Innovations in Education: the Colonial Historical Context

Rozprawy z Dziejów Oświaty 25, 235-241

1983

Artykuł umieszczony jest w kolekcji cyfrowej Bazhum, gromadzącej zawartość polskich czasopism humanistycznych i społecznych tworzonej przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego.

Artykuł został zdigitalizowany i opracowany do udostępnienia w internecie ze środków specjalnych MNiSW dzięki Wydziałowi Historycznemu Uniwersytetu Warszawskiego.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.
Sureshachandra Shukla

Innovations in Education: The Colonial Historical Context

The entire history of the development of education is marked by innovations. The development of the university, the organization of schools—and of the classrooms, grading the pupils by age and attainment, the organization of teaching in defined subject-areas and in units, lessons or lectures of about one hour duration are all innovations to which we are by now completely accustomed. The discussion of innovations in the current period seems, therefore, to relate primarily to new techniques, forms of organizing the content of learning in the recent period (perhaps the past one hundred years) mainly after the development of national educational systems represented by schools and universities had already been consolidated, concurrently with the development of the nation state—and in the West, the industrial commercial society. These would include, presumably, vocational and technical education, agricultural universities, adult and non-formal education, child centred methods, new subjects or organizations of subject matter, and now, non-formal education and the use of mass media and other similar developments.

The Educational System as Innovation

However, it is useful to bear in mind also that in the non-Western context, particularly in the ex-colonies, the development of nation-wide educational systems as they obtain today themselves constitute an innovation—as indeed, they were in western nations in an earlier period though in a different way and not to the same extent. In the colony, it was an innovation, of greater or lesser magnitude, varying with the complexity and sophistication of previous indigenous intellectual re-

1 I have made most of the points at some length in my earlier writings wiz.: Comparative Education and Non-Western Societies (mimeo, Zakir Hussain Centre of Educational Studies, Jawaharlal Nehru University, New Delhi 1979); Indian Educational Thought and Experiments ("Bikaner Teacher Today", October-December 1979), etc., starting from Educational Development in British India, 1854—1904 (unpublished doctoral thesis, University of Delhi, 1958).
sources and extent of progress towards formation of nation states prior to colonialization. To state this is not to under-rate the significance of widespread systems of learning and schooling in many colonies. Indeed, one of the main points I would like to emphasize is the particular historical—as well as pedagogic or heuristic—value of the situation in the colonies. In countries like India and Sri Lanka, as indeed in China and Japan, the transplantation of the system as known in the industrialized European world brought about a situation of interaction, sometimes in the nature of conflict and at others of accommodation and absorption between the indigenous ("traditional" and colonial "modern").

The idea of a national system has emerged with the nation-state which in its turn was associated with by well-known and recognized historical forces of industrial and commercial capital in recent centuries. Most colonies were, in this period, at a pre-industrial stage and had different types and levels of instruction catering in varying degrees of generality or specificity to occupational and cultural needs of different social group and classes within the pre-industrial society, not yet integrated into a national state. Consequently, the "schools" too, were not integrated into a national system either vertically or horizontally even though common cultural elements were widespread in the schools and other places of learning.

The further point which has also to be made is that although the pre-colonial systems of learning as well as of schooling lacked support in terms of employment as well as knowledge and skill requirements from either the national state or technology—based industry, they had, in the pre-colonial society, their own linkages with the systems of status and power as well as of wealth and production. In the establishment of the colony, a new system of authority and of economic relationships was imposed more or less—usually more rather than less—forcibly. However, maintenance of the society under colonialism was an exercise in accommodation at a subordinate level—of the older status and power groups. Thus, we notice a certain persistence of the indigenous systems, of schooling and learning. On this account quite apart from the vitality which indigenous systems of training for medicine and for priestly functions possessed by virtue of meeting continuing social and cultural needs. The gradual conversation or absorption into the new educational system lasted in the Indian case, for instance, over half a century in fact, rather longer.

TRANSFER OF INSTITUTIONS

Each new element of the Western educational system, e.g. the introduction of printed text or of the class system, of instruction, the teaching...
of arithmetic rather than trading or agricultural accounts, etc. was innovation—whether benevolent or otherwise—in the colonial situation. It was sponsored by the colonial state even as it laid the basis for modernization. The transformation of such educational transplants into something different from what they had been in the independent national system of the colonizing Western country is an aspect of the study of innovations particularly well illustrated in colonial contexts. The university, the introduction of diversified or practical courses particularly at secondary levels, the development of elementary curricula in the direction of sense-training, manual training, observation and relation to rural or agricultural environment, the provision of directly vocational or professional education within the system of formal education have all been characterized by such modification or distortion.

Briefly, the university became much more a department of the government than in the West, or at least in Britain on whom Indian universities were supposed to have been modelled, had much less independent intellectual creativity or social power, made virtually negligible contribution to genuine intellectual growth, unrelated as its was to indigenous intellectual idiom or activity. In fact, movements for national independence as in India, or revolution as in China performed the transforming functions, even on the intellectual plane which one would have associated with universities.

Similarly, courses of professional and vocational education have had rather modest success; if any—both on account of the exploitative colonial economic relationships which limited industrialization processes to minimal levels and on account of the fact that employment even in the limited measures generated by the colonial economy was often diverted to citizens of the colonizing western country concerned.

Again, the changes in school curriculum associated with industrialization and democracy in the western world hardly took off the ground in the absence of either a strong and growing industrial sector in the economy or a vigorous widespread democratic, political and administrative culture. As a consequence, strong support was provided by both of these negative factors to the traditional verbalistic or authoritarian pedagogy which, incidentally, corresponded equally or even more so—to authoritarian or hierarchical social relationships in the colonial context.

AFTER INDEPENDENCE

In post-independence societies of the ex-colonies we notice advances along many fronts. The sheer expansion demanded by democratization and by the needs of consolidation of national political identity and au-
authority has led to a multifold expansion of the formal education as inherited from imperial control. Varying with the scale of industrialization, itself dependent on the strength of the national bourgeoisie—and seldom very substantial on account of the unequal relationships within the post-war world economy—large or small systems of technological, professional and other production—oriented education represented by new institutional types, e.g. Institutes of Technology and Medicine and Agricultural Universities, etc. have been undertaken. While these sectors of education are, for instance in India, substantial and fairly advanced, they have tended to become producers of semi-processed manpower for the industrial systems of the West.

In the school curriculum, the need for a new national education of independence and democracy, the former more than the latter, has induced changes in the content of history, language and social science learning. The introduction of active methods of learning based on environment was indicated by needs both political and technological. However, the political culture has been democratic only in form, the absence of radical movements or social change, the essential authoritarian content of traditional society overlaid with the new stratification system of contemporary post-independence period has combined with educational methods and content of the inherited colonial education. Methods of instruction have not changed on any large scale. Introduction of indigenous language as medium of instruction has not been brought about. The introduction of science and technology—being confined to limited elements in society compared to the population as a whole—has influenced the school system only on a very small scale. The further problem of societies like India viz. the need to undertake advanced industrialization in face of strong competition from world capital and in the context of a shortage of capital indigenously led to the formulation of abortive schemes like basic education in India combining low technology work with schooling whose fortunes have been traced elsewhere.

AGRICULTURAL EDUCATION

In the long perspective of educational history orientation of education towards agriculture can easily be seen as late arrival. Training the rulers (elite), training industrial producers, training agricultural producers and training the common citizen, through general, technological, agricultural and mass adult education respectively appears to have

---

1 S. Shukla, *Foreign Influences on Indian Education*, „Delhi Conspectus”, October 1966.

2 Indian Educational Thought and Experiments (op. cit.).

3 Educational Development in British India, 1854—1904, Chapter IX.
been the broad sequence in which application of codified and cultivated knowledge through education, mainly formal, to improving economic production has been undertaken.

Throughout late nineteenth and early twentieth century, agricultural education has been in the nature of a groping venture based on a priori reasoning rather than empirically demonstrated fact. Thus, after the great famines of 1870's some officials of the British Government of India presumed that, on the one hand, industrial training could perhaps prevent the destruction of traditional handicrafts of the Indian countryside (by competition from industrial goods from the home country) and minimize the excessive pressure on land and, on the other, teaching of elements of earth science, botany, etc. could make the farmer more efficient. The second line of thought into training for agriculture took shape in the form of agricultural schools and colleges. But these seldom attracted children from the farming strata themselves and even when they did so, helped for reasons both social and educational, to make them more knowledgeable junior revenue officials. In fact, the very rationale for agreeing to four rather than only one Agriculture College in India in 1893 was "the leavening of the revenue service with agriculturally oriented personnel".

Indeed, twenty years later one read an expert report to say that adequate knowledge of Indian soils and climates on which to found a proper agricultural education did not yet exist. The Indian Agricultural Research Institute had started earlier in the century. But a substantial thrust of agricultural research and education had to await the big spurt in agricultural research in mid-century combined with the decision of the government of independent India to accept foreign assistance and to develop agricultural universities on the model of U. S. land-grant college combining research, training and extension in a single institution. The years early after independence had been characterized by experimentation. Certain other models of rural education, e.g. in community development or general rural higher education leavened with modest agricultural elements, in contrast to the British period model of agricultural college whose research and extension components, were minimally successful.

On reflection, it would appear that substantial agricultural education awaited not merely technical advances in agricultural knowledge and the sciences basic to it but also: I. the emergence of the independent state of national bourgeoisie providing the conditions in terms of a) marked for output, b) availability of needed inputs and c. services, e.g. extension for successful agricultural expansion, and II. structural changes in the agricultural economy which had, after independence, seen the rise of a class of independent farmers possessing land and other economic resources to have the capacity to utilize the new knowledge.
TECHNOLOGICAL EDUCATION

The case of technological education is similar though clearer. The colonial beginnings in education for civil engineering and small amounts of mechanical engineering corresponded to the infrastructure orientation of economy and policy under the British. The aspirations of the Indian bourgeoisie, expressed in small significant initiatives such as Tata sponsored Indian Institute of Science, Bangalore (1916), Banaras Hindu University’s Mechanical Engineering and Mining and Metallurgy Training (1920’s) or the Bengal National Council of Technical Education (1900’s). The Technological Institutes of the postgraduate level, multispeciality in their scope and oriented towards substantial R + D (research + development) relationships with industry are to be noticed largely in independent India—again related to the increased strength and ambitions of the Indian bourgeoisie as much as to the fact that such advances in technological education the world over were of, relatively speaking, recent origin.

In the industrial case, loss of trained manpower in the industrialized world is so substantial as to suggest, as it were, a division of labour in which Indian education produces, as was stated earlier, semi-processed manpower for the developed world.

In both these cases, it is to be noticed that the innovative sectors being very small compared to the educational system as a whole have tended to remain isolated from it and retain an elitist character in order to be able to perform their specific functions. As they require proportionately a small intake of the students and are in a position to attract it by virtue of the higher social status as well as academic pre-requisites associated with them, they cream off high ability students from the general educational system selected on more or less conventional achievement criteria. Thus, they do not exercise a leavening or spread effect in terms of skills and values emphasized but in fact strengthen the conventional bookish, knowledge-oriented pedagogy. The major exception to this statement is, of course, the spread of formal science education in the general system under their impact as much as by way of the general tendency in education.

NON-FORMAL AND ADULT EDUCATION

The innovation represented by adult and non-formal education has a very different history. By and large, adult education has represented, in all societies, the effort of established ruling social groups and classes to disseminate skills and values useful for adaptation to social and technical change conductive to their continued ascendancy in the

---

6 Op. cit., Chapter VII and VIII.
measure that obsolescence of inefficiency of formal schooling so requires. The sweep or substance of the adult education movement has never been very substantial when radical restructuring of social relations is not under way. For the contemporary period, one may present the hypothesis that Western educational thought has accorded legitimacy to non-formal education mainly after the student revolts of 1960's. In ex-colonial countries, the spread of literacy and formal schooling being far from universal, on account of the fact that market economy and organized polity and administration represent a minority, even though core, element of economy and polity as a whole adult and non-formal education acquires a specific place in the identity formation and economic development efforts of the elites. Here, the ideology is universal adult education but the attempted fact is much more modest target viz. knowledge and skill training for that minority of workers who are to enter the modern or the market oriented sector of the economy.