



THE TECHNICAL VOCATIONAL EDUCATION AND TRAINING PROGRAMS IMPACT ON THE SUSTAINABLE BUSINESS OPERATIONS OF PRIVATE SCHOOLS IN CALAPAN CITY, ORIENTAL MINDORO

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ABSTRACT

Skills development, technical and vocational education and training (TVET) are now becoming increasingly important on the international and national policy agenda. The creation of the Technical Education and Skills Development Authority (TESDA) by virtue of RA 7796 signifies the importance of technical-vocational education and training (TVET) to the Philippines. TVET provides education and training to prepare students and other clients for employment. To realize the objectives of TVET, TESDA has to work hand in hand with the Technical Vocational Institutions (TVI's). TESDA has to encourage and support the TVI's not only technically but financially as well. Thus, this research sought to determine how the Technical Vocational Education and Training Programs affect the sustainability of the business operations of TVET private schools in Calapan City, Or. Mindoro.

The respondents of the study were composed of three groups namely, TESDA Staff, TVI's in Calapan City and TESDA Scholars. The study used the descriptive-correlational research design. Regression analysis and ANOVA were used to answer the questions.

Results showed that the TVET private schools are sustainable in terms of financial operations, internal and external management. A moderate degree of relationship existed between the extent of implementation of the TVET programs, level of effectiveness and sustainability of the business operation of the TVET private schools. Significant differences are manifested among program components, assessment package, monitoring of programs, NC passers and employability. On the other hand, no significant differences existed in training delivery, internal management, financial aspect and external management.

Keywords: Technical vocational education, sustainable, internal management, external management, financial operation

Introduction

Skills development and technical and vocational education and training (TVET) are now becoming increasingly important on the international and national policy agenda. For example, UNESCO advocates TVET, claiming that technical and vocational education that is driven by market demand is more effective in enhancing employment and income for the disadvantaged (Adams, 2011). Generally, there is an expectation that TVET facilitates economic growth and poverty alleviation by serving as a mechanism to prepare people for occupational fields and by enhancing their effective participation in the world of work (NUFFIC, 2010).

The creation of the Technical Education and Skills Development Authority (TESDA) by virtue of RA 7796 signifies the importance of technical-vocational education and training (TVET) to the Philippines. The Labor and Employment Plan (LEP) 2011-2016 considers enhancing human capital through TVET as integral to the provision of gainful and productive employment for the Filipino workers (Villanueva, 2011)

TVET is referred to as involving post-secondary and non-degree technical vocational education and training. TVET provides education and training to prepare students and other clients for employment. The major problem in the Philippine labor market is the existence of supply-demand mismatches which leads to structural unemployment. Thus, TVET provides education and training opportunities to prepare students and other clients for employment.

To realize the objectives of TVET, TESDA has to work hand in hand with the TVI's. TESDA has to encourage and support the TVI's not only technically but financially as well. Thus, this research sought to determine how the Technical Vocational Education and Training Programs affect the sustainability of the business operations of TVET private schools in Calapan City, Or. Mindoro. As of December 2018, there are about fifteen (15) private schools offering TVET programs in Calapan City.

Statement of the Problem

This study analyzed the Technical Vocational Education and Training Programs effectiveness in relation to the sustainability of TVET private schools in Calapan City, Or. Mindoro. Specifically, it answered the following questions.

1. What is the status of the TVET programs in terms of:
 - 1.1 program components; and
 - 1.2 Assessment package?
2. What is the extent of implementation of the TVET programs in terms of:
 - 2.1 training delivery; and
 - 2.2 Monitoring of programs?
3. What is the level of effectiveness of the TVET programs as perceived by the respondents in relation to:
 - 3.1 NC passers; and
 - 3.2 Employability?
4. What is the extent of sustainability of business operation of TVET private schools in terms of:
 - 4.1 internal management;
 - 4.2 financial aspect; and
 - 4.3 External management?
5. Is there a significant relationship between the:
 - 5.1 status of TVET programs and extent of sustainability of business operation of TVET private school;
 - 5.2 extent of implementation of the TVET programs and sustainability of business operation of TVET private school; and
 - 5.3 Level of effectiveness of TVET programs and extent of sustainability of business operation of TVET private school?
6. Are there significant differences in:
 - 6.1 the assessment made by the respondents on the status of the TVET programs in terms of program components;
 - 6.2 the assessment made by the respondents on the status of TVET programs in terms of assessment package;
 - 6.3 the assessment made by the respondents on the extent of implementation TVET programs in terms of training delivery;
 - 6.4 the assessment made by the respondents on the extent of implementation TVET programs in terms of monitoring of programs;
 - 6.5 the assessment made by the respondents on the level of effectiveness of TVET programs in terms of NC passers;
 - 6.6 the assessment made by the respondents on the level of effectiveness of TVET programs in terms of employability;
 - 6.7 the assessment made by the respondents on the extent of sustainability of the business operations of TVET private schools in terms of internal management;
 - 6.8 the assessment made by the respondents on the extent of sustainability of the business operations of TVET private schools in terms of financial aspect; and
 - 6.9 The assessment made by the respondents on the extent of sustainability of the business operations of TVET private schools in terms of external management?

Related Literature

In the Third International Congress of TVET, it was emphasized that the demands on TVET are no longer confined to skill requirements for work but also for lifelong learning (UNESCO, 2012). In addition, TVET needs to prepare for several other dimensions. It was emphasized there that there is the need to prepare TVET for an increasingly fast changing and unpredictable world. That there is a need to put more emphasis on learning how to learn and how to adapt rather than just learning specific occupations. Likewise, there is also a need to balance generic learning skills, social skill and vocational skills. Social skills in terms of working in multicultural environment will also be necessary with increasing globalization.

In Africa, considerable achievements have been registered in enhancing enrollments and completion rates in general education (Tarabini, 2010). However, youth unemployment is still very high and those who make a living in the informal sector live at the margin. Therefore, the need for skills development for socio-economic development and poverty alleviation is not to be ignored.

Meanwhile, Oketch et al. (2009) states that the TVET system in the French-speaking countries follows the formal-TVET French model. This system has a large amount of general education content and lacks linkage with the specific needs of the informal sector.

Over the past two decades, sustainability has become more than a fad or just a buzz word. Research shows that sustainability has real business benefits when conscientiously integrated into business operations. There are some major advantages for practicing sustainability. These include the following: First, increase productivity and reduce costs. Detractors of sustainability claim that sustainable business practices eat into corporate profit. Development of sustainable business practices lends itself to efficient operation that streamlines effort and conserves resources, which enhances employee productivity and reduces cost. Second, increase business ability to comply with regulation. Integrating sustainability into your business will position it to meet changing regulations in a timely manner. Third, attract employees and investors. People like to be associated with the positive, especially younger generations raised on a steady diet of environmental protection messages.

As of July 2015, the TESDA compendium of institution-based providers with accredited programs lists 4,609 institutions offering 20,329 programs. Survey shows that the top three sectors of the course offerings are tourism, ICT, and health, social and other community development. These are some the fastest growing sectors of the economy in recent years. The next group of course offerings are more traditional TVET sectors of construction, automotive and land transportation, and metals and engineering (Orbeta & Esguerra, 2016).

In the Philippines like elsewhere, TVET is generally considered a post-secondary course even though there maybe courses which apparently does not require completing secondary education.

In a research conducted by Baraki and Kemenade (2013) they found out that AAA the TVET system in Ethiopia is in line with international best practices and the contemporary theoretical discourse. The key components that an outcome-based TVET requires toward quality TVET are there as part of macro-level components of the program.

In the study conducted by Orbeta and Esguerra (2016) they emphasized the critical role of the National System of Technical Vocational Education and Training (NSTVET) in skill upgrading and development.

The Tracer Study of Employability of Polytechnic Diploma Holders by Rathore, B. S.; Saini, J. S.; Sharma, D. D.; Dhameja, S. K.; Gurjar, B. R.: 'Strengthening Technician Education in India', a World Bank-assisted project in India, provided considerable inputs in capacity expansion, quality and efficiency. Its impact, however on the education system and the suitability of diploma holders passing out from polytechnics to the requirements of their respective work situations was not explored. This tracer study was carried out to determine the impact on the technician education system as reflected in the employment rate of the graduates on a comparative basis between the earlier and later stages of this project.

A tracer study was conducted relative to the implementation of the VTP II in Thailand in 1998. Findings of the tracer study show that graduates in general place high value on their vocational training and technical education. There is a high correlation between their training and employment/careers, and between employment/careers and socioeconomic improvement.

RESEARCH METHODOLOGY

The study used the descriptive-correlational research design since the researcher believes that this method yielded data sufficient enough to give a clear picture of the relationship among variables. Regression analysis and Anova were used to answer the questions.

The respondents of the study were composed of three groups namely, TESDA Staff, TVI's in Calapan City and TESDA Scholars. On the other hand, all permanent TESDA staff in the provincial and regional offices were taken as respondents. Similarly, the focal person, school administrator and AC manager of the TVI's were considered as respondents. The four schools were selected on the basis of homogeneity. All of them were grantees of STEP, PESFA and TWSP scholarships during the school year 2016-2018.

RESULTS AND DISCUSSION

This part presents and analyzes the data gathered and processed in the course of the study.

1. Status of TVET programs in terms of program components and assessment package

1.1 Program Component

The scholars to a very high extent acquired the competencies needed after the training. Likewise, to a very high extent, the scholars perceived also that the modules used covered the knowledge, skills and attitudes required from employment. Furthermore, the scholars and TVI's to a high extent felt that the number of hours allotted in the training is enough to learn the competencies needed by them. Meanwhile, the TESDA staff and scholars highly recognized that the TVET programs are taught by accredited and competent trainers. The overall mean scores clearly imply that they perceived the program component to a very high extent beneficial to the scholars and praiseworthy of implementing because its course design covers the knowledge and skills needed by the industry.

1.2 Assessment Package

The TESDA staff claimed to a very high extent that the assessors are competent enough to assess the scholars. Again, the TESDA staff perceive to a very high extent that the performance of each activity during the assessment is

critically evaluated by the assessor. The TESDA staff also believed to a very high extent that the assessment adheres to the design of the curriculum.

The overall mean score is a manifestation that to a high extent the assessment package designed by TESDA measures the competencies required for an NC holder. Furthermore, figures imply that assessment package adheres to national and international standards. Thus, the NC is recognized within and outside the country.

2. Extent of implementation of the TVET programs in terms of training delivery and monitoring of programs.

2.1 Training Delivery

The scholars observed that to a very high extent that scholarships are regularly available to TVET schools. Similarly, the scholars perceived to a high extent that trainings are implemented as scheduled and delivered only by registered trainers. On the other hand, the TESDA staff and scholars shared the same perception regarding the tools and equipment. For them, TVET schools to a very high extent are equipped with tools and equipment prescribed by TESDA.

The overall mean scores imply that the delivery of the TVET trainings is beneficial to the scholars not only because of its availability but moreover programs are facilitated by registered and accredited trainers and assessors. Thus, scholars acquire the competencies they need in their jobs.

2.2 Monitoring of Programs

The TVI's and TESDA staff affirmed to a high extent that there is monitoring of the actual assessment by TESDA representatives. Similarly, the trainings are strictly monitored by TESDA. The TVI's confirmed that to a very high extent that the facilities of the school are regularly inspected by TESDA. It was also to a very high extent that TVET schools conduct tracer studies to determine the status of their graduates.

3. Level of effectiveness of TVET programs in terms of NC passers and employability

3.1 NC passers

The scholars and TESDA staff gave very high extent rating to the program in terms of NC passers. On the other hand, all items were given a high extent ratings by the TVI's.

The overall mean scores imply that the NC holders enjoyed more opportunities to be employed locally and internationally. They became more competitive and are highly paid abroad. Thus, these figures are clear manifestations that TVET programs gave the scholars more confidence because they are now the priority in the industry.

3.2 Employability

All items were rated high extent by the three groups of respondents except for item (H) which was rated to a very high extent by the scholars (4.53) and TESDA (4.94). The respondents perceived that NC holders are fairly compensated and have more opportunities to engage in business. Likewise, the respondents also noticed that workers with NCII are preferred by international market.

4. Extent of sustainability of business operation of TVET private schools in terms of internal management, financial aspect and external management

4.1 Internal management

The study found out that operation of the TVI's is sustainable measured in terms of internal management. This perception is reflected on the overall rating of "high extent" given by the scholars and TVI's. Moreover, a very high extent rating was also given by the TESDA staff.

4.2 Financial Aspect

The scholarship grants from TESDA improve the funding of the school to a high extent as perceived by TVI's and TESDA staff. It was also to a high extent that the scholarship grants gave TVET schools more opportunities to improve their facilities. This implies that the TVET programs made the schools more viable and profitable and gave them greater avenue to engage in community services. The overall findings imply that TVI's are sustainable to a very high extent in terms of their financial operations.

4.3 External Management

The overall findings imply that the scholars and TESDA staff strongly believe that TVI's are sustainably operating measured in terms of external management. Furthermore, it is an indication that TVI's are externally efficient when measured in terms of the usefulness of the trainings given to scholars manifested on the employment rate of the graduates.

5. Significant relationship between the:

5.1 Status of TVET programs and extent of sustainability of business operation of TVET private schools

The computed F-values of 24.78, 22.69 and 17.59 with p-values lesser than the 5% level of significance could attest that there is a significant relationship between the status of TVET programs and extent of sustainability of business operation of TVET private schools. The multiple R-values of 0.40, 0.38 and 0.34 describe low degree of relationship between the independent and dependent variables.

Table 1

Regression analysis: Status of TVET programs and extent of sustainability of business operation of TVET private schools

Extent of Sustainability of Business Operation of TVET Private Schools	R	R ²	F	Interpretation
Internal Management	0.40	0.16	24.78	Significant
Financial Aspect	0.38	0.14	22.69	Significant
External Management	0.34	0.12	17.59	Significant

Findings show that the assessment package is the best predictor of the sustainability of business operation. It only implies that the main goal of the scholars is to pass the assessment to be able to get the national certification (NC).

5.2 Extent of implementation of the TVET programs and sustainability of business operation of TVET private school

Table 2

Regression analysis: Extent of implementation of the TVET programs and sustainability of business operation of TVET private schools

Extent of Sustainability of Business Operation of TVET Private Schools	R	R ²	F	Interpretation
Internal Management	0.59	0.34	68.82	Significant
Financial Aspect	0.42	0.18	24.40	Significant
External Management	0.60	0.35	72.09	Significant

The computed F-values of 68.82, 24.40 and 72.09 with p-values lesser than the 5% level of significance could attest that there is a significant relationship between the extent of implementation of the TVET programs and sustainability of business operation of TVET private schools. The multiple R-values of 0.59, 0.42 and 0.60 describe moderate degree of relationship between the independent and dependent variables. The training delivery is the best predictor of the sustainability of business operation of TVET private schools with beta coefficients of 0.58, 0.41 and 0.44.

5.3 Level of effectiveness of TVET programs and extent of sustainability of business operation of TVET private school

Table 3

Regression analysis: Level of effectiveness of the TVET programs and extent of sustainability of business operation of TVET private schools

Extent of Sustainability of Business Operation of TVET Private Schools	R	R ²	F	Interpretation
Internal Management	0.64	0.41	91.78	Significant
Financial Aspect	0.51	0.26	46.01	Significant
External Management	0.643	0.414	92.53	Significant

The computed F-values of 91.78, 46.01 and 92.53 with p-values lesser than the 5% level of significance could attest that there is a significant relationship between the level of effectiveness of the TVET programs as perceived by the respondents and extent of sustainability of business operation of TVET private schools. The multiple R-values of 0.64, 0.51 and 0.643 describe moderate degree of relationship between the independent and dependent variables. Employability is the best predictor of the sustainability of business operation of TVET private schools with beta coefficients of 0.47, 0.55 and 0.40.

6. Significant differences

Table 4

Analysis of Variance: Status of the TVET programs in terms of program components

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.98	2.00	0.49	3.37	3.03	Significant
Within Groups	42.73	294.00	0.15			
Total	43.71	296.00				

There are significant differences in the assessment made by the three groups of respondents on the status of the TVET programs in terms of program components since the computed F-value of 3.37 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Findings imply that they have different perceptions in the TVET programs in terms of program components.

Table 5

Analysis of Variance: Status of the TVET programs in terms of assessment package

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	2.56	2.00	1.28	9.80	3.03	Significant
Within Groups	38.34	294.00	0.13			
Total	40.90	296.00				

There are significant differences in the assessment made by the three groups of respondents on the status of the TVET programs in terms of assessment package since the computed F-value of 9.80 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom.

Table 6

Analysis of Variance: Extent of implementation of the TVET programs in terms of training delivery

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.71	2.00	0.36	2.38	3.03	Not Significant
Within Groups	44.06	294.00	0.15			
Total	44.77	296.00				

There are no significant differences in the assessment made by the three groups of respondents on the extent of implementation of the TVET programs in terms of training delivery since the computed F-value of 2.38 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Thus, the null hypothesis is accepted.

Table 7

Analysis of Variance: Extent of implementation of the TVET programs in terms of monitoring of programs

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.90	2.00	0.45	3.95	3.03	Significant
Within Groups	33.55	294.00	0.11			
Total	34.45	296.00				

There are significant differences in the assessment made by the three groups of respondents on the extent of implementation of the TVET programs in terms of monitoring of programs since the computed F-value of 3.95 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom

Table 8**Analysis of Variance: Level of effectiveness of the TVET programs in terms of NC passers**

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	1.32	2.00	0.66	4.45	3.03	Significant
Within Groups	43.65	294.00	0.15			
Total	44.97	296.00				

There are significant differences in the assessment made by the three groups of respondents on the level of effectiveness of the TVET programs in terms of NC passers since the computed F-value of 4.45 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Findings imply that the TESDA scholars and TESDA staff shared the same perception on the effectiveness of TVET programs as compared to TVI's.

Table 9**Analysis of Variance: Level of effectiveness of the TVET programs in terms of employability**

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	2.93	2.00	1.46	8.30	3.03	Significant
Within Groups	51.88	294.00	0.18			
Total	54.81	296.00				

There are significant differences on the assessment made by the three groups of respondents on the level of effectiveness of the TVET programs in terms of employability since the computed F-value of 8.30 is greater than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Findings imply that the three groups of respondents have different insights on the level of effectiveness of TVET programs measured in terms of employability.

Table 10**Analysis of Variance: Extent of sustainability of business operation of TVET private schools in terms of internal management**

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.44	2.00	0.22	1.22	3.03	Not Significant
Within Groups	52.83	294.00	0.18			
Total	53.26	296.00				

There are no significant differences on the assessment made by the three groups of respondents on the extent of sustainability of business operation of TVET private schools in terms of internal management since the computed F-value of 1.22 is lesser than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Thus, the null hypothesis is accepted.

Table 11**Analysis of Variance: Extent of sustainability of business operation of TVET private schools in terms of financial aspect**

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.03	2.00	0.02	0.10	3.03	Not Significant
Within Groups	48.97	294.00	0.17			
Total	49.01	296.00				

There are no significant differences on the assessment made by the three groups of respondents on the extent of sustainability of business operation of TVET private schools in terms of financial aspect since the computed F-value of 0.10 is lesser than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Thus, the null hypothesis is accepted.

Table 12

Analysis of Variance: Extent of sustainability of business operation of TVET private schools in terms of external management

Source of Variation	SS	Df	MS	F	F crit	Result
Between Groups	0.93	2.00	0.47	3.82	3.03	Not Significant
Within Groups	35.87	294.00	0.12			
Total	36.81	296.00				

There are no significant differences on the assessment made by the three groups of respondents on the extent of sustainability of business operation of TVET private schools in terms of external management since the computed F-value of 3.82 is lesser than the critical F-value of 3.03 at 5% level of significance with 2 and 294 degrees of freedom. Thus, the null hypothesis is accepted.

Conclusion and Recommendation

Based on the findings of the study, the following conclusions and recommendations were drawn. The program component of the training is deemed to a very high extent beneficial to the scholars since it covers the knowledge and skills needed by the industry. Further, the assessment package to a high extent measures the competitiveness needed to perform their jobs effectively. The TVET training is very valuable to the scholars since it gives them the competencies they need for their employment. Consequently, TVET programs are strictly and regularly monitored by the TESDA representatives. NC passers are more competitive locally and internationally. The TVET private schools are sustainable to a very high extent in terms of financial operations and external management. A low degree of relationship existed between the status of TVET programs and the sustainability of business operations of TVET private schools and the extent of implementation of the TVET programs and sustainability of the business operation of the TVET private schools. Lastly, a moderate degree of relationship existed also between the level of effectiveness and the sustainability of TVET private schools. Significant differences are manifested among program components, assessment package, monitoring of programs, NC passers and employability. On the other hand, no significant differences existed in training delivery, internal management, financial aspect and external management.

Since the training is very beneficial to the scholars, it is recommended that the program components be reviewed periodically to meet the ever changing needs of the industry. Thus, increase the TVI-industry linkages. For a more effective delivery of the training programs, strict monitoring of the TVET schools is suggested. This is to ensure that the scholars will learn the competencies needed in their jobs. Likewise, the assessment should also be monitored by TESDA representatives for a more effective output. It is suggested that TESDA should release more scholarship programs so that many clients can avail of these. Similarly, the requirements for the scholarship grants should also be reviewed. Though TVET private schools are sustainably operating, financially, internally and externally, it is still suggested that the training cost be increased for a more effective implementation of the programs.

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