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The opportunity-cost of education created by poverty among many rural families in Bangladesh causes a high rate of adolescent dropout from school. School’s lack of relevance to the realities of their life is an additional cause of the high dropout rate. Gender discrimination makes things worse.

CMES has developed its Basic School System (BSS) to address these problems. CMES arranges an integrated package of life-oriented education, a profitable practice of appropriate technology, and home-to-home interventions in health and the environment. Two decades of experience show that this integration not only offers a second chance for education to adolescents, it also enriches and adds qualities to both their education and the livelihood skills.
Economically indispensable as soon as he or she is seven or eight years old. Enrolment at a late age and frequent repetition of classes make them even older and therefore even more indispensable at home while they are still in school. A long, patient endurance of many years without any tangible effect is not worth the labor lost by their families.

There is a crisis of relevance in education. Many students, because of their family circumstances, come to feel that there is no gain for them in continuing through primary school. In over-crowded classes, they lose confidence in their ability to learn, receive little individual attention, and fail to achieve much. Many boys and girls feel more and more that school is only for those who can continue through the secondary and beyond and that he or she is not one of them. It is never emphasized that primary education may be useful in its own right and contain its own value. Young people would rather try to prove their worth outside the school.

Gender discrimination in society is another reason for adolescent dropouts. On many occasions we have come across girls who have dropped out so that a brother can continue. It is not still uncommon to treat schoolgirls differently as soon as they reach puberty. Many parents simply do not feel that they should continue to go out to the school.

In CMES’s long experience with primary school dropouts, certain needs have been manifested quite commonly:

- Opportunities to continue and improve upon income-generating activities, which are essential to the family.
- Immediate opportunities for use of improved literacy and numeracy, particularly in skill development and income-generating efforts.
- An atmosphere of quality education where the adolescent can bring in his or her own life-issues and fully participate, attaining competencies quickly and effectively.
- A school that provides guidance and assistance in real life, including in improved quality of life and employment.

CMES has developed the Basic School System (BSS) over about two decades, mainly to address the needs of adolescents who have never enrolled in school or who have dropped out. As income generation is an imperative for this group, our innovation has focused mainly on the integration of education with simultaneous technically competent livelihood practices. BSS arranges for a life-oriented education, a profitable practice of appropriate technology, and home-to-home interventions in health and environment, keeping the package compatible with the national curriculum. Our experience shows that this is not only a feasible integration, but it also enriches and adds qualities to both the student’s general education and livelihood skills. And, of course, to overcome the severe opportunity-cost of education for the disadvantaged adolescents, it is an excellent strategy.
The school-day environment is divided into inner campus and outer-campus time. The former gives the classroom education, while the latter offers opportunities to practice some of these. These switchovers provide a lot of variety and joy. The outer campus activities include the learning of technology skills and the home-to-home work. The integration is effected by the ample opportunities these components have to interact among themselves. For example, the general education curriculum may draw its topics and exercises from real life practices in skills. Thus, there is a lot of basic science and mathematics to learn through the making of soaps, candles, wood and metal crafts and through the work with the sapling nursery, poultry raising and bee keeping, the likes of which are the usual BSS practices. On the other side, the addition of a “classroom” education to these activities transforms the latter from mere laboring skills to joyful educative exercises in learning useful technology.

The integrated approach extends to the task of marketing too. Marketing activities take students to a very active interaction with the community and the trades in the locality. These interactions also help teachers succeed with hard-to-reach adolescents. In fact, the interaction with the parents and the community are intensive and multifaceted, taking care of enrolment and retention of the students, their education and practices within the school, and their employment or self-employment after school.

**Present Situation**
Non enrolment rate : 10%
Non-completion of primary: 40%

**CMES’s enrolment efforts for them shows:**

**Major Problem: Opportunity cost**
- Economically indispensable boys & girls
- Tangible effect of education comes too late for them
- Every one has a story to tell

**Typical Reasons for Dropping out**
- Parents need assistance
- Dependence on adolescents for income
- Real cost of education
- For girls, too far to travel safely
- Some tempting local opportunities for income
CMES model tries to address all these and the task is not easy

**Quality Education Requires**
Over & above the good teaching, good aids & class-room practices,
- Relevance with their present problems, pursuits & ambitions
- Integration with life-struggle
- Emphasis on practicality & usefulness

**Education-Work Interaction**
- Compartmentalisation does not help
- Gender stereotypes should be addressed
- Reduce barrier between educational world & working world
- CMES lets its graduates continue works-programme
- Prospect of self-employment

The whole thing needs Unconventional & Innovative Solutions.
CMES is trying some.

**CMES experience shows:**
- Adolescent dropouts need a second chance, But in their diverse ways
- A standardised curriculum, only dealing with literacy, is not enough.

**Some of the diverse needs**
- Creation and enhancement of income generation
- Immediate use of education
- Quality education bringing in their life-issues
- Practical guidance into life-quality and employment
Rural Technology centre (RTC).

**Between them they cover:**
- Primary & early secondary education
- Skill training & Income generation
- Practical work at home-level for life-quality

All fully integrated

**Diversity Comes as:**
- Type & mode of technology
- BS students learning part-time in the Technology Centre
- Lateral enrolment according to competencies
- Extra-School (income generation) in late hours
- Graduate-work for income
- Continuing Education for graduates (late-afternoon)

**Adolescent Girls’ Programme (AGP)**
- Gender problems are addressed
- Empowerment of girls
- ‘Agrani classes’ for continued education
- Skills, technology, Income, credit

**Ways of Integration**
- Switch Overs each day between inner campus & Outer campus
- General education draws from technology practices
- Works become educative
- Practices are at market level
- Income generation creates motivation
- Home to home work enhances quality of life

**Teachers’ Team Work**
Future CMES Plans

Rural Polytechnics for diverse needs combining secondary with useful technology, commensurate with Government’s Technical secondary stream. These may feed Vocational and Technical Institutes and the likes with well-prepared and motivated students, and provide even better answers to the multifaceted needs.

Mainstream may adapt these too
- Education integrated with real-life practice e.g. secondary education with practical skills
- Will give an immediate edge in livelihood
- A good strategy for total human resource development

Dr. Muhammad Ibrahim is Executive Director and Founder of Centre for Mass Education in Science (CMES), a NGO in Bangladesh. CMES's major focus is on education and empowerment of disadvantaged adolescents and youth through alternative education integrated with life-skills and income generation.

Dr Ibrahim is also Professor of Physics, University of Dhaka, Bangladesh, with interests in Solar Energy, Non-formal Education, Appropriate Technology, Gender & Development, Popularisation of Science.