The Project Package for Middle-Level TVET Program: An Assessment of the Situation in PHEIs

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Abstract

The 1994 Education and Training Policy of the Government of FDRE not only identifies lack of middle-level human power as a serious impediment to economic development but also envisages that the middle-level TVET program would offer basic solution in developing a competent taskforce graduating with sufficient theoretical and practical orientation. To this end, apart from the in-school training, the program consists of an apprenticeship practices and a good number of major project packages.

There are good theoretical reasons to share this optimism based on the experiences of other countries though, in the Ethiopian situation, empirical evidence is yet to be sought. This paper attempts to take a close look at the major project packages launched in the middle-level TVET program in a bid to assess whether there are positive indications or not.

The study was based on both primary and published materials. In addition, interviews and extensive discussions with course instructors and Department Heads were conducted. Questionnaires have also been filled out by students who were selected randomly. Finally, the data were analyzed using percentages and ratios in SPSS.

The findings of the study indicated that there are serious gaps ranging from attitudinal to technical problems that need to be addressed to expect tangible results from the project packages launched though there are departmental differences. The most serious problems identified were lack of data, group conflict and lack of full cooperation from institutions.

1. Introduction
   1.1 Statement of the Problem

The very preamble of a revised recommendation adopted by UNESCO in November 1974 states, among other things, that technical and vocational education is a prerequisite for sustaining the complex structure of modern civilization and economic and social development. The recommendation asks that high priority should be placed on technical and vocational education in national development plans as well as in plans for educational reform. If priority has been given in Ethiopia as is requested by UNESCO, it has not been evident before the last few years. These days TVET is not only a priority but issue of discussion among scholars and the society at large. As the program has started recently, there is no way that total evaluation can be made.
The technical and vocational education Proclamation of the FDRE stipulates that it is found necessary to organize a technical and vocational education and training system that would assist the younger generation to be prepared psychologically, have discipline and the potential to work, become competent employees and creator of work. This is deemed necessary "to enable the country's production, trade and service rendering establishments to have a competitive and enduring organizational set up through the employment of trained manpower" (Proclamation No. 391, 2004).

The very objective of the TVET program is to provide citizens with basic training which prepares them to gain employment. With that goal in mind, the TVET program is envisaged to comprise 70% practical and 30% theoretical education. Project packages are part of the practical training. A student is expected to work on a project package for every major course.

As the TVET program unfolds, differing attitudes are being raised. There are both proponents and opponents to the new educational policy but both sides lack empirical evidence to substantiate their arguments. Though providing empirical evidence regarding the new education policy in general is yet a matter to be seen in due course, there is at least an urgent need to check the direction it is taking. One such exercise would be focusing on the project packages given to students at the completion of every major course in a bid to assess the reality in light of the expectations.

1.2 Objectives of the Study
The objectives of the study are to:

1. have preliminary insight into the general direction that the TVET program is taking by looking into the handling of project packages provided under the program;
2. assess students' perception regarding the compulsory project works they undertake; and
3. identify problems encountered in connection with the project packages in the eyes of the students.

1.3. Significance of the study
The significance of the study can be seen from two angles. For one thing, the TVET program is still on the making. As it unfolds, confusions and uncertainties surrounding it have not yet been cleared. This paper is quite significant in that it provides at least a very rudimentary insight as to how the system is going. Secondly, there are proponents and opponents to the new curricula but both sides lack objective evidence to back up their argument. By providing practical experience in this context, this paper offers an evidence to argue either way.
1.4. Research Methodology

Even if there is an obvious need to empirically test the TVET program in general, that task is beyond the scope of this paper. The scope of this study is limited to assessing the overall working of project packages given to students at the end of each major course. To this end, the study is basically based on information obtained from primary sources. For the purpose of undertaking the study, 250 students from three different colleges were randomly selected. These were St. Mary's College, Admas College and Royal College. But, due to high non-response rate (43.2%), it was possible to get response only from 108 students. Open-and close-ended questionnaires were administered to collect the data. In addition, questions were forwarded to the instructors of the colleges. The data were analysed using the SPSS through employing percentages and ratios techniques.

2. Results and Discussions

2.1 General

It is with the objectives stated above in mind that a questionnaire and an interview were conducted to students and instructors currently involved in the TVET program. It is found out that all student respondents have worked out some projects for two courses on average. The respondents indicated that in most cases instructors choose topics for the projects. In the course of the actual project works, students get advice from their instructors. In fact, when asked about this, 64.1% of them replied that they have got some advice from their instructors while conducting project works. 72.2% of the respondents showed that the projects were more or less task-based. Students were also asked to explain as to how they have been working the project assignments. They indicated that the project works were undertaken either on group or individual basis or a combination of both. But when asked which one they would prefer, if given the chance, 66.3% of the respondents have preferred to go out for a project in groups. Only 15.7% of the respondents have preferred to work on individual basis. It was also possible to observe that groups were formed on compatibility basis in most of the cases. But, there were also indications of groups formed haphazardly. In the discussions to come, specific points regarding the perception of students and the problems observed in project undertakings are dealt with.

2.2. Perception of Student towards Project Works

The findings of this paper revealed that there were no marked differences of attitudes towards a project work among students. The respondents' attitudes towards project works were by and large positive. Nearly all respondents believed that project works are important. It is interesting to note that even if respondents have identified several problems in connection with project works (see
parts 2.3), a great majority of them (about 90.7%) still prefer working on projects if they were to decide whether or not to work. There is rudimentary evidence to argue that students have begun to appreciate the importance of projects. When asked whether they considered project works important for their future career, about 91.6% of the respondents replied positively. Most of the respondents indicated that project works they have been engaged in so far have given them the opportunity to acquire the skills of data collection, develop work habit, increase their level of confidence and observe the situation of the off-campus environment where they are going to work after completion of their studies. Most instructors also supported this. Only few of them indicated that students consider conducting a project as a burden.

The above analysis shows that there are no serious attitudinal problems among students regarding project works. This, however, is not the only part of the story as a good number of problems have been identified in this paper. These problems will be presented in the following section.

2.3 Major Problem Areas in Project Packages

As is stipulated in the TVET curriculum guide, the main objective of giving project works stems from the belief that practical project works would develop the problem-solving capacity and creativity among the trainees. Project packages are being launched with this expectation in mind.

The findings of this study showed that there are some critical problems that need to be rectified to realize these objectives. The major problems respondents were facing when undertaking project works in group are summarized below.

Table 2.1 Problems when Working in Groups

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group conflict and cohesion problem</td>
<td>42</td>
<td>38.9%</td>
</tr>
<tr>
<td>Lack of participation by some students</td>
<td>42</td>
<td>38.9%</td>
</tr>
<tr>
<td>Lack of data</td>
<td>12</td>
<td>11.1%</td>
</tr>
<tr>
<td>Any other</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>8.3%</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Survey Data

As the above table shows, group conflict and cohesion problem, lack of participation by some of the students and lack of data were some of the major problems identified by respondents.

As indicated by most of the respondents, group conflict or lack of cohesion was found to be a serious impediment to the success of project works. It is to be noted that projects are meant to create opportunities that allow students to develop their creativity and enrich their problem-solving capacity if handled properly. However, as mentioned above, group conflict coupled with lack of
participation and carelessness by some students has created a situation where project works were being accomplished by few students without involving the large majority.

Unfortunately, the grading system does not offer any checking mechanism. Some instructors have also indicated this. And as group works are graded on group basis, the grading is the same for both the careless and the duty-bound students. So, this does not allow to develop the creativity and problem-solving capabilities of individual students. A UNESCO report argues, "although standards of performance should be upheld, evaluation of the student’s work should be made on a total basis considering among others his/her class participation, interests and attitude, relative progress, and examinations and other tests" (1974 Page ?). It seems that the existing reality as far as evaluation is concerned does not tally with this requirement and individual capability is not being assessed. The fact that only 15.7% of respondents prefer to work projects individually might prove this conclusion (see Table 2.2).

Here, mention should be made of the way groups are formed. As Table 2.2 shows, groups were formed mostly on compatibility basis. True, that this kind of group formation has a number of benefits. It makes communication among students easier and creates a good team spirit. However, in the absence of other checking mechanisms, this kind of group formation might open room for negligence by some of the students as only few hard working students might do the projects in most of the cases.

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Compatibility basis</td>
<td>73</td>
<td>67.6</td>
</tr>
<tr>
<td>Alphabetical Order</td>
<td>20</td>
<td>18.5</td>
</tr>
<tr>
<td>Haphazardly</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Any other</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey Data

Another problem area relates to the way project titles are chosen. Only 3.7 percent of the respondents maintained that they choose the title of their projects by themselves. In most cases instructors choose the topics for the projects.

Lack of data was another major problem area. This problem was equally faced by students that worked on projects in group or on individual basis. Respondents have repeatedly mentioned lack of cooperation from institutions they visited for project works. Either due to lack of awareness, negligence or indifference, institutions visited by students have not shown full cooperation. But
still, significant number of students have preferred to work projects outside their college environment (Table 2.3).

**Table 2.3 Where Do You Want to Work Projects?**

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In their college</td>
<td>24</td>
<td>22.2%</td>
</tr>
<tr>
<td>Off campus</td>
<td>46</td>
<td>42.6%</td>
</tr>
<tr>
<td>Depending on the nature of the project</td>
<td>38</td>
<td>35.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Survey Data*

The above table indicates that 42.6% of the respondents preferred working projects outside the college where they are learning. When they were asked why, they replied that it would help them to get to know the working environment where they might get employment upon the completion of their studies. On the other hand, a good number of students have indicated the need for working on project in the college compound due to easy access to data, closeness of the instructors for help, easiness to get to communicate with the workers of the institutions for any possible support students might need. But it is questionable how much the academic institutions themselves cooperate. The danger of generalization, attitudinal problem is even noticeable in the academic institutions. The researchers recall their personal encounter in this regard. When conducting questionnaire or interview not only was the response rate minimal, but also the general attitude of people at the higher level of management was worrying to say the least. In general terms, doing projects in the college should not be something to be encouraged. This argument was also supported by instructors of the TVET program. They indicated that project works should be conducted outside the college compound so that students would be able to acquire the understanding as to how the business environment is working. However, they also indicated the need for creating awareness on the business society as far as the importance of providing information to the needy is concerned.

There were departmental differences observed as far as problems are concerned. For instance, in the Department of IT, working on projects individually was found to be a bit difficult. The major reason, according to the respondents, was shortage of computers and lack of access to other data sources. As a result, respondents from this department stressed the need for working in groups.

The attitude of instructors towards the new TVET program was also assessed. Eventually, it was found out that the program too laborious and demanding. They also indicated that some chapters of the courses are extremely large and some others are given less time. This has put a time limit on them so that they either fail to complete the course coverage or rush on them to finish in time.
3. Conclusions and Recommendations

Education is a lubricant; without it life would be full of discord and friction. Therefore, educating the youth is essential for any country if sustainable development is to be ensured. However, this is not only the task of government institutions. Private sectors are also equally concerned with producing skilled human power that can serve a useful purpose in devising strategies through which poverty can be reduced and economic transformation can be attained. This is possible only when the system of education is devised in a manner that would allow students to get acquainted with integrated analytical approaches to address the complexity involved in the socio-economic arena. In this regard, the project packages of the new TVET program are a good breakthrough.

“Theory and practice should form an integral whole: what is learned in the laboratory, workshops or in enterprises should be directly related to the mathematical and scientific foundations of particular operation or process, and conversely, technical theory, as well as the mathematics and science sustaining it, should be illustrated through their practical applications” (UNESCO 1974 Page ?).

However, these moves are not without problems. The most important inter alia are the reluctant nature of both government and private institutions to provide students with the required information, poor checking mechanisms put by instructors to identify 'who does what' and the limited capacity of the students themselves to write up projects up to the standard.

As a pointer for remedial actions, the writers recommend that the concerned bodies need to look into the mechanisms so as to create an enabling environment for the project packages to be a reality and thereby to keep the situation up to the expectations. Every institution, government or private, needs to be willing to help the needy at least through information provision. On the other hand, instructors should be aware of the need to establish a set of new problem-solving paradigms that can significantly help address the problems of the country at large for betterment of the future.

References


