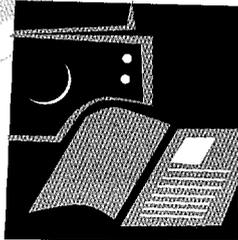
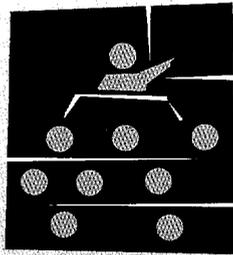


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LESSONS LEARNED
ON
CURRICULUM



LESSONS LEARNED ON CURRICULUM

Education is a valuable mechanism through which societal issues can be meaningfully addressed. Recognition of the intricate and profound relationships between science, technology, and society has moved education in new directions. The corresponding impact on curriculum has been both rapid in pace and global in scope.

The curriculum expansion has raised numerous questions and revealed a dearth of information about curriculum development based on curricular innovations and reform. A plan of action is needed to cope with the rapid knowledge explosion and the critical societal issues that schools are required to address.

In response, African nations have developed education strategies and curriculum programs to combat the pressing problems of:

- high rates of population growth;
- rapid degradation of the environment;
- increasing prevalence of STDs and HIV/AIDS;
- civil unrest; and
- declining economies.

Research in cognitive development has clearly demonstrated that children do not learn by mastering discrete skills, but by responding to the *gestalt* of learning environments and in the context of meaningful, real-world experiences. Curriculum designed from this perspective is very empowering to both students and the community. The challenge is to design and develop curricular programs that effectively marry new technology with societal needs.

Lessons Learned Research Study

There is a vital need for operational and behavioral research to better inform and guide program designs and curriculum development. In an effort to respond to the paucity of field-based evidence on curriculum development in sub-Saharan Africa and establish an information base, the Office of Analysis, Research, and Technical Support designed a research study to evaluate and document lessons learned from programs designed to integrate health, population/family planning, environmental issues, privatization, and democratic education into basic education curricula in Africa.

The "Lessons Learned" research study includes the following information:

- recent findings about the way students learn and how this research affects curriculum

development, curriculum and instruction, and curriculum and evaluation;

- three case studies (Botswana, The Gambia, and Senegal) outlining the curriculum development process in the key curricular areas;
- a synthesis of observations and perspectives, recommendations and promising approaches, along with the critical areas meriting further data and analyses; and
- an annotated bibliography of available programs and materials.

Assertions on the Nature of Curriculum and Policy Implications

Findings of the "Lessons Learned" research study are based on a literature review, interviews with educators, classroom observations, and the advice of an expert panel. The research clearly provides a richer understanding of issues surrounding curriculum development in Africa and establishes a clearer analytic framework for the development of a working hypothesis. As an outcome to the research, a number of assertions were constructed regarding the nature of curriculum and policy implications for donors and education planners.

1. *Classroom instruction is exam-driven.* While this presents a particular challenge for curriculum development, since it means that the intended curriculum is frequently not being implemented, it also demonstrates the potential for curricular reform based, in part, on reform of evaluation and measurement procedures.
2. *Interaction patterns within the classroom are almost exclusively teacher-directed.* While similar patterns have been observed in many other geographic areas, they may be particularly limiting within those sub-Saharan African countries where trained teachers are in extremely short supply. This phenomenon also limits and distorts the evaluation process since teachers, because of this interaction pattern, are unable to evaluate students' understanding as it evolves through open exploration of concepts and ideas in the classroom. Evaluation then is forced into a static, summative mode that has much less impact on classroom behavior and much less potential for improving student learning. While these interaction patterns may be susceptible to change over time, the short-term implication is the need to couple curriculum reform with intensive in-service teacher training.
3. *Instructional materials are rarely used in the classroom, and where used they are seldom produced locally.* This is unfortunate, because experience shows that teachers can easily learn to produce excellent teaching aids--posters, textbooks, and alternative types of reading materials and manipulatives used in the teaching of mathematical and scientific concepts. This not only casts the teacher as a learner--an extremely important paradigm shift in itself--it also connects school learning with the here-and-now in the mind of teachers and students which is another not-insignificant paradigm shift.

4. *The curriculum is structured in ways that prevent language from making a full contribution to the learning process.* Ironically, this has the perverse effect of turning Africa's rich oral tradition, potentially its greatest educational asset, into an educational liability, limiting both access to schooling and persistence within the schooling program for those children without easy access to a metropolitan language. Schools must explore and experiment with language--both maternal and second languages. The curriculum is a potential source of dramatic change if children become empowered through language. Since it is the medium in which knowledge is acquired, students need to develop and master both receptive (reading/listening) and expressive (speaking/writing) language skills.

Despite the controversy that surrounds language of instruction, common sense and curriculum imperatives must prevail at the classroom level. Whatever their long-term needs, children also need short-term affirmation; this means that they need a voice from the earliest days of schooling. Their language and their culture must be the basis of their first schooling experience. This may be the single greatest curriculum challenge facing educational planners today, particularly in the French-speaking countries.

5. *Student grouping patterns are highly predictable and generally foreign to the learning style children bring to the classroom.* In an oral, sharing tradition, peer tutoring, small group learning patterns, and similar approaches surely have something to offer. Grouping patterns need to enhance cooperation in the classroom and must not reinforce gender boundaries, isolation, and other types of social marginalization and stratification. Alternative grouping patterns can improve socialization in the classroom and increase the learning capacity of all children from the brightest to the slowest. This underscores the need for dialogue and the importance for in-service teacher training to strengthen teacher problem-solving skills, which can then be applied to these group settings.
6. *The learning environment is organized as a function of perceived teacher needs rather than student needs.* Methodologies and instructional techniques need to reinforce a more participatory, child-centered environment where the child feels emotionally and physically safe.
7. *Gender-related issues are a frequently unacknowledged factor with great potential for changing behavior patterns related to health, environment, and population.* Women and girls not only reproduce but also are often the guardians of households and the environment. Economic conditions and health factors converge in those cases where women and girls find it necessary to survive or gain economic independence by selling sexual favors. STDs, including HIV/AIDS, have become a greater threat to many women and girls facing limited social and economic options. Education for women and men in the countries studied often fails to provide women with equal access to the law.

8. *The integration of health, population, and environmental issues into basic education is currently in an embryonic stage, with curriculum and materials yet to be fully developed and implemented at the national level.* The fact that there is overwhelming public consensus and a clear mandate from the Ministries of Education to address these critical and often controversial issues in the school curriculum creates a positive climate for change. The Ministries are skilled in using consultation with a wide range of influential sectors of society to raise public awareness and achieve consensus. It would appear, however, that the success of these efforts to introduce new elements into the curriculum may be compromised by the frequently rigid, top-down hierarchies and centralized decision-making processes within the educational bureaucracies. This may combine, with a sort of negative synergy, with a growing tendency at the classroom level to skirt those topics that may hold the greatest potential for influencing behavioral change.
9. *Consultation is not synonymous with participation in curriculum decision-making.* The results may be apparently well designed materials and internally coherent programs with little or no external relevance to target classrooms. This points up the need for teacher involvement as "policy brokers" in curriculum matters.
10. *Teacher training strategies currently fail to address the new curriculum environment of most countries.* The environmental, population, and family life initiatives assume "multidisciplinary" integration of the new topics across the curriculum and a new pedagogical approach to education (student-centered, problem-solving, hands-on) that departs significantly from traditional student-teacher roles. Both of these assumptions require significant teacher training at a conceptual level, which is difficult to address through the current in-service strategy of the "multiplier effect." It may be more effective to devote scarce time, energy, and resources in developing strong regionally-based teacher training and support (that also assists teachers in developing the topics) rather than in costly new curriculum outlines and materials.
11. *Greater teacher participation in curriculum decision-making often provides teachers with needed incentives to implement new programs and practices not present in the current system.* Change agents must be found among local teachers, who are also better placed to "sell" new approaches, especially on sensitive topics such as family life education and human sexuality, to parents and community members. It is clear that there is growing recognition of the need to decentralize the Ministry of Education and spread decision-making power among regional and local units. It is less clear whether there is an understanding of the conceptual and qualitative changes that must occur for decentralization to lead to the desired increase in local ownership of curriculum decisions, as well as responsibility for the relevance of educational programs.
12. *Regional school partnerships and regional teacher centers in some countries have provided effective models that may suggest worthy strategies for future donor agency support.* These efforts often link specific school improvements to teacher training and education, and join schools with youth-serving agencies outside schools.

SOURCES TO CONTACT FOR MORE INFORMATION

INTERNATIONAL JOURNAL OF EDUCATIONAL DEVELOPMENT

Background:

The International Journal of Educational Development reports on key developments in national systems of education wherever they are to be found. The journal focuses on issues of interest to planners, practitioners, and researchers in developing countries. Topics covered include: new structures of schooling and higher education; new approaches to educational management; programs of research, inquiry, and analysis; studies of achievement and student participation rates; and initiatives in vocational and technical education.

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INTERNATIONAL BUREAU OF EDUCATION (IBE)

Background:

The IBE conducts three types of activities: (1) educational documentation and information; (2) comparative analyses and research; and (3) political dialogue among decisionmakers, educational specialists, and other staff involved in the education system. It possesses a large educational documentation center and is responsible for organizing the International Conference on Education every two years. The IBE also provides a series of monographs intended to disseminate information on innovations concerning structures, content, methods, and materials to educational planners, decisionmakers, and teachers in order to promote the exchange of experience. Two publications, the *International Educational Reporting Service (IERS)* and *Educational Innovation and Information*, are available from the IBE free of charge to institutions in developing countries.

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ALBERTA GLOBAL EDUCATION PROJECT

Background:

The Alberta Global Education Project is the Canadian Dissemination Center for SPICE, the Stanford Program on International and Cross-Cultural Education, part of the Institute for International Studies at Stanford University in California. SPICE links sound scholarship with current thinking on effective pedagogy and curriculum implementation to produce interdisciplinary, cross-cultural curriculum units for elementary and secondary students. Curriculum units are interactive, classroom ready, and reproducible.

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Information in this brochure was gleaned from a research study funded by the U.S. Agency for International Development, Office of Analysis, Research, and Technical Support, Africa Bureau. The technical team obtained their data by conducting a literature review, observing ongoing curriculum development activities, interviewing key informants in Botswana, The Gambia, and Senegal, and formulating an expert panel to guide and react to the team's findings. Neither the brochure series nor the research study were intended to be an exhaustive inventory of the programs in existence. Rather, they were intended to provide information to be used as a stepping stone toward the initiation and implementation of nontraditional curricula into basic education. The full research study, *Lessons Learned on the Integration of Health, Population, Environment, Democratization, and Privatization into Basic Education in Africa*, can be obtained by contacting the U.S. Agency for International Development, Center for Development Information and Evaluation, PPC/CDIE/DIE, Rm. 105, SA-18, Washington, DC 20525-1801.