

# Entrepreneurship Programs in the Bicol Region of the Philippines

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## ABSTRACT

**Introduction:** Entrepreneurship has been considered as an essential contributor to economic development. Entrepreneurship is founded on innovation and change, leading to productivity and economic competitiveness (United Nations Conference on Trade and Development, 2004). The positive effects of entrepreneurship is being recognized globally. Entrepreneurs help boost economies and improve people's quality of lives by providing employment opportunities, addressing environmental concerns, paying taxes, and empowering marginalized communities, among others.

**Objectives:** This study determined the status of entrepreneurship programs in the Bicol Region. Specifically, this study determined the extent of implementation of BS Entrepreneurship programs along with vision, mission, and goals, faculty, curriculum and instruction, support to students, research, extension, library, physical plant and facilities, laboratory, and administration; the common challenges and best practices encountered by entrepreneurship program implementers; and proposed interventions that can be recommended to improve the programs.

**Methods:** Descriptive research was used by the study. A total of sixty-four (64) were the respondents of the study. Primary data was employed in the study through the use of survey questionnaire and interviews. Data obtained were analyzed using descriptive statistics.

**Results:** Results of the study revealed that the Entrepreneurship programs in the Bicol region obtained very high ratings in the implementation of their programs. There are several challenges encountered by entrepreneurship programs implementers. Results further state that there are several best practices of entrepreneurship programs in the Bicol region.

**Conclusions:** Entrepreneurship programs should encourage faculty members to gain business or industry experience through industry immersion or hire new faculty members with business or industry experience. Future research comparing entrepreneurship programs' status between private and public higher educational institutions to determine their similarities and differences may be conducted.

**Keywords:** entrepreneurship education, Bicol region, best practices, implementation

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## INTRODUCTION

Many entrepreneurs have achieved great success without formal education. However, there were also numerous failed enterprises because of lacking knowledge, skills, and attitudes in business. This is one of the reasons why entrepreneurship programs are being offered in schools.

In 2005, the Commission on Higher Education issued CHED Memorandum Order (CMO) No.17, Series of 2005, formally creating the Bachelor of Science in Entrepreneurship. Today, entrepreneurship programs in the Philippines are governed by the CHED Memorandum Order No. 18, Series of 2017, or the Revised Policies, Standards, and Guidelines for Bachelor of Science in Entrepreneurship. The said CMO stipulates the minimum requirements of entrepreneurship programs curriculum, faculty, administration, library, laboratory, and physical facilities. Hence, an entrepreneurship program should comply with these necessities to be approved and continue operation. Through its

regional offices, the Commission on Higher Education conducts monitoring activities regularly to check the current status of entrepreneurship programs under the minimum requirements. These efforts show the initiatives to formalize entrepreneurship education in academic institutions. However, little research in entrepreneurship education has been conducted to describe or assess it.

In the Philippines, De La Salle University pioneered entrepreneurship education when it opened a bachelor's degree in entrepreneurship in 1983. The present entrepreneurship programs in the Philippines are beneficial in ensuring that Filipino entrepreneurs are equipped with the necessary knowledge and skills through classroom training and experiential learning.

In the Bicol region, there are seven public higher educational institutions and five private higher educational institutions that offer entrepreneurship as part of their curricular offerings. These higher educational institutions help the region increase the number of entrepreneurs by improving students' entrepreneurial knowledge and skills with relevant curricula and effective teaching strategies. The program also supports the Bicol Region Development Plan 2017-2022 that aimed to provide adequate and quality technical assistance to micro, small, and medium enterprises (MSME). The entrepreneurship programs in the Bicol region may also assist in developing future MSME owners who will help increase employment opportunities, use abundant regional resources, and may assist in the recovery of the local economy, which has been greatly affected by the Covid-19 pandemic. However, there is no study yet that focuses on the practices of entrepreneurship programs in the Bicol region.

### OBJECTIVES

This study determined the status of entrepreneurship programs in the Bicol Region. Specifically, this study determined (1) the extent of implementation of BS Entrepreneurship programs along with vision, mission, and goals, faculty, curriculum and instruction, support to students, research, extension, library, physical plant and facilities, laboratory, and administration; (2) the common challenges encountered by entrepreneurship program implementers; (3) the best practices of entrepreneurship programs; and (4) proposed interventions that can be recommended to improve the programs.

### METHODS

A descriptive survey method of research was employed in the study. A total of sixty-four (64) were the respondents of the study, which is composed of six (6) entrepreneurship program chairpersons and fifty-eight (58) faculty of higher educational institutions that offer entrepreneurship programs in the Bicol region. Survey questionnaires, online and phone interviews were used as the data-gathering tools in the study. Weighted mean was used to assess the level of implementation rating of the entrepreneurship programs in the ten areas. A 4-point Likert Scale was used: 4 – very high; 3 – high; 2 – average; and 1 – low.

### RESULTS

#### Level of Implementation of BS Entrepreneurship Programs

##### Vision, Mission and Goals (VMGO)

Table 1 shows the Level of Implementation of BS Entrepreneurship Programs along VMGO. Results revealed that entrepreneurship programs attained a very high rating (3.51) in vision, mission, and goals. All higher educational institutions have visions that show their aims as organizations and direct all their programs to achieve the vision. However, the vision statements of HEIs are different from each other because of the diverse needs in their communities. Abelman and Dalessandro (2008) found that 20 of 30 public colleges and only 4 of the 30 private colleges examined had vision statements aligned with the national vision statement.

**Table 1. Level of Implementation of BS Entrepreneurship Programs along VMGO**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The Institution has a system of determining its Vision and Mission.	3.77	Very high

2. The Vision reflects what the Institution hopes to become in the future.	3.89	Very high
3. The Mission reflects the Institution's legal and other statutory mandates.	3.80	Very high
4. The Academic Unit/department's goals are clearly stated and consistent with the Institution's mission.	3.70	Very high
5. The program outcomes clearly state the expected outcomes in terms of competencies and values of graduates.	3.21	High
6. The College/Academic Unit follows a system of formulating its goals and objectives of the program.	3.52	Very high
7. The College/Academic Unit's faculty personnel and students, and other stakeholders (cooperating agencies, linkages, alumni, industry sector, and other concerned groups) participate in the formulation, review, and revision of the VMG.	3.23	High
8. The VMG is crafted and duly approved by the Board of Trustees or Board of Directors.	3.75	Very high
9. There are full awareness and acceptance of the VMGO by the administrators, faculty, staff, students, and other stakeholders.	3.73	Very high
10. The program has an action plan to achieve its objectives.	2.48	Average
<i>Total</i>	<i>3.51</i>	<i>Very high</i>

### Faculty

Faculty refers to the indicators that concern faculty qualification and policies. Entrepreneurship programs attained a very high rating (3.35) in the area of faculty, as shown in Table 2 and this can be attributed to very high ratings on the majority of the indicators. Results revealed that all entrepreneurship programs have full-time program deans. All entrepreneurship programs adhere to the requirement that the teaching load of the Dean should not exceed twelve units per semester. Entrepreneurship programs hire business people and industry experts to compensate for the need for business and industry experience. Teachers invite entrepreneurs to question and answer sessions with students, present their success stories and share their experiences. Invited entrepreneurs can provide real-life examples of how small businesses are created and run, giving students a clear sense of the real world of entrepreneurship and a better understanding of the challenges and opportunities they may face as entrepreneurs (Karimi, Biemans, Lans, Chizari, Mulder & Mahdei, 2013).

**Table 2. Level of Implementation of BS Entrepreneurship Programs along Faculty**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. Faculty members are holders of a Doctoral/Master's degree in Entrepreneurship/ Business Management or any allied program.	3.18	High
2. Faculty members have three years of business/industry experience that is relevant to the courses.	2.48	Average
3. Faculty members are assigned to teach courses only in their field of specialization.	3.23	High

4. Faculty are assigned to teach not more than four (4) different preparations in one term.	3.34	Very high
5. Faculty attended relevant capability-building and enhancing activities related to entrepreneurship.	3.57	Very high
6. The institutions provides assistance to entrepreneurship faculty pursuing advanced degrees.	3.68	Very high
7. Faculty competence/performance is being evaluated periodically using approved/appropriate instrument.	3.61	Very high
8. Faculty have at least one membership in professional organizations relevant to the field of entrepreneurship.	3.43	Very high
9. Faculty served as resource person/lecturer/consultant in the field of entrepreneurship.	3.39	Very high
10. The institution implements: a) a Civil Service Commission-approved Policy guidelines in the Implementation of Strategic Performance Management System (SPMS), or b) approved policies on hiring and employee performance	3.45	Very high
<i>Total</i>	<i>3.35</i>	<i>Very high</i>

### Curriculum

Entrepreneurship programs attained a very high rating (3.38) in the area of the curriculum, as reflected in Table 3. Curriculum refers to the indicators relevant to the entrepreneurship curriculum. Entrepreneurship curriculum and programs are highly evaluated to encourage entrepreneurial attitudes and awareness of students and increase intent to start a business (Zhang, Duysters & Cloudt, 2014). Thus, in many studies on entrepreneurship education, the effectiveness of entrepreneurship education is often measured by the degree of entrepreneurship intention (Millman, Li, Matlay & Wong, 2010).

The program requires students to prepare a business plan and set up and operate their own business before graduation. In writing a business plan, students are trained to prepare an organization plan, marketing plan, production plan, and financial plan for their chosen business idea. Students are also required to present and defend the business plan to a panel, which is usually composed of entrepreneurship faculty members and industry experts. Entrepreneurship education exposes students to examples of successful business planning or proactive interaction with successful practitioners (Honig, 2004; Titrek, Ilgin & Ozturk, 2018). Bae, Qian, Miao, and Fiet (2014) argue that such pedagogical elements provide coping strategies that maintain motivation.

**Table 3. Level of Implementation of BS Entrepreneurship Programs along Curriculum**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The Entrepreneurship curriculum is consistent with the school's philosophy, mission and vision statement.	3.64	Very high
2. The institution uses an institutional OBEdized syllabus format.	3.23	High
3. Gender and Development are integrated to the Entrepreneurship program activities.	2.43	Average
4. The program requires students to conduct self-assessment to determine their level of entrepreneurial competencies.	3.61	Very high

5. The program requires students to scan the environment and determine business opportunities.	3.61	Very high
6. The program requires students to prepare business plan.	3.91	Very high
7. The program requires students to set up and operate their own business before graduation.	3.81	Very high
8. Classroom instruction is enriched by using other strategies (symposia, seminars, workshops, educational tours, peer teaching, computer-assisted learning).	3.09	High
9. Varied evaluation measures (portfolio, rubric assessment, skills demo, paper-pencil test, oral exam, individual or group reports/ study) are conducted.	3.20	High
10. Faculty members were trained on how to assess student performance properly.	3.21	High
<i>Total</i>	<i>3.38</i>	<i>Very high</i>

The operation of student businesses is also a program outcome of BS Entrepreneurship based on CMO 18, series of 2017, wherein students set up and operate their start-ups under the course “Business Plan Implementation.” Business plan implementation is a unique course in the entrepreneurship curriculum. While some business programs do on-the-job training to practice their skills and knowledge, entrepreneurship students, on the other hand, implement their business plans. Also, the result is related to the significant amount of literature (Barringer, Jones & Neubaum, 2005; Fayolle, Gailly & Lassas-Clerc, 2006; Packham, Jones, Miller, Pickernell & Thomas, 2010; Mueller, 2011; Barba-Sanchez & Atienza-Sahuquillo, 2016) showing the positive contribution of entrepreneurship education on the development of people’s know-how, skills, as well as on the enhancement of entrepreneurial attitude and intention.

### **Support to Students**

Entrepreneurship programs attained a very high rating (3.47) in the area of support to students, as reflected in Table 4. Support to students refers to the academic support services provided by higher educational institutions to attain students' holistic development.

All HEIs that participated in the research have student handbooks that contain information that students need to know, particularly the student rights and responsibilities, including the services they can avail themselves of from the institution. Likewise, this institution has student services, which include student welfare services, student development services, and institutional programs and services. All HEIs that participated in the study have student services programs spearheaded and monitored by a Student Affairs and Services office.

**Table 4. Level of Implementation of BS Entrepreneurship Programs along Support to Students**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The institution has an approved student handbook	3.80	Very high
2. The institution has student services program.	3.73	Very high
3. The institution has a functional medical and dental clinics for employees and students.	3.55	Very high
4. The institution has adequate buildings for student accommodation.	3.52	Very high
5. The institution has adequate food services.	3.29	Very high

6. The institution has adequate recreational facilities.	3.46	Very high
7. The institution complies with the counselor-to-student ratio that provides career counseling to enable students to choose the appropriate major/field of specialization.	3.29	Very high
8. The institution encourages students to conduct economic ventures.	3.18	High
9. There is an organization for entrepreneurship students.	3.2	High
10. The institution conducts leadership training for students.	3.64	Very high
<i>Total</i>	<i>3.47</i>	<i>Very high</i>

Other offices support this office to ensure the effective provision of all student services, such as the student council office, school clinic, registrar's office, school cafeteria, and supply office, among others. Batool, Qureshi, and Raouf (2010) shared that HEIs must demonstrate specific attributes of their student support services, such as being responsive to students' needs, having a consistent institutional mission, being supportive of student learning objectives, easily accessible, adequate student advisory services and processes, efficient professional care to provide students' support and advisory services, effective system of redressing the students' grievances, and complaints, updated and complete record of student complaints, grievances and institutional responses, built-in mechanism of student support services assessment and using assessment results for improvement.

### **Research**

Entrepreneurship programs attained a very high rating (3.40) in the area of research, as gleaned in Table 5. Research refers to the indicators of the higher educational institution along with its research activities. Research is one of the four mandates of HEI along with instruction, extension and production.

The majority of the respondents said that their institution has an approved research manual that contains the institution's research policies, research agenda, approved research process, and incentives given to faculty researchers, among others. Few faculty members are currently doing research to prepare instructional materials because it is needed for accreditation, and there are only a few instructional materials developed by Filipino authors. All entrepreneurship programs are in the process of conducting tracer studies for their entrepreneurship graduates. A tracer study is important to determine the status of the graduates after three years from the time they graduate. Aure, Cuadra, and Gonzaga (2019) mentioned that a graduate tracer study is appropriate for evaluating the academic institution's education and training. It gives basic types of information concerning the graduates' whereabouts and employment status. Such a study can provide sufficient information on the success of education and training for graduates and employers.

**Table 5. Level of Implementation of BS Entrepreneurship Programs along Research**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The institution has an approved research manual.	3.80	Very high
2. The institution's research agenda covers the field of entrepreneurship.	3.46	Very high
3. Faculty researchers conducted research relevant to the entrepreneurship program.	3.50	Very high
4. Faculty researchers presented entrepreneurship-related papers in local/regional/national and/or international fora.	3.52	Very high



5. Faculty researchers have published entrepreneurship-related research in a refereed national or international journal.	2.41	Average
6. Faculty researchers have prepared instructional materials (modules, software, visual aids, manuals, and textbooks) relevant to the entrepreneurship program.	3.71	Very high
7. Intellectual Property Rights laws protect the researches of faculty and students.	3.59	Very high
8. The institution has a tracer study for BS Entrepreneurship graduates for the last three years.	2.88	High
9. The institution provides opportunities for advanced studies or training to enhance faculty/staff research capabilities.	3.57	Very high
10. Faculty and students observe research ethics to avoid malpractices like plagiarism, fabrication of data, etc.	3.52	Very high
<i>Total</i>	<i>3.40</i>	<i>Very high</i>

### Extension

Entrepreneurship programs attained a very high rating (3.42) in the area of extension, as reflected in Table 6. Extension refers to the indicators of the higher educational institution along with its extension activities. Similarly, with research, extension is one of the four mandates of higher education institutions.

All HEIs have a separate extension office that monitors the planning and implementation of extension programs and activities, including that of the entrepreneurship program. In online interviews with program chairpersons, researchers found out that the extension office identifies the extension targets of each program. One program chairperson mentioned that their College has an extension coordinator who facilitates the extension activities of the entrepreneurship program. All HEIs have approved extension manuals, which contain the institution's extension services policies, extension agenda, guidelines for the conduct of extension services, benefits given to extensionists, and others. Entrepreneurship faculty and students participate in extension activities related to entrepreneurship.

**Table 6. Level of Implementation of BS Entrepreneurship Programs along Extension**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The institution has an approved extension manual.	3.77	Very high
2. The institution's extension agenda covers the field of entrepreneurship.	3.50	Very high
3. Faculty and student extensionists participate in extension and outreach activities relevant to the entrepreneurship program.	3.09	High
4. The conduct of research-based entrepreneurial extension projects and activities is sustainable.	2.48	Average
5. Faculty have served as a consultant/expert in extension projects and activities.	3.57	Very high
6. Faculty and student extensionists are involved in the planning and organization of extension programs and activities.	3.57	Very high
7. Faculty and students are involved in the implementation and dissemination of extension programs.	3.21	High

8. There is a separate unit that monitors and evaluates the implementation of extension programs and activities.	3.80	Very high
9. The program has linkages with local/national/foreign government and non-government organizations.	3.68	Very high
10. There exist a strong collaboration between the extension program implementers and the target beneficiaries.	3.48	Very high
<i>Total</i>	<i>3.42</i>	<i>Very high</i>

### Library

Entrepreneurship programs attained a very high rating (3.44) in the area of the library, as shown in Table 7. Library refers to the indicators that cover the library's concerns about the entrepreneurship program. Program chairpersons mentioned during online interviews that they always make sure the one hundred percent or more library compliance of their entrepreneurship programs. They ask faculty members to look for book titles needed in their assigned courses or sometimes ask for lists of available business books in bookstores. Libraries should not equate quality merely with collection size. Hernon and Altman (2010) note that libraries are now engaged in much more than the preservation and transition of cultural history and have a nebulous role in meeting the needs of society and the institutions they serve.

Faculty and students have access to library services online, even before the start of the Covid-19 pandemic, entrepreneurship faculty and students can already access library services online. However, HEIs strengthened online library services due to the pandemic, in fact mostly provided remote access to electronic books and electronic journals, so that faculty and students no longer need to visit the library physically. Aside from books and journals, most libraries use other resources for student learning, such as magazines for entrepreneurship and business, videotapes, audiobooks, and others. These different instructional aids are important to augment books and journals and respond to students' other learning styles.

**Table 7. Level of Implementation of BS Entrepreneurship Programs along Library**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The institution has an approved library manual.	3.34	Very high
2. Faculty and students have access to entrepreneurship and other business-related books and journals in the library.	3.63	Very high
3. The library is compliant with the required licensed librarian-to-student ratio.	3.48	Very high
4. Faculty and students have access to computers with internet connectivity in the school.	3.23	High
5. Faculty and students have access to library services online.	3.59	Very high
6. The library is adequately staffed with professionally qualified and trained personnel.	3.48	Very high
7. The library has a universally accepted library classification system with card catalogs, or a computer-based system.	3.50	Very high
8. The institution uses other instructional aids and resources available in the library.	3.20	High



9. The library has IT software and multi-media equipment.	3.45	Very high
10. The library has consortia, networking, and resource sharing with other libraries.	3.50	Very high
<i>Total</i>	<i>3.44</i>	<i>Very high</i>

### **Physical plant and facilities**

Entrepreneurship programs attained a very high rating (3.44) in physical plant and facilities, as shown in Table 8. Physical plant and facilities refer to the indicators along with the school facilities.

**Table 8. Level of Implementation of BS Entrepreneurship Programs along Physical Plants and Facilities**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. School building complies with appropriate: a. Zoning regulations, or b. Building regulations	3.86	Very high -high
2. The school maintains a campus conducive to promote the quality of its graduates.	3.57	Very high
3. The school has the following audio-visual requirements: *Overhead projector*Audio-Video Player*Sound Systems*Television and*LCD Multi-Media player	3.59	Very high
4. The institution has facilities to support services such as health, guidance, and employment/placement services.	3.88	Very high -high
5. Classrooms are well lighted, ventilated, and acoustically conditioned.	3.21	High
6. Classrooms are adequate for the student population of the program (1.5 sq. m per student).	3.45	Very high
7. The program enforces the maximum class size of 50 for the undergraduate course.	3.09	High-low
8. Sufficient supplies are provided to faculty in each classroom.	2.52	High -low
9. An outdoor educational activity area (for social, physical, cultural, military training, etc.) exists.	3.36	Very high
10. The institution has a conducive canteen/cafeteria (well-lighted, ventilated, and provided with a potable water supply).	3.23	High
<i>Total</i>	<i>3.44</i>	<i>Very high</i>

All institutions have school clinics that provide health and dental services. They also have guidance offices that give guidance to students while studying in the institution. The provision of facilities to support services such as health, guidance, and employment/placement services complies with CMO No. 19, series of 2013, or the Enhanced Policies and Guidelines on Student Affairs and Services. Cynthia and Megan (2008) confirmed a strong and positive relationship between the quality of school facilities and student achievement in English and Mathematics.

The majority of the HEI's school buildings complies with appropriate zoning or building regulations. This shows the strict compliance of higher educational institutions to zoning and building regulations to conform to the principles of safe construction.

### **Laboratory**

Entrepreneurship programs attained a very high rating (3.31) in the laboratory area, as reflected in Table 9. Laboratory refers to the indicators related to the incubation facility, laboratory manual, and other needed laboratory equipment, supplies, and materials for the entrepreneurship program.

**Table 9. Level of Implementation of BS Entrepreneurship Programs along Laboratory**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. The business incubation facility has a conference room for students' meetings.	3.52	Very high
2. The business incubation facility has computers with internet connectivity.	3.29	Very high
3. The business incubation facility has telephone line.	3.27	Very high
4. The business incubation facility has copy machine.	3.39	Very high
5. Students have access to a production area.	2.41	Average
6. A faculty or staff is assigned to the incubation facility.	3.57	Very high
7. The incubation facility is large enough to seat at least 10% of its graduating class at any given time.	3.66	Very high
8. There is a designated selling area for entrepreneurship students.	3.00	High
9. Laboratory Operation Manuals for the faculty and students are provided in each laboratory.	3.25	Very high
10. There is an approved Annual Procurement Plan (APP) for laboratory equipment, supplies and materials.	3.71	Very high
<i>Total</i>	<i>3.31</i>	<i>Very high</i>

Public HEIs prepare annual procurement plans to ensure the one hundred percent utilization of their budget. Program chairpersons are the ones who lead the preparation of the annual procurement plan for their entrepreneurship programs. All respondents mentioned that they use CMO 18, series of 2017, as a reference to determine the materials to be procured. Program chairpersons also use the gaps in previous accreditation to identify equipment, books, and other materials needed. The majority of the respondents also mentioned that they have an incubation facility; however, in an interview conducted, a program chairperson mentioned that in the case of their entrepreneurship program, the size of the incubation facility is not enough to accommodate the needs of his entrepreneurship students. Entrepreneurship programs identify specific locations inside their campuses to serve as a selling area for entrepreneurship students enrolled in the Business Plan Implementation. Most designated selling areas are located inside or near the school cafeteria since most entrepreneurship students pursue food businesses and since the cafeteria creates foot traffic. Entrepreneurship programs also participate in and organize trade fairs inside and outside the school.

### **Administration**

Entrepreneurship programs attained a very high rating (3.49) in the area of administration, as shown in Table 10. Administration refers to the indicators along with the administrators involved in the entrepreneurship program.

**Table 10. Level of Implementation of BS Entrepreneurship Programs along Administration**

<i>Indicators</i>	<i>Weighted Mean</i>	<i>Interpretation</i>
1. There is a full-time program dean/head.	3.77	Very High
2. The Dean has a doctoral degree in business administration/management or in a related field.	3.23	High
3. The Dean has at least five years of teaching experience at the tertiary level.	3.64	Very High
4. The Dean has at least five years' experience in Administrative or Supervisory capacity in an educational or business enterprise.	3.36	Very High
5. The Dean hold a licence issued by the PRC, where applicable.	3.59	Very High
6. The program chair has a bachelor's degree in business.	3.20	High
7. The program chair has a Master's degree in Business Administration/Management or in any related field.	3.55	Very High
8. The program chair has at least three years of teaching experience at the tertiary level.	3.61	Very High
9. The approved annual budget of the institution covers the program.	3.55	Very High
10. The institution has an approved action plan that covers the program.	3.41	Very High
<i>Total</i>	<i>3.49</i>	<i>Very High</i>

Results revealed that all entrepreneurship programs have full-time program deans. All entrepreneurship programs adhere to the requirement that the teaching load of the Dean should not exceed twelve units per semester.

Most Deans of entrepreneurship programs are holders of doctoral degrees in business management or related fields, such as business administration and hospitality management. However, some Deans have postgraduate degrees in the field of education. During interviews, the program chairpersons were aware that the Dean should have a doctoral degree in business administration/management or a related field. Still, they mentioned that this is something beyond their control. Most program chairpersons in entrepreneurship have bachelor's degrees in business or related fields, such as entrepreneurship, accountancy, and office administration.

### Challenges of BS Entrepreneurship Programs

Most faculty members mentioned that planning is usually done when there is an upcoming CHED or accreditation visit, and the program should prepare proof of compliance with the requirements; hence, only very few plans were being implemented.

Most respondents mentioned difficulty in teaching specific courses as a challenge in the area of faculty, and there are instances when the faculty finds it hard to deliver courses because they are not BS Entrepreneurship graduates and have not experienced studying some courses. Along with the curriculum, faculty members claimed that they are not knowledgeable on how to incorporate GAD into the entrepreneurship curriculum. Some faculty members expressed difficulty in monitoring and grading students' business plan implementation activities, so they rely on the reports submitted by their students. Most respondents also mentioned the difficulty of requiring students in the provinces to focus on innovative product development during their business plan writing because these ideas usually entail higher capital that they cannot afford for implementation.

The common challenge being faced by entrepreneurship programs in support to students is the absence of an organization where all entrepreneurship students from different HEIs in the Bicol region can be part. Faculty

members mentioned that they lack time to do research because of their workload. Most respondents mentioned that they find it hard to publish research in journals because they do not know how to choose the right journal, while others have had experience in publishing but were demotivated by the tedious revision process.

Most faculty members mentioned the lack of entrepreneurship books written by Filipino authors is a challenge to them since some of the concepts in foreign books are not applicable in the Philippine setting. Faculty members mentioned that the lack of production areas for food and non-food businesses is a challenge for both the faculty and students. Because of the lack of production area, students resort to developing food products that are easier to prepare, and faculty members find it hard to recommend improvements that would entail production facilities. The lack of student interest in the entrepreneurship program is the common challenge mentioned by most respondents in the area administration. Some of the reasons include not being attractive among students, a non-board program, and because of the culture of being employed among Filipinos.

### **Best Practices of BS Entrepreneurship programs**

Some schools have established a memorandum of agreement with their local government units and other organizations, such as the Camarines Sur Chamber of Commerce and Industry and the Metro Naga Chamber of Commerce. There are HEIs in the Bicol region that are ISO certified. The ISO has helped an entrepreneurship program improve through the standardization of entrepreneurial educational practices. The majority of the HEIs let their students attend seminars and training organized by government agencies such as the Department of Trade and Industry (DTI), the Department of Science and Technology (DOST) and the Department of Agriculture (DA). Non-government agencies such as the Camarines Sur Chamber of Commerce and Industry (CSCCI) are also involved. Some of the topics involved are product development, marketing strategies, technopreneurship, and business services. One entrepreneurship program implemented a saving scheme for students to save money for capitalization in their business plan implementation. Some schools in the Bicol region applied and were accredited by the DOST-Academe Technology-Based Enterprise Development (DATBED) program. Because of this accreditation, the DOST provides funds to the HEI to be given as loans with zero interest and zero collateral for students. Students should submit their application and qualify for the criteria of the DATBED program before they are granted student loans. One HEI has its own set of approved policies for business plan implementation, which will guide both faculty and students in facilitating the course. The said policies involve the program's policies for selecting business advisers, a set of student requirements, and a grading system. One HEI involved in the study has included the course on-the-job training in their entrepreneurship curriculum. There were HEIs who participate in local and national business plan competitions. For instance, three HEIs participated in the Business Idea Development Award (BIDA) organized annually by the Philippine Chamber of Commerce and Industry. One HEI in the Bicol region won first place in BIDA 2017. Some schools assist their entrepreneurship students in registering their products as utility models. The Shared Service Facilities (SSF) Project is a flagship project of the Department of Trade and Industry to improve MSME productivity and efficiency through better access to technology. There are some HEIs that applied and were granted a shared service facility from the DTI. The SSF was open to micro, small and medium enterprises, and entrepreneurship students can also use it for their production.

### **DISCUSSION**

Entrepreneurship programs in the Bicol region obtained very high ratings in the implementation of their programs along the ten areas of accreditation. The common challenges encountered by entrepreneurship programs include lack of planning, difficulty in teaching particular courses, difficulty in hiring entrepreneurs and industry experts as faculty, lack of business experience, integrating GAD in the curriculum, difficulty in grading business plan implementation, financial constraints of students, lack of student organization, lack of time for research, lack of knowledge in research publication, lack of Filipino books, lack of production facilities and poor student interests towards the entrepreneurship program. Best practices of entrepreneurship programs in the Bicol region include certification from the International Organization for Standardization, utilization of seminars and trainings to augment student learning, assistance for capitalization, application for shared service facility, memorandum of agreement with organizations, approved policies for business plan implementation, inclusion of on-the-job training in the curriculum/ industry immersion, registration of students' utility models and participation to national competitions.

Based on the findings and conclusion, entrepreneurship programs should prepare an action plan to identify their targets and strategies along with the requirements of the CMO, the accreditation, and other considerations. Entrepreneurship programs should also encourage faculty members to gain business or industry experience through industry immersion or hire new faculty members with business or industry experience. They may also train entrepreneurship faculty on how to integrate gender and development into the program. Furthermore, they may formulate their guidelines or policies for the course business plan implementation and grading system. The program should look for ways to assist students in looking for capital such as be accredited by the DATBED program or create its own saving scheme. HEIs should also assist entrepreneurship faculty members in publishing their research in refereed national or international journals. HEIs may also encourage faculty to conduct research that will lead to entrepreneurial and sustainable extension projects and instructional material development. Entrepreneurship programs may explore ways to get support from other government offices to get funding for a production area, such as applying for a shared service facility or may do facility sharing with other programs or nearby schools.

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