



# Needs Assessment of Electronics Shops in the Rinconada Area of Camarines Sur: Basis for an Extension Program

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This study aims to determine the needs of electronics shops in the Rinconada area of Camarines Sur. It aims to determine the following: business address, capital, services offered, number of technicians with or without a national certificate, educational qualification, business permit and licenses, and number of years in business operation; the strengths, weaknesses, opportunities and threats of the electronics shop in the Rinconada area; the extent of identified weaknesses that affect the operation; and the extent of the proposed program to improve the operation. The study uses descriptive quantitative research to gather data from 58 electronics shops in the Rinconada area through a questionnaire. Based on the analysis of the results statistically treated using percentage and weighted mean, a SWOT analysis was considered as a basis in the preparation of the extension program. It was found out that most of the electronics shops in the Rinconada area are operating, even though there is a lack of training and exposure to technological advancements demanded in the market and the great competition with other shops in the business centre. Based on these findings, the researcher prepared an extension program to address the needs of electronics shops in Rinconada using SWOT analysis. Thus, the researcher recommends implementing this extension program to solve the problem.

**Key words:** *BVTED program major in Electronics, Electronics shops, Extension Program, Rinconada Area, SWOT Analysis, Camarines Sur Polytechnic Colleges, Camarines Sur, Philippines.*



## Introduction

The College of Education, Arts and Sciences offers a Bachelor of Technical Vocational Teacher Education major in Electronics Technology (BTVTed). This is one of the curricular programs offered by the College designed for future teachers-to-be in the Junior High School through the Senior High School. The course is designed to develop technological literacy, which is the ability to develop, use, manage, understand and assess technology for their students (CHED Memorandum Order 79 s 2017).

Industry immersion is one of the requirements the learning institutions must comply with and experience to assess the skills and knowledge acquired by the students in school. Assessment is the process of gathering and discussing information from multiple and diverse sources to develop a deeper understanding of what students know, understand and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve (Assessment, 2017). Industry immersion does not only assess the content knowledge of students but also determines the application of these theories in real-life situations.

The study of Barandon, et al. (2016) focused on the utilisation of classroom techniques and found that the faculty has limited awareness and usage of the different formative assessments that give instant feedback to both faculty and students to improve learning. This is similar to the present study, which focuses on need assessment for electronics shops, to find out why this venture is dying in the Rinconada area and other parts of the Philippines (Barandon, 2016). The present study conducted an assessment of the electronics shop owners and technicians as well as their status with regards to new and innovative technology.

Another study focused on outcomes-based assessment (OBA), which involved mathematics teachers. It was noted that mathematics teachers hold grey areas of concerns in their perspectives and practices of OBA, which the author then recommends the revisiting of the fundamentals of outcomes-based education written by themselves (Cardona and Dagdag, 2018). The present study assesses the electronics shops and applies the SWOT analysis on the extent of the identified weaknesses that affect the operation of their business venture.

The study of Sarmiento and Dimalanta (2018) aimed to determine the assessment approaches used by preschool teachers who were used as inputs for an enriched module framework in kindergarten education. The assessment activities of the respondents were all categorised by the three profiles of assessment approaches. Notably, preschool teachers varied in assessment approaches used because they considered the developmental stages of their learners. The present study focused on assessing the status of the electronics shops and on trying to help the



owners and the technician/s to enhance their knowledge, skills and comprehension of the present technology available in the market, like CCTV, solar energy and so on.

The study of Rosaroso (2016) revealed that portfolio assessment was proven authentic in which the task was not only genuine, but was done in a real-life context. This is similar to the present study which assesses the needs of the electronics shop owners and technicians; whether they are at par with the new trends of technology or were they already lagging when it came to the electronic gadgets their customers would like to consult them about or to ask for a repair.

One of the courses offered by this department is the Bachelor of Technical Vocational Teacher Education major in Electronics Technology. This is the fifth year the college is offering the course. This program was submitted to the Accrediting Agency Chartered Colleges and Universities in the Philippines (AACUP) and is now accredited as candidate status for Level 1.

Also, the College is an International Standard Organisation (ISO 9001: 2015), certified by TUV SUD Philippines since 2013. With the continuous challenges besetting the Philippines' higher education, as mentioned in the CSPC Gazzera, issued January to March 2016, CSPC commits to keep up the pace. As such, Horizontal, Vertical Typology and Institutional Sustainability Assessment are now the next activities given priority by the college. This assessment would identify the type of typology to which the college belongs.

The primary goal of the Bachelor of Technical Vocational Teacher Education (BTVTed) major in Electronics Technology is to prepare competent teachers, by providing them with technical expertise in the field of Electronics Technology specialisation (CHED Memorandum Order 79 s 2017).

Generally, the program's curriculum is filled with education subjects. Thus graduates of this program are allowed to take the Licensure Examination for Teachers (LET). Once graduates of the BTVTed program pass the LET, they will be entitled to teach in academic institutions, specifically in elementary, secondary and collegiate levels. Home Economics and Livelihood Education (HELE), Technology and Livelihood Education (TLE), Agricultural Technology (AgriTech), Practical Arts (PracArts) and Computer Technology (ComTech) are just some of the subjects that graduates can teach (EPAS NC II, 2017).

Furthermore, graduates of the BTVTed program may also teach in the Technical Education and Skills Development Authority (TESDA), vocational schools, private and livelihood training centers as well as in charitable institutions that aim to train the oppressed sectors of the society to develop specific skills that they can use to earn money and become financially



independent. The subjects that they will teach will mainly depend on the field of specialisation that they have chosen.

At present, the College has a total of 247 enrollees for electronics technology from the first year to the fourth year, with four faculty members handling major subjects. During their third year, students are required to submit themselves for the industry immersion.

At the end of the third ladder, the students are required to undergo industry immersion in order for them to finish the course. The majority of these third-year students went to the CALABARZON Area to submit themselves for the industry immersion because there are very few electronics shops in the Rinconada area that can accommodate students for this purpose.

Based on the gathered data of students' feedback, students encountered difficulties in looking for electronics shops in the Rinconada area (Nabua, Bato, Iriga City, Baa, Bula, Buhi and Balatan) for their industry immersion. If there were enough electronics shops in Rinconada to accommodate the students, they would not need to go to Manila for industry immersion. Thus it would greatly help them in budgetary concerns. It was observed that this phenomenon is due to the lack of electronics shops in the Rinconada area. Therefore, this study is being conducted.

The researcher limits the study of electronics shops in the Rinconada area, which include, Iriga City, Nabua and Bato, Bula, Baa, Buhi and Balatan, in the province of Camarines Sur only. The SWOT analysis will be adapted to create the output of this study. A SWOT analysis (strengths, weaknesses, opportunities and threats analysis) is a framework for identifying and analysing the internal and external factors that can have an impact on the viability of a project, product, place or person (SWOT Analysis, 2017).

The findings of this study are deemed beneficial, foremost, to the electronics shops in the Rinconada area. They will have a clearer view of where they need to improve their services. The BTVTED students and parents will surely benefit from this study for they would have more opportunities to have their industry immersion in local communities, thus addressing the financial needs of their parents who support their studies. The college, with its faculty and administration, can further strengthen the ties with its stakeholders through the success of the expected output of this study.

This study attempted to fill this gap, particularly to prepare a Proposed Extension Program for electronics shop owners and the technicians of the Rinconada area, Camarines Sur, anchored on the findings from an assessment and specifically for an individual in the Rinconada area to engage in the electronic shop business as their source of livelihood.



Mainly, this study focused on the assessment of the seven (7) areas of the electronics shops; business address/location, capital, services offered, number of technicians with or without a national certificate and training, educational qualification, business permit or licenses and number of years in operation.

The theoretical foundations that underlie a discipline are far from stagnant. They are in continual motion, advancing on a path that may intersect with many disciplines at different times, changing direction and pace as new ideas take root. The same is true for the discipline of needs assessment. Needs assessment theory is both derived from and informed by numerous other fields of inquiry – including psychology, management, motivation, human resources, capacity development and others.

Matkin viewed economic development as the process of innovation that increases the capacity of individuals and organizations to produce goods and services and thereby create wealth. In the context of colleges and universities, it means institutional activities that are designed to encourage or promote the human and material development of a region, state or country. Notwithstanding, the belief that the most exciting breakthrough of the 21<sup>st</sup> century will occur not because of technology but because of an expanding concept of what it means to be human needs some reflection. Such conditions uphold the relationship whereby “the wider our horizons and the more powerful our technology are, the greater we have come to value the individual.” (Garry Matkin, 1990).

Producing a capable and competent workforce for industry, government and non-government sectors requires a review of the interacting development factors. Such a challenge calls for a planned scenario rather than just taking a chance; hence, the “Proposed Extension Program for Electronics Shops Owners and the Technicians of Rinconada Area, Camarines Sur.”

### **Objective of the Study**

The main objective of this study is to determine the status of Electronics Shops in the Rinconada area of Camarines Sur. It aims to determine the following: a) business address, b) capital, c) services offered, d) number of technician with or without a national certificate, e) educational qualification, f) business permit and licenses, and g) number of years in business operation; the strengths, weaknesses, opportunities, and threats of the electronics shop in the Rinconada area; the identified weaknesses that affect the operation; and the proposed program to improve the operation.

### **Methodology**



This study employs a descriptive survey research method. A descriptive survey is a research method that involves the collection of data to get information using a questionnaire about the research problem. A descriptive method is used to interpret the data gathering, as well as answer the question concerning the subject of this study. This method systematically describes a situation or area of interest accurately. The method is used to describe the status of electronics shops in the Rinconada area and to get the answers to the objectives of the study.

The researcher used a purposive sampling technique in identifying the respondents for data collection. The respondents are the shop owners and the technicians of the electronics shops in the Rinconada area. There are a total of 58 electronics shops in the Rinconada area of Camarines Sur, and all of these are part of the sample of the study.

To meet the objectives of the study, the researcher used a survey questionnaire, which was supported by an informal interview in gathering the data and information about the status of the electronics shop in the Rinconada area. This research instrument was used to get accurate answers from the respondents. The tool was created through a rigorous literature review and was subjected to validation and reliability testing. Before the actual data collection, the instrument was used in a dry-run to establish validity and reliability further.

The researcher began data collection by making the instrument of the study, which was appropriate for the chosen research design. The researcher administered the data collection by going to the locale of the participants and asking them to answer the survey questionnaire. An informal interview was conducted to validate the answers of the respondents. After data collection, the researcher collected the data for analysis and interpretation. Data analysis was made through statistical methods such as percentage and weighted mean. Based on the analysis, results were gained and findings were established.

## **Results and Discussion**

Based on the data collected, the following are the results that answered the objectives of the study.

### **The Profile of Electronics Shops in the Rinconada Area**

The Rinconada area is located in the fifth district of the province of Camarines Sur. It has six (6) municipalities and one (1) city (Bato, Baa, Balatan, Bula, Buhi and Nabua, and Iriga City, respectively). Electronics shops in this area are now diminishing because of the development of information technology. Based on an informal interview with the respondents, these electronics shops were mushrooming in the 80s even in the remote barangays. They could

easily find electronics shops with technicians. At present, with the development of information technology, solar energy and the like, electronics technicians who did not submit for re-training have been left behind. The training is conducted in Metro Manila, which many local technicians cannot afford to attend.

Below is the presentation of the profile of electronics shops in the Rinconada area.

**Table 1:** Number of Electronics Shops in the Rinconada Area

Municipality / City in Rinconada Area	With Business Permit		Without Business Permit		Total
	f	%	f	%	
Baao	0	0.0	5	14.70	5
Bato	1	4.1	4	11.76	5
Balatan	2	8.3	5	14.70	7
Bula	5	20.8	2	5.88	7
Buhi	2	8.3	5	14.70	7
Nabua	4	16.6	6	17.64	10
Iriga City	10	41.6	7	20.58	17
<b>Total</b>	<b>24</b>	<b>41.37</b>	<b>34</b>	<b>58.62</b>	<b>58</b>

Table 1 presents the number of electronics shops in Rinconada. Based on the results of the survey, there 17 electronics shops in Iriga City, making it the highest amount among the areas in Rinconada. Among the 17 shops, only ten (10) have business permits. Second to it is Nabua, Camarines Sur, with ten (10) electronics shops with only four having business permits. This implies that among the electronics shops in Rinconada, there is a higher percentage of shops operating without business permits.

**Table 2:** Type of Business Ventures of Electronics Shops

Rinconada Area	Solo	Percentage	Family	Percentage	Friends	Percentage	Total
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Baao	2	9.52	3	9.37	0	0.00	5
Bato	2	9.52	3	9.37	0	0.00	5
Balatan	4	19.04	3	9.37	0	0.00	7
Bula	4	19.04	3	9.37	0	0.00	7
Buhi	3	14.28	4	12.50	0	0.00	7
Nabua	4	19.04	6	18.75	0	0.00	10
Iriga City	2	9.52	10	31.25	5	100.00	17
Total	21	36.20	32	55.17	5	8.62	58

Table 2 shows the types of business in electronics shops in the Rinconada area. The highest percentage of the kinds of business is family owned, with 55.27%. This implies that most of the shops are family-owned, especially, based on the interview, that most of the shop locations are adjacent to the house of the owners.

**Table 3:** Educational Attainment of Shop Owners/Technicians

Rinconada Area	Elementary	Percent	TechVoc	Percent	Degree	Percent	Total
Baao	3	13.64	2	6.45	0	0.00	5
Bato	2	9.09	3	9.68	0	0.00	5
Balatan	4	18.18	3	9.68	0	0.00	7
Bula	4	18.18	3	9.68	0	0.00	7
Buhi	3	13.64	4	12.90	0	0.00	7
Nabua	4	18.18	6	19.35	0	0.00	10
Iriga City	2	9.09	10	32.26	5	100.00	17
Total	22	37.93	31	53.44	5	8.62	58

Table 3 shows the educational attainment of the shop owners and/or technicians. The results show that only in Iriga City the shop owners or technicians possess a degree. Most of the shop owners or technicians, however, are technical-vocational course completers. This shows that they have background and training in electronics technology.

### Location of the Electronics Shops.

In the Rinconada area, most of the sites of the electronics shops are outside the business district of the municipality, except for Iriga City, where almost all the electronics shops are located at the business district, and these have added other services like selling parts or components needed in the electronics gadget, small appliances or other electronics equipment. Data revealed that in the municipality of the Rinconada area, the electronics shops are located outside the business centre. When the researcher asked the reasons why they stay outside the district, respondents replied that it is because they cannot afford to pay for the permit, taxes and other government fees. Other respondents responded during the interview that they could

afford to pay for the rental. However, they decided to construct a little space adjacent to their house for their electronics shops for cost cutting reasons. Another reason is that maybe if there is no customer for a day, there is no income the whole day. To suffice for this, they add an income-generating business for their livelihood like a sari-sari store. Others responded that they are no longer updated with the technology now, such as closed-circuit television (CCTV, 2017), solar energy and the like, which is commonly asked for in the business district centre.

#### **TESDA National Certificate Holder.**

When the researcher asked respondents if they are a holder of TESDA National Certificate II for Electronics Products Assembly and Servicing NC II or higher (EPAS NC II, 2017), the majority of the respondents answered that they are not a holder of the TESDA National Certificate for EPAS NC II.

The EPAS course is designed to develop and enhance the knowledge, skills and attitudes of an Electronic Products Technician, per industry standards. It covers the necessary and common competencies in addition to the core competencies such as assembling electronic products, preparing PCB modules, and installing and servicing consumer and industrial electronic products and systems (TWC Programs, 2017).

Based on the actual informal interview by the researcher, almost all of the respondents do not possess EPAS NC II conducted by the TESDA Offices near their municipalities. Furthermore, most but not all respondents cannot afford to pay for the training, particularly EPAS, which is one of the trainings and certificates that they should have so that their knowledge, skills and competencies are at par with the new technologies.

#### **Common Electronics Jobs/Repair.**

Of the 58 respondents, the following electronics jobs or repairs that they encounter in their shops are: small appliances which include transistor radios, torches, electric flat irons, electric fans, refrigerators, air-conditioning units, mobile phones, personal computers, washing machines, and other small appliances common in their homes. The presence of CCTV and solar energy in many homes in Rinconada is now abundant. There are a lot of queries from prospective customers asking if they are knowledgeable or skilled in designing and installing CCTV and solar energy. However, because they do not have enough knowledge, skills and competencies, they refuse to accept the offers. This opportunity is a great drawback in their business.

#### **Knowledge, Skills, and Competencies on CCTV Repair and Maintenance and Solar Energy Design and Installation.**

Based on the data gathered by the researcher, CCTV is widely known to them, but they do not have enough knowledge, skills and competence to conduct repairs nor to install (CCTV, 2017).

Another in-demand electronics job is the designing and installing of new electronics technology like solar panels (Britt and Wiedeman, 2012). According to the respondents, they also wanted to attend training on these technologies to expand their electronics services but the training is usually conducted in Metro Manila, and for financial reasons, they cannot participate in these enhancement programs.

Respondents of this study revealed that if there are institutions that would help them to attend an enhancement training, particularly on Electronic Product Assembly and Servicing within the Rinconada area, most of them would attend the said undertakings. They also considered this as a challenge for them to improve their livelihood instead of going to Laguna or Metro Manila to look for a job, since they prefer to stay home with their family. Additionally, they also want to revive the dying electronics shops in the area and in the Philippines generally.

### The SWOT Analysis

The preceding text is a SWOT analysis of the present status of the electronics shops in the Rinconada area. The strengths, weaknesses, opportunities and threats are presented in the table below.

**Table 8:** The SWOT Analysis

Area	Strengths	Weaknesses	Opportunities	Threats
Location	They are located near the local community. The owner of the shop is, at the same time, the technician.	The location is outside the Business District	Continuing demands for solar panel energy, CCTV connection, and many more.	
Capital/ Electronics Shop		The capital of the electronics shop is minimal. No Registration permit from the LGU.		The electronic shop is not registered with the LGU.
Training & Experience	They are experienced technicians	No updated training or NC for the new		

	because of a long time in business or livelihood.	training regulation on Electronics technology.		
Tools, Equipment & Facilities		Most of the tools and equipment are outdated and not suitable for new technology.		The demand of clientele / new technology that may not be met because of the availability of tools, equipment or apparatuses
Owners & Technicians	They managed their shop, and at the same time, they are the technician. They possess a lot of experience in electronics technology.	They are not updated with the latest technology in the market.  Lack of training and exposure to the new technology	Demands of the new technology like solar energy, CCTV, small appliances, etc.	They can no longer compete with other electronics shops, especially those who are in the business centre.

### Strengths.

In recent years, the electronics shops have overcome several weaknesses during its decade of operation. Based on the assessment made, the following are its strengths. First, the electronics shops are managed by the owner. Second, they do not pay for the monthly rentals of their shops, and the electronics technician of the shops is the owner per se. They are fully equipped with a large amount of experience as both shop owner and technician. The transaction is made immediately if minor trouble, or repair will be conducted. If a part of the component needs to be replaced or repaired, they do it as fast as possible if there are available components or parts.

### Weaknesses.

Despite the very fast turn out of the electronics components, equipment, or gadgets, it also has several shortcomings. For one, the electronics shops are mostly outside the business district of the municipality or the city. Their electronics tools and equipment are outdated for the new electronics technology. Technicians do not possess enough knowledge, skills and competencies



for the new technology in the market. The majority of the owners or electronics technicians do not have TESDA National Certificate to show that they are ready to face new challenges in the present technology. Their capital is not enough to buy new tools and equipment that will help them to update in electronics technology. Lastly, they do not have any support from the local government since their electronics shops are not registered as an electronics business.

### **Opportunities.**

The electronics shops are still operational in the area. Most of the owners of new electronic gadgets are coming to their shops for repair or for troubleshooting gadgets or small appliances. The electronics shops are familiar with the locals. It is noted that based on the data gathered, there are a lot of customers inquiring about the new electronics technology like the solar energy, CCTV, and the like. This is another opportunity that both the owners and technicians can access in electronics technology. Also, their shops did not require them to pay for the rentals because the majority of them housed their shop in their home or in an adjacent room to the sari-sari store.

### **Threats.**

The development of the latest electronics technology in the country and the world affects the respondents' livelihood. Based on the data gathered by the researcher, there are so many clientele asking them to install or to repair CCTVs or solar panels, but the electronics shops do not have enough knowledge, skills and competencies to do that because they are not exposed to these technologies. They do not have a business permit to operate. They do not have enough capital to buy the needed materials, components, tools and equipment to design and install CCTV, solar panel energy, or other small electronics appliances. They need to attend formal training conducted by TESDA accredited training centres for them to acquire certificates. Their business location is outside the business district of their city of the municipality. The turnout of electronics technology is very fast.

### **Conclusions**

From the findings mentioned above, the researcher deduced the following conclusions.



1. The electronics shops in the Rinconada area are still existing, however, when it comes to their services, they can no longer compete with other electronics shops located in the business centre that have huge capital, business permits, and other such advantages.
2. The electronics shops outside the business district are offering services despite their lack of training and exposure to the new electronics technology, with high demands in the market.
3. Small electronics shops with one or two electronics technicians are a major strength, but it also posts a weakness which, if addressed, can be converted into opportunities.
4. The proposed Extension Program of the College of Education, Arts and Sciences is deemed necessary for the program in addressing the needs of electronics shops in the Rinconada area.

### **Recommendations**

With these conclusions, the following recommendations are given.

1. The proposed extension program for the electronics shop owners and technicians must be adopted and evaluated periodically.
2. The electronics shop owners' and the technicians' strong and weak points along the areas of evaluation should be one of the concerns of the CEAS Extension Program to be strengthened and sustained. An effort should be made to improve the weak points of the shop owners and technicians.
3. For the proposed extension program to be realized, the CEAS Extension Office may consider tapping the Department of Social Welfare and Development (DSWD), TESDA Provincial Office, Local Government Units (LGUs) and Non-Government Organisations (NGOs) to consider ways and means to facilitate the program's implementation.
4. For further studies, it is recommended to conduct an assessment of the extent of implementation of the proposed extension program.

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## **APPENDIX**

### **Proposed Extension Program for Electronics Shop Owners and the Electronics Technicians of the Rinconada area, Camarines Sur**

#### **Proponent**



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## **Rationale**

At present, the electronics shops in the Rinconada area are considered a dying livelihood because of the very fast turnout of the electronics technology. The Rinconada area includes the following city and municipalities, namely Iriga City, Baa, Bula, Balatan, Bato, Buhi and Nabua. At this time, to perform the repair of small appliances is no longer in demand. Customers just replace it with a new unit, module, or the whole circuit of the electronics gadget, equipment or appliances. Comparing it to before when a technician could replace it with specific components or parts; this is now what the respondents are experiencing and observing in the market.

This proposed extension training for the electronics shop owners and technicians of the Rinconada area is one of the programs of the College of Education, Arts and Sciences. TESDA has a program for the electronics technician, namely the Electronics Products Assembly and Servicing (EPAS) NC II.

The skills training on basic electronics leading to full competency of Electronics Product Assembly and Servicing NC II (EPAS NC II, 2017) is an ability building that is arranged for pre-selected, eligible candidates to develop knowledge, skills and competencies aimed to produce above-average training graduates. The latter produce higher chances in employment or can be used for their livelihood activity. The training design will deliver knowledge, skills and attitudes that are essential in work that will provide a sustainable source of income.

The extension program is patterned from the TESDA Training Regulations, particularly on the electronics area, which is much related to their job as electronics shop owners and electronics technicians. There are three (3) competencies that are the target of the proposed extension training. The Basic Competencies are: participating in workplace communication, work environment; practicing career professionalism; and practicing occupational health and safety procedures. The Common Competencies are: applying quality standards; performing computer operations; performing mensuration and calculation; preparing and interpreting technical drawings; using hand tools; terminating and connecting electrical drawings and electronics circuits, and; testing electric components. The Core Competencies are: assembling electronic



products; servicing consumer electronics products and systems, and: servicing industrial electronics module, product and system (EPAS NC II, 2017).

At the end of 260 Training hours, participants who have achieved this qualification are competent to be an Electronic Products Assembler, Domestic Appliance Service Technician, Audio-Video Service Technician, Industrial Electronic Technician, Electronic Production Line Assembler, Factory Production Worker (EPAS NC II, 2017).

### **Goals and Objectives**

The goal of the Extension Training Program for the Electronics Shop Owners and the Electronics Technician is to enhance their knowledge, skills and competencies, particularly in the new technology in the market, for them to compete with other electronics shops, mainly because most of their electronics shops are situated outside the business centre.

Based on the conducted survey, most of them are no longer up to date in the latest electronics technology. Primarily, this proposed training will capacitate their ability and capability to do repairs and perform maintenance on small appliances, closed-circuit television (CCTV) and solar panel energy, and to become up to date with the new technology today.

Participants are expected to finish the 260 training hours and pass the assessment for the Electronics Products and Assembly Servicing (EPAS) NC II given by the TESDA Provincial Office.

### **Sustainable Community Development**

The proposed training will surely develop the sustainable livelihood of the electronics shop owners and electronics technicians and widen the scope of their work as technicians or owners. It will also increase their ability to accept repairs, installations or maintenance of any kind of electronic gadget or small appliance, including CCTV and solar panel energy.

If the LGU unit of their municipality or the NGO and other government agencies were tapped to participate in this undertaking, it would be a good start in reviving the dying electronics shops industry in the Rinconada area.

Participants of this training will become self-reliant, earning economic progress, because if they attend or participate carefully, religiously and adequately, the training will be fruitful for them and the whole community. They are expected to pass the competency assessment given by TESDA for EPAS NC II.



### **Brief Description of Activity**

The training will use a nominal time duration of 260 hours based on the TESDA Training Regulation for EPAS NC II, and will be conducted at 8 hours per day during weekends. The training venue will be equipped under TESDA Standards that are within the main campus of CSPC. Instructors are required to be an EPAS NC II Certificate Holder or National TVET Trainer's Certificate (NTTC) Holder and have a solid background in electronics technology or have a proven track record in the conduct of EPAS NC II Trainings. Compensation for the trainers will be following the TESDA Standards for the remuneration of trainers for the three competencies. Trainees' total number in one classroom is limited to a maximum of 25 trainees.

### **Trainers Qualifications**

The trainer is expected to be a holder of EPAS NC II with Trainer's Qualification (TQ) I, NTTC Level 1, and must have at least two years of relevant industry experience.

### **Participants Qualifications**

Participants of the proposed extension training are expected to be of legal age, and able to attend regardless of religion, sex and status. Attendance is to be prioritised for those interested shop owners and electronics technicians from the Rinconada area.

### **Participants' Obligation and Participation**

All participants of this training are the identified electronics shop owners and the electronics technicians who are bona fide residents of the Rinconada area and who are still willing to learn the new electronics technology in the market. A registration fee may be collected in the amount of 2,000.00 pesos to cover the portion of the price of the expenses of the training from their Barangay Development Fund, if warranted. Otherwise, they may solicit funds from their friends. Other target expenses may be asked from TESDA, DSWD and other government agencies, and non-government organisations that are willing to finance the training.

### **Topics of the Proposed Extension Training Program**

The proposed coverage of the topics for the training will focus on basic electricity and electronics, electronics basic tools, equipment and apparatuses, and on other electronic tests and measurements, and instruments. There are small appliances, industrial appliances, CCTV, solar panel energy design and installation, and other common electronics equipment or



appliances in the market. Other electronic devices mentioned in the training regulations for EPAS NC II are also included.

### Venue of the Training

The Electronics Laboratory Shop of the College of Education, Arts and Sciences, or the nearest barangay hall that may provide a temporary laboratory for this training is the prospective venue. The venue may change depending on the memorandum of agreement among CSPC-CEAS, TESDA, DSWD, LGU and agencies who wish to partner with the college.

### Proposed Budget for the Training per Batch (25 Trainees)

The proposed budget cost and expenses for the training per batch will be finalised after this proposal is submitted to the concerned persons that may be involved in this undertaking.

Trainees:	25 participants
Trainers:	2 trainers
Facilitators:	1 facilitator
Cost of Electricity:	₱ 1,500.00
Transportation Cost:	
	₱ 2,000.00
Honorarium for the Trainer:	₱ 300.00 / hour X 260 hrs  = ₱ 78, 000.00
Facilitator:	₱ 200.00 / hour X 260 hrs  = ₱ 52, 000.00
Estimated Total Cost:	₱ <b>133, 500.00</b> ₱ 133, 500.00/25 participants
Cost per Participant:	= ₱ <b>5, 340.00</b>