

THE ROLE OF TECHNOLOGY IN SOCIAL RECONSTRUCTION

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Abstract

Technology is daily and drastically changing our world. All spheres are being affected one way or the other by technological advances and the society is not left out. Our society had suffered great depressions; and reconciliation in post-war societies remains elusive. Educators had then set out to reform education by calling for a social reconstruction. According to Benson and Harkavy (2000), education within a society performs a critical function in the reconstruction of that society. Social reconstruction aims at shaping the experiences of the young so that better habits will be formed, leading to an improvement in the future adult society. The school community serves as the base for developing skills in young ones and majority of these skills are beginning to have technological undertones. Why then can't we fully incorporate the current technological trends into the teaching and learning processes so that our curriculum could produce better and faster results to the benefit of the local, national and international communities? This paper looks at social construction from the standpoint of technology integration into our school curriculum - a curriculum consisting of ideas that enables students to feel that they have the power to change little things successfully. In totality, the school, the teacher and the students have very important roles to play in reconstructing our society through technology.

Introduction
The most widely accepted philosophy of life at present is that what matters most to a man's happiness is his income. This philosophy, apart from other demerits, is harmful because it leads men to aim at a result rather than an activity. (Bertrand Russell 1872 - 1970)

Social Reconstruction is a well-contested notion. It has aimed at shaping the experiences of the young so that instead of reproducing current habits, better habits shall be formed, and thus the future adult society will be an improvement on their own (Dewey, 1916: 79).

In reconstructing a society, some key issues need to be observed: (i) The society, and (ii) The many institutions in the society which provide education for all, especially the young.

It should be noted that apart from the formal schools, there are other institutions in the society, which provide education. Cremin (1977) argues that media, family, church and industry are just some of the institutions, which provide education. It is also necessary to note that in this age of technological advancement, every sphere of life is receiving a touch of technological breakthroughs and the society especially in its reconstruction cannot be left out. The school curriculum has not escaped the struggle for social reconstruction and this is closely linked with technological education.

Now, the question arises: where exactly lies the meeting point between technological advancement, education and social reconstruction? This paper seeks to answer this question and much more and to finally note the place of technology in our bid to educate our present generation towards a virile and positively structured society.

Social Reconstruction

Reconstruction means the action or process of rebuilding of a past event formed from the available evidence (Britannica, 2001).

Social reconstruction was originally focused on making changes to end war and economic depression (Bondy and McKenzie, 1999). It was actually a war in America between 1855 - 77 during which the southern states of the confederacy were controlled by federal government and social legislation, including the granting of new rights to black people, was introduced (Britannica, 2001). However, in the recent past, social reconstruction perspective has come to focus on the elimination of social inequality and justice in the society at large. Some educationist and international jurists preferred to use the word 'reconciliation' in reference to social reconstruction after the war, since reconciliation (which refers to a process by which peoples who were formerly enemies put aside their memories of past wrongs, forego vengeance and give up their prior group aspirations in favour of a commitment to a communitarian ideal, (Martha, 1998), best describes the process. However, social reconstruction was gradually absorbed as a better word due to the fact that "reconciliation" has theological overtones that reflect the Christian religious tradition. Social reconstruction could be used to best describe the evolution of social institutions, economic development, community - building and person-to-person connection that may underlie the commitment of people to live together.

Social Reconstruction and the School

During the first half of the century, progressive educators were advocating a restructuring of education in many developed countries (Zuga, 1992). Some of these progressives believed that, because of school practices, schools and society were caught in a dualistic relationship, which separated the school from mainstream society and created an isolation of the schools. The progressives believed that what happened under the auspices of the schools was not real or reflective of the problems in society (Bode, 1933). They furthermore argued that the artificial environment of the schools was mis-educative in that youths were not prepared to see and understand the values and issues which would confront them as they become adults (Dewey and Childs, 1933). The progressives believe schools create a new social order. This ought not to be. Social reconstruction should be a needed orientation in our schools; this is where we can inundate our youths with better and refined social standards. The teaching profession should eagerly grasp the opportunity which fates have placed in their hands to restructure the society and change societal ills. An identity, and equation exists between the urgent social need of the present and that of education.

Education does not start and end in the school. Many institutions exist in the society, which provide education. An integration of these institutions into the school curriculum will help a lot in changing the attitudes of students to life situations and challenges; while shying away from the realities of the existence of these very imposing institutions on our educational standards will be injurious and inimical to the future of the society.

Children learn a lot from school. They are susceptible to a great influence by teachers and peers. The school community should therefore provide an avenue whereby real social and societal issues are approached. The integration of media, industry and technology into the school processes will definitely have a great impact on the attitude and response of students both in and out of school. Cremin (1976) argues that a contemporary conception of schooling must account for the influence of these institutions and their modes of education.

Harold Rugg, an early Social Reconstructionist, prepared material on minority groups, including African Americans and women, and used the material to promote an understanding that we inhabit a larger, interdependent world. Rugg believed that students should immerse themselves in real-world problems, including working in their communities to find and present solutions that would improve their lives and the lives of their fellow citizens. (Stern and Riley, 2001).

Technology Education and Social Reconstruction

Technology is fast changing our world and according to Adedeji (2003), every nation desiring progress and development now sees technical education as a must for its populace especially in schools and colleges. Vocational and Technical Education (which provides training in basic technical skills) introduced into the school curriculum had helped young ones in coping with the challenges of technological advancement. Technology has always been a major tool for creating new physical and human environments.

Computer technology has taken over almost every sphere of life, be it education, communication, economic transactions, weaponry, building and construction. The driving force for the development of new technology each day is actually to solve grand societal challenges which includes fundamental global problems like hunger, literacy, pollution, homelessness, war and so on. For instance, Spencer (1997) stressed that rapid changes in technology in the last several decades have changed the nature of culture and cultural exchange. People around the world can make economic transactions and transmit information to each other almost instantaneously through the use of satellite communications and computers.

Technology according to Fatuyi (1996:7) is the understanding of society, their basic components, design and structures and production mechanisms. The product of technology is the material aspect of culture e.g. computer components. Presently, the way it is, developing countries cannot but employ technological skills, technical training and technical education in order to catch up with the current trends of the global economy and development.

The New Partnership for Africa's Development (NEPAD) once known as the New Africa initiative, is a pledge by African leaders to eradicate poverty, to promote good governance, accountability and transparency, achieve strong economic recovery, and give adequate attention to social services. In the development of Africa, poverty remains the largest constraint, despite the improvements in the social and economic policies of some of the African Countries. (NEPAD

October 2001)

One of the key strategies of NEPAD is to revitalize the provision of education and technical training and to promote social and economic development in Africa. (Kogie,2003). Technology can change a people's world if rightly taught and applied. As Kogie (2003) pointed out, one of the sectoral priorities identified by NEPAD is Human Resources including education, skills development and reversing the brain drain. NEPAD is actually a tool African leaders are using presently to reconstruct a decaying African continent. It believes that the expansion of educational opportunities in Africa would thus enhance the continent's contribution to its own growth and development, especially in the areas of social and economic demands, world science, technology and culture. (Kogie, 2003)

The key problems to education in Africa are poor facilities and inadequate systems under which students are taught. The objectives and goals of NEPAD in each country and especially Nigeria in particular should be commended. One of such is to revitalize and extend the provision of education, technical training and health services and to also promote the role of women in social and economic development through education and training.

Section 9 of the Education (National Minimum Standards and Establishment of Institutions) Act Nigeria- 1985 stipulates that:

One of the purposes of technical education is to enable men and women to have intellectual understanding of the increasing complexity of technology and the role technology plays in the world around them (ILO: e.quality@work, 2002)

If this is anything to go by, then there is a very pressing need to take technical education in our institutions and schools very serious. Technology does affect societal concepts, more so that there is a rapid increase in its complexity. For example, the manner of transfer of information across continents is now as easy as ever, and since knowledge is accepted to be power, such is needed to make the society improve.

Technology can be used as a tool to solve societal ills such as poverty, hunger, diseases, crime, fraud, drug problems, prostitution and so on. One way is to organize updates on technical education in the schools curriculum and another way is to provide technological influences in the school community. It is however not untrue that neo-technological advances could also have negative effects on the society. This is where technological education comes in. A right kind of education cannot be distorted. For example, the use of automated, cheap and efficient agricultural implements can help solve the problem of poverty and hunger. The provision of good health care systems through the use of sophisticated and computerized medical equipment will help in the diagnosis of some terrible illnesses and in the cure of such. Mortality rate could have been drastically reduced. Public enlightenment through the media, Internet and the use of computer chips or forensic science and medicine for detecting fraudsters would help to reduce crime. These and more are some of the ways technology will help to correct social ills.

Students' and Teachers' Role in Social Reconstruction

The school is a "laboratory or training ground for preparing a socially active citizenry." Students themselves are not passive receivers of knowledge, but rather, they should be active in constructing, developing, examining, and analyzing knowledge. Students come to the activity of teaching with existent knowledge and not as "blank slates." (Seda, 1996).

Teaching as an activity is more than merely telling or talking. It may sometimes refer to active argumentation, debate, and discussion. Within this interaction, teachers, with their students, are agents of social change. According to Rugg's approach to solving social problems through education, those who will be our educators must first experience problem solving within a social context.

Social Reconstruction can be implemented by engaging the students in various activities:

- (i) **Community Service:** Promoting recycling, planting trees on school grounds, building an incinerator or a bus stop, showing a film on health care system, building a bridge etc
- (ii) **Participating in a service-learning activity:** Students become active learners who meet their academic requirements while at the same time responding to pressing social needs of their local community, (iii) **Observing the media:** Students can reach a new awareness by observing the media and paying closer attention to the stereotypes depicted through commercials, sitcoms and movies.

Organizing Technology Education with a Social Reconstruction Orientation

To implement a social reconstruction curriculum orientation in technology education, social problems, which have particular relevance to technology, are chosen and become the means for organizing technical processes. For example, pressing social problems such as designing and constructing low cost housing for the homeless or refurbishing low cost housing becomes the driving force of a social reconstruction curriculum in a construction class. Students may never get a chance to try all of the processes, such as wiring, needed in order to build a contemporary home. The teacher is more concerned about the social problem and creating a community with students and society and is less concerned about 'covering the content.' Only the technical processes needed to construct the alternative form of housing are taught to those students who need to know the technical processes. The teacher also trusts that the greater social goal is of more value than specific content. The teacher believes that the experience of solving a problem such as creating low cost shelter for the homeless will instill in students habits and enthusiasm for seeking out the knowledge and skills needed to take on additional problems which will involve other knowledge and skills. The teacher also believes that by example and practice with selected processes that attitudes of safety and pride in quality will transfer to new processes. In this way the teacher hopes to help a student to be not dependent upon instruction in order to function as an adult in society, but to be willing to experiment and to try new ideas and skills.

We are not lacking in pressing social problems, which relate to technology. Each content area of technology education can be used as a vehicle for attacking social problems. Some examples include:

Transportation

1. Designing and creating less polluting power systems for vehicles.
2. Designing and creating prototype alternative transportation systems for the community and presenting those designs to city council.

Manufacturing

1. Investigating the effects of local manufacturing firms' policies on the local environment and either honoring the firms or approaching the firms with suggestions for improvement.
2. Investigating and attempting to develop biodegradable polymers.
3. Creating a manufacturing business which makes a product identified as valuable to a select market such as senior citizens or low socio-economic status (SES) citizens in the local community and marketing that product to them on a cost recovery basis.

Communication

1. Creating and testing personal emergency communication devices for handicapped people.
2. Examining advertising claims by doing product testing and reporting the results to the local community.

Construction

1. Conducting an audit on the school building and making recommendations to the school board.
2. Conducting audits and correcting the deficiencies on students' homes, homes of the elderly, and homes of low SES citizens.

The list of examples is bounded only by the imagination of the students and teachers who, in partnership, implement a social reconstruction curriculum orientation in technology education.

Conclusion

Technology could have a considerably good influence on social reconstruction starting from the school curriculum. A curriculum consisting of ideas towards social reconstruction enables students to feel that they have the power to change little things successfully such as improving school agricultural lands through scientific and technological means; erecting traffic lights; giving a community park a face lift or developing an after school mentoring programme involving scientific /computer games, educative film shows on fraud, diseases, prostitution etc for younger children. This also leads to the hope that when working together, much larger projects, such as decreasing school violence can also be accomplished.

When these traits are well developed in the school, it will be easier to carry such development into the larger society and thus leading to an explosion of positive societal values which will go a long

way in affecting our local, national and international communities.

"You see things and say why? But I dream of things that never were, and say why not?" -
George Bernard Shaw (Darden, 1997)

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