Technology and Livelihood (TLE) Instruction of Technical Vocational and Selected General Secondary Schools in Catanduanes

Maria Sheila R. Gregorio, Ed.D.
Catanduanes State University
sheigreg@yahoo.com

Abstract
Technology and Livelihood Education (TLE) Instruction of Technical Vocational and Selected General Secondary Schools in Catanduanes Abstract TLE in the secondary level is the response to the need of the industry in answering the call of job mismatch in the country. Considering the nature of TLE, it provides vocational expertise and develops critical thinking among our students. This study was covered to determine its depth and how the researcher can be of help to the TLE teachers to overcome these problems by working out recommendations to lessen the burden of TLE teachers especially in using remedial measures in the absence of facilities or equipment. This study employed the descriptive-survey method of research; covered 8 general secondary and 3 technical vocational schools in the Division of Catanduanes with an actual size of 113 respondents. The researcher conducted an ocular inspection of the facilities of the schools, distributed questionnaires, done informal interview and informal classroom observation. Results revealed that technical vocational teachers are greater in number when it comes to relevant seminars/trainings, NC II level and TM 1 compared to the general secondary teachers. More general secondary teachers who teach TLE subjects which is not his major area of specialization than technical vocational teachers. Available equipment, materials and facilities do not conform to the recommended numbers which are required to support the needs of the students who enrolled in the TLE subject and several problems being experienced by the teachers in the absence of the required facilities in school but they have some remedial measures done in order to facilitate the lesson well.

Keywords: Technology and Livelihood Education, Instruction, Facilities

Introduction

Education is a must for individual considering the problems, trends and innovations in educational system. (Padolina, 2004). Taking into consideration the global environment, people view education not only a way of developing people's skills but also a way of preparing our students to be globally competitive. If the schools were able to produce quality graduates it will redound on the quality of work they will provide in their respective workplace. The academic track provides for a continuum toward preparation for higher tertiary education and skills development qualifications for National Certificates I and II (NC I and NC II). While public-private partnerships have long been in existence, industry- academe linkages and partnership are essentially weak if not non-existent in many of our academic institutions and need to be strengthened and made part of local socio-economic development. Participation of local government units as well as local private industry and businesses in enhancing educational

programs of academic institutions located within the locality is a crucial step in closely watching the local manpower supply and demand requirements (A Gateway to Global Competitiveness, Hi-TechLink, June, 2013, Vol. 2, No. 001). When the researcher attended the Training for Trainers in Baguio City, some problems crop up based from the experiences of the different TLE supervisors and TLE teachers from all over the Philippines on the implementation of K to 12 specifically on the tools, equipment and materials which also crop up during the training conducted here in the province.

Statement of the Problem

This study was prompted after the researcher attended the Training for Trainers in Baguio City, were some problems crop up based from the experiences of the different TLE supervisors and TLE teachers from all over the Philippines about the implementation of K to 12 implementation specifically on the tools, equipment and materials that is needed to enhance the teaching-learning process in TLE education. In view of the foregoing problems, this study was covered to determine the status and problems in TLE education and how the researcher can be of help to the TLE teachers to overcome these problems by working out recommendations to remedy or lessen the burden of TLE teachers especially in using remedial measures in the absence of facilities or equipment.

Specifically sought answer to the following questions: What are the qualifications of TLE teachers in the general secondary education and technical vocational schools in terms of: a. relevant educational attainment; b. relevant seminars and trainings attended; c. number of years in teaching TLE; d. National Certificate Level II; and e. Trainer's Methodology Course I?, What are the teaching practices of the TLE teachers? 3. What instructional facilities in teaching TLE are available in the schools? 4. What remedial ways do the teachers adopt in case where equipment and tools are absent or insufficient? 5. What are the problems met in TLE instructions encountered by TLE teachers?

Research Design of the Study

Using the descriptive-survey method of research this study determined the status of TLE instruction in the technical vocational and selected general secondary in the Division of Catanduanes. There were 8 general secondary and 3 technical vocational schools in the Division of Catanduanes with an actual size of 113 respondents. The data were gathered through ocular inspection of the facilities of the schools, questionnaires, informal interview and informal classroom observation. Significance of the Study The results on qualification of TLE teachers and on professional development that is the more frequencies of teachers attended one seminar would be an eye opener to curriculum planners on policy making that is to strengthen the TLE curriculum in every program/subject offered. The teacher who will teach the subject should have completely acquired the minimum requirement to teach the subject within their area of specialization that is an ICT major should handle ICT subjects. Trainings and seminars attended should be related to TLE subjects taught by the teacher and are attended to enhance the teacher's professional growth such as developing teaching strategies and techniques to teach TLE subjects. Therefore the curriculum in TLE should include both the preparedness of the teachers and the professional advancement activities.

Method of Procedure

This study used the descriptive type of research utilizing survey technique. This research method was used because it describes the present status or condition of the topic investigated on. Procedure in the conduct of the survey was observed with communications done with concerned individuals.

Collection of Data

The study covered Technology Livelihood Education (TLE) teachers in the 8 general secondary and 3 technical vocational schools in Catanduanes. Out of the target number of TLE teachers which is 123, only 113 were retrieved. In view of ethical standards in research no compulsion was done with supposed participants in the research. Treatment of Data The study made use of frequency count to determine the number of responses in each item in the questionnaire. Percentage was used to determine what part of the respondents answered a particular item. Ranking was used to determine the problems and the ways the teachers adopted in the absence of tools/equipment and materials. Weighted Mean was employed to determine the average response based on the weight of the chosen option.

Findings

On the basis of TLE Teachers qualifications, the following are the findings of the study: The number of technical vocational school teachers whose educational attainment is relevant to TLE instruction is greater than the number of general secondary teachers; General secondary teachers who did not attend relevant seminars and trainings are greater in number than technical vocational teachers who did not attend seminars and trainings; Among those who have already attended seminars, the most attendees are technical vocational and general secondary school teachers who have attended 1 to 2 seminars; The technical vocational teachers who attended 3 to 4 seminars are greater in number than the general secondary teachers; The youngest in service which is less than 1 year in the general secondary teachers is lesser than technical vocational teachers and the oldest in service which is 9 years and above have greater frequencies of teachers in the general secondary group than in the technical vocational group of teachers; The technical vocational teachers who have NC II level status are greater in number than general secondary teachers who are NC II level status; There are more technical vocational teachers who took up Trainer's Methodology Course I than general secondary teachers and There are more general secondary teachers who teach TLE subjects which is not his major area of specialization than technical vocational teachers. In the aspect of teaching practices of the TLE teachers in General Secondary and Technical Vocational Schools, the following are the findings of the study:

The teaching practices that are rated 3 or "Always" are: (1)Take into account students prior knowledge when planning class program for TLE lesson. (2) Develop student's understanding of concepts in TLE. (3) Relate the concepts of Technology and Livelihood to other disciplines like Science, Mathematics, Languages, etc. (4) Students work in groups.5) Use the instructional tool as a primary source rather than a textbook. (6)Teach groups with the same ability (7) Listen and ask questions in order to gauge the student's level of understanding. Utilize picture of Technology and Livelihood Education lessons and activities from magazines and the Internet. (9) Relate Technology and Livelihood Education to current technology and (10) Giving the students a more market-oriented and customer- centered mindset rather than just focusing on the production.

The teaching practices with a rating of "Seldom" are: (1) Expose your class to the use of investigative strategies; (2) Use indigenous materials in teaching Technology and Livelihood Education; (3) Guide students in applying technology in launching livelihood programs such as research, printing, computer games, etc.; (4) Use of calculators/computers/LCD projector for drill and practice; (5) Use of computers/calculators to collect and analyze data; (6)Use computers/LCD projector to demonstrate Technology and Livelihood Education principles; 16.Use related learning experiences, charts concept clues, or concept mapping to explain principles in TLE; (7) Group Mapping; (8) Film Viewing; (9) Conducts survey to determine the right courses to offer according to the demand from the industry and (10) Linkage in the local

industry to ensure profit for the students after taking the course and acquiring a National Certification in TESDA.

Instructional Facilities used in TLE Instruction in Secondary Schools in Catanduanes, findings of the study revealed that based on the recommended number of trainees and the appropriate number of tools, equipment, materials and facilities that they should use, there are more available tools, equipment, materials and facilities in the subjects offered by technical vocational education schools such as Dressmaking, Technical Drafting, Nail Care Servicing, Consumer Electronics, Computer Hardware Servicing and Electrical Installation and Maintenance. In all the schools which offered TLE subjects, the available tools, equipment, materials and facilities do not conform to the recommended standards in terms of quantity. Based from the list of required facilities, tools and equipment, the unavailable tools, equipment and facilities is much greater than what are available in the schools which offered the subjects.

On specific question number 4, Remedial Measures Adopted by TLE Teachers, the following are the findings of the study; The foremost remedial measures which TLE teachers in the technical vocational schools adopt according to rank are: a.)Encourage students to practice working if they have the materials/equipment at home b.) Buying own materials/equipments for demo purposes c.) Provide pictures and d.) Make use of materials/equipment from home / borrowing materials from co-teachers. The foremost remedial measures which TLE teachers in the general secondary schools adopt according to rank are: a.)Buying own materials/equipments for demo purposes b.) Encourage students to practice working if they have the materials/equipment at home c.) Provide pictures and d.)Make use of materials/equipment from home. Problems

TLE Teachers encountered the following problems in teaching Technology and Livelihood Subjects according to rank. 1) Lack of trainings related to area of specialization 2.) No capital investment 3.) Planning of TLE subjects does not include allowance for contingencies for instructional facilities and teaching strategies and 4.) Unrepaired equipment due to absence/lack of budget.

The following are the foremost perceived problems by the TLE teachers in general secondary schools in teaching the subject according to rank: a.) Lack of teaching strategies b.) Lack of trainings related to area of specialization c.) No capital investment and d.) Inadequacy of facilities and equipment.

Conclusion and Implication of the Study

Based from the findings of the study, the following conclusions were drawn: The typical teacher respondent is a BS Industrial Education graduate, with no seminars attended, has been in the service for 9 years or above, with at least one National Certificate Level II and yet to pass a Trainer's Methodology Course; The teaching practices of the TLE teachers are: 1. Take into account student's prior knowledge in planning class program for TLE lessons, 2. Develop students understanding of concepts in TLE, 3. Students work in cooperative learning group, 4. Teach groups that are heterogeneous, 5. Relate concepts of TLE to other discipline, etc.; Most of the recommended tools, equipment and materials are not available in both technical vocational and general secondary schools. The available tools, equipment, materials and facilities do not conform to the recommended numbers which are required to support the needs of the students who enrolled in the TLE subject.

The schools have inadequate instructional facilities; Some of the remedial measures that the TLE teachers adopt are: 1. Encourage students to practice working if they have the tool or

material at home, 2. Buy their own materials, 3. Provide pictures, 4. Film Showing, 5. Video Presentation, 6. Solicit from community alumni by posting in a social media the tools or materials the school needs. The problems encountered by TLE teachers are lack of teaching strategies, lack of capital investment, lack of teachers, unrepaired equipment, inadequate number of facilities in teaching TLE subjects etc. The implication of this research is that policy makers were able to consider allocating an ample budget intended for the implementation of TLE subjects. The student even in a remote place deserves to learn at its best way possible.

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The Author

Maria Sheila R. Gregorio born at San Andres, Catanduanes, Philippines on February 28, 1974. She finished Doctor of Education major in Educational Management, Master of Public Administration at Catanduanes State University and Bachelor of Secondary Education major in Computer Science in Adamson University, Ermita, Manila. She is a licensed teacher and a lecturer in private review center for Licensure Examination for Teachers. She attended several trainings and seminars relevant to her area