

# Five Year Development Plan for Batangas Province Science High School: A Case Study

Simeona Rechie Cadiz Ojales San Nicolas Senior High School, Batangas, Philippines

Abstract: This study dealt with the assessment of the present status of Batangas Province Science High School along the areas of vision-mission, philosophy and objectives. Also included were the assessments on the faculty and staff development, curriculum and instruction, instructional programs, co-curricular activities, student development and services, physical plant and facilities, organization and management, research capability, and community extension program. Having identified the strengths and weaknesses, the output of the study was a five-year development plan for the school.

*Keywords*: Development plan, Internal analysis, strengths and weaknesses, opportunities and threats

#### 1. Introduction

Part of the vision and mission of every school in the Philippine Science system is to provide free quality education to young scientific talents. It endeavors to pursue its mission of developing the Science High School scholars to have a scientific mind and a passion for excellence, dedicated to the service of country, and committed to the pursuit of truth through the nurturance of competent faculty and staff. Tasked to produce competitive and skilled students, they continuously nurture science inclined individuals and develop them into science professionals and productive leaders of the nation. Public science high schools are regarded as the place for the cream of the crop. They are the breeding ground for future science and technology leaders of the country. Enrollment in these schools usually requires passing an entrance exam.

Every public science high school in CALABARZON is a specialized high school in the Philippines. Its curriculum is set out to meet the needs of the students and society as a whole. It is intended to ensure that the student, upon graduation from science high school will be able to learn more independently, acquire academic excellence and develop the capability to cope with new knowledge and technology. These schools are known for their active participation in various national and international science, technology, and mathematics competitions. These institutions also produce the best professionals and solid workforce of scientists, mathematicians, engineers, and other skilled professionals. Batangas Province Science High School is one of the nine (9) public science high schools in Region IV-A CALABARZON. It is a complete secondary Science High School situated in Dacanlao, Calaca, Batangas. globally competitive students. The success it is

reaping today is the cumulative effort of all its stakeholders.

In institutions such as this, good school management and effective teachers are essential to bring about greater school improvement and better student achievement. These are essential for a successful Science High School to turn into a center of excellence. The academic performance of schools cannot be improved without providing sufficient individual support to the learners and educators. The responsibility of crafting an effective and well-performing school lies in the hand of the school administrator with the support from all its external and internal stakeholders. Along with this thought, a school leader needs tremendous qualities not only on professional competence but also skills in human relations and community linkages. The realization of the established goals of the school greatly depends on the skills of the principal in performing his/her academic leadership and administrative role and by planning all the goals and objectives of the school.

The researcher believes that the quest for educational reforms must take place not only within the educational system but also with all its stakeholders, and that the effectiveness of school performance and student achievement depends very much on their dynamic qualities. Being a school administrator of one of the Science High Schools of CALABARZON, the researcher believes that there is still a need to enhance and revisit the leadership capabilities to further improve the performance of the school. A school manager being a "driver" should know where the organization leads and should therefore anticipate the future and make concrete policy, programs and services suited to the needs of the school, and more specifically the students which will bring about growth and improvement.

The researcher also believes that quality education requires an excellent development plan. Reforms through proper planning are the only way to put BPSHS in a better place. It is believed that a comprehensive study of the institution would uncover the true condition of the school. Thus, it is a challenge to assessing the status of BPSHS, analyze the factors that limit or push its growth and development, and formulate a five-year strategic development plan. This will pave a way to have a more relevant and specialized system of operation in consonance with the basic mandate of providing excellence in instruction. This will also chart existing and future programs geared towards its development.

In this situation, Batangas Province Science High School



must have the capacity to righteously diagnose its present status looking into its strengths and weaknesses. It must look into the factors affecting its performance and the threats and opportunities these present. BPSHS needs to find long term solutions to their problems. It is in these premises that the researcher was prompted to conduct a case study that will strengthen and improve different aspects of Batangas Province Science High School and devise a five-year development plan. This could be used to improve the academic performance of learners and teachers. This will serve as a blueprint of and together fulfill its collective mission and vision to compliment other sectors of society towards the total development of the learners and educators and the entire institution. It shall, therefore, serve as a channel which will mold the future of the institution covering the school years 2015 to 2020.

Finally, this plan would be significant and useful only if the implementation is guaranteed by those who will take responsibility in realizing it. The success of the five-year development plan will depend on the magnitude of commitment of each person who is involved at every stage of this study. The key word, then, is commitment of the human element which towers over all the determinants of development.

This study focused on the assessment of Batangas Province Science High School and aimed to formulate a five-year development plan for 2015-2020. Specifically, it sought answers to the following questions:

A. How may Batangas Province Science High School's external environment be described in consideration of the following:

1) Demographic and socio-economic profile of Calaca, Batangas;

2) School selection and preference of BPSHS parents;

*3)* Opportunities and threats/constraints for BPSHS; and enrollment?

*B.* What is the assessment of the stakeholders on the internal environment of BPSHS in terms of the following components:

- 1) Vision and mission;
- 2) Philosophy and objectives;
- 3) Faculty and staff development;
- 4) Curriculum program;
- 5) Instructional programs;
- 6) Student development and services;
- 7) Physical plant and facilities;
- 8) Organization and administration; and
- 9) Research capability; and
- 10) Community extension program?

## 2. Synthesis

The conceptual and research literature gave the researcher rich knowledge and contributed significantly to the present study. These served as frames of reference and blueprint on how the research was to be undertaken. The theories and principles taken from the different authors provided information on the development of study.

The ideas of gained from the different DepEd Orders and memos used in this study with regards to the principles, policies, guidelines and implementations relative to science high school system helped to point out the direction of the present study on the assessment of Batangas Province Science High School.

As to foreign and local studies reviewed their relevance to the present study flawed in the methodology upon which the study was anchored. On this part, the researcher gained the necessary concept on how to adopt simple idea into a wider one.

As to work values of principals, Thornton (2005), Kessler (2004) and Nicholson (2003) statements contributed significantly to the concern on characteristic of a school leader. Hardwick (2002), Fajardo (2003), Middlewood (2003), Kauffman (2005) and Hughes (2006) and Franco (2006) enriched the researcher's concept on importance of educational planning for the success of the organization is closely related to how management is able to foresee and develop appropriate strategies. Meanwhile, Sybouts (2002), Lerner (2007), Marshall (2003), Romney (2001) and Bryson (2005) insights on strategic planning contributed much to the researcher's idea of bringing direction and focus to the organization.

Also found relevant in this study were reviewed studies which substantiated the result of this study. In RA No. 9155, the roles and responsibilities of the school head was cited. Technical assistance must be embedded in the formulation and planning, curriculum and learning management, quality assurance and accountability.

The studies of Silang (2005) and Conahap (2012) which made use of Franco's planning model in formulating a development plan for their respective schools gave direction and insights on how Franco's strategic planning model was used as a framework in concrete school setting. Their studies also provided insights on what areas of improvement the school should focus on.

The studies Munoz (2009), and Pagaringan (2012) gave the researcher a rich knowledge and wider view on the effectiveness of the implementation of science curriculum and how this program can be improved.

The study of Ogena (2010), Rhonda (2010), Andujare (2010), Tan (2006), and Paningbatan (2004) focused more on the extensive assessment and evaluation of their respective subject schools. Through these assessments, they identified the areas in which their schools needed improvement. These gave the researcher rich knowledge and insights on the importance of assessment and evaluation in any development planning. It provided additional inputs for the researcher in developing the evaluation tool for this study. All these were valuable source and reference of the researcher in conducting survey and gathering data for the present study.

The above cited studies had similarities with the present study because most of them, if not all, investigated the effectiveness of managing Science High Schools. In contrast,



this study differs from those previous studies because of the following points: The present study limited itself to an investigation of Batangas Province Science High school. The previous studies made use of either the criteria or component of school programs or the variables of school effectiveness to assess the subject school. In contrast the present study attempted to go further by using them both in the assessment of the said institution.

The literature and studies reviewed in this chapter were found to be very significant to the present work. All of them gave valuable insights that helped her gain a deeper understanding of the intricacies of development planning. They motivated the researcher to work harder for the improvement of the institution by following a well –prepared development plan. The ideas and facts from the reviewed literature deepened the understanding of the research and shed light on coming up with a five-year strategic development plan for the institution. These shaped the direction leading to the realization of the present study.

It appeared from the foregoing review of research literature that despite of their similarities in concepts, the current study did not duplicate of anybody's work since the latter differed in setting, instruments used and variables included in the study. Most of the studies reviewed concentrated on assessing a conventional high school or institution while this study focused exclusively on case analysis of the Batangas Province Science High School, one of the nine Science High schools in Region IV-A CALABARZON aimed towards improving the school performance and student achievement and all of its aspects.

#### 3. Research Design

The researcher employed the descriptive survey method in this academic undertaking on the belief that this is the best method to use. The study assessed the present status of Batangas Province Science High School and its different qualitative and quantitative aspects. The design held much in pinpointing the strengths and weaknesses of the school that served as guide in preparing the five-year strategic development plan for the institution. School was formulated.

# A. Subjects of the study

In this study, former and current teachers, parents and students who are currently enrolled and some alumni and their parents were the subjects. There were a total of 324 respondents broken down to 130 students, 80 parents of those who currently enrolled in the institution at the time of the study, 48 alumni and their parents, and 18 teachers from Batangas Province Science High School. Respondents were randomly selected.

## B. The instrument of the Study

The study used a self-constructed questionnaire that elicited data needed in determining the past and present status and the qualitative aspects of Batangas Science High School. The other two means with which information was gathered were interview and focus group discussion that supplemented the gathered data.

## 4. Results/ Findings

From the gathered data, the following findings were revealed.

## A. Assessment of the External Environment

The areas covered in assessing the external environment were the demographic and socio-economic profile of Calaca, Batangas, school selection and preference of BPSHS parents, opportunities and threats or constraints for BPSHS and its enrolment history.

## 1) The Demographic and socio economic profile of Calaca, Batangas

Calaca Batangas is one of the first class municipalities in the province of Batangas. Some big industries have been risen in the Municipality. With these developments, it is now earning a reputation as an Industrial Estate. It has so much potential for development. In the comprehensive plan of the municipal government, it aims to become a city in the near future.In general, the delivery of basic education in this Municipality showed positive level of condition.

## 2) School Selection and Preference of BPSHS Parents

Findings showed that parents considered high quality of education/instruction, educational reputation of the school or its prestige, special curriculum, and belief in the vision and mission of the school as the most important factors affecting their choice of school for their children as evidenced by weighted means of 4.91, 4.86, 4.75 and 4.71 respectively. They considered convenience and safety as an important factor at a weighted mean of 3.48. However, factors such as friends or relatives were alumni, teacher-student relationship, parent-teacher /administrator relationship and recommendation by school heads and/or teachers were considered less important at weighted means of 2.42, 2.26, 1.97, and 1.68, respectively.

3) Opportunities and Threats or Constraints identified in the External Environment

The focus group discussion and interviews from the principals and teachers of BPSHS yielded the following opportunities and threats or constraints to the BPSHS.

The assessment of the external environment presented several opportunities. First was the fact that Calaca was chosen by the Provincial Government to be the town where Science High School was built because of its being one of the first class municipalities of the Batangas Province. With the municipal government's vision of transforming the municipality into a city with a functional role in the Province as an industrial estate, the population is seen to steadily rise and there will be a sure demand for quality educational services.

Secondly, Calaca is located in neighboring towns where most scholars reside. In terms of educational opportunities, BPSHS is the school for the deserving scholars of nearby municipalities. This opportunity can only be maximized if it will maintain its academic excellence and better school performance.

Thirdly, quality education had always been a top priority of every family in the country which was equally true among the



people of nearby towns. This was evidenced by the responses of parents on their reasons in choosing a school for their children. Aside from the scholarship, on top of their consideration was the quality of instruction.

Fourth was the development of the vision of Calaca, which alongside economic and industrial development emphasized on people development. Assistance had been extended not only to the students but to all families as well.

As for the threats, first was the fact that the school does not have its own land title but still using it as usufruct. In spite of the fact that the possibility of having a construction of new buildings can be extended by the national government and private sectors, it cannot be done due to unavailability of lot.

The mushrooming of public secondary schools was also a threat for more teachers were transferring to nearby schools due to promotion which they cannot get in science high school due to limited number of students and personnel. Insufficient space for possible construction of building due to unavailability of lot was another threat found in the study.

New regulations may require new facilities and teaching standards. This could plunge the school's academic competiveness and erode its reputation of academic excellence. It could be due to limited national item position allotted to the school due to its low number of students.

#### 4) Enrolment

There was a minimal increase of enrollment from its first year of establishment up to present year. This was due to the fact that there were only limited slots for each year level because students here are all scholars funded by the Provincial Government of Batangas. Generally, the study found that the enrollment will remain in the next five years unless the Provincial Government allots bigger budget for the said cause.

#### B. Assessment of the Internal Environment

The following assessment of the internal environment covered ten areas of the school:

## 1) Vision, Mission, Philosophy and Objectives

For the alumni, they observed that the vision and mission were understood, accepted and subscribed by administration, faculty, staff, parents and students to a great extent obtaining the highest weighted mean of 4.36. For the students, parents and teachers, with the highest weighted mean of 4.94, 4.73 and 4.33, respectively, they observed that the mission and vision was reflective of the constitutional provision on education to a very great extent.

On the other hand, alumni and parents observed that philosophy and objectives were scientific and produced empowered graduates to a great extent at 4.30 weighted mean t but students and parents observed that these were manifested to a very great extent at weighted means of 4.94 and 4.79, respectively.

# 2) Assessment of the External Environment. Faculty and Staff Development

Data showed that the most of the respondents assessed their BPSHS faculty and staff development as manifested to a great extent with composite means ranging from of 3.84 to 4.15. Interestingly, they assessed that performance evaluation for teachers was conducted to a very great extent with the highest weighted mean of 4.82. Providing equal opportunities for teachers to participate in professional growth and advancement program for teachers in the division, regional and national level were moderately rated by both parents and teachers, with weighted means of 2.80 and 2.89; and conducting action research on various concerns only to a moderate extent with lowest weighted means ranging from 2.80, 2.89 from parents and teachers.

## 3) Curriculum Program

All variables under curricular programs were assessed by the alumni as manifested to a great extent while the students assessed the variables as manifested to a very great extent. The composite means of 3.99, 4.29 and 3.63 indicated that the alumni, parents and teachers assessed the curricular programs of BPSHS as manifested to a great extent while the students assessed them as manifested to a very great extent at a composite mean of 4.77.

## *4) Instructional program*

With regards to instructional programs, the composite means of 4.17, 4.12 and 3.75 indicated that the instructional programs of BPSHS were assessed by the alumni, parents and teachers to be manifested to a great extent while for the students they were manifested to a very great extent as indicated by weighted mean of 4.77.

#### 5) Co–curricular Programs

The composite means of 3.97, 3.96 and 3.65 indicated that the co-curricular activities of BPSHS were assessed by the alumni, parents and teachers to be manifested to a great extent. The students found these manifested to a very great extent as indicated by the weighted mean of 4.83.

# 6) Student Development and Services

The composite means of 3.85, 4.20 and 3.74 indicated that the student development of BPSHS was assessed by the alumni, parents and teachers to be manifested to a great extent. The students assessed these to a very great extent as indicated by a weighted mean of 4.68.

The composite means 3.82., 4.24, 3.83 and 3.90 indicated that the student services of BPSHS were assessed by the students as manifested to a great extent.

# 7) Physical Plant and Facilities

The alumni, students and parents assessed the physical plant and facilities of BPSHS as evident at composite means of 3.72 and 4.28 respectively while for the students, the physical plant and facilities are moderately evident as indicated by the 3.40 composite mean. In the acquisition of school site for possible expansion should be given much attention.

8) Organization and Administration

The respondents assessed the organization and management of BPSHS as manifested evidently with its composite means of 4.20, 4.42 .4.24 and 3.94 respectively. According to them, very evident are Performance Appraisal System for teachers is religiously undertaken and reviewed at 4.15.4.38. 4.46 and 4.56



respectively weighted mean, and class programs are well prepared for teachers and students.

# 9) Research Capability

The assessment of the alumni, parents and student's respondents revealed that the research capability of PBSHS is evident as indicated by the composite means of 3.86, 3.67 and 3.93, respectively while the teachers assessed it as moderately evident as indicated by the composite mean of 3.10.

## 5. Conclusion

Based on the findings of the study, the following conclusions were drawn:

- 1. Batangas Province Science High school is strategically located and has much potential for development afforded by a fast moving economic progress envisioned by the municipality.
- 2. The students assessed the internal environment of BPSHs to a very great extent while the stakeholder rated it to a great extent. In general; the school performance in the different areas is satisfactory.
- 3. There are significant differences in the responses of alumni, students, parents and teachers regarding the internal environment of BPSHS
- 4. The identified strengths of Batangas Province Science High School are the attainment of Vision, Mission, Philosophy and Objectives and the weakness is on the involvement of faculty in research activities.
- 5. The proposed five-year development plan focuses on the different components in the internal environment which

may be looked into and be used for improvement of the whole BPSHS system.

#### 6. Recommendations

Based on the conclusions of the study, the researcher humbly recommends the following:

- 1. The proposed five-year development plan may be looked into and be hopefully implemented for the improvement of the whole BPSHS system.
- 2. The said development plan shall be regularly monitored and evaluated to assess the success of the plan.
- 3. Future researchers are encouraged to formulate comprehensive plans for their organizations.

#### References

- [1] Franco, Ernesto et al. (2006) Educational planning. Quezon City. National Bookstore,
- [2] Hughes A.J. (2006) Keys to the might of motivational teaching for excellence. New York: Merrill Publishing Company.
- [3] Kauffman, Roger. (2005) Planning educational systems. Pennsylvania; Technomic Publishing Company, Inc.
- [4] Macarandan, Ernesto, (2004) Educational planning, Quezon City: RP Garcia Publishing Co., Inc.
- [5] Paningbatan et. al., (2004) Secondary science education curriculum in the Philippines, Naruto University Education, Japan.
- [6] Rhonda (2010) The Philippine human development report. National Community Education Association.
- [7] Rowley, D.J. (2004), Strategic change in colleges and universities. San Francisco CA: Jossey- bass Publishers.
- [8] Sybouts, Ward. (2002), Planning in school administration. New York: Greenwood Press.