

Technical Vocational Education in the Eye of Professionals

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Abstract:

This study about Reshaping the Mindset on Technical Vocational Education: Professionals' Perspectives would like to change that negative image of TechVoc in the country. The researchers came up with the problem: "What is the mindset of professionals towards Technical Vocational education after graduating from one of its course?" with the objectives of knowing the profile of participants, their mindset on TechVoc Education before enrolling, reasons for enrolling on a TechVoc course, find out the benefits gained after graduating from one of its course, to determine how it helped in the development of their career, and to find out what is their current mindset about it. To achieve those objectives, the researcher employed the cognitive dissonance theory that explains why other people's perception in a specific matter, which is different from other, can influence the perception of others. The researchers used Qualitative Research Approach. The method used in conducting the study is a descriptive research method. To gather the data, the researchers used in-depth interview as the primary method in data collection. The participants were chosen based on certain criteria set by the researchers. As a result of the study, the participants' misconceptions were gone because of the benefits that they gain with the help of the said course. The researchers recommend that the High School and College graduates consider taking a Technical Vocational Course. The researchers also suggest that parents should keep an open mind about TechVoc education. The researchers also advise that TESDA and TechVoc institutions keep the people informed of the benefits of taking a TechVoc course.

Key words: *Technical Vocational Education, TESDA, TechVoc course/program, Specialista, Perception, Mindset, Career, Degree, TechVoc Training, Professionals*

Introduction

Education has different meanings for different people. Progressivists view education as a way of life or life itself. Classicists see it as the ability to derive enjoyment from the study of

the writings of poets, writers, philosophers, etc. To the culturists, it is one's ability to enjoy and appreciate the arts and culture. To Alfred North Whitehead, a noted realist, education is the acquisition of the art on the utilization of knowledge. To him knowledge that cannot be used is dead knowledge.

Every child in the world has the right to have a proper education. According to this statement, the parents are required to impose the proper action of educating their child by sending him to school so that they can achieve the proper way of attaining education.

Because of the reason that not anyone could afford to go through proper schooling, students in our country may rather stop attending to school that may result to unemployment, which is one of the main problem that is being faced by the government in the Philippines.

Due to the unemployment issue in the Philippines, graduates of four years and above degree bachelor courses are having a hard time looking for a job that will suit the course they've finished. The technical vocational education is an option to solve the unemployment issue. Vocational education, prepares individuals for trades and skills development at diverse levels, from a technician, bookkeeping, nursing, architecture, law and many more. Crafting skills are commonly dependent on manual or practical activities, related to a particular trade, profession, or vocation. It is often referred by students as technical education because it helps them develop expertise in a particular set of procedures.

Technical vocational education is an option to resolve the unemployment issues in the Philippines. Through specific training in a particular field, the training span can be minimized and prepares the enrollee into a well-trained "specialista" in a certain area of work or field. The formal TechVoc education begins in high school, with a two-year curriculum, which allows students access to tertiary vocational education. While non-formal TechVoc education is given by institutions usually accredited and approved by the Technical Education and Skills Development Authority (TESDA). Those institutions may be operated by the government, mostly by provincial government or by a private company/organization. They offer programs that could last from a couple of weeks to a two-year diploma course. Programs can be technology courses like automotive, computer and electronic technology. It can also be service courses such as caregiver, nursing, hotel and restaurant management. It also offers trades courses such as electrician, plumber, welder, diesel mechanic, and heavy vehicle operator. After graduating from one of the said courses, students may take an examination from TESDA to obtain the relevant certificate or diploma (Technical Education and Skills Development Authority, 2006). People under a technical vocational course program become more competent and suitable for the job they are aiming. Graduates from technical vocational courses can find a job, which is appropriate for their skills, easily. According to Director General Villanueva, out of the 1.5 million graduates, more than 900,000 individuals took the assessment. Of these, only 803,350 were certified in their respective technical skill. He also said that TVET could offer the highest chance in attaining a stable career and the resolve the recurring issue of rising

unemployment. (monitor.icef.com). In the Philippines, the technical vocational education offers an effective strategy to address the constant issue of poverty. It aims to deliver the greatest development of an individual equipped with technical-vocational and academic proficiencies, proper work ethics and desirable values that will enable the person to be economically-stabilized, be responsible, law-abiding, productive and competitive in the world of labor (monitor.icef.com).

But due to the current image and different perception of people on vocational education, the remedy for the unemployment issue in the Philippines, gain less attention and they tend to disregard the benefits of being a graduate of it. The Philippine Statistics Authority (PSA) said that the rate of unemployment in the Philippines climbed to 7.5% in January from 7.1% a year ago. The most recent unemployment rate implies that 2.969 million Filipinos were unemployed from which the greater part of them coming from the citizens who are 15-24 years old; followed by those who are 25-34 years old. These data came from the January 2014 Labor Force Survey (LFS).

Perception in technical vocational education varies in different people and those perceptions can affect the current image and status of technical vocational education. The society has a misconception that TechVoc education is meant for the dropouts, unintelligent and under-achievers. (Amoor, 2009)

With the reason that even professionals, graduates of four years (and above) degree courses, are enrolling into different TechVoc program and courses, the image of vocational education may be uplifted. This could also change the negative ideas and misconceptions on technical vocational education in the Philippines. Numerous achievements of technical vocational course graduates are being revealed by different media such as newspapers, magazines and TV news flaunting the beneficial aspect of technical vocational education. This study, **“Reshaping the Mindset on Technical Vocational Education: Professionals’ Perspectives”**, will show the image and benefits of being a TechVoc graduate through a meticulous approach on professionals who experienced the program and training processes of a TechVoc course. The mindset of professionals after taking the TechVoc program could influence the other mindset of others who are still hesitant in taking a vocational course. Through the study, the researchers would like to establish a more righteous image of vocational education.

The study limits its coverage on the present mindset of professionals who are graduate of four years (and above) bachelor or degree courses. The respondents must also be a graduate of a technical vocational course in any program in a TechVoc institution accredited by TESDA. The study focuses on identifying the different perceptions of professionals after graduating from a TechVoc course. It also focuses on the benefits gained from taking a vocational course.

The significance of the study is that, this research will provide an additional option for people who are in need of employment, skills, and knowledge. The study will present the concepts, ideas, benefits and the different development that Technical Vocational Education can bring on their table. Unemployment issue in the Philippines is really on the surface of

the society. The effects and implication of the problem mirror the current status of the people, education and economy and even on the government of the Philippines. The unemployment rate is increasing, and even the educational attainment and development of people are affected. Thus, this study would like to change the negativity of the image on Technical Vocational education and establish a better mindset to different people who are in need of job and education.

Methods

The researchers used Qualitative approach because it attempts to develop an understanding of the different mindset of professionals regarding TechVoc education. In addition to that, the data needed were mainly generated from interviews that are non-numerical in nature.

The researchers utilized Case study as the basis for the design of the study. Through this method, the researchers understood the factors that affect the professionals' perspective on Technical Vocational Education.

To gather data, the researchers utilized In-depth Interview as the primary method in data collection. With that, the researchers were able to identify the reasons why the participants enrolled to a Technical Vocational course even though they are a college graduate.

The participants were identified through Purposive Sampling Technique. The following criteria helped in the selection of the participants:

1. The participants must be a graduate of a four years bachelor course or higher.
2. The participants must be a graduate of a technical vocational course.
3. The participants should have come from a TESDA accredited technical vocational training center/institute.
4. The participants should have gained benefits and career opportunities after graduating from a technical vocational course.
5. The participants should have adequate knowledge on technical vocational education, concepts and training system.

The researchers used Interview Guide as the research technique in conducting the study. The researchers also used electronic devices such as audio recorder and a video recorder during the duration of the data gathering in order to systematically and conveniently record and document the responses of the informants.

Results and discussion

According to Director General Villanueva, out of the 1.5 million graduates, more than 900,000 individuals took the assessment. Of these, only 803,350 were certified in their respective technical skill. He also said that TVET could offer the highest chance of attaining a stable career and the resolve for the recurring issue of rising unemployment.

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The reaction of vocational education goes immediately to the youth unemployment rate. TESDA has been actively promoting its schools and learning centers as the practical option for high school students. TESDA Director General Joel Villanueva said "I know that the idea of a college or university education is always appealing, but TechVoc is more affordable, hands-on, and a path to a good job is shorter." He is telling everyone the advantages of choosing TechVoc rather than choosing college or university education.

Initial Mindset towards Technical Vocational Education

Vocational Education may develop conceptions or misconceptions in the minds of the people but holds one fact crystal clear that vocational education enables students to adapt into the career of their choice in such a way that they inculcates all their expertise in the particular field so that no one can question their capabilities. (Nayal, 2010).

Table (1) informants mindset before enrolling in technical vocational school

THEMES	STATEMENT(S)
NEGATIVE	
Lack of Understanding on Technical Vocational Education	“When I graduated from highschool, technical vocational education gain less attention.”
Lack of Facilities and Training Programs	“Before, TechVoch is not in demand. You are expected to take a 4-year course.” “Before, they lack in facilities and equipment. During that time there were only a few vocational schools that offer TechVoc courses especially here in Mandaluyong.”
Education for the Poor and Less Fortunate	“I thought TechVoc courses are for less fortunate people.” “The first thing that came to my mind is welding... hard labor.”
POSITIVE	
Technical Vocation Will Give Additional Knowledge and Skills	“My idea is that yes it could help me gain supplementary knowledge to what course I might take. At the same time I could find a suitable job for it.” “I have a positive mindset before I enroll. I believe that it is better to have skills. So that when you’re old and retired already, you can build a salon for example. It is

TechVoc Will Give Local and Overseas Job Access	<p>a nice thing to have knowledge on the business you want to pursue.”</p> <p>“Positive because it’s maritime based. The scope is very wide because you not only use it land based but also overseas.”</p> <p>“In our place, it’s only a vocational course. All of the takers of TechVoc course that majors on refrigeration and aircon technician are getting hired.”</p>
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Participants of the study have a different mindset towards Technical Vocational Education. But most of them have negative a mindset; it is because of the influence that they get from their family, friends and especially the image of Technical Vocational Education possesses that time. One of these mindsets is that TechVoc is only for people who are less fortunate and that graduating from a 4-year course is better rather than graduating from a TechVoc education. The participants believed that they should pursue Bachelor’s Degree Courses because it can give them a better job and a better life; that’s why they didn’t enroll to a TechVoc institute in the first place. Another finding is that before they thought of enrolling in a TechVoc course, they lack the proper understanding. The public knew only a limited amount of information regarding Technical Vocational Education. Another image that the informants think before enrolling to a TechVoc course is that it lacks facilities to give proper training. On the positive side, some of the participants said that TechVoc education provides you with a wide range of options for a career or skill training that you want to acquire and that these skills can be used if you have difficulty in finding a job or if you retired and you still desire to earn a living.

Reasons for Pursuing Technical Vocational Education

It is only natural for high school graduates to ponder about their future. Entering the workforce or continuing the education path are the primary options available for them. Those who finished college may also be looking for a change or a chance to learn something new. Though there are many other personal reasons why a person might pursue a new course, there are also a number of common reasons why people seek out higher degree programs.

Table (2) reason of the informant in enrolling to a technical vocational school

THEMES	STATEMENT(S)
Employment	<p>“It’s a job requirement for those to who want to aim high or to achieve something in life, before most of them go abroad and they need to take technical courses at the same time.”</p> <p>“Actually I wanted to work on a ship, because most of my friends are working on a cruise liner. You were being persuaded to attend a maritime school.”</p>

Additional Knowledge and Skills

“After I had graduated high school, I went to college right away. After that, I got challenged to have another thing to make myself busy so I took the vocational for additional knowledge.”

“Just like what I’ve said my plan is to apply abroad so I could use my skills. And my mindset during that time is that I could help my family if I could go abroad.”

Plans for Abroad

“In fact my husband is in Italy that’s why I need to stop my modeling events because I want to be with him. And in other countries, they prefer skills than diploma. Your degree could be disregarded that’s why I decided to pursue TechVoc.”

Economic Reasons

“It’s also for my additional income. Sometimes my workmate needs a companion for his sideline. I thought that I could use it when I go abroad especially when I do sidelines because I can earn bigger income overseas.”

There were various reasons why participants of the study enrolled in Technical Vocational Education.

Some of the participants said that Technical Vocational Education is a job requirement for some employers to be able to obtain a higher or better career locally and abroad. They also said that TechVoc education can give you more knowledge and job opportunity in case of choosing a different career path. According to them, sometimes you cannot use your degree in the occupation that you have after graduating college. They believe that acquiring TechVoc courses can give them knowledge and skills that they need for them to be able to suit in the job those they need. They believe that having your dream job is not enough; you must be practical and find a work that can give you enough earnings to support not only your needs but your family’s as well.

Benefits Gained After Graduating from Technical Vocational Course

Benefits can take various forms and arise at different points in time, during or after the course or training. Individuals enjoy benefits from improved earnings, employment chances, mobility, capacity for lifelong learning, measures of working conditions and job satisfaction. Employers’ benefits arise mainly from apprentices’ productivity increases. The state yields net benefits both in terms of social rents and in fiscal terms (Wolter and Weber, 2005).

Some benefits such as greater general openness and ability to learn and upgrade skills later in life are not easily quantifiable. One alternative way to assess benefits beyond an economic analysis of the material labor market benefits is to survey satisfaction both of the employers and individuals. Beicht and Walden (2005) have carried out a study to assess subjective current and future benefits of vocational education and training. It includes

issues like personal development, improvements in efficiency on the job, networking, improved perspective for better or more interesting employment, chances to move up the career ladder, better earnings, etc.

Table (3) benefits that the key informant gained from graduating on a technical vocational course

THEMES	STATEMENT(S)
Local and Overseas Career Opportunities	<p>“Yes, there’s really a lot. Actually if you didn’t go abroad you could also use it to your family or if you want to apply here in our country. You could apply to some wealthy families who need someone that could take care of other members of their family.”</p> <p>“Your first advantage is that when you go abroad, you already had an edge because of your skills. Second is that when you’re old and retired you can build your own business and use the knowledge that you have.”</p>
Better Job Positions and Employment	<p>“Because that time, TESDA is accredited by the Civil Service. So, when you graduate from TESDA you will have a certificate that you can use to have a regular position at work,”</p>
Less Job Training and Expenses	<p>“It’s a big advantage for me because I’m already a caregiver. I’m not required to train for I’m not sure if it’s for one month or one week and at the same time you need to pay 10,000 pesos.”</p>
Wider Span of Work Knowledge	<p>“I learned more, because apart from caregiving they trained us at Red Cross like CPR and so on. And at the same time we had our hands-on training from TESDA at Golden Acres and Jose Fabella Center.”</p> <p>“Your knowledge about a specialized field can help you widen your knowledge about it.”</p>
Additional Income	<p>“It helps me earn extra income. Sometimes I’m invited to do sideline. It’s because that work requires more laborer. So after that, I and my co-workers will share in our salary.”</p>

Development in Career after Taking Technical Vocational Course

The participants of the study have gained benefits after graduating from TechVoc education that later helped them in pursuing a better career locally and abroad. These include the knowledge that they gained through TechVoc that eventually helped in the improvement of their skills. These are the additional knowledge that they wouldn’t get from enrolling in a 4-year course. And because of that, doors of opportunities opened to the participants. One informant also said that he gained a more stabilized job position. Another thing is that they

experienced working abroad because of TechVoc and until now they still receive offers to work outside our country. They dreamed to go abroad because of better income that they can have. Another thing is that they gain less training and expenses when they apply to a specific job since they're well trained certified "specialista". Lastly, they were able to earn a living to help their families that are every people's aim. The participants have lots of career options to choose to, whether to go abroad, find a better job here in our country or even to start a family business or a sideline. TechVoc had given the participants a better job and a better life not only for them but also for their families.

As said in an article in The Philippine Star, "Graduates of technical and vocational courses can get employed without any effort." Mr. Villanueva supported this statement saying that "TechVoc graduates, particularly those the agency has certified, have a higher chance of getting hired. Many industries are already on the lookout and offering employment to graduates with technical vocational skills."

Besides promising their graduates employment, Technical Vocational Education improves their current careers. Development in different aspect of work is one of the advantages of being a Technical Vocational Education graduate.

Table (4) development to the key informant's brought by technical vocational course

THEMES	STATEMENT(S)
Improvement in Attitude Towards Work	"I gain confidence because of it. I also gain more knowledge about cooking like preparing and catering." "I became more confident when it came to my craft. When someone needs an air conditioner repair, they immediately call me to do the job."
More Access and Wider Scope of Job	"It's like you have a bigger access abroad. During our time, caregivers are in demand and at the top the rank for TESDA courses because when you apply in a foreign country you get a better chance of a higher pay." "Yes, because when you're at the office what will happen is you tend to get bored easily, and you want to grow. You desire to go beyond your work and find a new environment."
Broaden Field of Expertise	"Before, I only know how to write, how to do modeling. But now, I can do haircut and build my own business." "I became a sales clerk in the office. TechVoc helped me to shift to a different field of works."

The participants gained numerous developments in their career through TechVoc. One of this is the added knowledge that they gained which expanded their level of expertise in their chosen career. They were able to use both of their knowledge from their four-year course and TechVoc course and become a more efficient worker. Their knowledge and skills gave them a wide range of job to choose to. Because of that, the participants were able to

level up their career and earn a much greater income. Few of the participants claimed that they were able to have a better position in their work because of TechVoc. Another thing is that they were able to go abroad and work since skilled workers are in demand globally. They also said that TechVoc helps them to earn more simply by doing some sidelines that gave them an extra income. Acquiring Technical Vocational Education gave edge to the participants of the study. The participants developed their work ethics, competitiveness, confidence and gained more trust in the job. Through their new skills and knowledge, the opportunities of having a stable job and work position. They now have the tool to earn a living continuously with ease.

Present Mindset of the Professionals after Graduating from Technical Vocational Education

The 1990s have seen a resurgence of vocational education enrollments after a decade of decline. Out of the 39 states surveyed in recent research, 70% reported an increase since 1990 (Husain, 1999). Nonetheless, secondary vocational education continues to suffer from a negative image between students, parents, educators, and policymakers.

Table (5) present mindset of the key informants after graduating from a technical vocational course/program

THEMES	STATEMENT(S)
Technical Vocational Education Bring Better Career Opportunities	<p>“Most of my friends were jobless before, but because of TechVoc they now have a job and earning a living.”</p> <p>“At first I thought pursuing TechVoc won’t help you find a good job, and it is not in demand but that was before. Now, TechVoc is in demand and through your gained skills it can help you earn a greater income with ease.”</p>
Technical Vocational Education offers Exclusive Skills Training	<p>“I thought that you cannot learn something on TechVoc because I thought that it was all about theory. But I was wrong it’s more hands-on and skills training.”</p>
Technical Vocational Education is Modernized	<p>“They are straight to the point when teaching. They were more on hands-on.”</p> <p>“At first, I’m thinking on how far TESDA can offer, because it is not highly urbanized way back 1992. But as time passes they become urbanized. They now transform someone’s future into a brighter one.”</p>
Technical Vocational Education is not for the Poor, Less-Fortunate, and Mentally Challenged People	<p>“My misconception on TechVoc Education is that, the ones that take it are the poor, mentally challenged people, and the people that can’t afford college.”</p>

With all the significant changes that they encountered after taking up a Technical Vocational course, the participants now have a different outlook towards it. They now

understand the essence of a technical course. They said that TechVoc is not just for the underprivileged and unintelligent, but it is for those people who want to gain more skills and knowledge. The participants once believed that TechVoc graduates cannot find a job effortlessly but as one of those graduates and having a stable job changed that mindset. They have a life-changing experience because of TechVoc that they don't have in their minds before. All of a sudden their misconceptions were gone because of the benefits that they gain. One of the participants has a jobless friend which had a job now because of TechVoc. The informants recommend taking up Technical Vocational courses first so that you can determine your career choice and prevent yourself from choosing the wrong course in college. They also said that high school students who have a dream of working abroad should acquire TechVoc because it can help them gain more knowledge and skills. Now, all of the participants have a positive outlook towards Technical Vocational Education.

Conclusion

After the researcher gathered all the data needed for this study, they came up with the following conclusions, based on the methods used in the study that includes an in-depth interview with participants who had fit the researchers' criteria.

The researchers summed up all the responses of the selected participants and informants and therefore derived the following conclusions based on the study's objectives.

1. Profile of the Respondents

Participants that are interview in the study has are professionals who are graduates of 4-year bachelor and degree courses from different college and universities. They are ranging from 24 to 39 years old. They took technical vocational education from varied TechVoc institutions and training centers accredited by TESDA.

2. Mindset on Technical Vocational Education before enrolling

Based on the interviews conducted with the participants, the general mindset on technical vocational education before enrolling is that TechVoc is something that they really don't need. Most of the participants weren't well informed before considering TechVoc since their focus was on getting a diploma from a college degree because public opinion points out that having a college diploma would surely land you a job. They thought that being in college is far better than being enrolled in a TechVoc course. During those times, the participants assumed that TechVoc education is only for those who are less fortunate and cannot afford to go to college. Most of them also has a negative view regarding this Technical Vocational Education.

3. Reasons in enrolling on Technical Vocational Education.

Most of the participants appeared to have almost the same reasons for taking up a Technical Vocational course which is to land a job locally or abroad. Their primary reason

for wanting to have a job abroad is the promising salary that awaits them there. Aside from that reason, other participants also want an additional knowledge to develop their different skills in their work.

4. Benefits gained from graduating on a technical vocational course.

According to the participants, the most common benefit that a person who graduated from a Technical Vocational Education is a local employment and career opportunities abroad. The study revealed that if you graduated from a TechVoc course, you would surely receive job offers from abroad since most foreign countries are looking for skilled and certified employees. Most foreign nations are looking for personnel and workers with certificates than college diplomas. Though not all graduates wishes to work abroad. A couple of the participants took advantage of the partnership between the Civil Service Commission and TESDA and converted their National Certificate they got from their TechVoc course to Civil Service Certificate. Another benefit is that they have less job training and expenses when they apply for a job since they are already skilled and certified. Technical Vocational Education widens their work knowledge and skills giving them an edge to every employment opportunities.

5. How did the technical vocational course helped in the development of their career

The study reveals that Technical Vocational Education can improve and develop their skills and attitude towards their work. From a simple office work, TechVoc graduates can become a caregiver, a nurse, a computer professional and many more. TechVoc education widens their field of expertise. It also develop their work ethics, competitiveness, work confidence, and gained more trust in their area of work.

6. Present mindset after graduating from Technical Vocational

After graduating from a Technical Vocational course, the participants were enlightened on the real concept of TechVoc Education. They realized that their former mindset on TechVoc were misconceptions that should be rectify. The informants recommend that High School graduates should take a Technical Vocational course before deciding if they want to enroll in a college degree. Their negative perception before applying to a TechVoc course also changed. They now have a more righteous and positive stand on the imagery and concept of Technical Vocational Education.

Notes:

Amoor, S.S. (2009) The Challenges of Vocational and Technical Education Programme in Nigerian Universities. P.1-3

- Beicht, U. and G. Walden (2005), "Individuelle Kosten und individueller Nutzen beruflicher"
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Husain, D. D.(March 1999). "Good News on the Horizon." *Techniques* 74, no. 3: 14-17. (EJ 580 988)
- Jaymalin, M. (2012, March 29). Tech-voc graduates have better job prospects – TESDA. *The Philippine Star*. Retrieved from <http://www.philstar.com/headlines/791823/tech-voc-graduates-have-better-job-prospects-tesda>
- Labor Force Survey (January 2014)
- Malipot, Ina Hernando (2011, September). 622,831 'TESDA Specialistas' get certifications. *Manila Bulletin*, p.9.
- National Technical Education and Skills Development Plan 2004-2009
- Nayal, D. (2010, May 17). Vocational Education --- Conceptions and Misconceptions [Web log post]. Retrieved from <http://goarticles.com/article/Vocationa-Education-Conceptions-and-Misconceptions/2898972>
- Philippine higher and vocational education: revamped for 21st century demands (August 15, 2013). Retrieved from <http://monitor.icef.com/2013/08/philippine-higher-and-vocational-education-revamped-for-21st-century-demands/>
- Philippine unemployment rate hits 7.5% in January (Tuesday, March 11, 2014) Retrieved From <http://www.sunstar.com.ph/breaking-news/2014/03/11/philippine-unemployment-rate-hits-75-january-332492>
- Syjuco, A.B. (n.d.) The Philippine Technical Vocational Education and Training (TVET) system. Retrieved from <http://www.tesda.gov.ph/uploads/file/Phil%20TVET%20system%20-%20syjuco.pdf>.
- Technical Education and Skills Development Authority. (2006). Ladderized Education Program
- Technical Education and Skills Development Authority. (2006). TVET Outlook
- Technical Education and Skills Development Authority. (2006). 2nd Cycle
- Technical Education and Skills Development Authority (TESDA). Philippine TVET Qualification and Certification System: Assessor's Guide
- Wolter, S. and B. Weber (2005), "Bildungsrendite – ein zentraler ökonomischer Indikator des Bildungswesens", *Die Volkswirtschaft*, No. 10, pp. 38-42.