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THE NEED TO OFFER BASIC VOCATIONAL EDUCATION IN ZIMBABWE'S SECONDARY SCHOOLS

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Abstract

Concern has been raised as to whether secondary schools in Zimbabwe and elsewhere should continue offering a purely academic curriculum instead of a vocationally oriented one. The purpose of this paper was therefore to find out whether secondary schools in Zimbabwe should introduce basic vocational education to students in light of the low pass rate currently being experienced at 'O' level. The method used was to collect and analyse data on candidature lists and pass rates. The main findings were that very few candidates are registering for vocational subjects despite the fact that the pass rate in the academic subjects is as low as 21%. It is therefore recommended that the country deliberately introduce basic vocational education in secondary schools in order to prepare and equip the majority of students with survival skills. Admittedly, academic education should not be ignored completely but it should be complementary to vocational education.

Introduction

Thompson (1981) argues that schools have, for many years, been concerned with links between education and life work. Thompson further states:

> First schools have been called upon to provide the skilled manpower required by the economy; indeed, this has been the dominant theme of recent educational planning. From the point of view of the clientele even the most academic subjects have been studied with a view to their value in eventually securing employment. (p. 293)

These concerns are being raised in a world witnessing rapid developments in science and technology. This is affecting the lives of many people in a variety of ways which have far reaching implications for curriculum design and development and instructional practices in the classroom. The gravity of the situation is further revealed by the fact that even society in general is beginning to evaluate education's contributions to life survival skills in students. The value of a vocationally and practically oriented curriculum has a long history.

It is supported by the need to reinforce abstract learning with concrete experience - a feat which can only be achieved through the implementation of a vocationally oriented curriculum (Pestalozzi, 1894 and Hammerman and Hammerman, 1964). Such a curriculum not only equips students with practical life survival skills but also creates self employed people as opposed to job seekers. The issue therefore, is whether Zimbabwe should continue to offer an elitist and overly academic curriculum in its secondary schools or introduce basic vocational education without necessarily neglecting the academic subjects. This paper argues for the latter since the former caters for only 20 per cent of the students. The rest roam the streets since the theoretical education they received did not prepare them for lifework.

Brief Overview of Zimbabwe's Economy

One of the most useful yardsticks for a country's economy is the number of employees and their income in the various sectors. It is only through an examination of these statistics that one is able to identify the key players in the economy. Table 1 shows the sectors where most Zimbabweans are employed, as of December 1995, and earnings from each sector during the same period.

Table 1

Employees and Earnings by Industrial Sector (1995)

Agriculture, Forestry and Fishing	Mining and Quarrying	Manufacturing	Electricity and Water	Construction	Finance, Insurance, and Real Estate	Distribution, Restaurants and Hotels	Transports and Communications	Public Administration	Education	Health	Private Domestic	Other	TOTAL
Employees in thousands, annual average													
355,2 (28,3)	58,5 (4,7)	184,1 (14,7)	9,1 (0,7)	70,0 (5,6)	20,4 (1,6)	100,0 (8,0)	50,6 (4,0)	75,7 (6,0)	116,1 (9,3)	26,7 (2,1)	102,1 (8,1)	84,9 (6,8)	1253,4
Earnings in Z$ million													
1185,6 (6,3)	1146,1 (6,1)	4269,4 (22,7)	455,2 (2,4)	851,1 (4,5)	1408,5 (7,5)	2017,5 (10,7)	1455,2 (7,7)	1298,1 (6,9)	2521,1 (13,4)	573,9 (3,0)	190,8 (1,0)	1462,1 (7,8)	18834,6

Source: Central Statistical Office - Quarterly Digest of Statistics (2) June 1997

N.B: Numbers in brackets indicate percentages of totals for employees and earnings.

From Table 1; agriculture, forestry, and fishing, manufacturing, construction, mining, quarrying; distribution, restaurants, and hotels are apparently the main economic pillars of Zimbabwe. In the light of the above, schools in Zimbabwe are expected to provide the skilled manpower needed by the economy. To what extent then is the secondary school curriculum preparing students for the world of work, especially in a situation where industry absorbs only 10 percent of the 300 000 school leavers each year?

Admittedly the major goal of education is to prepare students for future living or simply for life. Schools, as the major educational force in the public sector, have both the obligation and the responsibility to provide students with the training necessary to allow them to lead fulfilling lives in future. Developed human resources are the greatest asset of any country. It is therefore imperative that schools equip students with knowledge, skills, and attitudes to help them build their own future world, that is, to help them cope with their daily lives. How then should schools prepare children for life? This is a perplexing question especially for the curriculum designer and developer because on the one hand academics argue that schools should adhere to the pure subject-based curriculum, whilst on the other is a school of thought advocating that more emphasis should be placed on, vocational education.

Concern therefore is with enabling the young people the industrial sector is unable to absorb to sustain their livelihoods, probably as self-employed workers particularly within their own local communities (thus both generating economic activity in these communities and reducing the rate of rural-urban migration). This need becomes even more important in Zimbabwe where the unemployment figures are hovering around 45 percent of the economically active population and more than 200 000 school leavers, largely lacking in vocational skills, are dumped on the job market (Central Statistical Office 1997) .

The Need for Vocational Education

In order to concretise the argument being given in this paper, the 1995 and 1996 'O' Level candidate entries will be used for illustrative purposes. However, educators should come up with an objective decision on what secondary schools could do by weighing the importance of academic subjects to the world of work (Fig 1a) in general and that of vocational education to the socio-cultural well-being of students. It is acknowledged that both are useful in their own right, thus stressing the need for a completely integrative type of curriculum which aspires to satisfy both areas of concern. A number of flaws have, however, been observed in the current system of secondary school education in Zimbabwe, whose main objective is to prepare students for more schooling, irrespective of their academic ability.

The myopic view of looking down upon vocational subjects should be dismissed with the contempt it deserves. One wonders how the generality of Zimbabweans could control the means of production, hence the economy in the country, without vocational skills. This explains why the paper is urging the necessity of blending theoretical with practical studies, many of which (e.g. woodwork, metalwork, building, food and nutrition, agriculture and fashion and fabrics) have vocational value in addition to educational value. Practical and vocational studies (Dewey, 1921; and Thompson, 1981) are no longer thought of as subordinate to general academic education. In fact, in the new curriculum being advocated in this article, work and education must meet on equal terms. It is no longer merely a question of balance in the curriculum but one of school organisation. The way forward is to search for new strategies of integrating theory, practice, and production in an interactive and dynamic pedagogy.

In 1995 and 1996 a total of 122 422 and 128 362 candidates respectively, wrote 'O' level examinations (Table 2), with the hope of obtaining at least five passes (at Grade C or better), the minimum requirement for a full certificate to enable one to continue with education at various institutions or become apprentices in various vocational fields.

Table 2

'O' Level Candidate Entries (1995 and 1996)

	1995	1996
Number of candidates who sat for five or more subjects	122 422	128 362
Number of candidates who passed five or more subjects	27 583	30 085
Percentage passing five or more subjects	22.5%	23.4%

The disturbing fact in Tables 1 and 2 is that out of all the candidates who wrote the examinations, an average of only 23% managed to get a full 'O' Level certificate and are likely to proceed with their education. The competition for places at institutions of higher education is very high since the institutions can only enrol a limited number of students. This means that the rest of the students fail to proceed to Advanced Level or other institutions of higher learning. Besides, they lack vocational skills to be absorbed in the world of work either as employees or self-employed individuals.

The strong bias towards purely academic subjects in the secondary school system in Zimbabwe is indicated by the number of candidates registered in 1996 in various 'O' level subjects (Tables 3, 4, and 5).

Table 3

'O' level Candidate Entries for Purely Academic Subjects (1995 and 1996)

	1995	1996
Mathematics 4028 (Calculator)	3 304	3 382
Mathematics 4008 (Non-Calculator)	79 954	83 809
Science 5006	117 708	120 760
Chemistry 5070	833	942
Physics 5054	802	935
Biology 5090	10 476	11 755
Extended Science 5007	3 418	2 651
Shona 3159	92 317	96 306
Ndebele 3155	16 213	17 299
English Language 1122	129 316	134 275
English Literature 2013	16 591	16 920
History 2160	1 613	1 162
History 2166	43 127	43 563
Geography 2248	99 110	105 456
Religious Education 2043	15 651	16 234
Religious Education 2042	25 564	26 641
Total	655 997	682 090

Source: ZIMSEC: Test Development and Research Unit (1997)

Table 4

'O' Level Candidate Entries for Vocational Subjects (1995 and 1996)

	1995	1996
Agriculture 5035	46 211	48 586
Technical Graphics 7049	2 253	2 822
Commerce	52 717	57 711
Fashion and Fabrics 6051	14 422	15 867
Food and Nutrition 6064	4 561	4 972
Principles of Accounts 7112	20 057	21 356
Building Studies 7035	5 488	6 658
Metalwork 6045	2 514	3 023
Woodwork 6035	4 717	5 152
Art 6015	1 749	1 790
Total	154 689	167 937

Source: ZIMSEC: Test Development and Research Unit (1997)

Table 5

Academic versus Vocational Subjects (1996 'O' level entries)

Academic Subjects	
Science (All papers offered)	137 043
English Language	134 275
Geography (2248)	105 456
Shona	96 306
Mathematics (Calculator/Non-Calculator)	87 191
History (2160/2166)	44 875
Religious Education (2042/2043)	42 875
Vocational Subjects	
Commerce	57 711
Agriculture	48 586
Principles of Accounts 7112	21 356
Fashion and Fabrics 6051	15 867
Building Studies 7035	6 658
Woodwork 6035	5 152
Food and Nutrition 6064	4 972
Metalwork 6035	3 023
Technical Graphics 7049	2 822
Art 6015	1 790

The curriculum is lopsided in favour of purely academic subjects. It emerges from these figures that our current system of secondary school education is doing very little to prepare our children for the world of work. Having gone through 'O' level, students lack the essential skills or foundation, required by industry or those required to start small scale enterprises. The need to offer basic vocational education in Zimbabwe's secondary schools is not only axiomatic but overdue as well, due to the nature of the country's economy.

The Way Forward

Introducing vocational education in Zimbabwe's secondary school system is a great challenge. Shelving it could lead to undesirable consequences in the not too distant future. There is need for a concerted and sincere start in this direction. An insightful curriculum formula blending theoretical and practical subjects has to be mapped out to defuse the potential time-bomb Zimbabwe is sitting on.

It is the contention of this paper that curriculum programmes and activities in Zimbabwe should actually be funded for the 60 to 80% of the students who will not enter a university or similar institution of higher education. This advocates a concern for the interests of the majority, without necessarily ignoring the academically gifted minority who proceed to higher education.

The school curriculum should promote career and vocational education at secondary school level. Vocational education brings a different emphasis to preparation for life and might motivate students. The focus is more on process rather than content. There should be a shift towards applied education even in purely academic subjects. Vocational education is a preparation for life and the function of a school is to provide experiences that prepare children for 'more living' rather than the narrower aim of preparing them primarily for more schooling. As Balch (1989) says:

> State and local school boards, administrators and teachers must stress practical, hands-on activities that could be used by the future workforce. Effort must be extended to reduce the percentage of class time devoted to memorization and recall and to increase the instructional time for activities that

> encourage higher thinking skills, decision making strategies and problem solving dilemmas. (p. 341)

Such a curriculum, one contends, will certainly help solve the current crisis where thousands of high school graduates head straight for the work market to compete for jobs for which they are ill-equipped. The present curriculum in Zimbabwe is failing, to a large degree, to help make school-leavers become better skilled, educated, and confident problem-solvers. The solution is to introduce meaningful basic vocational education in schools. It is true that the introduction of vocational education is very expensive in terms of equipment and trained personnel, but this should not dissuade educators to be oblivious of its usefulness to the majority of students and the economy at large. For example, to equip a metal-craft workshop requires 4 to Z$5 million. This money will be used to buy fixed machines; hand/portable machines; hand tools, and benches with vices as well as materials constituting basic consumables (e.g. sheet metal) and accessories such as oil (Mhlanga, 1989).

This article is in no way suggesting that academic knowledge should be done away with, but that it is inadequate to satisfy the aspirations of the majority of students and the needs of the country's economy. The call is for a 'complete' education. Academic knowledge in the pure sciences and other subjects, should continue to expand but is only one dimension of a complete education which should be complemented with vocational education. Emphasis should be on the applied aspects of school subjects. Focus on literacy (reading, comprehension, and writing skills) is acknowledged but there are other equally important areas that are prerequisites for future living. Competence for future living requires many types of knowledge, skills, and attitudes that are not adequately included in the school curriculum. Most Zimbabwean schools have failed to systematically develop a comprehensive programme for a future living education.

The challenge for curriculum designers and developers is to develop self-directed people with knowledge, skills, and attitudes for fully functioning future living. As Boyer (1986) and McNeil (1990) observe, the crop from schools should be made up of educated men and women who do

not only pursue their own personal interests, but are also prepared to fulfil their social and civic obligations. Similar views were expressed by Pyszkowski (1990) when he noted that schooling must provide all the students with the opportunity to develop intellectually, socially, emotionally, aesthetically, and physically throughout their life times. Currently, fully planned field experiences are becoming a more common part of vocational education in the few places it is being offered. These include industrial visits, work-study, and work experience programmes, community outreach programmes and pupils participating in some heavy and less pleasant work of society. Schools are also increasingly working in close liaison with parents. This should enable pupils to understand theory in relation to the working world.

In the light of the above discussion and given the figures of those pupils who fail to go to 'A' Level, university, and other institutions of higher education, one is convinced that the way forward for Zimbabwe is to have an integrative type of curriculum which blends purely academic subjects with vocational ones. Table 5 shows some of the possible selections and accompanying details.

Table 5

Proposed Curriculum

A	B	C
Purely Academic Subjects	Vocational Subjects	Special Subjects
English Language	Food and Nutrition	Basic Computer Education
Literature in English	Fashion and Fabrics	Basic Bookkeeping or basic commercial subjects
Mathematics	Woodwork	
Science (at ZJC)	Metalwork	
Science (at 'O' Level) could be	Building	
divided into Physical Science or	Technical Drawing	
Chemistry and Physics separately	Agriculture	
	Art and Design (to incorporate Pottery)	
Biology	Automobile Practice	
Geography	Beauty Culture	
Shona/Ndebele		
French		
History		
Religious Education		

Notes

Column A: Depending on the resources available in a school and ability, a pupil could do at least 6 of the subjects listed.

Column B: Each pupils will be required to do at least one vocational subject (From 1 to 4).

Column C: These two subjects should be compulsory.

A Caveat

The curriculum changes suggested in this paper are a mammoth task. Change is, however, inevitable and strategies have to be mapped out as soon as possible to effect it. The change being advocated here should not be looked at as an episode but a process. Vocationally oriented secondary

schools could be introduced in phases, especially in communal areas, ascertaining that the distribution is equitable. True, budgetary constraints constitute a hurdle. However, Thompson (1981, quoting Guilavogui) argues that the development budget is justified by the conviction that education is a `heavy industry' to be regarded as the sole path to the social and economic elevation of the whole nation.

Of course, no miracles can be expected from the introduction of vocational education in Zimbabwe's secondary schools. However, it may be argued that given other forms of development, especially in the communal area economy, possession of such basic skills may assist the school leaver to seize what opportunities may exist. It can be further argued that they will not be worse off than they are now when their education has provided them with no such utilisable skills. However, the policy advocated in this article must be realistic in terms of the environment of individual schools, the capacity of serving teachers and the availability of support services of information, materials, and training. Collective effort from the state, the school, commerce and industry, religious institutions, donor agencies and non-governmental organisations (NGO's) is crucial to meaningful vocationalisation.

Conclusion

The paper is arguing for a completely varied rather than a completely academic educational experience for better living. The escalating youth unemployment makes it inevitable to break out of the unnecessary division between education and the real world of work, schooling has developed as we have cut the student from day-to-day life in order to teach theory in the classroom. Undoubtedly, there is a place for theory in education, but it is argued that it is useful only as it meets the actual needs of a person, blending applied academic practices through vocational education and social education, will produce a student who is not completely academic nor practical who makes meaningful sense of the world about him/her and so enters the world of work confidently. The points raised in this paper however are not meant to be a panacea to Zimbabwe's secondary school curriculum

problems but rather to provoke more debate on this issue, particularly as the 21st century approaches.

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