, in formulating curricula and appropriate pedagogy and supporting post-training activities.

4.3 Concerning Technical Education:

(1) Given the low enrolment but high performance of women in technical colleges, increase their enrolment through affirmative action which also addresses root socio-cultural and economic problems influencing enrolment and performance, including more exposure to STM courses and practical work, career guidance at secondary and college level, counseling and negotiations for better employment conditions.

(2) Science and technical teachers should be given special attention in gender sensitization to avert discrimination and promote positive images of women in these fields.

(3) Promote diversification of the range of subjects currently studied by women through career days, publicity, etc.

RECOMMENDED RESEARCH TOPICS

A. GENERAL

1. The impact of school fees and other cost sharing devices on enrolment patterns and drop-out rates by gender, class, region, urban-rural location and ethnicity.

2. The impact of women's increased access to education and income earning on gender relations and personal histories.

3. Gender dynamics in the classroom and the school, with focus on (1) sexuality and (2) teacher-student and student-student relations.

4. Tracer studies of students leaving each education level.

5. Studies of high achieving female students at all levels; obstacles they faced and overcame and those they didn't, support systems.

6. The impact of home environment on school performance, with emphasis on the interaction between gender, class and other background variables at home and differential resources of schools.

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7. Investigate the attributes of a 'female friendly' curriculum in different subjects and work out strategies for creating and implementing it.

8. Analyze the personality attributes and social dynamics of school culture and adolescence, with attention to gender typing and how to overcome it.

9. Explore present and future expectations of students for sexual partners and marriage, children, employment and other aspects of their place in society.

10. The changing policies of governments and employers towards young women, beginning in the colonial period.

11. Investigate sexual harassment in schools and colleges and how girls/women cope and resist it as students, teachers and administrators.

12. Analyze the way female teachers, administrators and teachers have responded to the schooling process in general, with particular focus on forms of accommodation, contestation, resistance and organized struggle. Search for and publicize models of transformative intellectuals.

13. Study the significant contributions of specific women in specific areas such as politics, NGO activity, professional work, crafts, creative arts, science, education, informal sector, factory work, plantation work, peasant production, and reproduce their stories in the media to act as models for others.

B. SPECIFIC SECTORS

1. Primary Education

1.1 Analyze the reasons for female primary school teachers' rejection of certain locations as teaching posts and take steps to overcome the problems identified.

1.2 Analyze possible programmes of remedial support for pupils with potential at upper primary level using for example voluntary tutorial programmes with secondary school students and adults, design and implement some on a pilot basis while encouraging communities, NGOs and individuals to develop their own.

2. Secondary Education

2.1 Produce secondary and higher education enrolment statistics broken down by gender, district location, stream, whether boarding or day, coed or single sex, and by ownership.

2.2 Study the history and outcomes of the remedial programme at Muhimbili Faculty of Medicine, with special attention to how it is organized, final selections into the faculty first year intake, comparative performance later in Faculty courses, and how students perceive themselves and are perceived by others, with focus on gender differentials.

3. Adult Education

3.1 Carry out needs assessments of the kinds of curriculum which young adult learners would like, including topics, format, pedagogy, venue and preferred educators.

4. Vocational Training and Technical Education

4.1 Conduct gender sensitive tracer studies of vocational trainees to establish the impact of training and social benefits.

4.2 Analyze access of girls to vocational training with focus on selection procedures, choice of trade specialization and outcomes.

4.3 Analyze reasons for female drop-outs and suggest possible preventative measures.

4.4 Establish the training needs and potential of women in the informal sector, and the possibility of NVTD and/or other organizations providing such training.

4.5 Analyze the needs and potential of a self-employment stream and suggest possible curricula.

4.6 Assess the possible relocation and reorientation of PPTCs from a gender-sensitive point view.

4.7 Assess non-academic reasons for low female enrolment in technical colleges, including socio-cultural and economic factors as well as selection procedures and gender streaming so as to establish constraints on female enrolment and design strategies to overcome them.

4.8 Analyze employment status and career opportunities, present and potential, for women in the technical sector with a view towards formulating corrective measures.

CHAPTER ONE

"EQUITY IS NOT ENOUGH!"

GENDERED PATTERNS OF EDUCATION, EMPLOYMENT AND AID

by

Marjorie Mbilinyi, Patricia Mbughuni,
Ruth Meena, Priscilla Olekambaine.

THE PROBLEM AND METHODS

Gender differentiation and discrimination persist in Tanzania, in spite of substantive efforts by the government to promote equity in its social policies. Women now have equity access to schooling at the primary school level, but other aspects of education such as the content and quality of instruction, the concentration of women in gender stereotyped roles and subjects and women's examination performance remain as other forms of inequity perpetuating oppressive gender relations. Thus schooling, which could provide an alternative arena for transforming women's opportunities and lives, confines women to their traditional lower status in the labor market and the household. There have been many studies about differential access by gender, but less analysis of the root causes, resulting in partial solutions. At the same time, women's transformative efforts in resistance to the oppressive status quo as teachers, students, and education administrators have not been given adequate attention, nor has the impact of various affirmative action measures taken by the government to promote gender equality.

Objectives

The objectives of the review were to

1) summarize key knowledge available on women in the education sector;

2) assess this knowledge critically;

3) outline implications for support policy, areas of emphasis and research priorities.

This Summary Edition has had to leave out a good deal of the discussion and evidence in order to highlight key issues. Some issues, if covered fully in one chapter, are mentioned but briefly in another. Nevertheless, it is hoped that issues raised and recommendations presented will encourage and stimulate the current efforts to promote a more just and equitable education system.

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Scope

The review is limited to 4 sub-sectors of education: primary, secondary and adult education and vocational training and technical education. Emphasis is on institutions administered by the Ministry of Education (MoE) along with the vocational training programme run under the National Vocational Training Division of the Ministry of Labor (MoL).

Methodology

Traditional methodologies used in this review were library/documentary research, interviews, workshops and discussions. There was no original research done, as the focus was on the assessment of existing literature. Formal interviews as well as less formal discussions were held with resource persons including government officials, educationalists, teachers and headmistresses, students, scholars and members of women's NGOs. Regular workshops were held among the review team in order to present ideas, issues, drafts, review literature and to brainstorm. After the production of a first draft, a Resource Persons' Workshop was held in July 1990. This Workshop provided the forum for a fruitful discussion of the draft, as well as additional input through the personal testimonials presented by women who were or are deeply involved, as students, teachers or administrators, in one of the sub-sectors. These resource persons then presented an account of their own particular experience. It is revealing that these women identified struggle as one of the major factors in their lives. Due to limited space, their contributions cannot be included in the summary, but their testimonies to the transformative potential of schooling certainly informed a good deal of our analysis.

During the process of researching and writing this review, the team broadened its angle of vision. Originally we focused on impact of education on women, an angle which portrays women as passive recipients and teachers as robots. Later, due in part to our own readings and discussions but also to the stimulation of the Resource Persons' Workshop, we came to focus on the transformative potential of students and teachers. From this angle of vision, schools are sites of contestation, resistance, negotiation, analysis and action, rather than mechanical socialization agents for the status quo.

Analytical Framework

Gender issues in education as well as other sectors are often analyzed from a quantitative point of view which we name equity participation. Analysis of this type focuses on the quantitative measure of women's participation: are women teachers/students/administrators etc. present in equal strength to men? Do girls have equal access to schooling? Do as well as men? If not, why not? But for purposes of this review, equity analysis does not go far enough into the root causes of gender differentials, nor does it highlight the ways in which women students and teachers accommodated, contested or resisted them.

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Therefore we adopted a second perspective to broaden the first; we also analyzed the extent to which education contributed to a transformative process in alleviating basic societal problems which constrain or oppress women. Does education reinforce these basic problems, or does it equip women with the knowledge, skills and attitudes needed to challenge them? To what extent are teachers, students and others contributing to a transformation process? How are they confronting or accommodating basic problems? What are the qualitative aspects of curriculum, pedagogy and school environment which affects the status of gender relations, either for change or entrenchment of the status quo? By asking such questions, we also analyzed and measured the extent and way in which education facilitated women's empowerment.

For purposes of this review, we grouped basic societal problems affecting women into three major categories. The gender division of labor in Tanzania assigns women both productive and reproductive roles. Not only do women undertake the majority of tasks in agricultural production, they also perform tasks in agricultural production, they also perform tasks associated with biological and social reproduction such as pregnancy and lactation, cooking, caring for the young, the sick and old, cleaning and all service work to sustain dominant gender relations. A second problem is women's unequal allocation of and control over resources. Women have less access to and control over those resources needed to promote economic and social change such as land, finance, education and extension services, technology and disposal of their own labor and time. A final set of constraints stems from the patriarchal order which assigns women a subordinate secondary status in relation to men. Children are third in this hierarchy. Dominant male power is evident in male control over decision-making on the household, village and national levels.

Given this triad of constraints, women need education more than men. Given their dispossessed position in society and the family, education is a potential transformative resource. Tanzanian women have realized this potential for some time, as they often invest in education for themselves or their daughters in order to gain access to productive resources and/or cash earnings which they can control.

However, we also recognize that as an analytical tool this triad is also affected by historical circumstances such as class, ethnicity and local culture as well as the context of the Tanzanian society and economy within the global economic system. In this Summary edition, we cannot hope to do justice to all the ways in which these gender relations and practices have varied over time in response to changing historical circumstances. For a detailed discussion, we refer the reader to the original report. Here it suffices to point out that the gender triad persisted and indeed worsened in spite of independence and the post 1967 reforms.

Official efforts to address these constraints faced by women have been minimal so far, and have mainly resulted from pressure by women struggling individually and collectively for change and redress. Our discussion mentions such struggles whenever possible, but we are limited because most researchers have not studied the contributions of feminist-minded teachers and administrators. Interviews and the

Resource Persons' Workshop, more fully covered in the original report than here in the Summary, did help to fill this silence in the literature. Further research is urgently needed to make these contributions visible.

HISTORICAL FRAMEWORK AND ISSUES

Colonial Education

The present position of women in formal education partly reflects the patterns of development emerging during the colonial period. The most salient aspect of colonial education was the principle of education for adaptation, which sought to use education to match skills, attitudes and knowledge to "the world of work" and what was considered to be local mentality or educational potential. In colonial society, the "world of work" and aptitude of an African was shaped by the policies of racial segregation and division, which denied both men and women access to higher levels of education and employment. But while the colonial state allowed men access to employment in the lower levels of civil service, women's "world of work", her "natural" aptitude, was defined as the home and home-making; she was a supporting, often subsidizing agent for the "working" man.

The policy of education for adaptation lay out different educational programmes on the basis of race. For the African, education was for the few, and it was elementary (Stds. 1-4). Agriculture was its centerpiece. The few who passed on through post-elementary schooling to study liberal arts subjects in the English medium were slated for employment in junior administrative posts. Most of these select few came from the families of colonial chiefs and/or the wealthy.

Aside from elementary schooling, an adult education programme gradually took shape in literacy schemes which combined literacy and social welfare activities such as "home-craft" and hygiene for women as well as some agricultural training (Meena 1989). These programmes were heavily supported in some areas, for instance among the Pare. Together with elementary education, adult education contributed to a high increase in the literacy rate from 3% in 1940 to 16% in 1961.

By the early 1950s the popular demand for education and racial equity in education had become both powerful and controversial. The debate centered on the introduction of a new Provisional Syllabus of Instruction for Middle Schools (Stds 5-8) in 1952. The new syllabus was practical and vocational and aimed at training students for rural life. The boys' syllabus was to focus on agriculture and/or animal husbandry, while the few girls' schools were to focus on home-craft. Efforts to implement the syllabus failed. African parents opposed it as inferior, dead-end schooling; they preferred schooling which lead to employment, rather than some form of improved agriculture. Teachers also opposed the syllabus and used the practical components such as agricultural labor as punishment or a free labor pool. Social and economic relations in the rural communities also hindered school leavers from undertaking the improved farm ventures on an individual or independent basis.

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These conflicts were accentuated by further inequalities in access to schooling based on regional and class background. As the major portion of finance for education was the local community (self-help or today's cost-sharing), wealthier regions or ethnic groups were able to build and maintain more schools and support more students, even, in some regions, scholarship students. In 1953, for instance, primary school enrolment reached 53% in Tanga Province, which was relatively wealthy, compared to 18% in the Central Province (Morrison 1976: 107). Further differentiation occurred according to the level of family wealth or status, with "sons of chiefs" being officially favored.

African women came at the bottom of the list of priority access to schooling. Even during the period of educational expansion in the late 1950s, women's enrolment increased only slightly, for example, from 0 to 204 female students in post Std 8 schooling (Cameroon and Dodd 1970: 104), and these students were enrolled mainly in government run schools in urban areas. Women's low enrollment was partially due to official policy (i.e. lack of places, resistance to expansion for girls), but the policy was also augmented by traditional leaders who complied with and in some cases encouraged the policy utilizing arguments of tradition and custom. Where schools did exist, "tradition" legitimatized curricula based on gardening and domestic science.

Hence official government policies, augmented by arguments for tradition, created structural constraints limiting women's education both in quantitative and qualitative terms.

Post Independence Education

Expansionist Phase

Immediately after independence, priority issues in education were racial integration and expansion, integration and uniformity of schools, financing, teaching staff and curricula and expansion to meet popular demand for education at all levels. The process of integration and expansion corresponded to measures taken throughout the civil service and institutions offering social services such as health. Thus part of the popular demand for education was linked to the demand for employment at all levels and the Africanisation of the Civil and other services.

As the base of the educational pyramid, elementary schooling, expanded, so did the demand for upward mobility into education and employment at higher levels. But the limited expansion of higher levels could not keep pace with the growing base of the pyramid, and selection to post primary education became a major issue. The result was increased focus on examinations as the sole method of selection. The importance of passing the examination let to reliance on copy copy teaching methods, which would later combine with large classroom size and scarcity of teaching materials to create an authoritarian system of school management.

Pressure for greater access to schooling eventually led to the establishment of a

regional quota system, which restricted Form 1 intake to a set proportion of the primary school leavers (PSLs) in each region and district. By 1976 access to Form 1 places was very similar in all regions, averaging 6.3% of PSLs (URT/Manpower 1976). Equity access was also furthered by government policy of allocating more resources for education to the less developed regions. Within this debate, however, the issue of women's unequal access disappeared or became subsumed under issues of regional access.

The curriculum issue, which along with access, had became a major one during the colonial period, was initially handled by maintaining a national syllabus which taught academic or liberal arts subjects. This choice was not only due to popular demand, but also to the manpower requirements of the Africanisation exercise, which needed high and middle level manpower to be selected from the pool of PSLs. Curriculum reform occurred later, in response to the educational implications of the Arusha Declaration articulated in the policy of Education for Self-Reliance (ESR), and the apparent decline in demand for middle and high level manpower.

Mass Education and Curriculum Reform: ESR, Literacy, UPE and the Secondary School Bias System.

At the center of the 1967 policy of Education for Self-Reliance is the issue of mass education. With popular demand for expansion multiplying, how much education should be given to the masses? What should the curriculum be? What curriculum could both "fit" the masses to the "world of work" and at the same time prepare a few for higher education? Given the severely restrictive educational pyramid, what system of selection should be used? Given the weak economic base and limited opportunity for formal employment, what should be the relationship between schooling and formal wage employment? What are the legitimate educational demands of the population vis a vis the state?

The context in which ESR was introduced was full of contradictory pressures. The population had understood education to be a gatepost to further education and formal employment. This expectation was reasonable, as it was the basis at least in part for initial post independence expansion, and as Africanisation had made visible the benefits of belonging to the new African middle class created by it. At the same time, chances for higher education, as well as employment opportunities in the civil service, were declining as vacant positions were filled and as more and more PSLs entered the potential pool of selection for further education. In the context of these pressures, the government formulated both the Arusha Declaration and Education for Self-Reliance.

ESR reforms aimed at promoting national unity, loyalty to the government and adaptation to one's place in society - which for the majority meant being smallholder peasants, casual laborers and unpaid family workers (women and youth). According to ESR objectives, primary school was to provide all students with the skills and values necessary to become economically active members of their community after leaving school. All students were expected to participate in collective production

activities in order to gain manual work experience and provide the school with income. Teaching methods were to encourage the development of an inquiring mind, self-confidence in problem-solving, creativity and cooperative values rather than individual competitiveness. Paper examinations were to be given less weight in selection for further education. In principle, ESR was to be sufficient and terminal education, not a gatepost further education or employment (see Chapters Two and Five for further discussion).

Along with curriculum reform, steps were taken to further expand primary and adult education. The mass literacy programmes of the 1970s were initiated partially in response to popular demand, partially by the need to instill civic and other responsibilities in the adult population, and partially in response to global pressures (see Chapter Four). Expansion of primary schooling culminated in the policy of Universal Primary Education (UPE) in 1977 (see Chapter Two). This policy was a radical shift from earlier expansion priority given to higher levels of education. Why did this shift occur? The rationale given was manpower planning. However, projections of manpower needs were based on mechanical extrapolations from existing employment figures, and ministerial planning departments as well as manpower planning headquarters did not function efficiently. Throughout the late 1970s to date there are conflicting assessments of the adequacy of the manpower supply, sometimes within the same government or donor institution (Cooksey and Ishumi 1986: 57).

Underlying this confusion were the anxieties among government and donor agencies about the political risks involved in the creation of a large number of unemployed secondary and post-secondary school leavers. One of the measures used to defuse this anxiety as well as student expectations, was the introduction of the secondary school diversification or bias system (see Chapter Three). More recently, popular demand has in part been met by allowing local communities and districts to build and maintain their own schools.

Employment and Incomes

Many of the gender patterns found in education reflected as well as sustained gender patterns in employment. During the colonial period, women were identified as "unpaid family labor" whose productive labor sustained the labor migration necessary for plantation and large-scale agriculture for export. Their labor also facilitated the low, non-family wage paid to Africans, as the state could argue that the maintenance of the family was the responsibility of the women left "back on the farm". At the same time, colonial policy, backed by racial barriers and denial of access to resources such as credit, effectively blocked Africans from becoming large-scale farmers or producers in their own right.

The impact of colonial policies on labor and agriculture was largely negative for women, as they reinforce a patriarchal farming system. Both African women and men were forced to intensify their labor in economic activities oriented to the market and the earning of money. Mechanisms used to force labor were not always direct: head tax, licenses, court fees and fines, forced use of money in lieu of barter trade

and the promotion of imported goods such as cloth for sale were but a few. Women contributed both directly and indirectly to cash earnings by working in agricultural production oriented to the market as well as household consumption, by selling produce under their control, and by reproducing the family's labor force through childbirth, child-rearing and daily maintenance of the household. As cash crop production increased or men migrated to seek employment, women's labor intensified in the production of goods and services which sustained the household, in addition to the multiple tasks necessary to reproduce the family. Eventually, the colonial state even went so far as to make explicit policies to keep women in the countryside. These policies recognized women's key role in reproduction and maintaining an orderly fabric of rural society.

The colonial government thus created and/or sustained selected aspects of "customary" or "traditional" laws and practices, perpetuating and sometimes inventing a "tradition" which maintained women in this subordinate role. For example, whatever official support was provided to African peasant farming, including extension services, farm inputs and equipment and cooperative society membership, was limited to male household heads. Such policies are evidence of the vested interest of the colonial state in perpetuating, indeed increasing women's oppression in the patriarchal farming system. In this context, the emphasis on domestic science and homecraft for women schooling in the colonial system can be seen as a part of these larger efforts.

In post-independence Tanzania, the government took immediate steps to rectify racial discrimination. But although discrimination in wages on the basis of sex was made illegal, no explicit moves were made to remove the "gender bar". Peasant agriculture continued to depend on a patriarchal farming system using unpaid female and family labor. In fact, gender exploitation in this system probably increased due to the movement of men out of many rural areas.

As men moved out of rural areas or abdicated responsibility for household maintenance, women took over increased market-oriented activities and gained control over more of the household cash flow. This change had contradictory consequences. On the one hand, women had more independence and autonomy: many moved outside of the restricted household domain and learned to operate in new arenas. However, increased autonomy also meant increased responsibility which in turn meant an increased workload for women. These contradictions are still with us today, and many women are still walking a tightrope between the desire for independence and the increased responsibility and work that independence entails.

Women have been a growing percentage of permanent and casual employees in both the public and the private spheres from 1977 to 1984 (the last year for which Bureau of Statistics data is available). However, a larger percentage of women than men are hired as casual labor, particularly in the private sector, where terms and conditions of service are at their poorest. Women also concentrate in the lower levels of paid employment. They receive consistently lower average wages in most sectors than men (ILO/JASPA 1986). Moreover, these wage differentials exist even

within the same occupations, even after controlling for work experience and educational credentials. This fact holds true for those occupations which require post-secondary education as well as those which require no formal schooling. Clearly, access to education is not enough to achieve equal wages and work.

Funding Education: The Crisis of the 1970s and 1980s, the ERP and Donors.

For the past two decades Tanzania has been going through a serious social and economic crisis which finally led to the deterioration of the education system in the early 1980s. From the mid-1970s to the present, there was steady economic stagnation and decline: The GNP stagnated at a rate of 1.5% per annum while real per capita income declined at about 2% per annum (Havnevik et al 1988). The rate of inflation has also increased, thereby exerting downward pressure on real wages as cost of living rose. The average wage of industrial workers in 1984 was reportedly 70% lower than that of 1972 (Havnevik 1988).

Two major points of view have emerged as to the cause of the crisis: the Tanzanian government has emphasized external causal factors, the World Bank heads donors emphasizing internal causality. The government, for example, has pinpointed factors beyond their control such as the 1974 drought, the war with Uganda, the rising costs of imports especially oil, and declining world prices for agricultural exports. The World Bank and others donors view these external factors as contributing to the crisis, but not as sufficient reasons for its magnitude; nor do they provide a rationale for solutions. The major causal factor from this point of view is government domestic policy, including such policies as nationalization and the creation of parastatals, poor pricing and support to the agricultural sector, and social democratic policies which acted as barriers against full-scale capital investment and accumulation.

Aside from the fact that such assumptions are not necessarily supported by close analysis of the relevant data (a good deal of government support went to large-scale agriculture at the expense of the small-scale sector), we believe that the internal/external dichotomy is a false one. It assumes, for instance, that policy formation and implementation occur within a domestic vacuum, oblivious to external influence. On the contrary, Tanzania has had little or no autonomy in these spheres since the relatively autonomous moments of the Arusha Declaration and its subsequent policies. After the 1978 fiscal crisis, the government was left with few resources at its disposal and eventually acquiesced to IMF/World Bank policies of structural adjustment and stabilization, including devaluation, monetary and financial restraints, reduction in public expenditure and measures to increase state revenue.

The IMF package included measures related to education, specifically the transfer of financial responsibility for construction of primary schools from the government to local communities, reduction of the public share of expenditures and an increase in private costs through cost-sharing measures such as school fees at all levels and the encouragement of the private education sector (UNESCO 1988).

Funding for education has mainly been from the two sources of government and donors. Figures for 1962 - 1988 indicate that foreign funding has contributed from between 60% to 87% of total budgeted expenditures, reaching a peak in 1976/77 and declining thereafter (URT/Education 1984). However, these figures are somewhat misleading. First, government expenditure figures hide the contribution of local communities to education, including labor (self-help building), teaching materials and the maintenance of the school population while at home. Without such contributions, achievements such as UPE and ESR would never have been possible. Second, foreign funding of education actually declined during the late 1970s. By the time the IMF was pressing the government to reduce expenditures on education, most donors had already decreased their allocations.

Education's share of government total expenditures (development and recurrent) has remained stagnant at around 14% from the period 1970/71 to 1987/88 (UNICEF statistics). Expenditures in other services have declined, along with agriculture and public administration, while servicing the public debt has increased from 7% of total expenditure to 31% for the same period.

The Economic Recovery Programme's (ERP) policy of further reductions in government funding of social services has had a negative impact on the quality and quantity of educational services, as well as their transformative potential. We believe that increasing user charges in a period of severe erosion of real wages and real incomes will reduce the amount and quality of education for children of the poor, and will increase inequality of access to schooling at all levels, according to gender as well as class, region and ethnicity. At the same time, decrease in actual educational resources such as classrooms, teaching materials and teacher training will negatively affect the pedagogy and school environment. It is also most likely that transformative efforts for change, such as those voiced in this review, will be shelved, at least on a national level if not on the level of individual struggles, for lack of resources.

CHAPTER TWO

PRIMARY EDUCATION

by
Priscilla Olekambaine

.... understanding of what goes on in primary education is crucial to understanding gender issues in the country. Apart from socialization that goes on at home, attitudes and norms that are built up in primary school will affect how girls think of themselves ... The gender socialization role of primary school is important. It prepares them for their role as rural workers as well as mothers and wives. How does this happen? Why do boys and girls go through the same system and come out differently? (Sumra 1990b).

This chapter focuses on girls' education in the primary sector, particularly on developments following the post 1967 reforms of Education for Self-Reliance (ESR) and Universal Primary Education (UPE). Little work has been done in Tanzania concerning gender issues in primary education, despite its significance for women's lives and future education. Primary schools have the potential to offer girls an alternative arena for developing skills, attitudes and knowledge within a democratic environment, although indications are that such goals have not been reached. Given the lack of adequate research, it was necessary to extrapolate a great deal from the materials available. The issues we raise will hopefully stimulate others to do the research necessary.

DIFFERENTIAL ACCESS BY GENDER

The Socio-Economic Factors

Female education was not a priority for the colonial authorities, but then, neither was African education (see Chapter One). African women received the least education of all groups in terms of amount and level. The low priority given to women's education was partly the result of the labor needs of local economic systems; women's labor was increasingly relied upon to provide casual workers for large-farms and plantations as well as family labor in peasant production systems. By making economic use of women's "free" labor, men were freed to join the migrant labor system and to enter the semi-skilled occupations open to Africans. At the time of independence, only 36% of primary school students were girls (Std 1-4), and the proportion declined at ever higher levels: 19% in Middle School (Std 1-5) and 14% in secondary school (URT/Education 1963). Thus girls were affected by both low enrolment and high attrition rates.

Although gains were made in girls' enrolment after independence, their enrolment remained lower than boys' until 1982, five years after the introduction of UPE. Higher attrition rates for girls have also continued to pose a problem until recently.

The reasons for the low enrolment and high attrition rate in the pre-UPE period

continue to affect performance in school and access to secondary schools. These reasons are inter-locking factors of gender relations, and regional and economic patterns of development.

Access to primary education for both boys and girls varied in relation to the region, with the highest enrolment of 60% in Kilimanjaro and the lowest recorded in Shinyanga of 23% (MoE Statistics 1961-1975, Lindi and Rukwa not recorded). These differences can in least in part be explained by regional differences in resources available in school and at home. Better off regions tended to have more trained teachers and materials, and communities were more able to provide additional support to teachers in the form of gifts and labor.

Thus patterns of regional differentiation partially reflected different patterns of economic development in each area, and the place of each region in the national and global economy. Even greater disparities existed within some regions. The highland communities in Moshi, Rungwe, Mbinga and Bukoba were highly productive producers of export crops and also advanced in commercial trade. Intensive smallholder cash crop farming resulted in land scarcity and the commoditization of the local economy. As the smallholder system could no longer absorb all family members, investment in formal schooling offered relatively high returns. At the same time, the people in these areas were relatively more able to produce funds for schooling and to free youth labor from family obligations.

Girls' access to primary education was not only effected by these economic factors, but also the socio-cultural environment of gender relations played and continues to play a crucial role. Because of the sexual division of labor and the system of bride-wealth marriage and adultery fines, girls were often denied education, even in households and communities wealthy enough to support schooling. Households relied on girls' work in farming, small livestock keeping, child care and basic domestic tasks such as firewood and water collection, cooking and washing.

Girls were also valued as objects of exchange value i.e. in bride-wealth exchange and the custom of charging fines for adultery or pregnancy of unmarried women (Kerner 1988). In many areas, parents feared to send their girls to school because they feared the loss of "income" (Mbilinyi 1973, 1974), or they withdrew them with approaching puberty. Furthermore, school girls were considered less submissive and obedient, more resistant to local patriarchal systems, and more promiscuous. Their schooling did not up their bride-wealth, but lowered their exchange value.

Parents, and in particular mothers, also had cause to favor boys' education in that they were dependent on adult sons for "old age insurance". In addition, the sexual division of labor meant that mothers had to rely on their daughters' labor.

By the 1980s, however, there is some evidence for change in such valuations of girls' schooling, especially in areas where farming no longer provides adequate subsistence and families have become increasingly dependent on non-farm incomes. There is for example an increasing rate of investment in girls' private secondary

education in well-off as well as less developed regions (see TADREG 1989 and Chapter 3). These changes also reflect the gradual withering away of certain aspects of old, patrilineal systems, at last is some areas of the country. The crisis in people's incomes has led to major changes in survival strategies for households and communities with an impact on their perceptions of schooling (Kerner 1988).

The Impact of Differential Family Income

Research shows that girls' chances for going to primary school were strongly influenced by the socio-economic position of their families. Although there appears to be no simple, unilinear relationship between gender, income levels and the decision to educate a child, gender and future investment returns are a major factor in this decision. This was found in 1969 surveys of Tanga and Mwanza carried out by Mbilinyi (1973) and was confirmed in Malekela's findings of 10 years later concerning secondary school girls (Malekela 1983). There have been too few studies of this issue. It is all the more important now as a result of the reintroduction of school fees and the rising costs of schooling.

Religious Differentials

In areas where organized non-indigenous religions (Christianity and Islam) had become well established, enrolment rates were generally higher. This pattern reflects the investments which Christian missionaries and local African churches made in schools, and the value given to literacy in Christian and Islamic faiths.

EDUCATION FOR SELF-RELIANCE AND ITS IMPACT ON WOMEN

ESR was originally developed with the aim of providing "relevant" education for local conditions, another form of education for adaptation. ESR's stated aims were that school leavers go back to the land and become more productive farmers. However, as early as 1975 Tanzanian educators realized that parents and the community continued to define education as a means of upward mobility, and peasants continued to aspire of non-farm wage employment for their children (Mwobahe and Mbilinyi 1975). Adapting to local conditions also meant sustaining the status quo when it came to gender and patriarchal relations which oppressed both women and youth.

The instilling of democratic principles, critical thinking and the practical application of knowledge are other objectives of ESR which have not been reached. Freyhold's research in Tanga (1977) found that ESR school activities did not link theory and practice, nor were democratic principles used in the planning and implementation of productive school activities. All involved, including teachers, administrators and pupils viewed formal education as the key to wage employment outside the rural areas.

Eighteen years after ESR Sumra (1985) identified many of the same problems. In

addition, he pointed out that the structural content in which ESR was set was highly bureaucratic, given the organizational structure of the MoE. Teachers, school administrators and pupils had no voice in decision-making about the curriculum in all its major aspects, i.e. content, texts, examinations and pass selections, as well as pedagogy. This over-centralization left little room for individual initiative and innovation, a problem compounded by the shortages of materials and the inheritance of an authoritarian school environment. Under different conditions, such as the prioritization of a truly transformative education, the situation could have been different.

For women the adaptive, non-transformative approach of ESR implementation meant a tendency to entrench women's dispossessed status, while at the same time providing them with the means to overcome it - i.e. education and the enlightenment so often associated with it. In spite of ESR's radical rhetoric, it never confronted the issues of patriarchy, nor did critics of ESR policy ever raise the gender issue in their analyses (see references in Mwobahe and Mbilinyi 1975). Moreover, steps taken to expand school enrolment made no provision for women's interest and needs within the curriculum, and in teacher education. By not specifying women's needs, men's needs and interests tended to dominate.

ESR's objective to return school leavers to the land as more productive farmers conflicts with another ESR objective of promoting independent, problem-solving behavior and a critical attitude. No critical thinking woman would go back to the land as an unpaid family worker, not if she had an alternative. Within the context of oppressive patriarchal gender relations, sending primary school graduates back to the land had different meanings for boys and girls. Perhaps increased resistance to patriarchal control currently being researched (refusal to work on husband's farm without benefits, movement to plantation wage and casual labor, migration to urban areas) are the fruits of the beginnings of critical thinking.

The ideological constructs adopted to legitimatize ESR and the Arusha Declaration such as "ujamaa" were based on an idealized imagery of a genderless past, as imaginary world in which no one exploited another. As has been said often, men may not have exploited each other but they certainly exploited women in that common past (Mascarenhas and Mbilinyi 1983, Part One). Policy which uncritically seeks to resurrect or to preserve the past cannot benefit women.

UNIVERSAL PRIMARY EDUCATION AND ITS IMPACT ON WOMEN

UPE was one of the boldest moves made by the Tanzania government since independence. Primary school enrolment had increased from 0.5 million at the time of Independence to 2.2 million in 1976, a percentage increase of 340%. The rapid increase was due in part to the rapid expansion of primary schools, as well as the expansion of public schools through joint efforts of community self-help and government support. The villagisation drive of the mid 1970s, with the promise of a school for every village, also facilitated expansion. This pressure from below ultimately led

to the Party's declaration declaration of UPE in 1974, and implementation was underway by 1977.

Access

UPE was a positive development for women; for the first time full equality in access to primary school was achieved at the national level. The female ratio rose from 42% of total enrolment in 1974 to 49% by 1984. Full parity in access was reached in 1985. However, the relatively higher drop out rate for female pupils remained until 1986 (URT/Education 1984, 1988). This change was due at least in part, to the passing of a law to enforce the policy of compulsory enrolment and attendance. However, the use of law and a repressive system of court fines and local law to enforce what is a progressive policy seeking to promote equity and human rights, raises important considerations. Such means may be needed when the rights of a minority group are threatened, but in the case of gender relations we are also dealing with basic relations between people, in fact, relations between members of a family household. Although a law may help enforce attendance, the root socio-economic factors affecting girls' access, attrition and performance remain untouched.

Performance

The most frequent criteria adopted to evaluate primary school performance is the examinations taken at the end of Standards 4 and 7. There have been hardly any assessments on the basis of day to day performance of teachers and students through classroom observation, analysis of regular school work, end of term tests and homework. This situation has forced us to rely on analysis of examination results as a proxy for more thorough forms of assessment.

Observers have noted that examination scores are declining. In 1986, for example, 35% of Standard 5 students taking the Standard 4 examination failed with marks below 25%. Even more alarming, 12% never answered a single question (MoE communication). The implications of more than one third of the student body repeating Standard 4 must have been daunting. The Primary School Leaving Examination (PSLE) performance is also questionable. Although the actual results are, in accordance with official government policy, kept secret, teachers, students and the general public are not satisfied with the examination, particularly as a basis for selection to secondary school. One prominent Head-teacher even stated that the examination worked as a disincentive for both students and teachers (Resource Persons' Workshop).

Girls' performance was generally poorer in all subjects examined in the PSLE (English/Kiswahili, Mathematics and General Knowledge, which combines History, Geography, Civics and Science). Ndabi (1985 cited in TADREG 1989) analyzed the results of the PSLE for nearly 200 pupils in 7 schools. Boys performed better than girls in all subjects, although results were nearly the same for language (6% differential). However, girls performed 12% below boys in general knowledge and 31% below boys in mathematics. These results are worse than the usual gendered pattern

of final examinations found in other countries. Girls usually outperform boys in primary school and begin to slip behind later in secondary school as they enter puberty.

The reasons for girls' lower performance are complex. Some of the socio-economic factors have been touched on earlier in relation to access. A common explanation is girls' heavier burden of work at home. This situation has often been described and lamented by secondary school girls (see, for example, Jangwani School Magazine), but it reflects the general situation of girls and women of all ages (for specific data on school girls see Mbilinyi 1973 a,b).

Another hypothetical explanation for the differentials in performance (Mbilinyi, personal communication) is that school culture in Tanzania fundamentally male-oriented and male-dominated, beginning at primary school and permeating the higher levels. The reliance on caning and other forms of physical violence, the prevalence of men in the teaching staff, the army-like rituals ("parade", "stand at attention") and the significance given to individual competition correspond to a macho world. Moreover, only aggressive, downright domineering and/or highly motivated children can become leaders (chosen as prefects or monitors) or hope to win the attention of teachers in overcrowded classrooms (Manase and Kisanga 1978, Mbilinyi et al 1976). These macho elements are starkest in primary schools.

Another explanation is that girls reaching adolescence face conflicting role expectations and fear to be labelled too "smart" in school. At adolescence, being "feminine" means not being intelligent, ambitious and resourceful. Moreover, Tanzanian girls are faced with the "male supremacist" ideology rooted in the patriarchal culture that men are naturally more intelligent as well as mechanically able. Questionnaire research on gender stereotyped attitudes in Tanzania showed that adults believed girls more limited than boys, i.e. they cannot "assume responsibility (Mbilinyi 1973a: 372). The same research also showed that girls, particularly non-school girls, had internalized these views of their own inferiority and lower intelligence.

These results give us some indication of the handicaps which girls carry with them to school. Faced with a harsh school environment and persistent failure, how comforting it may be to say "after all, I am only a girl, it doesn't matter if I don't make it." This is the compensatory thinking which is the "normal" response of persons in discriminated groups, and it can become a self-perpetuating cycle. Twenty years after the above research school girls expressed similar ideas in interviews held in Coast, Iringa and Kilimanjaro regions (TADREG 1989):

> There was a widespread prejudice that girls are less academically able than boys: most girls said that their parents would be very surprised were they able to score first division marks in the CSSE, but would not be surprised were their brothers to do so (p 26 draft).

Regional and Gender Differentials and the Quota System

Male superiority in examination performance is consistent throughout the national (based on 1985 PSLE results, cited in TADREG 1989). Girls performed less well in almost all districts, and in both urban and rural areas. Table 1 compares the cut-off points for boys and girls, and the percentage who scored 50% or more on the exam, 50% being the pass mark.

According to Mbilinyi (personal communication), one of the most salient messages in this Table is the low proportion of both girls and boys who achieved at or above the 50% level. Another is the significance of regional and district differences, which may be as great as gender differences. In Mtwara, Dodoma and Iringa, for instance, the intra-regional district differences among girls are greater than gender differences within any given district.

This situation suggests we should also give attention to regional and district variations among girls or boys as well as gender differentials. Otherwise, we are in danger of blindly reinforcing the male supremacist ideology that girls are less intelligent than boys. Clearly girls on the average performed less well in any given district, but gender alone does not explain the differences in examination performance, and not all girls performed less well than boys.

More in-depth analysis is needed of the effects on performance of differential resources at schools and in the home. Puja (1981) found that performance depended on the socio-economic situation of the family (educational level, occupation, life styles/living conditions and family size. These findings have been supported by other studies (Shuma 1980, Mkoma 1979, Omari 1977, Dubbeldam 1969 and Mbilinyi 1977b).

Table 1   Cut-off points and proportion of male and female candidates obtaining marks of 50% or more in the Primary School Leaving Examination in selected regions (1985)

Region/District	Cut-off Point		% of candidates with 75/150 or more	
	Boys	Girls	Boys	Girls
DODOMA				
Dodoma Rural	75	70	3	.3
Rural	78	66	4	1
Municipal	89	76	16	6
Mpwapwa	91	78	9	2
Kondoa	88	79	7	3
Regional Ave.			4	

Region/District	Cut-off Point		% of candidates with 75/150 or more	
	Boys	Girls	Boys	GirlsDAR
ES SALAAM				
Kinondoni	94	80	20	11
Ilala	90	77	19	9
Temeke	92	74	20	7
DSM Rural	77	60	9	3
Regional Ave.			14	
MTWARA				
Municipal	92	85	12	6
Rural	73	61	3	.3
Masasi	74	68	3	1
Newala	70	62	2	1
Regional Ave.			2	
SINGIDA				
Municipal	94	76	8	1
Rural	88	77	8	2
Iramba	95	85	.2	2
Manyoni	83	75	6	1
Regional Ave.			5	
IRINGA				
Municipal	89	75	19	7
Rural	80	73	4	.4
Mufindi	85	74	6	1
Mufindi/Malangali	62	52	6	1
Ludewa	87	75	7	1
Njombe (U)	89	77	19	7
Njoe (R)	88	77	7	2
Makete	93	82	13	2
Regional Ave.			4	
Sample Average			6	

Source: MoE/National Examinations Council of Tanzania, mimeo 1986, cited in TADREG 1989, Table 12.

Classroom Size

One result of UPE expansion coupled with lack of funding (see Chapter One) is the large classroom size. National averages for classroom size mask the reality. For example in Dodoma Region in 1980 there was an average teacher:student ratio of 1:56 (Olekambaine 1987). The range of variation, however, was large according to location of school and Class (Standard) level. There was a regional shortage of 1140

classrooms and 47,000 desks - 50% sat on the floor or stood up. Figures double that amount were cited for Dar es Salaam, which tended to be more privileged than rural locations.

Although a good deal of emphasis has recently been put into improving the desk situation, the issue of classroom size has not been taken seriously. The rather abstract debate about the impact of large classroom size on teacher effectiveness and pupil learning seems, under the circumstances, to be cynical if not dishonest. The World Bank, for instance, has argued that classroom size does not matter, and they have insisted that the government increase the student: teacher ratio as part of the austerity drive for education (See UNESCO 1989,b). Large classroom size means that slow or shy learners are left on their own. How do the government, donor agencies and experts justify their position concerning Tanzanian schools, when the average classroom size in developed countries is 20 or less, where primary school teachers have qualifications equivalent to university degrees, and they have access to a host of materials and support unavailable to Tanzanian counterparts?

The physical infrastructure of Tanzanian schools as well as availability of teaching materials is also low. Schools lack electricity, lighting, audio-visual aids, adequate books and any kind of wall charts, maps, etc. - all basic necessities to enable a teacher to deal with large classroom size. The student:textbook ratio was about 1:5. What kind of meaningful effective learning can take place in such classrooms?

Classroom interaction is also affected by classroom size. A recent report of classroom interaction in Morogoro primary schools found that teachers had become more authoritarian as a result of large classroom size and shortage of teaching materials in combination with other factors (Education Fac 1990). The impact on girls will be discussed below.

Curriculum

The number of subjects (13) taught in the primary school curriculum definitely affects teaching and learning effectiveness. Subjects cannot be taught in depth; they are rushed through in a hurry to meet the national syllabus. On the average, there were 30 periods per week in Stds 1-3, 35 in Stds 3 and 4, 40 in stds 5, 6 and 7. Teachers thus lack the time to use innovative methods, to encourage original or critical thinking, or to provide tuition for those late developers. There is also no place in the curriculum for counselling or guidance.

Schools also lacked many extracurricular activities; competitions in ngoma, song, poetry and drama were infrequent, and often involved only a small segment of the school population. Yet they provide an excellent opportunity for students and teachers to employ their creative and artistic abilities. Girls are active in most of these activities, and indeed tend to monopolize ngoma and song in many schools. Such activities, if lost, are lost opportunities to build student creativity and confidence as well as build community support through active participation of the parent community.

The highly centralized curriculum does not allow time or space for teacher initiatives and innovations. The Faculty of Education's (1990) classroom interaction study found that "recitation" was the prevalent method used in language teaching, and the lecture method predominated subjects like science, geography and history. A situation such as this prevents democratic classroom interaction, creates boredom, anxiety or both, and leads to absconding from school. For some students, it would be preferable to spend time earning money in petty trade activities rather than being caned in a classroom or forced to sit for hours listening to subjects whose value is questionable taught by methods which do not encourage individual thinking.

Freyhold (1977) and Sumra (1985) both found that primary education lacked the practical content required in the ESR programme and considered necessary to strengthen the learning process. Manual work, for instance, was to form an integral part of the curriculum, lending subjects a high practical content. In reality, the shortage of equipment and materials and conflicts over the distribution and proceeds of ESR tasks reduced practical work to the bare minimum.

The content of curriculum does little to transform women's lives. The school could be used to transmit information of specific use and interest to girls. Some examples include appropriate technologies; information about sources of credit, about the value of their labor in the domestic and family farm work. Another set of relevant skills are organizational; leadership and resource mobilization skills: how to organize a meeting, how to effect democratic administration and decision-making, how to plan and lobby for women's priorities.

A third area of useful knowledge skills and attitudes relates to the history of gender relations and its impact on development in society. Girls need to have a more specific understanding of their condition as an oppressed group, and as a minority within the work-place and higher levels of schooling. They need to develop coping skills to handle discrimination, and assistance to recognize the way in which their own attitudes perpetuate their inferior status. This knowledge, skills and attitudes can best be referred to as gender sensitization, a development strategy now well recognized by the Party and government. It is time to involve the members of the community who have so far been denied access to this sensitization process. The primary school is an excellent medium, as it is the major socialization agent in society and a central place in the community. It is also a way to sensitize teachers, parents and develop a gender-positive curriculum at the same time. Educators need to work for change with the institution as well as with its primary change agents, the teachers.

The gender content of texts needs to be analyzed and new texts need scrutiny for gender-biased content. We know from observation that most primary textbooks depict women as well as men, boys and girls in gender-typed roles: the mother/wife cooks, the father/husband farms or returns from office; the boy herds cattle and the girl carries water. As Sumra (1990b) noted in his discussion remarks, how often are women depicted in positions of power and authority?

Examples of the types of analysis needed are available. The Women Expert Group

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carried one out in relation to post-literacy adult education materials. Women scholars have also directed critical analysis at the popular culture which has a daily impact on teachers, students and the community at large (Besha 1978, Lihamba 1979, Matteru 1978, Mbughuni 1983, 1988).

Instructional Materials

Having adequate amounts and type of instructional materials is crucial for effective teaching and learning. As confirmed by many reports (Puja 1976, Mrutu 1977, Komba 1977, UNESCO 1989), Tanzanian schools have not been well supplied with instructional materials, while other materials such as supplementary reading have been forgotten in the squeeze of the economic crisis. UNESCO (1989) has examined the textbook situation in detail, and current programmes to provide instructional materials are highly welcome.

TEACHERS

Teacher Training

Tanzania has 40 teacher training colleges offering diploma courses and Grade A and B Certificates. Grade B Certificate holders are Std 7 leavers with 4 years of residential training. They spend 2 years taking academic subjects, equivalent to Form 2, and then 2 years taking education courses, including 12 weeks of supervised block training. Prior to 1979 this was known as Grade C. Grade A colleges take Form 4 leavers, and the Diploma colleges take Form 6 leavers. The majority of Diploma graduates become secondary school teachers, along with many Grade A graduates as well.

Generally colleges lack adequate facilities and funds to buy instructional materials; college libraries are stocked with old textbooks.

Many teachers are also participating in correspondence courses so as the get a Secondary School Certificate or qualify in some other programme. The MoE also provides training through in-service courses. However, during the Resource Persons' Workshop it was found that primary school teachers are now reluctant to participate in such in-service courses because of the extremely poor, indeed hardship conditions under which such training is held. Teachers receive a minimal amount of allowances and poor quality food and other services.

Many of the teachers recruited for the UPE expansion were trained through long-distance training (Mrutu 1977). During the period from 1976 to 1881, roughly 35,000 teachers were trained in this way, a large proportion of whom were women. The majority of trainees were young adults who had completed primary school within the last two years and were living and working at home. Research indicates there is no substantial difference in teachers trained through UPE long distance training and those who went through institutions.

Teacher Quality and Pedagogy

Primary schools are mainly taught by Grade B and A teachers. According to one participant in the Resource Persons' Workshop, many of these teachers are unable to write on the blackboard and cannot teach science, maths or English. Their low ability is also coupled with poor motivation. Teachers work in difficult if not impossible conditions in the classrooms and schools, with unattractive living conditions. Salaries are low, and often the teacher has to travel to the District headquarters at her own expense to collect it. Tight work schedules to complete the long syllabus plus large classroom size frustrate teachers' efforts to gain a supplementary income. It is a common sight to see teachers with baskets of snacks to be sold within and without the school compound.

Komba (1977) argued that the quality of teachers and teaching deteriorated during the early and mid 1970s as a result of inadequate resource allocation to primary schools. According to our Workshop discussions, things have not gotten better, in fact, with the real erosion in wages, the time and effort needed for adequate teaching are in further danger. Thus the gaps in the teaching and learning process of primary students will continue.

Such teaching and learning conditions make it inevitable that teachers adopt authoritarian management styles and teacher-centered methods of teaching. This situation is confirmed by the classroom interaction study (Education Fac 1990). Rote memory is also enforced by the nature of the PSLE and its significance as the criteria for selection to further schooling. Copycopy methods of teaching (teachers copies notes on the blackboard from her lesson notes or text - or gets a student to do this, and students copy the same from the blackboard and later regurgitate it on a school test) are by nature boring, unattractive and insensitive to the specific needs of individual pupils and disadvantaged groups.

It seems likely that the teaching conditions combine with low teacher motivation, authoritarian management and copycopy pedagogy have a more negative impact on girls than boys, as evidenced, for instance, in examination performance. This is partly because girls are so dependent on the school as a major learning arena; after school, they have to help at home and thus have little time for study. Teachers cannot provide the special counselling needed, for instance, by adolescent girls. Instead of encouraging girls to be outgoing, assertive, critical and challenging, they would rather insist on maintaining social order in the classroom. It is therefore advantageous to encourage girls to behave and respond in the 'traditional' submissive and subordinate manner. Studies of the differential impact of pedagogic styles carried out elsewhere indicate that this current style is more harmful to girls (see Duncan, Weiler and Sharpe). Of course exceptions, both among teachers and students, exist, but forms of resistance and struggle are relatively poorly documented and need further research as well as encouragement.

SCHOOL ENVIRONMENT

The learning which takes place at school is affected not only by the official curriculum but also by the hidden curriculum. The hidden curriculum includes the way in which students are selected, the way subjects are divided from each other, the organization of the school timetable, the structure of social relations (eg the prefecture and monitor system, teacher relations with each other and their pupils), the method of discipline and the kinds of behaviors which are rewarded and punished. As discussed earlier, these elements contribute to the macho world of the school environment, dominated by authoritarianism, strict discipline and overcrowded curriculum and classrooms.

Other factors also contribute to the failure of the school environment to encourage transformation process for girls. One is the age of entry. By law, a student can be admitted at any age between 7 and 12 years old. In 1986, for example, Std 7 students' ages ranged from 11 to 27 years and over, with the majority found between 14 and 15 years, but another 40% were 16 years or older (MoE Statistics).

The school system has no provision for differential treatment of students of different ages, i.e. young adults as opposed to preadolescent children. Thus the latecomer is not only disadvantaged by late entry into the school learning process, but having such a variety of ages within one classroom makes teaching difficult. Most likely, the social dynamics of this mix hits girls harder than boys. The entry age law was established in the early days of UPE in order to ensure that school was open to all who had as yet missed the opportunity. However, it is now time to initiate a more consistent age entry policy. Alternatively, separate middle school classes could be established (Std 6-7). Such schools would allow space for a different social dynamic developing among adolescents, as well as a more independent and critical pedagogy. Girls would benefit from the "girls only space" as well as space for discussion and counselling.

Another factor which hinders the learning process for girls is the discriminative attitudes of teachers. The ongoing Faculty of Education study on classroom relations found that boys received more attention than girls in all subjects observed (1990: 17, 31), regardless of the teacher's sex.

Teachers also reinforce the macho environment through corporal punishment to maintain social control. Although the MoE had to adopt special measures to try to control the situation (the Corporal Punishment regulation GM 133 of 1979), caning remains one of the most common punishments in the school system. There has been no study of the differential impact of such punishments on girls and boys, but it could be considerable, as girls are considered more vulnerable to and shamed by public and physical abuse.

Dropouts

There is most likely a causal relationship between the negative school environment

and truancy. The majority of students who left school between 1982 and 1986 left because they "did not like school" (MoE Statistics). Unfortunately, gender break-downs in the categories for dropout statistics are not given. One can assume, however, that the majority of those expelled for pregnancy were girls (some boys were also expelled for causing pregnancy). Once expelled, students do not have a re-entry path.

There has been a major debate over the policy of expelling school girls for preg-nancy, recently summarized in the study by Kassimoto (1987). Those against the policy observed that it was no longer relevant to Tanzanian society, where so many unmarried young women engage openly in sexual partnerships and have children without being formally married. In her study Kassimoto recommended that preg-nant school girls be given leave of absence and be allowed to re-enter without penalty after bearing their children. This recommendation was also adopted at the Resource Persons' Workshop.

The timidity with which educators, especially women talked about the issue of sex has become problematic, given the prevalence of commoditised sex relationships involving female youth. The very real threat to the health and lives from AIDS and other venereal diseases as well as early pregnancy makes such timidity verge on negligence. The MoE must adopt a strong family life education curriculum as well as counselling as part of the regular school curriculum.

FINANCING PRIMARY EDUCATION

Primary education has received more than half the recurrent budget for education in the period 1981/2 to 1987/8 (MoE Sectoral Planning Statistics 1989), and took 57% in 1987/8. However, development expenditure shows the opposite pattern. During the same period primary education received only 14% of the total develop-ment budget, in spite of the major expansion going on in enrolment. This is one indication of the degree to which UPE has depended on cost-sharing from its inception, in that schools and teachers' houses were mainly built through local community rather than government or donor resources. In comparison, technical education (does not include vocational training under the MoL) received 21%, the largest share for a relatively small student body. The University received 16%, Secondary 14%, Teacher Education 11%, and Adult Education was the lowest re-cipient with 8%. Thus expansion and mass education efforts have received the smallest allocations despite the large student body.

The primary school sector has been drained of financial resources, which has had a negative impact on supplies of books and other resources, real wage levels and teacher incentives. Lacking resources, schools are less able to adopt innovative methods of teaching and counselling or establishing remedial classes for those students in need of additional help. In Tanzania the current average expenditure per student in primary education is equivalent to US $30. This figure is only 57% of the average for sub-saharan Africa (US $52). Most of this money goes to cover teachers' extremely low salaries. Funds for instructional materials are also excee-

dingly low, eg US $0.70 per student out of the total US $30.

Indications are that improvements in the quality of education will, like the expansion efforts under UPE, depend a great deal on local community and household resources. However, while communities can fund desks, classrooms and teacher incentives, some gender-specific quality improvements may well need to take place on a national scale with government and/or donor funding, i.e. gender positive curriculum and teaching transformation.

CONCLUSION

The goals of ESR and UPE are potentially progressive, and should be supported by women in their transformative sense. However, schools alone cannot change society, though they can become sites of struggle and resistance. The outcome of women's efforts to advance themselves in education will partly depend on struggles in home, the labor market and the political arena. Women have tended to shy away from the political arena, but they cannot hope to make real long-term changes in their conditions without becoming political actors at all level, from household to village, factory and school, to national level.

Many of the issues which were raised in this Chapter are also relevant to other education sub-sectors. These include the lack of books and teaching aids, the prevalence teacher-centered pedagogy and authoritarian management styles, gender-typing among teachers, lack of gender positive curriculum and texts, the (relatively) poor performance of girls, the punitive attitude to pregnant young women and financing issues. Other issues are more specific to the primary sub-sector. These include the extend of corporal punishment. Features peculiar to the primary school are parity in access and attendance and the fact that both sexes take similar courses.

Primary schools have the potential to promote equity, to offer an alternative development arena for young girls. These schools are also key factors in transforming oppressive gender relations, as they are a key agent in the socialization process. But why then, do schools continue to perpetuate differentials in girls' performance and attitudes to self? Answers must be sought in a combination of more hidden factors, such as discriminative classroom relations, the macho environment, the authoritarianism and lack of gender-positive learning content. The learning and teaching conditions are also not conducive to a transformative process. If the schools had adequate supplies of books and teaching aids, library facilities, then children lacking such materials could find them at school. Well-paid teachers with adequate monetary and non-monetary incentives would be able and willing to provide additional assistance, as they did in the past. Smaller classrooms, a more flexible curriculum and forms of assessment other than national examinations would allow teachers' individual initiative, and creative instruction and counselling.

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CHAPTER THREE

SECONDARY AND HIGHER EDUCATION

by
Marjorie Mbilinyi

INTRODUCTION

This chapter examines gender differentiation in secondary and higher education in access and content of schooling, and its impact on women's life chances in education and employment. The focus is on secondary and university level education. Technical colleges administered by the MoE are analyzed in Chapter 5; most other tertiary institutions fall outside of the MoE's orbit.

The first section analyses issues of the student access, including government and donor policy towards public and private schooling and the impact of gender and socio-economic and ethnic differences on equality of access. Government strategies to increase women's access to secondary and higher education are assessed in the second section. Teachers' conditions and the gendered nature of work in the education profession is discussed in the third section. The fourth section explores the gendered nature of school and classroom, including arts and science streaming and the diversification bias programme. The differential outcomes of the schooling process for women and men indicated by women's generally lower examination performances at O and A level are discussed in the last section.

STUDENT ACCESS

There has been very little progress in reducing women's unequal access to secondary education at the lower level (Forms 1-4) before the 1980s, and the progress made later stems mainly from increased female enrolment in private, rather than government secondary schools.

As a result of UPE, the number of girls eligible for secondary schooling increased as the number of girls in primary school more than doubled. However, this had little impact until the period of 1980 to 1988, when there was a high rate of growth in female secondary school enrolment, especially in the private sector: 31 percent increase for girls and only 5 percent increase for boys (TADREG 1989: 6). In other words, nearly one third as many girls found secondary school places during that time. This growth reflected the high level of demand for education among girls and their families. However, the figures also indicate that girls' increased enrolment depends heavily on the expansion of the private, nongovernmental sector. For example, the female ratio in the nongovernmental school sector has grown from 31% in 1968 to 45% in 1988, and in the public schools from 25% to 36% during the same period (TADREG 1989: Table 3).

Official policy towards private, nongovernmental schools has shifted in response to political and donor pressures as well as reduced financial resources available in the public sector.

During the mid-1960s there was a rising popular demand for secondary schooling following independence. As the government lacked financial resources to meet the demand and had also diverted substantial resources to disadvantaged regions, it appeared to take a neutral stand when the first major expansion of private secondary schools occurred in Kilimanjaro and other educationally advantaged regions.

By the mid 1970s, the government was forced to try and regulate the expansion of private schools, and "transfers" from private to public schools, due to two sets of considerations: anxiety about the political consequences of having a large number of educated urbanized people in the ranks of the floating unemployed, and growing public dissatisfaction with regional and class inequalities in securing secondary school places as well as irregularities caused by corruption in the bureaucracy of schools and examinations.

The government effort to restrict private school expansion became increasingly untenable, however, as the demand for secondary school education grew in the early 1980s when government resources were inadequate to maintain, much less expand, the public school sector. This policy reversal also corresponded to donor agency policy in favor of shifting the costs of education, especially post-primary education, on the shoulders of students and their families, and reducing overall public expenditures in education and other social services (see Chapter One). By the 1980s donors had also declared their priority for "basic", low level education in Tanzania and the rest of sub-saharan African (UNESCO 1989, World Bank 1988), with a negative impact on resources available for the expansion of education opportunities for both women and men.

As government policy shifted to allow more private school expansion, private schools have mushroomed. By 1989, there were 195 private secondary schools, compared to 131 public ones (Kalunga 1990). Since 1981, Form 4 private school places have doubled, from some 7000 to 14,350 in 1988, compared to the much slower increase in the public school sector from some 8500 to 9200 places (TADREG 1989: Table 5, figures rounded here and throughout).

Thus more secondary school students now study in private schools, especially girls. Using MoE statistics in BEST (1989: Table 2.1), I calculated that in 1984 51% of all secondary school girls were in private schools, compared to 42% of the boys. By 1988, the proportions had risen for both girls and boys to 62% and 54% respectively. Expansion for girls has also been greater in the private sector. During the period from 1981 to 1988, the female ratio in Form 4 places rose from 37% to 42% in private schools, compared to an increase from 31% to 34% in public schools.

The pattern of female access to Forms 5 to 6 is similar. The government has failed to expand Form 5 and 6 places to keep up with the demand, and one result has been

a drop in female enrolment, from 23% in public Form 6 streams in 1981 to 19% in 1988 (TADREG 1989: Table 5). There has been a corresponding increase in female enrolment in private Form 6.

Clearly girls in particular depend increasingly on the private sector for post-primary education opportunity. What impact has this had on their life chances, their examination performance and subject specialization?

According to all of the documents and research consulted, as well as interviews, private schools are generally inferior to public schools in every dimension of education. Teachers were less qualified. Most private schools lacked adequate teaching aids and equipment as well as textbooks for students, and many could not provide quality instruction in basic math and science subjects. As a result, fewer subject combinations could be provided, especially at A level. Such schools have become part of a second chance inferior school system which acts as a safety valve to relieve public pressure on the government and donors for more public schools.

Although private school expansion promotes equity by opening up secondary school opportunity to girls, this was a contradictory development as private schooling promotes greater inequality to access than public schooling.

Socio-economic, Regional and Ethnic Differences

Socio-economic status, regional residence and ethnic group combine with gender to affect access to secondary school places. According to Malekela's (1983) detailed research on equity access, children from middle class households and from the more educationally developed regions have greater access to secondary school places at lower and higher level. This confirmed the findings of earlier research (Mbilinyi et al 1975a, 1976, UNESCO 1981).

These socio-economic and regional inequalities are more pronounced in private schools and among girls; more private school students had "elite" fathers compared to their public school counterparts (23% and 16% respectively). Wealthier children were able to reenter the public school hierarchy at Form 5 level by attending private schools at the lower levels, because of the absence of a quota system at Form 5 level. For example, one fourth of Form 5 students (boys and girls) in 1982 had graduated from private schools. Malekela (1983: 167, cited also in TADREG 1989) found that a high proportion of private school students came from well-endowed regions; some 70% of all Form 5 girls with private school backgrounds were from Kilimanjaro. The only other region which monopolized Form 1 and 5 public school places out of proportion to its share in the total population was Dar es Salaam (Malekela 1983: 177).

Differentiation becomes even more marked if ethnic backgrounds are considered. Many families have adopted a strategy of "education migration" to get access to public schooling (Kerner 1988). At Form 5 level, Chagga students had more than five times as many places as their proportion in the total population would allow. Pare students had four times as many places, Haya and Nyakusa had two times and

many, whereas Mwera and Makua had only one-fifth of their share and Makonde had one-tenth.

According to Malekela (1983), regional and ethnic disparities would have been much greater without the regional quota system which protected equal distribution of secondary school places. Others (Cooksey and Ishumi 1986, TADREG 1989) have recently argued that since the elite have succeeded in circumventing the quota system, it no longer serves a useful purpose and should be dropped. My own conclusion is that the quota system should be preserved; without it, no girls would have qualified for Form I from Mafia, and only three fourths and one half respectively of those in Coast and Iringa. Instead of removing the quota system, donors and the government need to respect and support the popular demand for radical expansion of post-primary education. Expansion of publicly-supported secondary school places in an equitable manner could be combined with revision of selection procedures, including the closing of the 'back door' to entrants utilizing position and patronage to gain access to schooling.

The examination system would also need revision. Studies elsewhere have documented that examination performance is related to the level of school and family resources. This situation invalidates the use of examinations as true indicators of intelligence or even schooling potential (see argument and references in Weiler 1988).

Rather than drop the regional and gender quota systems, high-potential children with lower achievement need remedial programmes to help them "catch up" to those with the resources they have missed. At the same time, there seems to be an urgent need to investigate differential resources and standards of schooling by region, district and school location.

Differential Access to Higher Education

Female enrolment in university level education has fluctuated and declined in response to different policy interventions and the economic environment. The female share of first year places rose from 10% in 1976/77 to a peak of 27% in 1979/80, and then gradually dropped to 16% and 19% in 1987/88 and 1988/89 respectively (Muro 1982: 22, BEST 1989). The fluctuations and later decline were partly caused by the change in admission requirements associated with Musoma Resolutions of 1974, which required university applicants to have a minimum of two years' work experience after completion of Form 6 and National Service. Supportive recommendations were required from employers and local party leaders. The Musoma policies had a different impact on women and men. During its first year of implementation, there was a 71% drop in female enrolment, and only 9% of mature age intake that year were women.

The most common explanations were: women were more likely to marry and/or bear children during the two year period, and once married, lacked support or "permission" from husbands to continue their education; that employers, including mana

gerial personnel, were less supportive of women applicants; and that the latter often demanded sexual services from women in exchange for their support. In 1977, women were given special exemption from the two year requirement, along with engineering and forestry students and other special science combinations. A major consequence has been the overall increase in female enrolment, especially of young unmarried women.

Another reason for low enrolment is the shortage of qualified applicants, due to poor examination results at Form 6 level. This has affected both male and female enrolment. Aside from examination performance, however, the rigidity of admission requirements for particular degrees or course majors narrow the potential pool of candidates.

Another explanation for general under-capacity enrolment and low female ratios is the growth of alternative tertiary education opportunities outside of the MoE, and student preferences for more vocationally-oriented courses. There were over 264 post-secondary institutions in the late 1980s (UNESCO 1989), only 17% of which were administered by the MoE. Admission requirements were often lower, and interviewees noted that young women preferred such training because it was shorter and led almost immediately to higher paid work than university education. Seemingly these material rewards outweighed the greater prestige value of a university education. In 1986 and 1987, there were more than twice as many first year enrollments in the Diploma courses offered at IDM, IFM, Ardhi, Nyegezi Social Training Centre, Technical Colleges and the Cooperative College Moshi than at the University.

Interviews located another set of factors making university education unattractive for women. One was the high failure rate in certain fields, the most outstanding example being the Muhimbili Faculty of Medicine where only 10 out of 60 first year students and 10 out of 20 finalists passed in 1989/90. Another factor was the high level of sexual harassment of women students. A number of women reportedly chose not to enroll at the University of Dar es Salaam main campus because of Punch, a form of wall literature which has increasingly subjected girls to sexual harassment.

Post-graduate level opportunities have been severely reduced as a result of the economic crisis, and the deprioritisation of higher education in donor agencies. Both SUA and the UDSM operated under-capacity, though their resources were also undermined by a growing brain-drain of top level academics and the deterioration of equipment, book supplies and other resources. As expected, the female ratio was even lower in post-graduate enrolment than at the undergraduate level. Muro (1982: 27) found only 7 women out of 83 candidates in 1977, for example. During 1984-1987, only 18 out of a total of 240 post-graduate students were women at SUA (Shayo et al 1987).

Special support systems including women-oriented scholarships are needed to help overcome sex discrimination in post-graduate education, according to the conclusions of the Evaluation Workshop on Women's Advancement Programme held in

1981. Women who received these fellowships from the Ford Foundation stated they had to overcome many difficulties during their studies. These included the lack of employer support for release and funding; bureaucratic procedures; open and latent sexist discrimination at employment and at the university; sexual harassment; opposion from husbands and in-laws; and women's lack of self-confidence (see Semesi and Koda 1981).

GOVERNMENT STRATEGIES TO PROMOTE WOMEN'S EDUCATION

One of the most effective strategies to promote women's education has been the quota system of separate selection of boys and girls into Form 1, such that girls only have to compete with each other, and the reservation of at least one third of the places in urban day public schools for girls. This has helped increase the female ratio in Form 1 initially, but it has proven to be inadequate to the demand; a 50-50 policy seems called for. In the long run, women's examination performance, or the examination system, will have to be upgraded. The current decline in their performance reflects the lack of any kind of remedial education programme to help girls catch up.

Other strategies have included the intake of girls into what were formerly all boys' schools (technical schools at Moshi, Tanga, Ifunda), the opening of new girls' boarding schools, and double sessions in urban day schools. Form 5 and 6 places were increased by creating A level streams in 3 schools, and expanding the number of places elsewhere (MoE meeting, 13/6/90). Form 5 and 6 intake has also been increased by the transformation of six diploma teacher training colleges into three year programmes which include preparation for A level examinations. The exemption of women from the two year work requirement before university admission is another example of affirmative action which has benefited women.

However, the policy to "deboard" secondary education being fostered by the donor agencies and the government seems to work to the disadvantage of girls' advancement, as will be discussed in relation to performance.

The decision to provide sex breakdowns in education statistics has enhanced our ability to monitor women's progress and institutional differentials. Statistics that have yet to be covered include in-service training for teachers, teachers staff composition and post-graduate education.

More recent government and donor policies will probably have a negative impact on women's access to secondary and higher education. These include the reduction of public expenditure in education in real terms, the deprioritisation of post-primary education, the channeling of more funds to the private sector, a move which will benefit the more advantaged groups in society, and the growing costs of education for students and their families (Brock-Utne 1990).

TEACHERS AND THEIR CONDITIONS OF WORK

One fourth of all secondary school teachers and one-fifth of secondary school administrators were women in 1988 (BEST 1989), the latter mainly in the public sector. There was much higher employment of women in the public school sector (32%) than the private sector (14%). In comparison, only 11% of university academic staff were women in 1980, and the percentage has been dropping (UDASA 1980, Shayo et al 1987). Most university women are employed in the lower levels of the hierarchy.

Women teachers face the same kinds of problems women face throughout the civil service. As noted by Kalifumu (1990), women employees "have been construed in the paradigm of unequal husband/wife relationship" (p 21) within the civil service. For example, women teachers married to a civil servant must rely on the husband for housing, travel and medical privileges, and have no automatic rights to the same privileges which unmarried women and men receive, regardless of marital status (see also Shaidi 1990, UDASA 1990).

The initiative of university women, who organized themselves under the umbrella of UDASA to investigate the position of women's employment at the University (UDASA 1980) is one to be emulated by other teachers to better their working conditions. Women at the universities need to persist in their efforts, however, as little has changed with respect to the problems they raised.

Teacher Training

Education remains one of the most significant employers of women. Statistics for 1988 show that some 42% of teachers in training were women (BEST 1989). However, women are beginning to reject the teaching profession. University level statistics, for example, indicate that less women are taking science education than non-education science subjects. This probably reflects students' own preferences; many young women including Form 4 and 6 students reject the teaching profession because of low prestige, low pay and poor promotion prospects (eg Malekela 1983, TADREG 1989 appendices). Similar reasons may have caused the decline in female enrolment in diploma-level teacher education which began in 1986. However, further investigation is needed to determine the cause of failing female enrolment rates in teacher education at all levels, as it causes a loss of female employment opportunity and potential impact of female teachers.

Without women teachers at secondary and higher level, girls will lack appropriate role models, all students will miss the opportunity of having women teachers, and the school system as a whole will lose the group with the strongest commitment to teaching.

Working Conditions and Teacher Morale

The morale of teachers was low throughout the 1970s and 1980s, according to many researchers as well as periodic press reports (Chonjo 1985, ESAURP 1982, 1987,

Kalunga 1988, Killaghai 1990, Manase and Kisanga 1978, Mbilinyi 1975b, Muze 1987, Nyonyi 1980, Puja 1976, Sekwao 1986). These studies considered low teacher morale one of the most significant explanations for poor teaching in the schools and low examination results at Form 4 and 6 levels. Reasons for teacher dissatisfaction and frustration was attributed in these studies (see especially Puja 1976, Muze 1987) to four major factors:

- low pay and poor incentives of other kinds (poor promotion prospects, few fringe benefits, and inadequate training schemes);

- deteriorating working conditions (inadequate supplies of books, lab equipment and other teaching aids);

- low student motivation and low achievement in classroom activities in national examinations;

- low or nonparticipation in major decision-making about course syllabi, books, examinations and other aspects of teachers' work, as well as in evaluation of teachers' performance.

Higher pay has not always been sufficient incentive to correct the situation. In 1976, when pay conditions were better than in the early 1980s teachers emphasized the other three factors as reasons for job dissatisfaction (Muze 1987). As real wages declined, however, incentives became the most significant factor.

Low teacher morale was considered a major explanation for falling standards in the schools in the report of the Presidential Commission on Education (1984). The government accepted the report, and quickly implemented some of the recommendations such as the payment of teaching bonuses in lieu of salary increases, and the creation of the Teachers Association which was meant to be a more autonomous organization than the Unified Teaching Scheme.

A measure of job satisfaction and commitment to the teaching profession is whether teachers remain teachers after fulfilling their obligatory period of teaching service after teacher training ("bond"). A large number of trained teachers have left the profession as soon as their bond period is complete and even before, causing severe shortages of teachers. By 1974, despite adequate numbers of trained teachers, there was a shortage of 24%, or 36% if the positions held by expatriates were included. By 1983, some 8300 teachers had been trained while only 3200 staff positions in public schools existed, and still major shortages remained (Muze 1987). Job dissatisfaction continued to cause shortages, such that even committed teachers looked for work in the private sector, in parastatals and in non-education civil service jobs. Other teachers went to work in private schools, where they received higher pay, subsidized housing and other benefits like car loans.

Women are more committed to the teaching profession, or at least fewer have left for non-teaching positions. Sanyal and Kinunda (1977) found that only 11% of

women graduates moved out of teaching, compared to 29% of men. Puja (1976) had similar results for primary school teachers. In Muze's 1976 survey of secondary school teachers, women scored somewhat higher on job satisfaction, and also had different priorities than men. Women emphasized student discipline and curriculum relevance as the most significant factors affecting job satisfaction, whereas men emphasized salaries (see Chijumba 1982 for somewhat similar findings in other occupations). These findings confirmed how significant the structures of the workplace are for women teachers.

Muze interpreted women's greater staying power to the fact that teaching was a "female" job, requiring the kind of nurturing skills that women naturally had as "mothers": "interest, love, patience and care" (p 92). This kind of reasoning reflected gender typing. A stronger explanation for women's persistence in remaining in the teaching profession is their lack of adequate alternatives due to the gendered structure of the labor market and the sexual division of labor at the household level.

Conditions changed in the later 1980s, as real wages in the civil service declined, and opportunities in the private and informal sectors increased. At this point wages, specifically promotion, became a major source of discontent. In interviews, women educators including school administrators expressed frustration at the failure of the government to promote themselves and others, in spite of years of good service. According to government regulations, many women, and men, teachers had "hung" at one level for ten years or more, and felt forgotten as well as unrewarded.

Women face specific barriers to promotion, often associated with marital status. For example, it was pointed out that a disproportionate number of Headmistresses are single, widowed, or divorced. Top bureaucrats tend to oppose the appointment of married women to high positions, or are reluctant to request transfer of their husbands. Husbands themselves are often reluctant to "allow" wives to move away, and wives are afraid they will lose their husbands if they do move. This indicates the way 'work' and 'family' institutions were affected by sexual politics.

Sexual politics also influence teachers in their fear of being sexually harassed in more isolated, rural postings. Lack of secure housing with adequate privacy, loneliness and of the lack of a good social life and poor marriage prospects also deter women from rural postings in some regions. This was confirmed by Muze's study; women expressed more concern about geographical location then men.

GENDERED RELATIONS IN CLASSROOM AND SCHOOL

This section explores the gendered nature of relationships in the classroom and school and its impact on gender typing in arts and science streaming.

Contradictory Role Expectations in School and Society

There have been no studies which carried out detailed content analysis of gender

typing in subject matter and teacher-student relations (books, teaching materials, teacher manuals, teacher presentations and verbal/nonverbal behavior) at secondary and higher level, although one exemplary study exists in adult education (Education/SIDA 1987). Similarly, no classroom interaction studies have been reported which raised the gender issue although one is underway in relation to primary education (Education Fac 1990). We have therefore depended on surveys of student attitudes and comments found in reports and interviews.

Schools could have a transformative impact of women individually and the community of women in general. However, the evidence suggests that Tanzanian schools are internally inconsistent; they demand universalistic principles of equality while reinforcing gender typing at the same time.

For instance, schools could be transformative as ideally they reward students regardless of sex for being competitive, hard-working, knowledgeable about subject matter, self-confident, active, capable of independent work and critical analytical thought. According to official policy, all students should be treated equally in school and classroom, and have equal opportunity to achieve.

However these behavioral demands conflict with behavior traits considered ideal for women when they are in certain public spheres, especially those organized in a male-dominated, hierarchical way. In such "male" spheres, women are expected to behave with docility, passivity and dependence, while in "female" spheres they are rewarded for the same kind of characteristics required at school (eg Sheikh-Hashim 1989). Education, particularly higher education, is defined as a male arena, making it difficult for girls and women to reconcile contradictory role expectations: excellence as students versus excellence as wife, mother and/or "feminine" person.

This conflict is reflected in a recent survey (TADREG 1989) which collected girls' attitudes towards schooling and their own self-images. When asked to define "a successful woman", many girls chose women with Form 6 credentials and a good high-paying job. Marriage was rated of secondary importance. However, the majority believed that parents and society valued the role of wife and mother most, and many agreed with this view. The ideal behavior demanded by these two sets of roles (success in school and at "work" and success as partner, wife and mother) are mutually incompatible, not only in terms of behavior and attitudes, but because of the lack of time and energy available for most women to fulfill all the demands each entails.

Women young and old must learn to negotiate these conflicting demands or make a choice for one or the other. Young women teach each other how to survive the conflict: avoid appearing like a "nurd" by openly studying hard, do not get better grades than boyfriends in the same subjects, and do not spend too much time in school. According to Hongoke (1987), educated women considered themselves both unemployable and unmarriageable. They could not obtain the occupational positions commensurate with their education level due to sex discrimination, and also were unable to fulfill "traditional" expectations for themselves as women. These

conflicts act as a des-incentive for other women to pursue higher education, especially at the post-graduate level.

Male preference for marriage partners with less education and occupational status has been cited by many in interviews and confirmed by Chijumba's research; women's fears were well-grounded.

Dynamics of School and Classroom Organization

Relations among students, teachers and administrators are generally authoritarian in practice, if not in intent. The structure of power relations in school and classroom reinforces passive subordination among students, in fact the kind of dependent, passive behavior expected to women and young men vis-a-vis male elders in gender stereotyped roles. This behavior is in contrast with the independent, assertive and critical person projected as the ideal student. School heads have a great deal of power within the school, but their main function seemed supervisory, ensuring that syllabi were taught and order maintained among teachers and students. Other teachers and student leaders supported them in maintaining social control.

The macho (super-masculine) substance of school relations is epitomized in school rules, consisting of a long list of "don'ts", backed up by a battery of mainly physical punishments modeled after the military (Manase and Kisanga 1978). The most notable are "Kiboko (caning), press-ups, grass-cutting, dish-washing, extra drill, rolling mud or dew, scolding and expulsion" (ibid: 12). Official restrictions sought to limit the number of teachers who carried out corporal punishment and its severity (eg number of strokes), but there is considerable variation from school to school, and some notably punitive "regimes" (interviews).

Shortages of books and other teaching materials have almost forced teachers to adopt teacher-dominant pedagogy. Regardless of their intentions, teachers have to use some from of "copycopy" methods to fill the gap. Their own marginality in the curriculum process is heightened by the pre-packaged nature of course work. Curriculum specialists control the design of the curriculum and the selection of topics, exercises and books to read. Another group of specialists constructs the national examinations used to evaluate teacher as well as student performance.

The majority of teachers in secondary schools, with the exception of all girls' schools, are men, especially in science, technology and maths subjects. For example, in eight Dar es Salaam upper level secondary schools, 90% of technical teachers, 81% of maths, and 66% of science teachers were men, compared to only 42% male arts teachers (Sekwao 1989). This must have a powerful impact on girls' and boys' experience in the classroom, particularly in terms of providing models and the resulting dynamics in teacher-student relations.

Thus, with the exception of all girls' schools, girl secondary students operate as a minority within a macho environment. At Form 5 and 6 level, women taking science subjects were truly a minority. For example in 1988 there was only one woman out

of 117 science students in Form 5. The situation was best at Tambaza, with 25 women out of 86 in Form 5 and 15 out of 66 in Form 6 science. But the MoE has discontinued the women's stream at Tambaza, arguing that their numbers were too small and there was no suitable housing (MoE meeting June 13, 1990; interviews). This conflicted with the fact that many more girls had enrolled at Tambaza than elsewhere, and that the government had just finished building new men's hostels at the same school!   Girls experience a similar minority status according to subject.

This situation also holds for the Universities, especially in science, technology and math subjects. Recalling her student experiences, one scientist pointed out that relations with fellow students were harmonious so long as the men did not feel threatened by their female colleagues. However, when the women began to excel, the men

> got angry and gave us a hard time. We stuck together, didn't care, but we had to struggle. They even used Punch, "marks za chupi" (marks gotten from underpants) and gave us no help. Those who wanted to cooperate with us could not do so openly. They feared to show help and were afraid to sit with the girls - others would ridicule them (interview).

Differential Treatment of Girls/Women

With rare exceptions, teachers discriminated against girls, albeit often in an unconscious way. The research cited in the following passages found that teachers in science, technology and math subjects tended to push boys to achieve more, whereas girls' performances at average or below average levels were considered "normal".

Teachers' biases can be extrapolated form the way they generalized about girl students (generalizations of any kind tend to reflect stereotyped attitudes and behavior). These statements also give us a clue about how girls negotiated gender relations in the classroom. According to Kalunga (1988: 3), biology teachers told her that "... girls are very slow in answering questions, they like being on their own and they are usually reluctant to raise their hand to answer questions even when they know the answers". Some teachers openly concentrated more on boys because they were more active (and therefore more rewarding to teach). Girls seemed "aloof". Moreover, girls were over-concerned about their physical appearance, and were therefore hesitant to engage in lab experiments for fear of harming their physical appearance or spoiling their clothes. Diyamett (1989:8) and Damball (1983) describe similar gender dynamics in the classroom. For example, physics teachers claimed that girls were not capable of thinking critically or logically (Damball).

However, differences were noted between schools. At Weruweru, an all girls' boarding school, girls had a very high achievement record, and teachers denied that girls were inferior in any way to boys in the classroom. They blamed girls' poor exam performance on teachers, thus suggesting that teacher behavior and attitudes (individually and collectively within the school) have a major influence on student performance within the classroom as well as on examinations. Perhaps the gender-positive attitude of such teachers explains why girls attending all girls' boarding

schools perform better than other female students.

Arts and Science Streaming

At the end of Form 2, secondary school students are channeled into an arts or science stream on the basis of previous subject performance and personal choice. In general, teachers try to stream all high performing students into science subjects. It is government policy that 70% of all Form 3/4 places are allocated to science students, although students appear to be resisting this policy (1986 only 39% of Form 4 examination candidates took science exams).

Proportionately fewer girls than boys enter the sciences at Form 4 and 6 levels. This has usually been attributed to gender typing (see papers in the Women Science Workshop, Diyamett 1989, Dambal 1983, Kalunga 1990, Sekwao 1986, TADREG 1989). Malekela (1983) found a definite relationship between gender, socio-economic background and arts/science streaming. Fewer elite students took science subjects (65% science, compared to 70% of the non-elite). However, both elite and non-elite girls concentrate in arts subjects. As shown in Table 2 below, both elite and non-elite boys conformed to official policy (70% in sciences) whereas the girls were more likely to take arts subjects (48%), especially the elite.

Table 2   Arts and Science Streams in Form 4 by Sex and Family Background (in percentages)

		Science	Arts
Girls	Non-elite	64%	36%
	Elite	52	48
Boys	Non-elite	72	28
	Elite	74	26
Seminary Boys		43	57

Source: Calculations by Mbilinyi, based on data in Malekela 1983: 250-251.

Malekela's (1983) explanations for these findings reproduces gender stereotypes: boys had to "establish their own families and be responsible"; therefore they study harder than girls, and this was associated with their enrolment in science subjects. Elite girls do not have to work as hard as non-elite girls, and therefore avoid sciences, because they could anticipate being married by elite men! In this manner Malekela and the other authors cited argue that girls' own ideology and behavior influenced their choices. While this argument holds some validity, it does not mean that girls are choosing only on the basis of ideological stereotypes, and it certainly does not mean that these stereotypes are true. Many girls think sciences and math are male subjects and believe that science is more difficult than arts and that they are less able to perform well in science and math than boys. Underlying these attitudes is the

assumption that boys/men are more intelligent than girls/women. Low expectations for success probably encourage poor performance, in that many girls would excuse less-than-excellent work as inevitable, and not push themselves (see Chapter Two for further discussion). Others who try to excel experience anxiety, like that described by Muro (Original Report, Appendix 4.1) who "shivered" with fright over math examinations.

I believe we need to pay more attention to girls' own logic in making choices. They had solid reasons not to major in science subjects; there is a high failure rate for both male and female science students, and there is a relatively low rate of return for science compared to arts and commerce subjects. Girls also recognized that a majority of science, technology and maths students are boys, and that women have less opportunity in the top science-based occupations such as doctors, scientists, engineers and inventors, as they generally fill only subordinate roles such as nurses, lab technicians or teachers. Given the generally poor examination results in the sciences at Form 4 and 6 level, as well as the University, upwardly mobile girls deliberately choose to avoid such subjects because they intend to succeed.

Galabawa's (1989) study as well as interviews confirmed the validity of girls' view that university arts majors have higher returns. At secondary level, the arts stream leads to post-secondary courses which are easier and shorter in duration and to higher returns in terms of salaries, fringe benefits and promotions. Boys are not as free to resist sciences, because of gender typing. Male arts students are labelled as "nishai" (shy) and ridiculed for being feminine, sissy and unable to cope with the rigors of science (interviews). But gender typing can be misleading in relation to boys as well as girls. A growing number of boys have joined girls in shifting into arts subjects. At Form 5 level in 1982 - 1986, male enrolment in arts rose 77%, nearly as much as the female increase of 80% (Mbilinyi calculations, based on Olekambaine 1998: Tables 5,6). These figures indicate that it is not student acceptance of gender typing alone which is informing their decisions as to subject fields.

Girls' future expectations are therefore shaped by the real gender bias in future education and employment structures. In education, girls are excluded from a number of alternative choices. For example, some Form 5/6 subject combinations are still not available or much less available to girls than boys, i.e. Physics/Chemistry/Math, the key science combination for many higher level science courses, and Physics/ Chemistry/Biology (TADREG 1989: Tables 7,32). In contrast, women outnumbered men 10 to 1 in Commerce/Book-keeping/Geography, and they were twice as many or more in some of the arts-related subjects, including Economics/Commerce/Accounting. This represents a continuation of structural discrimination in subjects offered to girls (Mvungi 1981, Munuo 1978).

Many women have succeeded in overcoming gender typing in the sciences, and have become scientists and technologists, in spite of all the barriers they had to confront (see Diyamett 1989: 1-3 for the description of one person's struggles). We were not able to identify any research which specifically studied how girls resisted negative stereotyping and other forms of discrimination. One of the goals of the Resource

Persons' Workshop was to invite teachers and other educators to share their own histories to fill this gap in our knowledge. Several participants emphasised the positive influence of a "significant other", som teacher or school administrator who literally "fished out" these young individuals and gave them special attention. Two main messages were communicated: first, you can make it if you work hard, because you have the potential; and second, you must concentrate now on academic studies, and place sex, love and marriage as secondary. These are a few examples of the potential role of a transformative teacher.

Secondary Diversification Bias Programme

The secondary diversification programme, which began in 1970, reinforced gender typing. Most public secondary schools have had to adopt one vocational bias (commerce, agriculture, technical, domestic science). The policy was highly controversial from its conception, partly because of its association with World Bank conditionally (Chonjo 1985). One of the major arguments of critics was that the bias programme represented a scheme to stream low class students out of competition for higher education places, and "adapt" them to their place in the labor market, primarily as unskilled and semi-skilled workers in the formal and informal sector (Mbobahe and Mbilinyi 1975). This kind of "education for adaptation" was considered necessary to assuage the growing number of unemployed secondary school leavers.

The recent evaluation of the bias programme by World Bank funded evaluators (Psacharopoulos and Loxley 1985: 4) confirmed its "adaptation" goals. One of the primary measures was the success with which student attitudes towards "work" were altered and their educational and occupational aspirations lowered to match their own class conditions and national needs. Another indicator of success was the match between training and eventual placement in the labor market. They expected the students who graduated from the bias system rather than those in arts or sciences to be more willing to seek employment after Form 4 rather than to look for further education, especially at the universities, and to be employed in areas of their specialization in training.

There is a definite gender typing in the allocation of boys and girls to the different biases, as shown in Table 3. Girls are increasingly concentrated in domestic science in spite of the opposition to this bias by teachers, parents and students. The MoE is fully aware of public dissatisfaction with domestic science; as early as 1971 it remarked on the need to provide girls with alternative biases in each school, as soon as funds allowed (Hongoke 1987). In reality, however, the Ministry doubled the proportion taking domestic science and informed us they had no plans to revise the bias programme (Interview 13-6/90).

Table 3   Student Enrolment by Biases in Forms 1-4, Public Schools
               (in percentages)

Bias	1982				1986			
	Boys	Girls	Total	F Ratio	Boys	Girls	Total	F Ratio
Commerce	28%	45%	10558	45%	25%	34%	10320	45
Agriculture	58	30	15353	21	61	28	17237	22
Technical	14	7	3770	18	13	4	3334	15
Domestic Sci	0	18	1923	100	1	35	5015	95
Total	100	100	31604	33	100	101	35906	38
N	21092		10482	22126	13780			

Source: Mbilinyi's calculation from data in Olekambaine 1988: Table 4, 31.

The problem with domestic science, as noted by many observers and admitted by MoE officials at our June 13th 1990 meeting, is that it represents a dead end as far as future education and formal employment are concerned. It does not fit any Form 5/6 subject combination, and is not even acceptable for the Textiles and Nutrition courses offered at Monduli College, because domestic science students are allowed to drop physics, which streams them out of most Form 5/6 science combinations (Olekambaine 1988). Moreover, there are no trade tests for Domestic Science or for Agriculture biases. MoE officials assumed that students in these two biases would not be able to get formal sector employment and would work in the informal sector.

Table 3 also shows that the majority of both boys and girls were streamed by the bias programme into dead-end subjects. Well over half girls enrolled in 1986 were concentrated in Domestic Science and Agriculture, an over-representation relative to their proportions in total secondary school enrolment. Similarly, boys are over-concentrated in technical and agriculture courses, with an amazing 61% in agriculture alone. There was major student dissatisfaction with agriculture, due to the amount of manual work required in this bias; students associated the manual work with their failure to perform well in both school and examinations (Nyonyi 1980).

EXAMINATION PERFORMANCE

In general, female students performed less well in Form 4 and 6 level examinations, in spite of their often high performance in school activities. This section explores the factors associated with poor performance, in order to try and understand causes and possible solutions.

Malekela (1983: Table 57) analyzed performance in Form 4 examinations from 1971 through 1980, and found that public school students performed consistently better

than private school students, with the exception of private boys' seminaries, which have exceptional performance records. Seminary students have since been denied the right to take Form 4 examinations, in contrast with other private school students! All but one of the top 25% schools were single sex and all were boarding. The bottom quartile consisted entirely of private and Zanzibar schools with the exception of 2 public schools, Ruvu Agriculture (coed boarding) and Kisutu (girls' day). These averages are a powerful indication of differentiation in the school system.

Malekela (1983: 218) found that 18% of all Form 5 students came from private schools, compared to 72% from public schools and 9% from seminaries. These figures can be misleading, however, as they do not reflect the chances of student selection from the various types of schools. Using the same data, I found that only 7% of private students were selected into Form 5, compared to 21% of public and 52% of seminary students. This means that students in seminaries had the highest chances of selection (they have now been barred) followed by public and finally private school students.

Girls' pass rates into Form 5 are lower than boys' in both boarding and day schools, but particularly lower in day schools: 23% of the boys and 17% of the girls in boarding school were selected compared to 25% and 13% respectively of day school boys and girls (Malekela 1983). Malekela (1983) and TADREG (1986) emphasized the special handicaps faced by girls in day schools, due to the sexual division of labor forcing them to spend their after-school hours working at home instead of studying. These findings may also reflect the fact that there are fewer places for girls in boarding schools, which are therefore likely to be more selective than boys' boarding schools. It seems that both boys and girls benefit from boarding school experience, not only because of the better educational resources available , but also because they are able to concentrate better on their studies, being separated from town social life (Malekela 1983, 1984; TADREG 1989). Both boys and girls referred specifically to the distractions caused by sexual activity in day schools.

I used Malekela's data on socio-economic backgrounds, school type and gender (Malekela 1983: 232) to find out whether having an elite background might compensate for attendance at day schools. The evidence indicates that family background has an impact on the performance of both girls and boys, but that its impact on girls is greater. In each case, non-elite children were better off attending public boarding schools, which seem to compensate for whatever disadvantages they might have. In elite homes, girls - and boys - received extra supports such as books, equipment, tutorials, in addition to an English-speaking milieu and the other advantages middle class children have around the world.

A close examination of performance in the 1986 Form 6 examination (TADREG 1989, Appendix 2, Table 7) indicates that both women and men performed worse in the basic science subjects and maths, especially in Biology and Chemistry. Vacancies for girls in higher education in science subjects is increasing at an alarming rate. These vacancies have been attributed to poor examination performance, which has steadily declined for both women and men. According to TADREG (1989), soon

there will be no women qualified to enter science-based courses at the University due to their falling pass rates in Form 6 science combinations. Without a doubt, arts students have a far better chance of passing and getting credits than science students, thus confirming that school girls had logical reasons for choosing to specialize in arts subjects.

However, it is important to emphasize that women also outperformed men in certain subjects e.g. in accountancy, commerce and Kiswahili. Moreover, instead of the steady decline in exam performance expected due to common assumptions about falling standards, women's performance rose during the 1980-1986 period in some subjects and declined in others.

There have been a large number of studies which sought to explain gender differentials in examination performance, especially in science, technology and maths subjects (Kalunga 1988 is particularly thorough; see also Damball 1983, Coulson 1987, Sekwao 1990, Ndabi 1987, Leshabari 1978, Seka 1979, Komba 1983, Kagaruki and Sekwao 1990, Chonjo 1985, Nyonyi 1980, Psacharopolous and Loxley 1985, Nabudere 1978, Sekwao 1986, Valonge 1985, - not all of these carried out gender analysis). There was basic agreement that poor examination performance was the result of deteriorating conditions in the schools, which forced teachers to adopt rote memory, copycopy methodology due to the absence of books, equipment and teaching aids and the large number of students per class. In addition, teachers lacked adequate training and experience in student-centered teaching methods and practical work. Faced with long syllabuses, a final examination testing rote memorization, and low motivation among students, many teachers have lowered their standards for their own achievement.

The examination system itself also needs to be questioned. Low correlations have been found between Form 4 and Form 6 examination results, and between examination results and selection to Form 5 and placement in formal employment.

Sekwao (1986) discovered that high/low performances in Form 4 Biology examinations in 1980-1985 could not be used to predict results in Form 6 Biology examinations. Ndabi's (1987) study of the correlation between Forms 4 and 6 examinations confirmed the existence of a low, though significant, correlation. Psacharopoulos and Loxley (1985) found no correlation between Math and English scores in Form 4 and selection into Form 5 and other education institutions, or in Vocational Achievement examinations. Many high scorers in Maths or English were not selected for further education.

These findings were based on large-scale surveys, and need to be taken seriously. They suggest that the selection procedures for Form 5 and other post-secondary education institutions were not systematic and were no longer based on merit as measured by examination results. As subjective factors become more predominant, discriminatory attitudes will probably have an even more negative impact on women's advancement in education.

CONCLUSION

This chapter explored several dimensions of gender inequality in secondary and higher education. It showed that women have less access to post-primary education, and are concentrated in certain subject areas and denied equal positions of power in decision-making in the education bureaucracy. They are also subjected to both overt and latent forms of discrimination, the most extreme example of which is the Punch phenomenon at the University of Dar es Salaam. Curriculum is differentiated by gender, the arts/science streaming being the best example. Girls were making their own decisions on the basis of an often logical perception of their life chances, given the gender segregation and differentiations found in education and employment. They were neither passive victims nor empty slates waiting for external forces to imprint gender typing ideology. Instead, both students and teachers tried to "do the best they can", adopting a variety of responses to often oppressive and male-dominant situations.

CHAPTER FOUR

ADULT EDUCATION

by
Ruth Meena

INTRODUCTION: A GENERAL OVERVIEW

Adult education can be defined as an organized educational process, whether formal or informal, undertaken by adults. Adult learners can be individuals who have not gone through the formal learning process, or those who have not completed the existing formal learning package. They may also include those who have attained high level education but wish to continue to pursue further education - hence the concept of "lifelong education" also applies. In Tanzania, the first group to receive attention as adult learners were the illiterate and those who had not undergone or completed formal primary education. Recently, the primary school leaver has become potentially the most dynamic in terms of interest and demand for innovative adult education programmes.

Unlike primary school students, the adult learner is a purposeful and voluntary learner. There are four main objectives generally noted for adult education: realization of social integration (acculturation), bringing about social change (transformation), acquisition of technical competence (skills) and building up social responsibility (citizenship). Within the context of these objectives, adult education can be considered as a means through which adult populations are incorporated into the socio-economic and political system of the state. This is a double-edged process. While the state can use it to socialize the adult populations, the adult learners can use it for their own aims. In either case, adult education has the potential to bring about change in the existing oppressive relations, including gender relations (Weiler 1988).

In this sense, the Arusha Declaration is considered a turning point in the development of adult education in Tanzania, as it articulated the aim of socialist transformation through the educational process, along with other means.

POLICY ISSUES IN ADULT EDUCATION

When launching the First Five Year Development Plan (FFDP 1964-69), the then President stated the significant role of adult education:

> *First we must educate adults ... The attitudes of adults .. have an impact now. The people must understand the plans for development of this country; they must be able to participate in changes which are necessary, only if they are willing and able to do this will the plan succeed (URT/Economic 1964: ix)*

At this stage, adult education was understood as a means to initiate development

through a combination of improvement and transformation approaches. The improvement approach aimed at:

the progressive improvement of the present method of crop and animal husbandry to ... induce productivity without radical changes in the traditional social and legal systems (ibid).

The transformation approach aimed at changing attitudes of farmers in order to facilitate the modernization process, the introduction of new techniques and the appropriate minor social and political changes. Neither approach, improvement nor transformation, aimed at radical change in existing social relations, and neither addressed itself specifically, or identified as a problem, oppressive gender relations in the farming system.

Methods used to implement these approaches were the community development and extension services. The community method was considered appropriate in those areas where farmers expressed a felt need for attitude change to become more responsive to technical advice. As such, it was most appropriate in those areas where the transformative approach had been adopted. It aimed at making people accept modernization. Main targets were male farmers in new settlement schemes.

The extension method focused on the progressive farmer. Here the attitudes of the farmers were not considered to be obstacles to improvement in agricultural production. The farmers were already receptive, what they needed were skills to improve production.

Both these methods were gender biased. Community officers hired a significant number of women as community staff whose main duty was to advise women's groups on how to improve their reproductive roles within the existing sexual division of labor. Aside from literacy, sewing, knitting, cookery, hygiene and health were the mainstays of women's adult learning, thus improving or even increasing women's domestic labor tasks without threatening the community's social fabric.

The community approach also aimed at enhancing the people's loyalty to the new government, "winning their trust" (FFDP: 1964). But is was also a means for mobilization of 'voluntary' labor for development projects such as school and road construction. Women were also asked to contribute their labor in the name of "equality", burdening them further with development, in addition to productive and reproductive tasks.

Extension services also mainly benefitted men, as it targeted the progressive farmers, particularly large cash crop smallholder farmers, the majority of whom were men. Most of the extension officers were also men, who tended to orient their work to fellow men. Studies have show how women were and continue to be denied access to these extension services (Meena 1988, URT/Education/SIDA 1987).

Other adult education innovations before the Arusha Declaration also aimed at im

proving productivity within the existing social structure or instilling civic values. The Ministry of Agriculture, for instance, established Farmers' Training Centers which focused on the progressive farmer. Although the Centers have undergone a number of changes of curriculum and parent ministry, they continue to serve two major roles, i.e. imparting relevant skills to improve production and grooming a leadership cadre through citizenship training.

However, as some critics have stated, initial adult education efforts lacked a sense of direction or purpose, drifting "scattered, uncoordinated and on a limited basis" (Kassum 1978) until the Arusha Declaration.

THE ARUSHA DECLARATION AND ADULT EDUCATION

The Arusha Declaration is a landmark as the articulation of an alternative ideology which challenged the existing oppressive production relations. In education, the Arusha Declaration considered education as a basic human right of all citizens (Nyerere 1968). These rights were elaborated in the separate policy statement popularly referred to as Education for Self-Reliance (ESR). Within the framework of ESR, adult education was given the task of widening the mental horizons of the people so as to enable them to exert control over their own future (URT/Education 1972). In essence, ESR was to equate education with liberation, or education for empowerment. Specific objectives for adult education were: to sensitize people to reject under-development, to enable them to improve their living conditions, to enable them to understand national policies and to gain confidence in their own abilities as equal members of society.

Post-Arusha adult education was to contribute to the liberation of men and women from the oppressive social economic conditions, including gender relations, although no clear or specific policy formulation was made for the eradication of oppressive gender relations.

Although the Arusha Declaration provided general policy direction, the implementing government organs were and remain free to translate these policies into specific programmes. Unfortunately, the transformation of gender relations, in fact the bulk of the transformative thrust of the policy, was left unimplemented, creating an observable gap between policy and practice. The very first post-Arusha government plan (Second Five Year Development Plan 1969-74) did not include education for socialist transformation. In fact, the plan did not differ from the previous plan, except that it increased the government budget for adult education. Curricula remained basically the same with training in agricultural techniques, crafts, health education, civics and citizenship training. The non-transformative community method also continued to be used. The adult education centers, including community centers, never became people's learning institutions where learners could influence the content and method of learning (Kweka 1986, 1987).

In this context, interest in transformation of women's lives was marginalised, both in practice and in the literature covering the period. Major interest however focused

on the quantitative aspects of adult education, i.e. increased government spending, increased enrolment rates and administrative changes at the expense of attention to an evaluation of transformative goals (Kweka 1986).

LITERACY PROGRAMMES

The Beginnings in Functional Literacy

Functional literacy was introduced into Tanzania in the late 1960s in response to popular demands for increased educational opportunities and the push by donors, specifically UNDP/UNESCO, for a functional literacy campaign. While popular demand can be seen as a factor which created a receptive environment for the functional literacy programme, it was the external push which brought the programme to Tanzania.

Tanzania's inclusion in the functional literacy programme grew out of a UNESCO sponsored meeting in Teheran. The donors felt that the increase in global illiteracy was a threat to international peace as well as a massive waste of human resources (see World Bank papers on Basic Education during the 1970s, also UNESCO Chronicles, 1965). The global experiment in functional literacy which grew out of these concerns sought to establish a functional relationship between education and the world of work. Its hidden agenda included an effort to appease peasants demanding more educational opportunities.

The learning of literacy was supposed to be in conjunction with learning how to raise the level of productivity in those areas and activities in which the learner was already engaged. This made functional literacy oriented to the status quo, another form of education for adaptation rather than transformative education. By implication, gender and other oppressive relations were to be accommodated, not changed.

Almost all facets of the Mwanza Pilot Literacy Project, for example, perpetuated and encouraged gender stereotypes. The content of primers aimed at improving cash crop production, a man's domain, while food crop improvement was neglected (Mbilinyi 1976a, Meena and Kristosia 1987). Pictures and concepts used in the primers depicted existing gender relations uncritically, i.e. women carrying water, men a cane or woman cooking, man reading a newspaper. The method of learning was supposed to merge theory and practice, embedding the learning experience in knowledge and practice of immediate use value. However, the tendency was to "practice" using what is already there, including the oppressive sexual division of labor. The programme recognized, for instance, the responsibility of the individual and the group at large with regard to specific tasks they had to perform (UNESCO 1963). By implication women as a group had to acquire functional knowledge to enable them to perform their tasks in production and reproduction more efficiently, with no question as to the basis of the assignment of tasks. Functional literacy was also considered to have political value, and political education was a subject in the programme. Literacy was valued for its potential to increase the number of literate, politically active people. However, the subject taught more about civic responsibi-

lity than rights, and conspicuously absent was the knowledge which would have made women aware of their existing civil rights, including rights to property ownership and marriage rights (URT/Education/SIDA 1987).

Despite these limitations, literacy teaching combined with citizenship training was beneficial to the population generally. Before, adult education efforts had been controlled by religious groups or community development and social welfare workers, and reached only a small portion of the population. In 1969, adult education activities were shifted to the MoE, which was able to mobilize primary school teachers and students all over the country in the mass literacy drive. The party also took part in the campaign in a war against ignorance. Village governments as well as the party organizational structure which reached to the grassroots level, also facilitated adult education.

One of the positive results of adult education was, aside from literacy skills, the provision of space in which women could organize themselves. There was a proliferation of groups of women in villages organizing themselves for a variety of activities: training in income-generating skills, creation of consumer shops which proved basic goods in time of scarcity as well as providing income, and co-operative farming ventures. There were mixed results in that many groups failed to earn income, but members were attracted by the new forms of female solidarity, the chance to meet others outside the home, and the local political leverage it could provide (Mgughuni and Mwangunga 1989, Koda et al 1987).

Adult educators undertook most of their activities at the village level and worked within village administrative structures. As such, they often played a central role in village activities. Committed and enlightened educators helped to galvanize local communities, and supported women's efforts to use adult education as venues for their own activities (see also Chapter Six).

The basic civic knowledge, awareness or sensitization which is one objective of adult education is also a potential transformative instrument. The former President and CCM Chairman shared his experience during a two-year tour of the country by pointing out that adult education and UPE had created new peasants (Daily News 12-4-1988). These peasants, Nyerere maintained, are as poor as others from developing nations, but they are different because literacy and schooling had opened their eyes to their needs and rights, sharpened their economic appetite and made them a potential force for a politics of opposition.

Women's Participation in Mass Literacy Campaigns

Given the transformative potential of literacy, it is significant that women have responded so well to mass campaigns. Women have formed the majority of adult literacy learners from 1969 (62%) to 1986 (55%). High enrolment rates resulted in decreasing illiteracy rate. In 1969 the illiteracy rate among women was placed at 81%, by 1975 it stood at 44% and by 1986 it had reached 12% (MoE figures, 1989, Tanzania Statistical Reports on Literacy Campaign).

Although national averages are encouraging, there is a great deal of regional variation in illiteracy rates among both men and women as well as varying degrees of differentials between men and women in one region. In most regions, the female illiteracy rate was double or more the male rate, even in such urbanized regions as Dar es Salaam, Kilimanjaro and Tanga, where illiteracy rates in general are very low.

This situation evidences the genuine need to carry out thorough needs assessments to facilitate localization of the learning process. The curriculum should take into account the different learning needs of the various sectors of the population, including women, while at the same time incorporating transformative aspects.

Available statistics (it should be noted that statistics on enrolment as well as performance are extremely variable - see Kweka 1986, 1987 on this problem) indicate that although women make up the majority of adult learners, their performance in literacy tests has been lower than that of men (see Table 4). There are several ways of explaining poor performance by women. Perhaps the teaching methods did not take into account gender differences in learning needs and therefore failed to motivate women. It may be the nature of the tests, which women find irrelevant or intimidating. Another strong possibility, backed up in discussions with adult education teachers, is that women do not have the time and conducive environment to continue study outside the classroom. Even in the classroom, their attention is often hindered by small children (URT/Education/SIDA 1987).

Table 4   Differential Performance in Literacy Tests

Year	Participants Tested			Percentage Qualifying Stages III & IV			
	Men	Women	Total	%	Men	Women	%
1975	1738461	2066062	3804463	77	42	33	37
1977	1066759	1279395	2346154	34	43	28	34
1981	1230832	1875574	3107506	51	35	21	27
1983	777015	1312799	2089814	34	40	18	33
1986	757376	1260717	2018093	32	66	54	57

Source: MoE 1989, Tanzania Statistical Report on Literacy Campaigns

Although women's high enrolment rate in literacy programmes is an indication of their determination to make use of educational opportunities, various intervening variables limit them from full participation and benefits. The initial enthusiasm which both men and women demonstrated during initial mass literacy campaigns in the 1970s faded away in the 1980s.

A Case of Gender-Positive Transformation

Within the context of developing materials which are oriented to benefit women learners, a woman expert group (WEG) was asked by SIDA and the MoE to evaluate

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the post-literacy adult education materials from the point of view of women. In the resulting report (URT/Education/SIDA 1987), the voices of adult educators, women adult learners and village leaders were heard. Women were able to comment on general problems related to adult education, its content, and recommend measures to transform the materials. Their ideas, together with those of adult educators, made up the body of recommendations contained in the report. This process was in itself a transformative exercise, at it encouraged cooperation and sensitization to gender oppression at all levels.

Although all the women interviewed recognized the significance of adult education, they stressed two problems which constrained them from implementing the knowledge learned. These constraints can be generally classed as the unequal access to resources and the sexual division of labor. New skills such as sewing or gardening are useful only insofar as the resources needed to use them are at the women's disposal. These resources include not only cash or credit but also land, technologies and labor time. Without mobilizing time and resources for women, the knowledge they gain will be under-utilized.

One of the major thrusts of the report, therefore, was to initiate a reorientation of the materials to address these major problems. Recommendations to transform the curriculum, for instance, included new materials on family cash and time budgeting, income-generation management, family life education, food crop cultivation and skills to construct technologies and tools useful to women or of a labor-saving nature.

These recommendations then led to the revision of the post-literacy syllabus, then the teaching materials themselves, and finally the sensitization of the teaching adult educators as well as those producing supporting materials such as rural newspapers. The whole process was a part of a transformative effort by educated women who not only took part in the evaluation but were also at the same time sensitizing educationalists, adult educators and policy makers and gender issues. It underscores the importance of engaging women in all stages and levels of decision-making. Such efforts need more support, and we commend SIDA for their positive stand and material support which facilitated the initiatives from the Women Expert Group.

RADIO AND STUDY GROUP PROGRAMMES

Several campaigns were carried out which supported and supplemented the functional literacy programmes. These campaigns included "Kupanga in Kuchagua" (To Plan is To Choose), launched in 1969 to popularize the Second Five year Development Plan. The second campaign, *Uchaguzi in Wako* (The Choice is Yours) was directed to mobilization for the presidential and parliamentary elections. *Wakati wa Furaha* (A Time for Rejoicing) was in preparation for the celebrations in 1971 of ten years' of independence. *Mtu ni Afya* (Man is Health) and *Chakula ni Uhai* (Food is Life) were interrelated. The government had established elaborate primary care services with donor assistance. The Man is Health campaign called upon the people to use these services, while Food is Life was launched after a famine in order to increase food production and possibly to defuse the tensions and conflicts arising

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during the food shortages. Finally the *Msitu ni Mali* (Forests are Wealth) campaign was launched after a more recent drought attribute to desertification.

The radio and mass media have both merits and demerits as means of instruction. All radio programmes were coordinated under Radio Tanzania (Mhaiki and Hall 1972). This meant that adult education used various popular programmes. While the radio may be an efficient and cost-effective means for reaching a large number of learners, given the shortage in Tanzania of adult educators, by using the radio adult learners miss the advantages of teacher/student interaction which some consider vital to the adult learning process. Radio programmes are a one-way system of communication, unless the programme builds in a system of communication with the learners to assess their needs and views; without this, the educator totally controls the learning process.

The study method sometimes utilized to supplement radio campaigns may make up for these shortcomings. Study groups may provide women with a venue to enhance their confidence as they participate fully in discussions. Adults are said to learn best through the study group method (Muller 1986). It allows learners space to share the learning process and the production of knowledge. The study group can also involve the demonstration method involving their use of acquired skills. Mbughuni (1990) relates a personal experience in which "community cookouts" were found to be extremely popular among women's groups engaged in home economic and health programmes. Other methods, such as role play could also be introduced to stimulate discussion and render visible those experiences which adult learners might not be facile in verbalizing.

In group work every learner becomes a resource person; all the learners are involved in producing knowledge and improving on existing knowledge. For women, such methods probably have particular significance, but there are no studies of the gender impact of different kinds of pedagogy on adult learners. It can be assumed, however, that learning which is totally individualized, i.e. does not provide special time and space for learning, will fail to reach the majority of women. They will be too busy to rationalize the free time for study. Experiences from the women's study/research groups at the university and elsewhere have demonstrated that group and collective methods can have a tremendous impact in generating knowledge and stimulating adult learners (such groups as the Women's Research and Documentation Project and the IDS Women's Study Group).

Aside from its overly controlled learning process, the radio also has other problems as a means of learning for women. Women may be blocked from timely access to educational programmes due to their work schedule and the unequal division of labor. Furthermore, as women do not have the ready access to cash which men do, they may not have access to the control or use of the household radio. Some men even move around with a portable radio, denying the women and other members of the family reasonable access.

However, as men have more access to radios and have more leisure time for listening,

it is possible to use popular programmes to inject gender issues for purposes of sensitization of men. This means that gender issues should not be limited to special women's programmes, but became integrated into all popular programmes. There is also a need for radio campaigns to initiate a built-in evaluation process which involves the participants.

EDUCATION BY CORRESPONDENCE

Education by correspondence is directed to those individuals interested in advancing their formal learning for purposes of taking final national examinations at the Form 4 and 6 level. Women's participation in this form of adult education has been very low, averaging 16% for the past 20 years, and their rate of completion even lower, averaging 6% for the same period (Department of National Correspondence, ENP, p.2)

There are advantages and disadvantages to the correspondence method for women's education. Chale (1975) warns that distance education, as it does not commonly use the face-to-face method, has an inherent danger of reinforcing subject-oriented courses at the expense of student-oriented subjects. Courses are easily launched without a prior study to assess the needs of the clients. Perhaps this lack of student dialogue is one of the reasons why women's enrolment is so low.

Edostrom and Erdos (1970), on the other hand, argue that correspondence education has three areas of interest relevant to gender issues: the type of course and how it is distributed, the student, her needs and aspirations, and the teaching methods and techniques. These three areas should all be considered when developing a programme targeted to women. Teaching by correspondence has usually focused on the learner in isolation. Where learning is normally a collective, social activity, correspondence courses may not be effective. Although modern communications systems have the potential to allow wider communication networks and dialogue between teacher to learner, Tanzania has not reached that stage.

RURAL NEWSPAPERS

There are about 7 zonal newspapers which are supposed to provide the rural population with relevant materials in agriculture, health and economics. They are also supposed to contribute to the improvement of living conditions and promote the national language, Kiswahili.

Women may have difficulty influencing the content of these papers as ordinary readers. First of all, their heavy workload allows minimal free time for reading. Supportive programmes are needed to reduce women's workload in order to free this time. With greater participation by women, the newspapers could become a forum for articulating their views. More of the content could be produced by the learners themselves. The rural zonal presses should exploit and encourage existing creative skills in song, stories, lyrics and sketches from popular drama. Cartoons with political overtones such as Chakubanga can be utilized. The popular characters

from radio dramas such as *Vipindi vya Michezo* can be reproduced and expanded in written genres.

RURAL LIBRARIES

Rural libraries were specifically established as part of the post-literacy programme. Initially they were part of the global literacy pilot project and later adopted as part of follow-up programmes. The library is more flexible and non-discriminatory than the classroom. There is no rigid timetable, curriculum or prerequisites other than literacy skills. Rural libraries also have the potential to cater for the needs of people with different educational levels and experiences. Books and other forms of reading materials could be produced whose contents address social problems affecting women (division of labor, lack of access to resources, lack of empowerment), specific women's interests such as legal and marital rights and health, or whose content addresses larger issues affecting women such as equity in all its aspects.

Exposure to the various ideological positions found in books can have an empowering effect, and simple books on legal rights or histories of women's struggles would help some women understand their situation and the potential for change. Production of such gender-positive materials is already underway, for example in Sauti ya Siti and Mwenzangu, both publications produced by and for women. The government needs to make use of all such materials, and encourage more writing about women's issues.

The rural library service has some problems of particular concern for women. Books are centrally purchased and library users had no way to influence book choice. In an evaluation (URT/Education/SIDA 1987) it was observed that villagers expressed dissatisfaction with the supply of books, even though some lay on the shelves unused. In some places, library hours were not in keeping with the work patterns of women, thus denying them access. The library might be open from 4 to 6 p.m., for instance, a period which coincides with preparations for the evening meal. Libraries which stayed open all day were more frequently used by women. Some also had active discussions groups, but these were monopolized by men because of the timing of meetings.

FOLK DEVELOPMENT COLLEGES

Folk Development Colleges (FDCs) were established as rural based institutions for post-literacy learners. Initially the aim was to establish 110 FDCs, one per district on the mainland. To date there are only 52. The majority of students are male primary school leavers. Married women have been unable to utilize the boarding facilities because of their inability to leave domestic work for either short or long term courses. The curriculum is gender-typed as are other post primary curricula, with the majority of women enrolled in home economics, as seen in the Table 5 below.

Table 5   Enrolment and Curriculum at Folk Development Colleges 1986 - 1989

Year	Course	Men	Women	Total
1986/87	Agriculture	397	170	467
	Vocational	1506	170	1515
	Home Economics	15	1065	1080
1987/88	Agriculture	312	161	473
	Vocational	1399	11	1410
	Home Economic	11	920	931

Source: Folk Development College Statistics 1990

The original aim of having one center per district would enable more women to participate as day students. They should receive preferential treatment in selection procedures and more short courses should be started which cater specifically to gender issues and the kinds of information/skills/knowledge which women want.

It would seem that the FDCs are increasingly becoming a post-primary school institution which imitates the post-literacy curriculum. While these school leavers are a large potential pool of adult learners, their goals are most often geared to employment-oriented learning. The fact that the curriculum is national and there are increasing numbers of FDC students taking, for example, national trade tests is further evidence of this trend. While this is one direction for the FDCs seem to be taking, it stands in contrast to be objectives of establishing a rural oriented, localized curriculum for self-improvement. On the one hand, the students are new entry level employees in the employment market, young, unmarried and aiming at urban mobility through national level examinations. The other type of FDC would have a student body drawn from the adult rural population, a curriculum localized for their local needs and potential, and would aim at self-improvement of productive activities rather than employment. (As the FDCs have, since the original writing of this report, been placed under the new Ministry of Community Development, Women and Children, this is a perfect opportunity to ensure that the FDCs are oriented to benefit women in curriculum, content and methodology).

Teaching Methods and Staff

Folk Development Colleges, like other educational institutions, have been affected by the economic crisis. Teaching materials, particularly those needed for practical learning, are in short supply, as noted in the following quotation of a student's views (Sumra 1990a):

In our tailoring class the teacher only lectures. We do not have practicals. As the school has a limited amount of money to provide clothes to every student. So we learn tailoring on the blackboard. The same is for the carpentry classes. They are not given wood to make things.

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This lack of practical training opportunities is particularly harmful to women learn-ers, as they are less likely to have the time or resources to buy their own learning materials or to design alternative learning. Furthermore, as noted in earlier chap-ters, women tend to learn more from a "hands on" pedagogy.

One expert in the FDC section believed that Tanzanian adult educators were not competent in adult education methods (interview). Teachers lack self-confidence and therefore depend heavily on the set curriculum. They need more exposure to different methods and practice in using them. The FDC introduced a training component for adult educators, but it lacked any attention to gender issues. It is also controlled completely by the Swedish experts who are expected to train adult educators in appropriate teaching methodology. Cultural differences may lead to difficulties in handling gender issues.

A skills training programme has also been introduced to enable participants to prepare a basic tool kit so they have basic tools for self-employment after completing the programme. Again, the tools programme is gender-biased. It has ignored the need to upgrade the tools of labor used by women so as to reduce their work load. It has the potential, however, to provide really useful information and skills to women.

TRAINING OF ADULT EDUCATORS

There are established training institutions for training adult educators, who range from untrained volunteers to degree holders. The roles differ, with the highest trained holding administrative duties while the least qualified carry out most of the actual teaching. There are 6 major training institutions. The University of Dar es Salaam offers two main courses for adult educators. One trains adult educators who will work in the Ministry. Part of their training involves teaching practice in an adult class although they are not expected to teach later. The second course trains education students who will be teaching in secondary schools and teachers' colleges.

The Institute of Adult Education Diploma Course in Adult Education began in 1969 as a full time residential course for the training of adult educators who would later train others. The main courses include the history and philosophy of adult educa-tion, adult learning methods and rural development. Students are drawn from ministries, the party and other institutions. In addition to the Diploma Course, there are short term training courses ranging from 2 days to a week. These could be used promote gender sensitization courses for adult educators.

All Teachers' Colleges have adult education as a compulsory course since the primary school is expected to function as a center for adult education. This training was introduced in 1971. The Mwanza Literacy Project is responsible for training functional literacy tutors, which is the largest single group which interacts with adult learners. The Project also organizes courses in radio education, rural librarianship, rural construction, regional training teams and the rural press. The regional training teams and the rural press. The regional training team trains teachers of functional

literacy, most of whom are volunteers. None of this training has a specific gender component. There is an urgent need to conduct seminars and workshops to sensitize adult educators, including curriculum developers. The sensitization undertaken for post-literacy educators by the Women's Expert Group should be expanded on and imitated in other areas of adult education.

Evidence indicates that an adult education teaching methodology is yet to be implemented in Tanzania. The majority of adult education trainers are not equipped with adult methodology. Most volunteers had never been exposed to alternative methods. According to one professional adult educator, cited by Sumra (1990a: 13):

> *I believe voluntary teachers are not capable of teaching adults, first they are very poor students and did not pass the Standard 7 exam. Secondly, they do not have techniques of teaching adults. How can they teach new primers which require a good deal of education to handle?*

Sumra's study also noted that the lack of knowledge about adult psychology made adult educators ineffective. They taught adults as if they were teaching small children, even using the same kind of ridicule used in primary schools, such as telling adults they were stupid if they failed to understand a lesson. It is very embarrassing for an adult to be addressed in this manner by a young teacher, and many learners drop out as a result.

These educators are the cadre which we will continue to rely upon as change agents at the grassroots level. It would seem that, least in some cases, the culture of oppression is being reinforced rather than challenged by them. This is a great loss of a potentially transformative learning process. For women, this loss is even greater, as it can stifle self-confidence, knowledge and imaginative resistance to oppression. A more gender-sensitive adult psychology should be incorporated into the training programmes.

There are also many other extension agents who function at grassroots level who should receive training in adult education methods as well as gender sensitization. These include agricultural extension officers, health extension workers and community development and social welfare officers.

FINANCING ADULT EDUCATION

Adult Education depends heavily, since its inception, on foreign aid for its development programmes. From 1984 through 1987, for instance, roughly 98% of the development budget derived from foreign sources, a much higher percentage than for either primary, secondary or vocational or teacher training subsectors (URT/ Development Expenditure 1987). For this reason, new developmental programmes in adult education are particularly vulnerable. The sustainability and acceptability of any one programme is dependent on the interests and priorities of particular donors at any given time. Currently most donors have shown a particular interest in supporting gender aspects. While this is highly welcome support, once donors

shift their interest to something else, programmes specifying gender interests may find themselves starved of funds unless alternative sources are found. There is an urgent need to build local capacity by making use of the supportive environment which now exists within the donor community. This should involve strengthening the research capacity of educated women, further sensitization of the planners and resource controllers, as well as national level interventions dealing with curriculum and pedagogy.

CONCLUSIONS AND RECOMMENDATIONS

Policy

The adult education policy documents lack clarity in issues of gender relations and have thus been reinforcing oppressive gender relations. There is a need for a clearly spelled out policy document which would condemn oppression in existing gender relations and orient adult education towards eradicating them.

Curriculum and Content

The curriculum and content of adult education have not addressed gender issues. Content continues to perpetuate gender-typing, in literacy programmes, the FDCs and, to a lesser extent, post-literacy programmes. These programmes should develop content and use methods which help to challenge and break the barriers of traditional gender roles. A transformative exercise such as that undertaken for the post-literacy materials by the Women's Expert Group, should be imitated elsewhere.

More emphasis can be given to follow-up literacy programmes to develop information and skills which are really useful to women, i.e. group organization, business and management skills, family life education.

Specific attention needs to be given to the need and interests of youth, including the many PSLs without further education and training. Family life education should also be incorporated into a youth education programme.

Gender sensitization and curriculum reform required the participation of adult learners and educators, particularly women, in assessing, designing, implementing and evaluating.

Education by correspondence needs to expand beyond its present concentration on preparation for final examinations. Further research can help identify the kinds of programmes which women want and need.

Issues of Teachers and Teaching

The effectiveness of various teaching methods for women adult learners needs careful gender sensitive research and assessment, in order to identify the specific needs and problems facing women in adult education. To date, adult educators have

not been trained in appropriate methods. Moreover, gender studies also need to be incorporated into teacher training so as to create a greater awareness of the impact of, for instance, oppressive pedagogy or gender typing on adult learners.

The quality of teaching is affected by several factors. The use of young and less qualified teachers for adult education needs to be questioned, especially within the local socio-cultural context. Primary school teachers, who are already overburdened, are often forced to undertake adult education with little or no remuneration. Adult educators at all levels require major increases in basic salaries and fringe benefits, as well as recognition of the significance of their work. There is also a need to share the load of teaching adults through cooperation among the several ministries with extension and outreach services.

Adult educators need to have appropriate books, teaching manuals and teaching aids to support their work. There is also a need to design and strengthen mass communications to support adult education programmes. We need concerted steps to build and motivate local capacity to produce and publish relevant materials.

CHAPTER FIVE

VOCATIONAL TRAINING AND TECHNICAL EDUCATION

by
Patricia Mbughuni

This chapter will examine the issue of vocational training and technical education as it relates to gender issues. It covers three programmes: vocational training through the National Vocational Training Division (NVTD) of the Ministry of Labor, Culture and Social Welfare (MoL), the Post Primary Technical Centers of the Ministry of Education (MoE) and the technical education provided through the Technical Colleges of the MoE. The approach will focus on 1) equity issues in women's participation including access, subject specialization and performance and 2) the transformative potential of the sector and 3) the impact of training.

The History and Objectives of Vocational Training in Tanzania

As discussed in earlier chapters, the introduction of vocational elements in education during the colonial period became a major source of conflict between the state and the population. The issue was the "adaptive" nature of these vocational elements. The state saw vocational education as means to introduce relevant skills for rural life, but the population regarded it as a legitimization of inferior and futureless, non-academic education. The unpopularity of this "adaptive" approach led to its failure in the early sixties. It was also at least partially responsible for the post-independence insistence on academic, employment-oriented education and the subsequent manpower planning/employment approach.

The conflict of differing government and popular demands emerges from the different expectations of student/trainees and the objectives of the educational or training programme. While students continue to seek educational opportunities which will lead to employment and upwardly mobile careers, the education system continues to segment and "stream out" students from a wider range of career opportunities. From the popular point of view, vocational elements in formal schooling are to be tolerated only as a means to wage employment, not as a road "back to the farm".

With the advent of UPE and the economic crises of 1970s and 80s, the population has placed increased pressure on the government to provide vocational training for employment as skilled labor (currently there are 8 applications for every available NVTD placement). For a large number of primary school leavers, vocational training is a major alternative road to employment.

However, for girls, the "adaptive" trend within vocational education has consistently led to their further entrenchment in reproductive or secondary roles. Although vocational elements in ESR were meant to be "transformative", for instance, the system continued to stream girls into "traditional" female activities and made little

effort to change the existing social relations (for further discussion, see Chapters One and Two). Even in employment-oriented vocational training, there is a real danger that women will be streamed into homecraft or a lower level of less market-able or employable skills.

I. SECTORAL ISSUES

The Industrial Sector: Prospects for Women

What is the future for women in the industrial sector? Why train women in voca-tional skills? What are their prospects?

As discussed at length by Havneik (1990) and Skarstein and Wangwe (1986), the major growth of the industrial sector has been in parastatal industries characterized by high level technology and the use of foreign personnel. The Economic Recovery Programme has emphasized increasing capacity utilization rather than expansion, the production of incentive, intermediate and revenue goods. These priorities mean that high level, large scale industries along with "revenue producing" industries will be supported, i.e. beer, soft drinks and cigarettes.

The implications of this programme are that 1) the "modern" skills will be needed for high level technologies and 2) little expansion can be envisioned in the parastatal sector. Both of these tendencies may make vocational training less open to women. Women are most often employed and trained as semi-skilled rather than "modern" skilled labor, and the parastatal sector is the major source of in-plant training and they are more ready to offer places and employment to women than the private sector (Interviews, NVTD personnel). Thus it would appear that the maximum growth potential industries may not hold a bright future for women entering the skilled labor market.

On the other hand, the low capacity and growth potential of Tanzanian industry in general has also led planners to the consider more broad-based and flexible training for self-employment. The fact that women are entering the informal sector in increasingly large numbers has been evident at least since the late 1970s (See Chapter One). The increasing number of women joining the self-employment pool may well benefit from such training if made available to them.

Two possible streams for vocational training emerge: one for self-employment for skilled crafts persons, one for more highly specialized skills for the employment market. The level of skills and types of marketable trades derived from these two alternatives are quite different. A trainee geared for self-employment, for instance, can hardly expect to acquire high level technology. Within this framework, women will most likely (given the evidence of history), be streamed out of the higher technology skills and relegated to the lower skill, self-employment stream.

Manpower Planning and Market Demand

The NVTD rationalizes the choices of skills and levels to be taught through manpower planning. However, manpower needs data have been generally assessed as unreliable and irrelevant for vocational training because: 1) the major focus of manpower planning has been on middle and high level placement of secondary and tertiary graduates in government/parastatal employment and 2) the government has tended to rely on "supply side" planning and overlooked the demand side of manpower planning. These factors have led to criticism of past manpower forecasts on the basis on their inadequacy, irrelevance and unreliability.

In the face of this situation the best alternative for women is to strengthen the capacity for flexible manpower analysis geared to the marketplace. Lauglo (1990) has pointed out the need for a segmented market approach which would specify the needs and potential of various segments of the labor market. As current data is not specific enough to guide training choices, such work is needed to established the actual demand for skilled labor. By ensuring the marketability of skills, a labor market assessment would greatly benefit the more vulnerable woman trainee.

Institutional versus Employer based Training

The literature on vocational training has also consistently dealt with the issue of the locus of training. Within the spectrum of possible modes there are two poles: industry/employer based and institutional training (Lauglo 1990). The former is based on the apprenticeship system, the latter on formal or certificate oriented training.

Tanzania's vocational training system theoretically combines both modes of training. Originally, training focused on apprenticeship regulations and employer based training. However, in practice vocational training has moved increasingly closer to institutional training, not only because of the social demand for certified, formal education but also because of the cumbersome organizational problems of apprenticeship (in Tanzania, in-plant) training (see for further elucidation Lauglo 1990). The NVTD is currently extending basic training to two years for some trades, while in-plant training is being overhauled through an ILO sponsored project. For women, an increased emphasis on employer based training would tend to exclude women, as their representation in this sector is low and access of women to training opportunities within the sector, particularly by private employers, is low (for evidence and discussion see Mgaya 1976, Meghji 1977 and Stella Msemwa's personal history Original Report). The extension of basic training to two years would increase the skill level and marketability of skills and the acceptability of trainees to employers, so important for women. However, it will be crucial to ensure that women are not "streamed out" of the longer training programmes or "streamed in" to lower skill level programmes.

Financing Vocational Training: Government versus Employer

To date a good portion of the recurrent and capital expenditure for vocational training under NVTD derives from donor sources, questioning its sustainability. For the years 1984/5 through 1988/89, external sources funded an average of 75% of the capital expenditure (1986/7 excluded) and 29% of recurrent expenditure (Lauglo 1990).

As the government's ability to subsidize training is increasingly minimal, who will foot the bill and how the employer through training levy or customs tax on technology, the institutions through self-reliance activities or the trainee through higher fees?

Giving the employer a large share of the training costs may have a negative impact on women's training opportunities, as women are considered more expensive employees and their skill level is generally low. If this option is chosen, mechanisms will have to be set up to ensure equity access.

Self-reliance activities are also problematic. The NVTD has introduced self-reliance activities for income generation in Dodoma, and they have been assessed both positively (ESAURP 1990, Machagge 1989), and negatively (Lauglo 1990). For women, the "protected" environment of a self-reliance unit resembles the spoon-feeding approach which proved fatal to many women's projects (See Mbughuni and Mwangunga 1989).

There is a need for further research to clarify the implications of various financing options for women. Such research could learn from earlier research on the impact of school fees on girls' access to primary and secondary school, as well as the experience of private and parastatal efforts at self-reliance. Almost all training needs some form of subsidy. The notion that vocational centers can be self-reliant in toto is a fallacy, as experience in Tanzania as well as developed countries has made clear. The issue is not how the centers can be self-reliant, but what extent and what form of support would be most effective.

Educational Issues

Although scantily treated in the literature, vocational and technical training also involves educational issues. In relation to curriculum, a major issue is the scope or broadness of training offered. Vocational training geared to serve the needs of an industrial sector (employer) focuses on the impartation of occupational skills, some manual dexterity plus some knowledge of the technical or mechanical working of the whole. This focus has the danger of turning out piecemeal workers whose future progress is limited by the narrow scope of their understanding. In a volatile labor market, these students may not prove flexible or adaptable enough for upward or horizontal mobility. Women, being more vulnerable in the labor market, need the flexibility and adaptability of a broad based training.

A second educational issue is the "hidden curriculum" in training. Vocational training and particularly apprenticeship training has the objective of imparting the values, attitudes and practices needed for employment and production. These include traits such as punctuality, discipline, the value of (manual) work and obedience, pride in craftsmanship - all traits needed by the employer for the smooth functioning of production. The hidden curriculum thus increases the subordinate status of labor vis a vis employer within the context of already ambiguous labor-employer relations. Women, a subordinated group, are in danger of further subordination as women employees.

A final educational issue is gender relations in the classroom. Do instructors favor male students? How do the women students handle adolescent male sexuality as well as their own? What sorts of pressure are brought to bear on women students from peer groups, male students, teachers, and the environment outside the classroom? Such factors have not been studied in the context of vocational training, but the personal testimony of Stella Msemwa (Original Report) evidences that relations between male and female students can cause major problems for the women. In her experience, male students harassed and hounded the minority female students. The women survived with the help of a transformative Headmaster who made a number of new rules to control male students, and also provided the women with appropriate role models and encouragement. We need such transformative teachers, for they are the "bottom line" in teaching - the teacher and the student.

II. THE NATIONAL VOCATIONAL TRAINING PROGRAMME

The NVTD holds responsibility for five areas in vocational training: basic training, in-plant and apprenticeship training, evening courses for upgrading of skills, training of instructors and in-plant supervisors and trade testing. Currently, it runs 15 Vocational Training Centers which teach 33 trades in a two phase programme of basic training (1-2 years) plus in-plant training (2-3 years). Except for some subjects requiring secondary education, the courses are open to primary school leavers. The objective is for trainees to pass the Grade III Trade Test after 1 year of basic and 1 year of in-plant training, the Grade II after 2 years' in-plant training and finally the Grade I after 3 years in-plant training. Annual output has grown consistently and reached 1,738 in 1987.

As discussed earlier, the Division has grown in response to the demand for post primary education and/or training. UPE was initiated in 1974, the same year that the party introduced the Vocational Training Act to meet needs created through nationalization, the Basic Industrial Strategy, and continued popular pressure to provide skills and employment for the increasing number of Standard 7 leavers.

Although initially apprenticeship and employer based training were emphasized, the tendency has been for the programme to place more emphasis on institutionalized training (see Machagge 1989 for the case of Dodoma NVTD).

For women, the movement towards institution based training is optimal due to their

low participation in the industrial sector in general, their lack of previous skill and exposure, and vulnerability in the skilled job market.

Participation of Women in NVTD Programmes

Issues in participation include issues in access (numbers, enrolment patterns), performance and impact.

Issues in Access

Girls' participation in NVTD basic training programmes has increased in general over the years, from around 8% in the early 1980s to the current 20.7% (NVTD Annual Report 1989).

Although the rising percentages are encouraging, they are low given the equal numbers of boys and girls in the potential trainee pool of Std 7 leavers. Reasons for the low enrolment of girls are most likely manifold and variable from region to region, center to center. No in-depth research as been done on this issue. Possible reasons include the traditional streaming of girls out of the vocational training which is employment, industrial and urban oriented, the traditional male dominance in the field, the gender stereotypes of desired male and female occupations, the macho environment of vocational trades and parents' attitudes towards girls' training. Other possible explanations may be economic (the perceived low return from vocational training as opposed to other opportunities), educational (lack of girls' exposure to technical/craft skills), ignorance of vocational opportunities, or, particularly in rural areas, the opportunity cost of girls' labor or early marriage.

Enrolment Patterns

Analysis of the enrolment patterns for the 1988 intake indicates that there is a higher concentration of girls in the small centers with fewer trainees and fewer course options than in the larger, more diversified centers. The percentages of girls are higher in the smaller, less diversified centers. All major centers, with the exception of Tanga, i.e. Mwanza, Dar, Dodoma and Moshi, have a smaller proportion of girls than the small centers (Lindi, Kagera, Kigoma, Iringa, Singida) (NVTD Annual Report, 1988/89).

It is evident that girls have less likelihood than boys of gaining access to the more modern skills offered in the centers such as Dar, Moshi and Dodoma as well as less access to the diversified skills offered in these centers. However, they have a greater chance of gaining access to less diversified centers such as Lindi, Kagera and Kigoma.

Selection Procedures

The NVTD currently draws trainees from 3 pools, from PSLs nominated by the Regional Education Officer, from employers, and through self-initiated application.

In 1985 a quota system was established whereby 30% of all trainees nominated by the Regional Education Officer are girls.

While this quota system has no doubt done a good deal to increase girls' participation, it is unclear whether the rising female enrolment is a direct result of the quota system, as girls can also enter from other avenues, i.e. the employer pool or self-initiated application. Nor do we know trainees from which pool are most likely to complete training successfully. There is no indication that this affirmative quota has positively affected girls' performance levels or subject specialization.

Another factor in the selection process which may affect girls is the age requirement. Centers select candidates up to age 27, but it is most likely that girls enter at pre-marriage age, directly or shortly after primary school. Their youth makes them particularly vulnerable to the milder forms of sexual harassment as well as to the "sugar daddy", affecting performance and drop out rates. Aside from counselling and gender positive teaching to minimize the harassment, the programme may also consider applications from older women seeking new skills.

Research needs to be done on the various avenues of access, their accessibility to girls and their subsequent performance during training and employment. Such knowledge would help rational initiation of measures to increase the numbers of girls enrolling. In general, affirmative selection processes which are systematized or regularized tend to give girls a better chance of gaining a place and ensuring successful performance.

Boarding Facilities

The NVTD has a total of 1150 boarding places distributed among 8 of its 15 centers. Centers offering boarding facilities for girls are Dodoma (under construction) and Moshi. The 1989/90 Annual Report stated that 809 students or 37% of total students boarded. There is an obvious need to expand boarding facilities for girls.

Trade Specialization and Curriculum Development

Girls' participation in vocational training is heavily influenced by gender-streaming, as is the case in other post-primary educational institutions. Of the 33 trades offered, girls tend to concentrate in "soft" trades, although some have taken advantage of increasing diversification to take up new trades.

Data compiled from the NVTD Annual Report 1988/89 and Lauglo (1990) indicated that the majority of girls are enrolled in tailoring, painting and sign-writing followed by plumbing, electrical installation and office machines. Further analysis of female enrolment by the percentage of girls within a particular trade course shows that girls form the large majority of trainees in tailoring (94%), office machines (87%), printing and book-binding (81%), painting and sign-writing (73%) and laboratory assistants (65%) (1988/89 figures). Trades with a very low percentage of girls are blacksmith (2%), diesel mechanics (1%), motor vehicle mechanics (5%), carpentry/

joinery (6%), masonry/bricklaying (7%), pattern making (6%) and tool and die making (8%).

Girls are thus not only streamed into the traditionally feminine trades, but are concentrated in trades with low technology and/or low employment opportunity. Tailoring is taught on domestic machines with no design/cutting training. Painting/Signwriting is a problem trade for in-plant placement, as is printing and book-binding (Interviews, NVTD staff). The Division has undertaken some measures to ensure higher quality instruction in the "soft trades" allocated to women, such as fashion design and word processing.

While these measures are to be welcomed, they should not be considered adequate forms of integration of women. There is a need to review curriculum with a eye to marketability of skills. Is there a real market for these skills or are trainees streamed to the self-employment or informal sector? What other trades are being planned, trades which may both attract and develop women's potential in other areas?

What, for instance, are the training needs of women in the informal sector? Is there a need for NVTD to create shorter training opportunities for technical/business skills for women in traditional activities such as food processing as well as new or non-traditional activities such as tire repair, tile making, charcoal kiln construction.

Aside from streams aiming at industrial employment and informal (self) employment, what about the rural industry or "craft" target group? Are the smaller centers offering craft level skills in carpentry, plumbing and tailoring geared to rural self-employment? What happens to the trainees in these centers? Are they employed in urban and peri-urban areas for (self) employment? Given the rapid changes and increasing differentiation in rural and urban areas, curriculum planning needs to address such issues.

Reasons for gender streaming in vocational training need to be researched in order to provide effective changes for integration. On the one hand, it may be that girls are more "attracted" to certain trades linked with traditional gender-typed activities. On the other hand, there is also a tendency to earmark certain trades for girls and select them into these trades. The following section provides a more detailed analysis of the patterns of female trade specialization in relation to performance.

Other Equity Issues in Access

There has been scant mention in the literature of differential access to vocational training by class or region, although evidence indicates that class differences are becoming a factor in enrolment, with a disproportionate number of trainees come from the waged class. Moshi has a disproportionate number of trainees from Kilimanjaro. Tracer studies and student records could provide the relevant data.

Access to and Participation in Other Training Programmes

There are as yet no gender breakdowns on other training offered by NVTD, i.e. evening courses and instructor training. The acceptability and effectiveness of such training for women should be examined.

Issues in Girls' Performance

In the literature, performance assessment is made on the basis of three criteria: the completion of basic training (internal efficiency), placement in industry (external efficiency) and trade test performance.

Basic Training Performance

For assessing basic training performance, studies have had to rely on the dropout rate, as grade markings or continual assessment data are unavailable.

Most studies indicate a higher drop out rate for girls than for boys, i.e. 6.5% rate for boys and 10.6% for girls (Lauglo 1990), or 14% for boys and 17% for girls (my calculation, 1988/89 statistics). However, as reasons for dropouts are not given, it is impossible to separate the "social" dropout (i.e. due to dissatisfaction, misplaced expectations, pregnancy, harassment) from "academic" failures. It was generally accepted that girls do not fail in academic work but faced social conflicts resulting in dropouts (Interviews, NVTD staff) The fact that socio-cultural, not academic problems are the main cause for girls' drop outs is important. Their slightly higher dropout rate does not call into question their academic ability, but the learning and outside environment affecting their continuation in studies.

Furthermore, the statistics for 1988/89 indicate factors other than gender also affect the dropout rate. For instance, in the larger centers there is a higher percentage of male dropouts than girls, while in the smaller centers a larger proportion of girls drop out. This may indicate that the larger centers are freer of those social constraints which hinder girls' performance. There is also great variation in the gender differentials in drop out rates among the smaller centers. Lindi, for example, had a 3% male dropout rate as compared with 42% for female trainees. In Singida the male dropout rate was 32% compared to 18% female, Kagera 6% male and 26% female. This data suggests that regional and center size are also variables affecting the dropout rate. Regional differences, for instance, may be explained by differences in staffing, equipment, and economic opportunities available as well as the specific socio-cultural environment.

One study also asserts that girls are more likely to drop out in courses where they are a minority (less than 1/3) (Lauglo 1990). This assertion is then used to legitimize the "inefficiency" of teaching girls non-traditional or male dominated trades. However, analysis of the 1988/89 figures provides a different picture: the trade being taught seems to have a higher correlation to drop out rates than the percentage of girls in the class. The subjects most likely to be dropped by women are tailoring

(12.9%), plumbing (9.2%) and electrical installation (7.8%) (Lindi data excluded). As both tailoring and electrical installation have a high percentage of girls, the thesis that dropouts are related only to percentage of girls in the course is false. There is no indication that the number of girls in the course, or the "male domination factor" has an important influence on girls' dropout rates. Therefore, the notion that girls should not be encouraged to take up male dominated trades because they will fail is based on false premises.

In-Plant Placement

As there is as yet no systematic assessment of in-plant performance (a system is currently being piloted at NVTD), external efficiency has normally been measured by in-plant placement alone, although these figures are difficult to obtain, often due to high mobility. Narman's stacer study of Moshi trainees gathered reliable data on 70% of the classes of '84, '85 nd '86. He found that 1/4 had not turned up as placed and 1/3 had left their employers.

Due to the dearth of data, it is difficult to draw an accurate picture of girls' performance once they have left the training institutions, and opinions and observations vary. A joint team of observers noted that girl trainees, even in "male" jobs are doing well: "They are accepted and they are doing an excellent job as was noted by the mission at several occasions "(URT/NVTD 1978, p.89). Another evaluation stated that "the examinations performance of women compare favorably with that of men but that data on subsequent success is lacking" (Dodoma Evaluation, p.44). Gender-sensitive tracer studies are needed to sort out crucial variables. Lauglo and the Dodoma Evaluation both recommend a tracer study for girls, but comparative data would be more valuable.

The fact that one often hears opinions of the nature "it is harder to place girls", it may be worthwhile to take a closer look at the scant data available. Additional data gathered for this study indicated that while there is a minimal overall gender differentiation in placement rates (56% for males, 52% for females), there is a good deal of variation from center to center which is hidden by the averages, i.e. a 28% average for Tanga compared to a 90% average for Songea (source cover various centers for 5 years and was compiled by Juma Marijo of NVTD headquarters for this study).

There is also great variation in the rate of placement of different trades. Highest placement is in carpentry (68%) followed by masonry and motor vehicle mechanics with Painting/Sign-writing (32%) and Printing (25%) in last place.

The year is also a variable influencing placement, suggesting that economic and/or center leadership changes influence placement rates. The only set of data available which covers a reasonable span of years is that gathered from Tanga records for this study, the variation from year to year was wide, ranging from a 9% placement rate in 1984 to 79% in 1981.

Thus it appears that there are a number of factors influencing the placement rate aside from gender, i.e. yar, center and trade. The data indicates that a simplistic analysis which pinpoints gender as a single crucial variable is misleading, although it may conform to well-entrenched opinions.

Trade Test Performance

The general level of trade test performance had declined from 62% in 1977-80 to 33% in 1984-85, although recently there is a small upward trend. At the same time, the number of candidates tested has risen by over 33%. There are no gender breakdowns in the trade test figures.

Impact of Training

It is impossible to assess the impact of vocational training and in particular to evaluate its transformational aspects as there are so few tracer studies and no gender-sensitive ones. Here is suffices to suggest that impact assessment should take into account not only economic benefits but also the transformative and "social" benefits of vocational training for women, i.e. to family welfare and the transformative benefit of crucial role models for other women.

Teacher Staffing and Training

There are very few female teachers at the NVTD in technical subjects; the majority teach academic subjects (Interview NVTD staff). However, the potential of women instructors as transformative, breakthrough role models is high.

Instructor training for the VTCs will be undertaken by the Instructor Training Center at Morogoro. The curriculum is now being drafted. Given he need for counseling of female students as well as the need for gender positive or transformative attitudes for the teachers, it is recommended that counseling and gender sensitization should also be included in the syllabus. The Center should make deliberate efforts to seek out and recruit women instructors for technical fields.

Summary

Controversial issues in vocational training for women are the issue of the "efficiency" of women's training, gender-streaming or the concentration of women in 'soft' trades, and gender relations at the workplace, i.e. in industrial employment. While current measures such as the quota nomination system, upgrading of "soft" curricula and in-plant monitoring and supervision are short term tactics to deal with these problems, in the long run more attention must be paid to formulating a strategy for more complete integration of women and increased transformation through training. Such a strategy would include gender positive teaching (transformative teaching), the integration of girls into a wider range of trades including "male dominated" trades, and the inclusion of curricula and trades relevant to women.

III. POST PRIMARY TECHNICAL CENTERS

Post Primary Technical Centers (PPTCs) were established by the party in 1973 to provide primary school leavers with the technical skills and attitudes necessary for employment/self-employment and to decrease urban migration of youth. The ambitious goals was to establish 4 centers in each district, each center teaching 4 trades (Domestic Science, Carpentry, Masonry and Tinsmithery) to 25 students per class in a 2 year course. To date 316 centers are registered, of which 284 are operating.

Issues in the PPTC programme from a gender perspective include girls' participation, performance and the impact of the centers on the quality of girls lives and opportunities.

The Nature and Type of Girls' Participation

Since inception, one of the major problems of the PPTCs has been the low enrolment and high dropout rate resulting in very low capacity utilization, averaging around 30% for the year 1983-86 (MoE statistics and Institute 1983). Girls' enrolment averaged 31% in 1980 but has shown a declining trend (25% for 1981, 22% for 1982 and 24% for 1983).

As in other post-primary institutions, girls' participation is dominated by gender-streaming. Girls concentrate heavily in Domestic Science courses, compared to 9% of Tinsmithery courses, and 4% of Carpentry courses. They are totally absent from Masonry (Institute 1983, statistics for 1980-83).

The PPTCs have a high dropout rate. Available data suggests the rate is higher for girls than for boys and that dropout rates are highest for both girls and boys in those subjects which are non-traditional to their gender.

Reasons for Low Enrolment, Gender-Streaming and Dropouts

The literature mentions a number of factors contributing to poor enrolment: lack of good teachers, of raw materials, distance of schools from home, hostile attitudes of parents, irrelevant and inapplicable outputs including lack of certificates, and the unfavorable environment for graduates, the attitude that the school is merely an extension of primary education, and lack of support in the form of tools for student graduates and lack of flexibility in the imported curriculum which does not reflect local felt needs.

While all these factors contribute to low enrolment, it is necessary to try to prioritize their importance. One micro/study in Mara (Mwita 1978) as well as the Institute Survey (URT/Institute 1983) found that the skill levels of teachers and the adequacy of teaching materials were not crucial variables causing low enrolment. Mwita pointed out that the crucial factor causing low enrolment was the different expectations of "the designers, the participants, the implementers and the community"

(Mwita 1978, p. viii). The PPTCs are another example in the tug of war between rural people's expectations and national concerns.

From a gender point of view, these conflicting expectations can be seen as a clash between a "transformative" and an "adaptive" objective. Transformation would offer new or alternative economic opportunities and a change in women's role in production and reproduction. However, the centers offer neither new opportunities nor change in the quality of life.

It is not surprising that girls do not consider the domestic science skills they are taught as employable skills. One homecraft teacher in the Lushoto District told the author that these courses make the girls more marketable for marriage but do not set them up for employment or self-employment. One reason is that the basis for student (self) employment is lacking in the rural areas. Youth and women, and especially young women, lack access to the basic resources needed to begin self-employment, i.e. capital or the means to produce surplus capital, uncommitted labor time, control over the products of their labor. Other contributing factors are the low level of economic development in (some) rural areas, and the lack of training in new or relevant skills. For women and youth subject to the constraints of patriarchy, the lack of a transformative approach means that such courses area "dead end" training.

If the programme is to be transformative, it must also work to change the oppressive division of labor, unequal access to and control over resources and women's subordinate socio-cultural status, otherwise, programmes tend to reproduce the status quo rather than transformation.

Course Content

Course syllabi are drawn nationally and are were based, with the exception of Domestic Science, on NVTD training. This raises two issues. As the NVTD courses are known to have an industrial and urban employment bias, is the NVTD syllabus appropriate for training which aims at curbing urban migration? Utilizing a national syllabus also raised pupil expectations for taking a national trade test, and effectively curtails local adaptation or specialization of curricula. A second issue concerns the domestic science stream. The fact that the NVTD does not have this particular stream is in itself an indication of the "non-employability" of domestic science skills taught such as cookery, laundry and sewing/mending.

A final curriculum issue is the benefit of skills taught for women. Do, for instance, the masons learn how to construct a water tank? Do carpenters learn to make scooters, wheelbarrows or oxcarts? Will these skills alleviate women's work burden or provide an alternative technology to human muscle power.

Performance

Examination performance in technical subjects is quite good, while performance in academic subjects is poor (pass rates of 10.3% Mathematics, English 30.1%, Kiswahili

60.3% and Civics 52.2% for 1980). However, there are only a very few students who actually turn up to take the examinations, as low as 1% for Tinsmithery to 33% for Domestic Science (MoE figures for 1979-81) Thus the performance data is almost meaningless except as an indicator of the general lack of interest. The fact that girls' turnout (Domestic Science) was highest indicates either their dedication to "sticking it out" and conforming, or their (relatively) greater interest in the course itself.

Teacher Staffing and Training

The Institute survey stated that there is only a minor lack of teachers, however, the level of teacher education varies. Only 60% of the teachers in Domestic Science, Masonry and Tinsmithery and only 50% of Carpentry teachers had certificates. Domestic Science teachers have the highest percentage (86%) of ex Standard 7 teachers, and they are not drawn, as are other streams, from an artisan pool. Thus the Domestic Science staff has a relatively low specialized skill level and has had no training specifically meant for the PPTC position. Thus girls are given the low skill level course utilizing the least skilled staff.

Impact of Training

The Institute survey gathered information on the employment and income levels of graduates, although the sample was narrow and biased as interviews were held only with those who could be easily reached. Although the data has no gender breakdown, the Domestic Science graduates had the lowest level of self-employment (53%) compared to Masonry (88%), Tinsmithery (75%) and carpentry (82%). It is also likely that the majority are among the 29% who reported earning well below the minimum wage.

For despite its relatively rosy data on employment, the survey cautions that the social and production relations in the villages are such that actual improvement or innovations by youth are quite difficult to achieve. Oppressive gender relations are then an added constraint hindering women's economic and educational initiatives. Another indication of this trend is that only 33% of the graduates actually remained in the villages.

Financing PPTCs

A small initial amount was made available to each center from the MoE and tools and equipment from DANIDA. The Institute survey found that the present supply of equipment was more than adequate. However, other financial resources which were to be obtained locally, either from the region or the community, have not been forthcoming. As much of the future of primary and secondary expansion is to depend on local community financing, parent and student expectations must be considered if the Centers are to survive. There is a real need to involve those "target" groups in the formulation of objectives and planning of such local-based training.

The Future of PPTCs

What is to be done with the failing PPTCs? The 1978 Evaluation recommended an overhaul of the philosophy, objectives, curricula of the centers. The current syllabus, geared to urban needs, drives (male) students to the cities for employment. Possible rural based topics might include farming and livestock related subjects such as animal/crop husbandry, irrigation and soil conservation as well as social-based subjects such as health and sanitation. However, unless such skills are visibly profitable, the rural population will continue to seek urban employment.

An alternative is to place the PPTCs under the NVTD. The centers would offer district-oriented programmes utilizing NVTD personnel and syllabi. Such centers, rural oriented with a syllabus based on the assessment of district needs, have been planned by the NVTD for some time. There should be some coordination of NVTD, PPTC and Adult education efforts to avoid unnecessary duplication but ensure real alternatives.

Whichever option for curriculum and administrative placement is chosen, women's needs and interests in a transformative approach must be considered. Key points include:

- a curriculum geared to transform the division of labor,
- the streaming of women into (self) employment skills including the elimination of domestic science,
- the teaching of skills which would reduce/diversify women's work burden.

Other changes which would make the training more attractive to youth and women include a programme of grant and/or loans, local needs assessments and cooperation with local authorities to produce marketable skills, and the selective location of the centers in areas with real growth potential.

IV. TECHNICAL COLLEGE EDUCATION

The three technical colleges, Dar es Salaam (1957), Arusha (1978) and Mbeya (1986) offer three types of technical education. The Full Technician Certificate is a three year course for technical bias secondary school leavers. The Diploma in Engineering is a three year course offered to students who have completed the FTC course and have had at least two years of experience. The Diploma in Technical Education is a two year course for the preparation of technical secondary school teachers offered to those who have finished the FTC or have achieved Grade 1 in the Trade Test.

Important issues from the gender perspective in this sector are the low enrolment of girls in technical education and their concentrated subject specialization.

Enrolment and Gender-Streaming Issues

The actual number and percentages of girls enrolling tin the technical colleges has been declining from a 10.9% average in 1982 to 5.1% in 1988 (BEST 1984-88 and Best 1982-86).

Women are concentrated in the FTC courses, with less representation in the Engineering Diploma course. They are almost absent from the Diploma in Technical Education (See BEST statistics). Within the FTC courses, they prefer electrical engineering, telecommunications and electronics and laboratory assistant courses. They avoid mechanical and to a lesser extent civil engineering. Women's course choices are less diversified than men's, and they are increasingly concentrating in telecommunications (24% of women students in 1982 34.8% in 1986), which draws a number of students from the parastatal Posts and Telecommunications.

There are a number of reasons for women's low enrolment. One of the major reasons is the low number of women performing well enough in technical/science streams at secondary school level. As a result of their poor performance, the MoE decided in the late 1970s to initiate affirmative action: women were allowed to enter the technical colleges from academic as well as technical streams. However, many women selected did not want technical education as a first choice, and were forced to take up their places in the colleges. Some used influence to secure another place, others did not show up (Interview former student).

The fact that the number of women enrolling is still declining despite affirmative action, and the resistance of some women students to take up technical education indicates that gender-typing is also a major factor affecting enrolment. Rooted in the socio-cultural norms and ideals for male and female behavior, i.e. dominant gender relations, this attitude is articulated often in the literature i.e. girls think technical education is "male", they have little confidence or are afraid of getting dirty.

Such gender-typing is reinforced rather than broken in the earlier educational levels. In her research on technical education, Sekwao pointed out that primary schools are doing next to nothing to promote technical interest among girls. In Dar schools, for instance, crafts teaching is a mechanical exercise limited to bringing a craft object on the day of marking. There is no exposure to or development of real technical skills and gifts and no gender barrier breaking.

Another set of reasons for turning down technical careers may be the methodology and content of technical education. Lugwisha and Tibanyenda (1990) have pointed out that the rote learning methods and male favoritism of teachers are the two major factors contributing to women's rejection of these subjects. It is clear that rote teaching or the "terrorist pedagogy" which hinges on examination performance and the control of knowledge by the teacher, cannot forward the transformation process for either men or women.

Teachers' favoritism of male students may also play a role in stifling interest. The women students interviewed in Sekwao's study stated that they did not feel "discriminated" against in class, but their advice to fellow women students was to "be tough" and "not be afraid of the boys". These statements are revealing; the women may not actually recognize discrimination, but they recognize the macho environment of technical education. They also recognize that the most crucial barrier to success lies in dominant gender relations, whether this means interaction with teachers or with male students, or amongst themselves.

Another set of reasons for women's low enrolment may be economic, based on girls' valid choices. Salary structure is such that technicians are not adequately reimbursed for the length and difficulty of their training. The FTC course, for instance, takes a total of four years post secondary before one can start work. However, the FTC graduate has only a slight edge in salary over an NABOCE (bookkeeping) graduate. The NABOCE certificate can be obtained after 9 months of training at the Dar es Salaam School of Accountancy or through job/evening/part time study. In light of these facts, it is not surprising that women should opt out of a difficult, male dominated field and choose a more "feminine" field.

Reasons for Gender Streaming

It is generally stated that women's reasons for choosing fields such as electronics, laboratory technician and electrical engineering is that they are "soft" subjects that do not require physical strength and grime. The case bears similarity to that found in vocational education, where women are streamed into "soft" trades. We need an in-depth study which analyses and prioritizes factors which lead to gender-streaming in order to take appropriate action. True integration can not be achieved until a wider range of fields are opened up to women.

There are no reasons given in the literature, for instance, as to why women avoid a technical teaching career. Students interviewed in the Sekwao study said that wanted careers in industry, not teaching. Reasons for this choice most likely have to do with the different salary/fringe benefit, mobility and spin-off benefits (consultancy jobs through direct contact with industry) of the two careers. The lack of visible role models in teaching may also be a major factor. Steps should be taken to "fish out" and encourage potential transformative teachers in these fields.

Performance

In her analysis of performance data from Dar Tech, Sekwao found that women tended to perform better than man in the more recent years, i.e. 80% pass rate for women compared to 53% for men. The reasons for women's improved performance have not been researched. We should identify which variables are most crucial to women's performance: course/teacher, number of women in class, boarding/non-boarding, academic background? Answers to such questions would give us a basis on which to formulate effective support.

Impact of Technical Education

There is little data for the assessment of the impact of technical education except in terms of career/employment placement. Even this narrow form of assessment has been given little attention. Skilled female technical labor is covered only in the Sekwao survey.

This survey has a narrow and limited based of 10 parastatal organizations with 26 women technical employees. The survey found that women make up 3% of the technical staff, but very few are managers or supervisors. Women technical staff are also under-represented in staff development training.

At least one identified obstacle to women's technical advancement at this level is the attitude of employers. Although the employers interviewed by Sekwao stated that they had no discrimination against women, the facts speak otherwise; only a low number of women were promoted or given staff development opportunities. Such statements are therefore only lip service disclaimers, and must be taken as such. In fact, out of 144 requests sent to Dar Tech for diploma finalists, only one employer stated (s)he would accept a male or female graduate; 143 requested male engineers (Kabyemera 1990: 10).

This situation is part of the same pattern of women's employment in general as discussed in Chapter One, and some of the reasons for it may be similar, i.e. gender-typing of employment for socio-cultural and economic reasons. However, as the graduates of technical colleges represent the cream of secondary school leavers, special attention should be given to the fate of these high potential women. Where are they now? Have they opted for other, more lucrative or less demanding careers? How many have achieved further advancement in the field? What are the consequences for their children's welfare and education?

Such questions, all part of a large assessment of impact, can only be answered through a gender-sensitive tracer study of technical graduates.

Teachers Staffing and Training

The quality of staff at the Technical Colleges has been a source of concern in the literature, as 1/3 of the teaching staff held a Diploma in Engineering only (Joint Survey). Statistics from BEST 1983/4 confirms the poor staffing situation. Reasons for low qualifications of staff include low salary and fringe benefits (transport, housing) and competition from more lucrative, sometimes non-technical employment. If we are serious about giving priority to technical and scientific development, the teaching staff must be given more motivation.

At the same time that benefits are minimal, women staff tend to be more qualified than male staff. There is a higher percentage of women holding B.A.s and M.A.s than men. Have the highly qualified men moved on the other positions? Why are there so few in administrative and senior posts. Are the women teachers effecting

change or "transformation" as role models? What is their impact on students? What is their potential role and how can it be encouraged? It is clear that teachers, especially women teachers, should be both motivated and encouraged to carry through the transformation process and develop the potential of the cream of the cream who have gained admission to technical colleges.

Other Educational Opportunities

The colleges also offer evening classes and general certificate courses. It is not known how many women take advantage of this opportunity. As these classes are a major alternative entry point into science/technical careers, the nature of the courses and womens participation in them ought to be examined.

General Observations and Issues

Aside from problems of lack of academic prerequisites and performance at secondary school level, the core problem for women in technical education appears to be the dominant gender relations which foster a discouraging form of gender-typing. To facilitate womens entry we need to target negative gender relations through measures such as career and exposure campaigns and promotion of role models. We also need to assess the impact of educational factors such as methodology, curriculum and classroom relations, and to effectively support transformative teachers. A final set of measures would target the problem area of employment opportunities and mobility. The low level of womens participation can also be seen as part of the national lack of concrete strategy promote and popularize science and technology. Priority should be given to exposing an equal number of women to these skills in order to break the macho barriers to science and technology fields.

CONCLUSION

From the preceding discussion and analysis of the literature, we can identify three major areas which constrain women's participation and the transformative potential of vocational training and technical education. The first area is the socio-cultural sphere of dominant gender relations which results in gender-typing, negative attitudes, lack of confidence and the macho domination of training and education. A second area is the educational sphere and involves such factors as curriculum and teaching methodology. The third problem area is the employment or future career opportunities, also reflected in the differing expectations of the student and the education designers and planners.

In order to facilitate women's integration and benefits from these forms of education, priority targets should therefore be:

-    to increase women's enrolment,
-    to diversify the range of women's subject specialization,
-    to revise and enlarge or transform the curriculum to attract and benefit women,
-    to support and encourage transformative teachers,
-    ensure equitable employment opportunities, marketability and adequate wage for skill and training levels.

CHAPTER SIX

CONTRIBUTIONS OF THE SCHOOLING PROCESS AND ISSUES FOR GENDER TRANSFORMATION

by
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with Patricia Mbughuni, Ruth Meena and Priscilla Olekambaine

Many of the educational problems noted in earlier chapters reflect a global tendency in formal education during the last two decades: the emphasis on examinations and rote memory learning, the growing vocational content of primary and secondary schooling, the devaluing of a liberal arts university education, the priority given to technical education and the decline in student ability to engage in creative, analytical thought (Aronowitz and Giroux 1986). Tanzanian education also reflects its place in the international division of labor: for example, the extremely low expenditure on students in real terms and the dependence on non-graduate teachers.

The principles of education for adaptation have tended to dominate the education reform process ever since the colonial period: the success of the Tanzanian education system is measured by the scaling down of expectations of students, and their willingness to adapt productively to the "world of work", whether as waged labor or improved farmer (Psacharopolus and Loxley 1985, in conjunction with the World Bank; Sanyal and Kinunda 1977, of IIEP and UN circles, World Bank 1988). These instrumentalists policies of education for adaptation tend to develop a form of citizenship illiteracy.

The principles of liberating or transformative education are different; they mean to raise people's expectations and consciousness, their ability to engage in critical and creative thought, and to increase their capacity to directly control the economy, the government and all other institutions. In this sense, liberating education is part of the mobilization of the population to citizenship literacy, to demand their citizenship rights, including rights to financial resources, time, space, relevant knowledge, accurate information, autonomous social organization, social networks and the instruments and tools of production (Friedmann 1989: 7-9).

Liberating education depends on the existence of transformative intellectuals among teachers and school administrators, who support emancipatory traditions and cultures in the schools and other institutions such as encouraging the ability to critically examine both public and private life, to make decisions and policy. It is in women's interest to become critical of reality, to imagine the possible and to struggle to achieve their citizenship rights.

The first part of this chapter will document some of the contributions education had made to women's struggle for equality and for transformation of gender relations. The second part raises those issues we perceive as having special significance at the moment.

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WHY EDUCATION MATTERS

Benefits of Education at Grassroots Level

Tanzania's achievements in expanding mass education at primary and adult level have received international recognition. By 1987, 85% of the adult population was literate, and by 1984 nearly all school-age children were enrolled in primary school. These achievements greatly improved the educational status, particularly of those groups which had been deprived of education during the colonial period. Women were thus major beneficiaries, but how has schooling and literacy actually benefitted women? We found no specific studies on this question, but we were able to tease out some answers from reports on women's groups, from macro-level data on women in the labor force and developments in the health of women and children.

Infants and children of women with some schooling were more likely to have better health and nutrition (UNICEF 1985, URT/BOS 1989). Their mothers tended to have lower fertility rates, with a positive impact on maternal and child health. The recent success of the basic immunization programme was partially the result of UPE, which was initiated at the same time. There is also an increasing number of women delivering in health centers or with trained attendants, and almost all women have visited a pre-natal clinic. The drop in population growth from the 1967-78 period to 1978-88 has yet to be explained through in-depth studies, but most explanations center on women's greater participation in education and employment. Although it is difficult to draw direct causal links in these cases, the positive association with UPE, the adult education programmes and the educational components of health programmes, is clear.

Education has also facilitated the formation of a number of grassroots women's groups. In the last decades, many of these groups have taken up income-generating, service and educational activities (Koda et al 1987, Bryceson and Kirimbai, 1980, Mbughuni and Mwangunga 1989). Local women with slightly more education became the leaders of these groups. Group meetings provided space for women to meet other women and develop organizational, leadership and political skills among themselves such as learning how to speak publicly, how to conduct meetings, how to relate to the local government and seek support from government agencies. Women's groups provided an entry point into the public, political arena for many women.

Another educational component of these groups was the informal sharing of vocational skills such as sewing, tailoring, knitting, embroidery, food processing and preparation. Some formal education in commercial skills such as bookkeeping and accounting were also taught to a few members. Literacy and numeracy became more valued in the context of such groups.

The percentage of women in formal wage employment rose during the 1970s and 1980s, as shown in Chapter One. In rural areas, a large number of young female primary school leavers were hired and trained as shopkeepers, day care attendants,

first aid medical workers, and UPE teachers. These opportunities depended on a minimum level of primary schooling, as employers have adopted PSL Certificates as the minimum education credential necessary. Primary school leavers may be preferred even as casual workers in agro-processing factories (like the tea factories studied by Mbilinyi in Rungwe), because of their basic literacy and numeric skills and the socialization provided by schools (punctuality, regular attendance, ability to adapt to bureaucratic hierarchies, etc). An even greater number of women now work in the informal sector, in self-employment, family work and in some form of casual labor (Chapter One). They control a large proportion of family income, hold greater responsibility for household income needs and thus play a greater role in decision-making over basic resources at household level and beyond. Exposure to primary education has not only equipped women with the basic numeracy and literacy needed to seek employment, it has probably widened the horizons of many young women, increased their aspirations for higher standards of living, and therefore helped to propel them into the labor market in search of regular wage or self-employment.

A growing portion of young women are also resisting oppressive forms of patriarchal relations, including marriage and the patriarchal farming system. Statistics indicate a higher rate of rural-urban migration for women in the 1970s and a high rate of divorce in many rural areas (Bryceson and Mbilinyi 1980). These are signs of increased resistance to the oppressive dominant gender relations.

The values and curriculum of schooling have most likely influenced these changes in women's status, opportunities and outlook. Both primary and adult literacy texts draw heavily on Party ideology, which stressed the abolition of exploitation of all kinds. In principle, schooling espouses liberal values of universality, human rights, democracy and equality. In school, girls and boys must learn similar things, compete in the same tests and have equal rights to the teachers' attention, to books, and to positions of responsibility. The school has thus provided an alternative arena in which dominant gender relations can be questioned and more space negotiated for resistance and change.

Education has also begun to impart a "reading culture". Personal observation confirmed that there is a high demand for relevant books, pamphlets and newspapers among women. We need to encourage this seeking out of information, news and new points of view. We also need to encourage the educated women who have begun to produce the relevant, gender-positive materials needed. The number and quality of new reading materials produced for women is encouraging. Sauti ya Siti, a commercial magazine produced by TAMWA, and Mwenzangu, a mimeo newsletter produced by WRDP, are few examples of materials produced by and for women. Women educators, lawyers and journalists have also produced small pamphlets in Kiswahili on women's legal rights (Zijene Haki Zako, 1984) and on women's perspectives of development (Miradi ya Akina Mama Matetereka, 1984 and Wanawake na Upandaji Miti, 1987) and on women in politics (Meena and Mtengeti-Migiro). The UWT commissioned a history of women's struggles and contributions to Tanzania to be published in both Kiswahili and English, and SIDA has sponsored the translation and revision by Mbughuni of the Mascarenhas/Mbilinyi 1983 critical anno

tated bibliography. Penina Mlama, Amandina Lihamba and the late May Matteru have consistently written plays concerning gender and other social issues, in Kiswahili, which are performed and also published in written form.

Efforts to advance women's education and increase their educational opportunities have also resulted in the increasing use of participatory pedagogy aimed at empowering women, i.e. equipping them with necessary skills and knowledge to gain better control over their environment and their lives. The village training programme centered at Ruaha College in Iringa combines participatory assessment and analysis of problems with villagers. The curriculum is designed anew each time to fit issues and problems raised by the villagers. Specific quotas exist to ensure full participation of women in all phases of the programme. UNICEF and UNIFEM are also promoting a similar form of participatory education in their JNSP and WAFT programmes respectively. JNSP utilizes participatory planning and monitoring of health conditions at the village level to raise nutrition levels. WAFT women's groups are taught the basics of problem-solving and feasibility analysis using the participatory action and research approach. This methodology allows women to make use of the space and time created within the programme to equip themselves with essential skills in political and social organization, as well as analysis and problem-solving.

Benefits of Higher Level Education

Most of these developments involving grassroots women have depended on the initiative, participation and/or leadership of more educated Tanzanian women. The biggest bottleneck today in promoting this grassroots development has been the lack of enough educated women with a high degree of commitment and gender-consciousness, and who are trained in gender studies. There are also very few women in higher level positions of responsibility, power and decision-making in government, private and NGO organizations. One of the most common explanations for their lesser participation at the top is their lower education credentials. Increasing women's access to secondary and higher education is therefore a necessary, if not sufficient, condition for further promotion of equality.

The presence of the few women in high level positions has made a difference. Women members of parliament, women principal secretaries and other women leaders have increasingly been chosen by virtue of their work and education qualifications, and not because they are the "wives of somebody". This is also true of an increasing number of high and middle level officials in UWT, CCM and other official organizations. Many of these women have proven to be outspoken, committed and willing to seek advice from other women. They have lacked only an organized network of women to provide support and demand accountability.

Other types of impact are less visible; they take place "behind the scenes". Recent appointments of women to high level regional and central positions in the civil service were the result of queries from the top as to why qualified women were not being promoted. Educated women have produced research confirming gender differentiation and discrimination, which has been used by women in official posi-

tions to press for affirmative action at all levels. They have also helped to communicate these findings more widely, for example, in official country reports to the UN such as the country report to the 1985 Nairobi Women's Decade meeting, and the recent government report on the status of women (URT/Community Development 1988). Women experts are also contributing widely to sensitization programmes for top level officials, or within their everyday work relations. Thus policy and top-level decision makers are acknowledging the importance of gender issues and the significant influence of women's groups.

Educated women are providing the voice for grassroots women, and they are also providing the evidence needed to advance women(see Mascarenhas and Mbilinyi 1983 for references to earlier work and TADREG 1989 for more recent material). Decision-makers, both women and men, need basic knowledge and concrete "evidence" to support the assertion that gender-typing and discrimination exist, and to help guide the planning of strategies for abolishing them and creating a gender-positive environment.

As at the grassroots' level, many educated women's groups and NGOs have emerged in the last decade. They have provided educated women with a space to organise and promote women's solidarity to their own members and to other women, especially in grassroots groups. The earlier intellectual groups like WRDP and IDS Women Study Group have worked closely with the UWT, the Cooperative Union and other national organizations and institutions which have sought their assistance, as well as donor agencies. Some of the active contributions of other NGOs or group, such as TAMWA and WEG, have been mentioned in other sections of this study. Women lawyers, doctors, scientists, educators and business women have formed their own associations to both lobby and provide mutual support for women.

The process through which this report has been produced illuminates the way in which educated Tanzanian women have contributed to the promotion of gender issues at all levels. The participation of 19 Tanzanian resources person in the Resource Persons Workshop - the quality of their participation - has been a central part of this process.

It is necessary to emphasize the contribution of Tanzanian expert women because they are likely to become fewer as women's participation in higher education has declined, a decline which stems partly from government neglect and partly from the bias in donor policies which prioritize "basic education". Funding for the basic research needed or workshops such as the Resource Persons' Workshop, are given low priority by the government and donors. The need for transformative researchers, intellectuals, teachers as well as politicians, employers and bureaucrats who have learned from them, is crucial. Elementary education is therefore not enough to bring about gender equity.

The least known actors for transformation are the women within the schooling process, the teachers and head-teachers. Although they rarely get invited to become consultants or researchers in their own right, the greatest changes are the products

of their work. We have tried to "dig up" some of the experiences that lie hidden below the surface of research reports. One of the most challenging and inspiring moments of this study took place during the Resource Persons' Workshop, when researchers, teachers, administrators and other educationalists began to listen to each other and analyze together. Such collective efforts broke the divide between organized women's groups, highly educated feminists and the women working elsewhere in the system. Just as teachers "fished out" promising young girls from primary and middle schools since colonial times, we have had to "fish out" transformative educators and encourage them to speak out. They have since provided us with inspiration and strengthened our resolve to continue working for the advancement of education for all women.

In summary, we can point out that although the impact of education on the transformation of the lives of women may be difficult to assess statistically, the signs of real change and the will to change are evident. On the grassroots level, changes in health and nutritional status, growing organizational and political skills as well as increased numbers in the formal and informal employment sectors are indications of change. On national levels, the contributions of educated women to the transformation process have been crucial in providing a voice and the evidence for progressive change.

ISSUES FOR GENDER TRANSFORMATION

The following are the major recurrent issues considered priority concerns for the transformation of gender relations in the schooling process.

We have learned from the history of formal education in Tanzania that education for adaptation has contributed to the scaling down of Tanzanian education, the loss of new and alternative educational opportunities and thus the loss of women's (and to a lesser extent men's) potential, and the further entrenchment of women in oppressive gender relations. Are we now witnessing a new set of education for adaptation principles? Does the trend for vocalization, the importance given to employer needs, the emphasis on "basic education" and the declining support for higher education means that we are again "adapting" Tanzanian education to a specific, neo-colonized position in global relations? Within this context, what does it mean that women are streamed to learn "domestic" non-employable skills, or that so few women reach higher education? Are their routes to a better, more equitable life being closed or are new ones being opened? Rote pedagogy, the examination system, poor teacher motivation can also be seen as part of a new "adaptive" education whose end result is the de-skilling of teachers and students in creative, imaginative, critical thought.

Affirmative action measures are needed, but they must accompanied by remedial measures or we are programming women for failure. Women should be given equal opportunity to participate in all forms and levels of education. However, action must also be taken to defuse those constraints which have hindered their performance in the past. Therefore teachers and parents should also be sensitized to women

students' needs and problems, counselling should be made available and transformative teachers recognized and motivated.

We have seen a continuity in the educational system's gender-typing or gender-streaming and rote pedagogic principles. This continuity is not a cloning process in which the same circumstances create the same educational system. Historical circumstances, political interests, economic pressures and social forces have made differing demands on the educational system to bring about transformative changes in curriculum and pedagogy.

The current educational system furthers gender inequities. While the government of Tanzania should give high priority to bringing about change in the system, donors who fund an inequitable system are also responsible for the outcome, and should urge change.

Tradition has been used to rationalize and legitimize inequities in the educational system. In the case of school girl pregnancy, for instance, girls are continuing to be punished for pregnancy on the ground that "society" has always censored or banished unmarried mothers. Not only is this assertion false as it does not hold true for all groups which make up the Tanzanian nation, but tradition has changed in the past with changing economic and social circumstances. There is no reason to doubt that tradition will continue to change; it should, in some cases such as punishment for pregnancy or the practice of female circumcision, be helped along on its way out through enlightened government and donor support.

The government and the Party have yet to produce an official position and strategy to deal with sexual harassment, not only within the schools but in the work place. Because of is nature as an often unrecognized and latently accepted form of behavior, there is a need to clearly specify and name forms of harassment and stipulate punishment. The Party and government should also formulate a strategy for eradicating sexual harassment which would include a form of "legal literacy" on the forms and punishment for sexual harassment.

In conjunction with these efforts, we need more research on sexuality and sexual harassment which is geared to strategy formulation. Why has so little research been done, for instance, on adolescent sexuality, although it is one if not the burning issue among our youth? What measures can we take to alleviate or use productively the sexual energy of the secondary school student? What is happening in primary schools when girls reach puberty? What is the role of the sugar daddy? We need studies which will assess, analyze and prepare the strategy for action.

Secondary and higher education should not be neglected in favor of "basic" education. Transformative teachers and teacher trainers as well as planners, bureaucrats, politicians, parents and employers are needed. Gender positive support and expansion of secondary and higher institutions of learning will be an integral part of the transformation of the educational system as a whole.

Transformative teachers are key figures for transformation. They should be sought out, encouraged and motivated to further their efforts. They should also be included in research, policy and strategy formulation.

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