

# **IDENTIFICATION OF THE TECHNICAL-VOCATIONAL TRACK STRANDS TO BE IMPLEMENTED FOR SENIOR HIGH SCHOOL AT THE DISTRICT OF CLAVERIA-2, CLAVERIA MISAMIS ORIENTAL, MINDANAO, PHILIPPINES, 9000**

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## **ABSTRACT**

The Department of Education, Division of Misamis Oriental, has made efforts in preparation for the full implementation of the Senior High School in the year 2016. Several conferences, seminars and meetings have been conducted with TESDA, CHED, to name a few. Critical to the success of the Grade 11 to 12 implementation is the identification of the technical-vocational (tech-voc) track from among the four tracks that can be offered for Senior High School.

The objective of this study was to determine this tech-voc strands from which the top three specializations were identified. The teacher-respondents involved were from the District of Claveria-2, Claveria, Misamis Oriental. The district has three secondary schools, namely: Dr. Gerardo Sabal Memorial National High School, Hinaplanan National High School and Patrocinio National High School. Interview was also conducted in the Public Employment Service Office (PESO) to identify the type of industries that could be partners of Senior High School during student-work immersion.

Descriptive research method was employed to achieve the objectives of the study in which the survey questionnaires identified the strengths of the district, in general and the schools in particular, to offer the identified specializations based on faculty qualification, school capacity like buildable space, existing laboratories, equipment and tools; and potential industry linkages. Results of the study and its implications are discussed in this paper.

**Keywords:** K to 12, identification, implement, strands, tracks

## **INTRODUCTION**

It is said that change is the only permanent reality in life; hence, the Department of Education (DepEd) has opted for curricular change with the end in view of improving further the Philippine Educational System. This 360-degree change is targeted on extending basic education from ten years to twelve years. This is because that among the 193-member states of UNESCO, only three countries have retained the 10-year program: the Republic of the Philippines, Djibouti and Angola (UNESCO 2011a).

In addition to this is the fact that the educational background of the country's graduates is deemed insufficient when they work abroad since they have to undergo further studies and trainings before they can get decent jobs. Together with this is the low performance of Filipino students in international test results which consistently show Filipino students lagging way behind practically everybody else in the world. In the 2008 on mathematics examination, for instance, "we came in dead last" (academia.com).

The K to 12 Program is born and is set against a domestic backdrop of declining investment in education, declining standards and declining participation rate and student outcomes in both elementary and secondary education (Mapa 2009). The program is designed to solve, if not, alleviate the latter. Its main

goal is to produce globally competitive graduates that will possess competencies and skills relevant to the job market. With K to 12, Filipino graduates will be automatically recognized as professionals abroad because the country is following the international education standard as practiced by all nations.

On the other hand, the implementation of the K to 12 Basic Education Program has given rise to various issues and concerns that DepEd has to contend with. One of these is the additional expenses for the added two years in high school which concerns the parents. Many of them, especially the poor families, cannot afford to pay for the education of their children due to their meager income. Although grade school and high school tuition fees are free, which normally accounts for a very large share of the total expenses, parents still need to spend for uniforms, fare and other school incidentals. It is this inability to afford the other expenses that has caused a very high dropout rate among students (Buelva, Ester: academia.com).

More challenges are seen within every school. According to Conrado Contreras, head of Lakan Dula High School's Music, Arts, Physical Education and Health (MAPEH) department, lack of learning materials, facilities and manpower are among the problems that teachers are facing in the implementation of K to 12. The learning materials are not only delivered late or not on time, but the copies are limited; hence, the teachers have taken the initiative to spend their own money to photocopy the workbooks and manuals.

Another challenge of the department is the preparation for the full implementation of the Senior High School which will be fully operational in school year 2016-2017. Senior High School is a two-year specialized upper secondary education aimed at preparing the graduates for higher education, entrepreneurship, further middle skills development, or joining the workforce immediately after high school.

Schools in each locality have series of meetings with their local school boards, parents and stakeholders to better prepare their potential and prospective Senior High Schools in their municipality or district. To reiterate and for emphasis, not all secondary schools will become Senior High School; it is selected and identified as per requirements set by the department: the buildable space; its proximity to tech-voc centers, internal capacity of the school to offer Senior High School, strategic location, accessibility, commute time and distance, potential partnerships and potential demand creation (DepEd National Curriculum Orientation). Preparation involves not only acquiring additional buildings for classrooms and laboratories, equipment, tools and material, but also training of teachers that will soon handle Senior High School subjects.

Another predicament is the track that will be offered for Senior High School students. This involves careful planning since community and industry linkages are involved in the future during the senior students' work immersion.

Choices of tracks include *Sports Track*, *Arts and Design Track*, *Academic Track*, and *Technical-Vocational Livelihood Track (TVL)*. In the technical-vocational programs, there are specialization courses known as strands: (1) Agri-Fishery, (2) Home Economics, (3) Information and Communication Technology, and (4) Industrial Arts. In each strand, there are different areas of specialization (See Appendices).

In the Academic track there are strands known as **STEM** (Science, Technology, Engineering and Mathematics), **ABM** (Accountancy and Business Management), **HUMSS** (Humanities and Social Sciences) and **GAS** (General Academic Strands). Their choice of career track will define the content of the subjects and the strand a student will take in Grades 11 and 12.

Atty. Joseph Noel M. Estrada, in his presentation during the PAASCU General Assembly (2013), said that there is an assumption that public schools will most likely go in to the technical vocational track and the private schools in the academic track. Meanwhile former Dapped Secretary Jesli A. Lapus is determined to push for technical-vocational education in public high schools because of the results of the 2007 National Career Assessment Examination (NCAE) in which of the 1.3 million high school senior examinees 711, 526 showed a high aptitude for tech-voc programs while only 49, 066 showed a high aptitude for college (ELHC, 2009).

These challenges are also felt in the Division of Misamis Oriental, particularly in the District of Claveria, hence, a study on the bearing of the Technical-Vocational Livelihood track (TVL) for the senior high school was conducted.

## MATERIALS AND METHODS

### The Respondents

The respondents of this study were all the Technology and Livelihood Education teachers from the three Secondary Schools and the informants of the Local Government Unit and from the Public Employment Service Office of the Municipality of Claveria.

**Table 1** Population of the School and Number of T.L.E. Teachers

School	Enrolment	No. of T.L.E. Teachers
<b>1. Dr. Gerardo Sabal Memorial National High School</b>	1,071	10
<b>2. Hinaplanan National High School</b>	478	5
<b>3. Patrocinio National High School</b>	305	3

### Research Instrument

There were two sets of questionnaires. Set 1 was intended for the T.L.E. teacher-respondents and Set 2 for the LGU/PESO informants. Set 1 was divided into two sections. In Section 1 was on the respondents' demographic data. They were asked to answer the number of students they handled during their laboratory class and the ratio of students against the number of tools and equipment used. Section 2 made use of a checklist where the respondents were asked to check the existing resources in their school in teaching his/her specialization. The list of tools and equipment indicated in the checklist for every specialization were based from the Training Regulation (TR) of TESDA.

On the other hand, the PESO and LGU informants answered the questions set in the guide questionnaires to verify all the existing and registered industries found within the municipality of Claveria.

In the guide questions, the industries were grouped according to these categories: Agricultural and Fishery Industries, Industrial Companies, Information and Communication Technology Companies and Tourism Companies. This gauged the type of industries that would become potential partners of senior high school.

### Data Gathering

The questionnaires were personally given by the researcher to the respondents. School and office visitations were done for this process. After the respondents answered the questionnaires, they were gathered, checked for data completeness and correctness. After the data were checked, they were subjected for statistical analyses.

### Scoring Procedure

The questionnaire for the T.L.E. teachers made use of numerical ratings. A rating of one indicated that the school has no available tools/equipment. On the extreme end was the Rating of five which indicated that the school has twenty to twenty five items or more.

### Statistical Tool Used

Since this is a descriptive research, it made use of frequency distribution in describing the data collected and getting the percentage. The data were presented in tables.

## RESULTS AND DISCUSSIONS

### 1. What are the qualification of the T.L.E. teachers from D.G. Sabal, Hinaplanan and Patrocinio National High Schools in terms of educational attainment and examinations passed?

**Table 1** Profile of the Teachers by Educational  
Qualification and Examination or Trainings Passed (n=18)

Variables	<i>f</i>	%
<b>Educational Qualification</b>		
Bachelor's Degree Holder with LET	18	100
M.A. Units Only	1	5.56
Master's Degree Holder	2	11.11
Doctorate Degree Holder	0	0
<b>Competency Assessment Passed</b>		
National Certification 2	7	38.89
None	11	61.11
<b>Trainings Attended/Certificates Gained</b>		
Trainers Methodology Certification (TMC)	0	0
National TVET Trainers' Certificate	0	0
None	18	100

The result in Table 1 reveals that majority of the T.L.E. teachers are graduates of Agriculture Education with specialization in Economics, Animal Science and Crop Science, the rest are graduates of Secondary Education and Home Economics. All of the T.L.E. teachers are LET passers. Two (11.11%) among the 18 teachers are MA graduates. These teachers are teaching in DG Sabal and at Hinaplanan National High School. Majority of them, though, are not NCII holders as shown in only 7 or 38.89% of the teachers having the certificate. The data also show that none of them are holders of TMC and NTTC.

**Table 2** Profile of Teachers by Years in Teaching

Years in Teaching	<i>f</i>	%
3 years or less	11	61.11
More than 3 years but less than 5	1	5.6
More than 5 years but less than 8	2	11.11
Beyond 8 years	4	22.22

n=18

Table 2 shows that 11 or 61.11% are novice teachers. This could probably explain why most of the teachers are not MA graduates. In connection to Table 1, since most of the teachers are neophytes, most likely they are adjusting to the curriculum and they do not have extra time yet to enroll in graduate studies nor take the NCs and TMs. Also, National Certifications and Training Methodology Certificates were not yet required during their hiring. Since LET rating is required, it attributed to the 100% data.

**Table 3** Profile of Teachers by Subjects Taught

Subjects	<i>f</i>	%
<b><i>Agri-Fishery</i></b>	<b>15</b>	<b>83.33</b>
1. Animal Production	6	33.33
2. Agricultural Crops	5	27.78
3. Horticulture	3	16.67
4. Food Processing	1	5.56
<b><i>Home Economics</i></b>	<b>12</b>	<b>66.67</b>
1. Cookery	3	16.67
2. Handicraft	3	16.67
3. Beauty/Nail Care	2	11.11
4. Dressmaking	2	11.11
5. Food & Beverage Services	1	5.56
6. Bread and Pastry	1	5.56
<b><i>Information and Communications Technology</i></b>		
1. Computer Hardware Servicing	2	11.11
<b>Industrial Arts</b>	2	11.11
	<b>0</b>	<b>0</b>

In Table 3, there are 15 teachers or 83.33% teaching in the Agri-Fishery strand with specializations on Agricultural Crops, Animal Production, Horticulture and Food Processing. While in the Home Economics strand, there are 12 teachers or 66.67% teaching in areas namely; Beauty and Nail Care, Dressmaking, Front Office Services, Cookery, Handicraft, Bread and Pastry and Food & Beverage Services. Only 2 or 11.11% teaching in the ICT and none is teaching in the Industrial Arts strand.

The choice of specialization to be taught in each of these three schools depend on the teachers' specialization and the available resources. The other reason is related to what a teacher can teach even if it is not his field of specialization.

**Table 4** Laboratory Class Size per Teacher

No. of Students in the Class	# of TLE Teachers	%
less than 20 students	2	11.11
between 21 to 30	5	27.78
between 31 to 35	2	11.11
between 35 to 40	4	22.22
beyond 40	5	27.78

Table 4 shows the average size of a laboratory class per teacher. It has equal importance as prescribed by TESDA in most of its requirements found in the Training Regulation; the class size has to have a maximum of 25 students. In this study, majority of the T.L.E. teachers have a class size between 21-30 students and beyond 40 students. Four teachers said that they have a class size of 35 to 40 students. Only 2 teachers or 11.11% have a class of less than 20 students. From these data, it can be said that the given situation occurs because of some factors like there are more students and less classrooms, or the lack of teachers and facilities, hence the school has to maximize what it has.

## 2. What are the available T.L.E. facilities, equipment and learning resources used in these schools?

**Table 5** Profile of Secondary Schools by Tools and Equipment

Subjects	Patrocinio	Hinaplanan	DG Sabal
<b>Agricultural Crops</b>	32.41%	44.83%	20.69%
<b>Animal Production</b>	3.23%	3.23%	3.23%
<b>Beauty &amp; Nail Care</b>	13.51%	0	35.14%
<b>Bread &amp; Pastry</b>	0	0	42.22%
<b>Computer Hardware Ser.</b>	0	44.83%	96.55%
<b>Cookery</b>	4.11%	38.36%	43.84%
<b>Dressmaking</b>	34.04%	63.83%	0
<b>Food &amp; Beverage Services</b>	0	0	25.42%
<b>Food Processing</b>	0	0	0
<b>Horticulture</b>	0	0	32.14%

Table 5 presents the data on the response of the T.L.E. teachers that determined the existing and functional facilities. The checklist, as mentioned in the previous chapter, is taken from the Training Regulation of TESDA per qualification. The result shows that there are schools where facilities are not available and some have few facilities. Although Computer Hardware Servicing is not found in one school, this is found to be available in the other schools, DG Sabal showing the highest percentage which is 96.55%.

There is a good percentage of Animal Production in the three schools. However, DG Sabal is found to have a high percentage in terms of availability of tools and equipment.

These figures could indicate that T.L.E. teachers handled laboratory classes in batches and that they made certain that the number of hours per subject, which is five hours per week, are fully utilized. (See Appendices). It has also implication on how teachers maximized the time so that students learn the necessary skills in the target lessons.

With regards to the Learning Materials used by the teachers, majority of them rely on textbooks (94.44%). A number of them use Modules; but most of these are not CBLM based from TESDA (72.22%). Fifty percent (50%) say they combine one or more resources and a few use DVDs, CDs, and magazines. The implication of this is that, a T.L.E teacher cannot use or make his own modules if he has not undergone the NCII and NTTC training and assessment. If a teacher has the latter, it would be easy for him to create his own modules with the training regulation of TESDA as his guide. Another positive point is that the students will be guided as to what might happen during their assessment in TESDA's assessment center.

From the data gathered, the study yields the following findings:

- ❖ There is an NCII holder in a certain subject, but the facilities are not available or minimal.
- ❖ If facilities are available, the teacher is a non-NC holder.
- ❖ There are no facilities and the subjects are taught by a non-NC holder.

**3. What are the strongest strands that can be implemented based on the qualification of teachers, availability of functional facilities, learning resources and with potential industry linkages?**

**Table 6** Profile of Secondary Schools by  
NC Qualification and Tools/Equipment Availability

Subjects	NC2			% of Facilities Available		
	None-0	Yes -1				
	PNHS	HNHS	DGS	PNHS	HNHS	DGS
Agri. Crops	0	1	1	32.41	44.83	20.69
Animal Prod.	0	2	1	3.23	3.23	3.23
Beauty & Nail Care	0	0	0	13.51	0	35.14
Bread & Pastry	0	0	0	0	0	42.22
Computer Hardware Servicing						
Cookery	0	0	1	0	44.83	96.55
Dressmaking	0	0	0	4.11	38.36	43.84
Food & Beverage Services	0	0	0	34.04	63.83	0
Food Processing						
Horticulture	0	0	0	0	0	25.42
	1	0	0	0	0	0
	0	0	1	0	0	32.14

The table above shows the comparison of three schools by the number of teachers with National Certification and the percentage of tools and equipment available. With Agricultural Crops, DG Sabal and Hinaplanan have faculty with NC2 and have a considerable percentage of facilities available. There is a fair figure of the three schools in terms of facilities available for Animal Production, but Hinaplanan has two NC2 holders while, DG Sabal has one, and none at Patrocinio National High School.

There is a good percentage with that of Computer Hardware Servicing at DG Sabal since they have a greater percentage (96.55%) of available facilities and they also have a faculty with NC2. Dressmaking also has a great figure in terms of facilities at Patrocinio and Hinaplanan but none of the faculty are NC2 holder.

In terms of industry linkages, which is presented in Table 7, agricultural-fishery is shown to have a number of industry partners.

**4. What is the alignment of the identified strands with those found in the job market?**

**Table 7** Industries Present in the Municipality of Claveria

Source: ELLAINE C. EDIO/PESO/Community Training and Employment Coordinator-Designate

Industries	<i>f</i>	Percentage
Agri-Fisheries	23	45
Industrial Arts	14	27
Information Communication Tech. (ICT)	1	2
Tourism/Agri-Tourism	5	10
Others	8	16
TOTAL	51	100

After the interview with the Designate Officer of PESO-LGU in Claveria, Misamis Oriental, it turned out that the municipality is highly agricultural (Table 7). These industries engage in crops from farming to post-harvesting. Farmlands are bountiful; the dairy farms have partners abroad like in New Zealand. Present also in the municipality are industries like MORESCO, Minergy, Corn Processing and Gasoline Stations which fall under industrial companies. Few companies/industries can be found under Tourism and Information and Communications Technology with 10% and 1%, respectively. Other companies are also present like banks, cooperatives, and private and government offices which comprise the 15% of the total number of industries in the municipality.

## CONCLUSION

The conclusions are based on qualification of teachers, available resources, and strong industry linkages. Based on the findings, it is concluded that it is best to offer the Agricultural Strand with these specializations: Agricultural Crops and Animal Production either at Dr. Gerardo Sabal Memorial National High School or at Hinaplanan National High School.

It is further concluded that there is also a good chance of offering the I.C.T. strand at DG Sabal since it has a teacher with an NC2 who can handle the class and it has available facilities.

Although dressmaking has plenty of resources available in Hinaplanan and Patrocinio, but there is no qualified teacher to teach the subject.

## RECOMMENDATION

Although the strong strands and specialization have been identified, there are several things that should be taken into consideration.

One, for the T.L.E. teachers, it is recommended that they have to be (1) Retooled, (2) Enhanced and (3) Retrained.

Retooled, since some teachers are teaching areas in TLE which are not their specialization during their undergrad, as exemplified in the BSAEd teacher major in Economics teaching Agricultural Crops.

Enhanced, meaning the teachers need to be updated with the latest trends in their individual specialization. They are encouraged to gain NCII/TM/NTTC and enroll in graduate studies.

With regards to facilities, the schools could ask help from their local government or provincial government office to assist in the acquisition of tools and equipment. The school may also request a SOTA (State of the Art) building from these offices.



It is recommended also that whichever of the three schools that will be identified as the Senior High School, must not limit its avenue for work immersion within the municipality. Like in the case of ICT-Computer which has limited linkages in Claveria, it needs to have partnerships with the other municipalities and localities. It is best if they can link with big industries like in Cagayan de Oro City.

Further study is also recommended that is not limited to the Tech-Voc Track. They may try to figure out other tracks, like ABM and HUMMS, if they can find strengths from these.

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