

Effectiveness of the Integration of Religion as Core of the Curriculum (RCC) in Learning Biological Concepts

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ABSTRACT: *The main objective of the study is to explore the perception of the second year students of San Roque Catholic School on the effectiveness of the integration of Religion as the Core of the Curriculum in their learning of Biology concepts. The researcher made use of the descriptive-survey method of research. The instrument used was locally constructed questionnaire prepared by the researcher and was subjected to expert validation by experts in the field of Biology. There were a total of 200 respondents composed of 103 male and 97 female students in this study. The data collected were sorted, tallied and analyzed according to the objective of the study. The statistical tools used were percentage, mean, and F test. Based on the findings of the study the following conclusions were drawn: Majority of the respondents are between 13 – 15 years old, male, Catholic, and graduate of public schools. The students perceived that it is effective when RCC is integrated in their learning of biological concepts. The study reveals that there is no significant variation in the type of grade school where they graduated from and their religious background in the integration of RCC in learning Biology concepts. The study also reveals some issues and concerns that the students encountered when their teacher integrate RCC in their Biology class. The study also identifies implication that will help the students in learning Biology concepts. In the end based on the findings of the study, conclusions and recommendations were drawn for the improvement of instruction in Biology class.*

KEYWORDS – biology, effectiveness, integration, perception, religion

I. INTRODUCTION

Education is essential and indispensable part of life. It is a systematic process in which students acquires knowledge, experience, skill and sound attitude and makes an individual civilized, refined, cultured and educated. In the Philippines, the educational system was patterned both from the educational systems of Spain and the United States. The Department of Education envisions every learner to be functionally literate, equipped with life skills, appreciative of arts and sports, and imbued with the desirable values of a person who is makabayan, makatao, makakalikasan, at maka-Diyos. The vision is in line with DepEd's mission to provide quality basic education that is equitably accessible to all people. In which it will lay the foundation for lifelong learning and service for the common good.

In the Philippines, Catholic school has developed and made use of a system in developing and implementing Religion as the Core of the Curriculum (RCC) aside from following the mandate of the DepEd in term of its curriculum, the school also has the privilege to make some modification in its curriculum and one of this are to include Religion as one of its subject. The challenge is not just to teach religion but to make those who learn it, live it. Catholic parochial schools became beacons of the true knowledge of the faith where Religion has given focus and attention and has been ardent on the perennial watchword that RCC as the breadth of its education ministry will form not only the minds, but the total well being of students as well as academic

and non – academic personnel. Times indeed have by, and large changed in a sense that Religion as Curriculum, as an instruction, is not anymore an exclusive ministry of priests and sisters. Religion as the core of the Curriculum aim to effectively instruct, evangelizes, and forms the young as well as the whole academic community in parochial schools. It must be intensify in all means possible. It then becomes the practice of every parochial school to emphasize religion as the core of the curriculum; one example is by integrating gospel in their lesson in every subject. Every teacher is encouraged to use gospel reading as they go along with their lesson, whether they are in the motivation part or the generalization aspect of the lesson.

Having been teaching science subject for eight years, the researcher used gospel reading or bible verse as one of the strategies in teaching science concepts. The researcher in some of his lesson used bible verse or gospel reading as its motivation. It can also be used in the lesson proper itself, in the integration of values, or in the generalization part of the lesson. The researcher observed that when bible verse or gospel reading is incorporated in the lesson some students tend to ask question on the usage of bible despite that their subject is Science. Some students also have confusion whether their subject is Science or Religion. Some students on the other hand, like to study Science concepts particularly in the lessons of Ecosystem when the teacher used bible verse as part of their lesson. They become interested in the lesson and see the connection of the bible verse used to their topic in Biology and lead to their understanding of the lessons. The researcher realized that the students have different views on the implementation of RCC in their learning of Biology concepts. The researcher also realized that it is appropriate to conduct a study that will explore students perception on the integration of RCC in their Biology class.

II. THEORETICAL FRAMEWORK

The study draws theoretical underpinning from Wilber Integral Theory. Integral theory seeks to integrate all of human wisdom into a new and emergent worldview. This theory able to accommodate the gifts of all previous worldviews, including those which have been historically at odds such as science and religion, eastern and western, and pre-modern, modern and post-modern view. For instance though Religion and Science are two different aspects, integration of religious instruction like gospel reading in Science is still possible as long as they are not contradicting one another but instead they help the students in learning the lesson.

According to Integral Theory by an American philosopher and writer, Ken Wilber, the word integral is a comprehensive, inclusive, non – marginalizing and embracing. Integral approaches attempt to comprise as many perspectives, styles and methodologies as possible within a coherent view of the topic. Integral approaches in a certain sense bring together an already existing number of separate paradigms into an interrelated network of approaches that are mutually enriching. Integral Theory is integral in a multiple sense. It integrates spirituality and science, or more precisely the pre-modern, modern, and post-modern ways of knowing thus creating a post – postmodern stance.

III. REVIEW OF RELATED LITERATURE

Religion in Teaching Biology Concepts

In his paper “Biology and Religion” published in the book “The Cambridge Companion to the Philosophy of Biology” by Hull and Ruse (2007), Pennock stated that the historical, conceptual, and cultural interplay between biology and religion involves a complex and philosophically fascinating set of relationships. Certainly the simple view that religion has uniformly been a hindrance to biological research is an unfair caricature. Religion has sometimes had a positive effect, often indirectly stimulating or even directly encouraging scientific research of the biological world. Similarly, biology has had a profound effect on religion, sometimes offering challenges that require believers to reassess basic theological assumptions. Scholars have examined both directions of influence, finding both expected and unexpected connections.

Pennock (2007) also acknowledged that one of the best cases by which to examine the interplay between science and religion is the ongoing religious controversy over evolution and creation. Although this controversy is often stereotyped as little more than a simple attack upon biology by naïve biblical literalists, this

superficial view misses the way the battle distills the essence of the deep conceptual divisions in ways that people conceptualize and deal with scientific and religious worldviews and their implications. He also emphasized that it is important to recognize the extent to which most mainstream religions have already accommodated evolutionary biology. Even Christian theology, for which evolution might be thought to pose the greatest challenges, has for the most part made peace with the findings of Darwin and the evolutionary biologists who have followed. Mainstream Christianity has done this in much the same way that it eventually came to terms with the earlier challenges from physics and astronomy. Rather than following a simplistic reading of Scripture, religious thinkers have followed Galileo's advice that truth should not contradict truth and that believers should allow God to speak through the book of the world and not just the book of the word. Rather than insisting that God must have used a direct form of miraculous creation to bring biological complexity, they have taken a more broad-minded and generous view of God's powers of creation.

Another ongoing controversy presented by Pennock (2007) is the issue about euthanasia and physician-assisted suicide. The biological notion of brain death, for instance, continues to meet resistance from religious conservatives, as does the practice of removing life-sustaining technology or hastening death of the terminally ill by lethal injection. Only God should decide who should live and die and when a life is over. Similarly, for many believers, only God should decide when a life may begin. Moral objections against contraception, in vitro fertilization (IVF), and reproductive cloning in large measure may not usurp God's powers to create new life.

In his paper, Pennock (2007) added that Belief in God will not go away, because the religious impulse is hard-wired in the biology of the human brain. Some suggest that this is the common biological origin of all religions. Theological responses range from taking it to be suggestive that God is both real and reachable, to criticizing it as a form of scientism. Critics question the appropriateness of trying to measure mystical experience, suggesting that it is a mistake to think that theological notions of the transcendent could correspond to empirical observations.

In an article by Jeffrey Kluger entitled "The Biology of Belief" published in the Time Magazine (February 2009), he stated that when a person pray and meditate enough and some changes in the brain become permanent. Long-term meditators — those with fifteen years of practice or more — appear to have thicker frontal lobes than non meditators. People who describe themselves as highly spiritual tend to exhibit an asymmetry in the thalamus — a feature that other people can develop after just eight weeks of training in meditation skills. Better-functioning frontal lobes help boost memory. In one study, a scanned brain of people who complained of poor recall when they underwent meditation training, and then scanned again observed that the lobes bulked up, and memory improved.

Religion as Core of the Curriculum

In the Gospel of Matthew Our Lord Jesus Christ said, "Go, then, to all people everywhere and make them my disciples: baptize them in the name of the Father, the Son, and the Holy Spirit, and teach them to obey everything I have commanded you". In the vision mission statement of MaPSA, the challenge of bringing the gospel to every student is manifested. In the Spirit of Communion, an institution who take pride linking arms and joining hearts in order to strengthen the ministry of Catholic education in the Ecclesiastical Province of Manila and strive to excel in academic pursuits within the context of the reign of God. In the State of Mission, to confront the challenge to live up and reaffirm commitment to the program of evangelization and draw all students, administrators, personnel and teachers to the "Fullness of Life" catechesis through the Pondo ng Pinoy. In the Service of the Young, take on the yoke of deepening the life of faith in children and young people and becoming center of excellence of learning and creating an environment where justice and development are emphasized. The Manila Archdiocesan and Parochial Schools Association (MaPSA) envisions itself as a Communion of Schools, in mission of promoting evangelized globalization in the light of the Church's love and preference for the poor.

In view of the above vision, MAPSA is committed to: 1.) Assist its school members in their ministry of accompanying the human person towards his/her total development with emphasis on moral conscience and maturity in faith; 2.) Promote quality and excellent academic and non-formal education programs pursuant to constitutional norms, national development goals and the guidelines set by the Catholic Church; 3.) Strengthen religion as the core of the curriculum; 4.) Recognize co-partnership among the laity, religious and clergy and; 5.) Exercise dynamic educational leadership, characterized by creative fidelity, unselfish service, and responsible stewardship grounded in faith and spirituality.

Synthesis

In view of the related literature presented, science education new methods and approaches have also been found to result in favorable attitudes of students toward science and may interest the learner that will help them understand the lesson. In connection with this, the Manila Archdiocesan and Parochial School Association implemented the initiative making of Religion as the Core of the Curriculum in all academic subjects like Science, Mathematics, and English. The purpose of the church and mission of Catholic education is to turn every students into little Christ, and to continue the process of transformation in Christ that began in baptism. In which the Catholic schools will help to develop, in both students and staff, the character of Christ. A Catholic Institution must have the following essential elements: 1. A Christian inspiration of the entire school community, 2. Religious instruction integrated into the over-all education of the students, 3. Fidelity to the Christian message as it comes to us through the Catholic church, 4. An institutional commitment to the service of the people of God and of the human family in their pilgrimage to the transcendent goal which gives meaning to life and 5. A canonical element with recognition by a competent ecclesiastical authority. Science and Religion though as of now there still continuous debate whether they can connected with one another can presume two things; there are separate and distinct and non-overlapping subject matters which distinguish the two subjects and science is about "the empirical constitution of the universe" and religion is about the "search for proper ethical values and the spiritual meaning of life."

IV. RESEARCH METHODOLOGY

The researcher utilized the descriptive survey method of research. This method is the most appropriate one that deals with the present problems facts and behaviors of the respondents under study. A validated self-constructed questionnaire was used as a primary data gathering tool. The perception of students on the effectiveness of the integration of Religion as Core of the Curriculum in learning Biological concepts was identified in terms of promoting students interest of the relevance of science in life, learning science concepts, developing critical and creative thinking skills, understanding human interactions and their relationship with the environment and applying human interaction and their relationship with the environment.

Furthermore, the study aimed to identify the issues and concern of the program and to improve further and minimize the issues and problems that linger in its implementation. In the end based on the issues mentioned in the study, implication and recommendation for the improvement of the integration of RCC in Biological concepts will serve as an output of the study.

V. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Perceptions of Students on the Integration of Religion as Core of the Curriculum in Learning Biological Concepts

In the following tables the perceptions of the students on the integration of RCC in learning biological concepts will be shown.

Table 1 Distribution of the Respondents Perception in terms of Promoting Students Interest of the Relevance of Science in Life

	Promoting students interest of the relevance of science in life.	WT.MEAN	INTERPRETATION
1.8	Applying bible verse is effective in getting students' interest in the topic about Protecting and Conserving Ecosystems.	3.39	Effective
1.6	My teacher catches my interest to learn the topic of human activities that threaten the ecosystem when they integrate bible verse with it.	3.34	Effective
1.2	I feel interested in the topic about types of ecosystem when Gospel Reading is applied.	3.28	Effective
1.7	Applying bible verse is effective in getting students' interest in the topic about Components of Ecosystem.	3.27	Effective
1.20	Applying bible verse is effective in getting students' interest in the topic about photosynthesis.	3.26	Effective
1.1	I feel interested in the topic about branches of Biology when Gospel Reading is applied.	3.24	Effective
1.13	My teacher catches my interest to learn early studies on cell when they integrate bible verse with it.	3.14	Effective
1.5	My teacher catches my interest to learn Scientific Method when they integrate bible verse with it.	3.11	Effective
1.18	My teacher catches my interest to learn Meiosis when they integrate bible verse with it.	3.09	Effective
1.16	I feel interested in the topic about Cell Division when Gospel Reading is applied.	3.03	Effective
1.17	Applying bible verse is effective in getting students' interest in the topic about Mitosis.	3.03	Effective
1.11	I feel interested in the topic about basis for Taxonomic Classification when Gospel Reading is applied.	3.00	Effective
1.14	Applying bible verse is effective in getting students' interest in the topic about Prokaryotic and Eukaryotic cells.	2.97	Effective
1.19	I feel interested in the topic about osmosis when Gospel Reading is applied	2.93	Effective
	Average	3.14	Effective

In terms of promoting students interest of the relevance of science in life as shown in table 1, the respondents said that applying bible verse in getting students' interest is effective in the topic about Protecting and Conserving Ecosystems (3.39), effective and their teacher catches their interest to learn the topic of human activities that threaten the ecosystem when they integrate bible verse with it (3.34), effective and they feel interested in the topic about types of ecosystem when Gospel Reading is applied (3.28), applying bible verse in getting students interest is effective in the topic about Components of Ecosystem (3.27), bible verse is effective in getting students' interest in the topic about photosynthesis (3.26), effective and they feel interested in the topic about branches of Biology when Gospel Reading is applied (3.24), effective and teacher catches their interest to learn early studies on cell when they integrate bible verse with it (3.14), effective and their teacher catches their interest to learn Scientific Method when they integrate bible verse with it (3.11), effective and their

teacher catches their interest to learn Meiosis when they integrate bible verse with it (3.09), effective and they feel interested in the topic about Cell Division when Gospel Reading is applied (3.03), applying bible verse is effective in getting students' interest in the topic about Mitosis (3.03), effective and they feel interested in the topic about basis for Taxonomic Classification when Gospel Reading is applied (3.00), applying bible verse is effective in getting students' interest in the topic about Prokaryotic and Eukaryotic cells (2.97) and effective and they feel interested in the topic about osmosis when Gospel Reading is applied (2.93).

Table 2 Distribution of the Respondents Perception in terms of Learning of Science Concepts

	Learning of Science Concepts	WT.MEAN	INTERPRETATION
2.3	Concepts in Biology such as Characteristics of Life can be related to a particular bible verse.	3.49	Effective
1.12	I feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological Concept like the Six Kingdoms of Life.	3.40	Effective
1.3	I feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological concepts like the Different Characteristics of Life.	3.36	Effective
2.13	My teacher easily relates bible verse in our discussion of Biological concepts such as Six Kingdoms of Life.	3.34	Effective
2.1	I see the relation of Gospel Reading in Biological concepts such as branches of Biology.	3.33	Effective
1.4	I feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological concepts like Succession in Ecology.	3.22	Effective
2.5	My teacher easily relates bible verse in our discussion of Biological concepts such as Scientific Methods and Attitudes.	3.16	Effective
2.2	I see the relation of gospel reading in Biological concepts such as photosynthesis.	3.15	Effective
1.9	I pay attention on the topic about Energy Flow in the Ecosystem when bible verse is applied in our Biology class.	3.10	Effective
2.17	Concepts in Biology such as cell organelles can be related to a particular bible verse.	3.07	Effective
2.12	Concepts in Biology such as basis for taxonomic classification can be related to a particular bible verse.	3.05	Effective
1.15	I pay attention on the topic about Cell Organelles when bible verse is applied in our Biology class.	3.04	Effective
2.14	I can see the relevance of the study of early studies on cells to Religion.	3.02	Effective
2.18	My teacher easily relates bible verse in our discussion of Biological concepts such as cell division.	2.98	Effective
1.10	I pay attention on the topic about Taxonomic Hierarchy when bible verse is applied in our Biology class.	2.95	Effective
2.19	I see the relation of gospel reading in Biological concepts such as Mitosis	2.95	Effective
2.11	I see the relation of gospel reading in Biological concepts	2.90	Effective

	such as Taxonomic Hierarchy.		
2.16	I see the relation of gospel reading in Biological concepts such as Prokaryotic and Eukaryotic cells.	2.88	Effective
2.8	I see the relevance of the topic osmosis to Religion.	2.82	Effective
2.20	Concepts in Biology such as Meiosis cannot be related to a particular bible verse.	2.66	Effective
Average		3.09	Effective

An examination of the data in table 2 would show that in terms of learning of science concepts, the respondents said that it is effective that concepts in Biology such as Characteristics of Life can be related to a particular bible verse (3.49), effective and they feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological Concept like the Six Kingdoms of Life (3.40), effective and they feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological concepts like the Different Characteristics of Life (3.36), effective and their teacher easily relates bible verse in our discussion of Biological concepts such as Six Kingdoms of Life (3.34), effective and they see the relation of Gospel Reading in Biological concepts such as branches of Biology (3.33), effective and they feel excited to learn new topics in Biology when Gospel Reading is taken up side by side with Biological concepts like Succession in Ecology (3.22), effective and their teacher easily relates bible verse in our discussion of Biological concepts such as Scientific Methods and Attitudes (3.16), effective and they see the relation of gospel reading in Biological concepts such as photosynthesis (3.15), effective and they pay attention on the topic about Energy Flow in the Ecosystem when bible verse is applied in their Biology class (3.10), effective and concepts in Biology such as cell organelles can be related to a particular bible verse (3.07), effective and concepts in Biology such as basis for taxonomic classification can be related to a particular bible verse (3.05), effective and they pay attention on the topic about Cell Organelles when bible verse is applied in their Biology class (3.04), effective and they see the relevance of the study of early studies on cells to Religion (3.02), effective and their teacher easily relates bible verse in their discussion of Biological concepts such as cell division (2.98), effective and they pay attention on the topic about Taxonomic Hierarchy when bible verse is applied in their Biology class (2.95), effective and they see the relation of gospel reading in Biological concepts such as Mitosis (2.95), effective and they see the relation of gospel reading in Biological concepts such as Taxonomic Hierarchy (2.90), effective and they see the relation of gospel reading in Biological concepts such as Prokaryotic and Eukaryotic cells (2.88), effective and they see the relevance of the topic osmosis to Religion (2.82) and effective and concepts in Biology such as Meiosis cannot be related to a particular bible verse (2.66).

Table 3 Distribution of the Respondents Perception in terms of Developing of Critical and Thinking Skills

Developing of Critical and Thinking Skills		WT.MEAN INTERPRETATION	
3.2	I understand our lessons about the characteristics of life when Religion becomes the core of the curriculum.	3.30	Effective
3.14	It helps me to understand our lesson in the Six Kingdoms of Life when RCC is incorporated.	3.30	Effective
3.19	It helps me a lot to understand concepts in Biology such as cell specialization when it is related to particular bible verse.	3.22	Effective
3.1	I easily understand our lessons in branches of Biology when Religion becomes the core of the curriculum.	3.18	Effective
3.3	It helps me a lot to understand concepts in Biology such as Scientific	3.14	Effective

	Method and attitudes when it is related to particular bible verse.		
3.18	I easily understand our lessons in role of cell when Religion becomes the core of the curriculum.	3.11	Effective
3.15	I understand our lessons in the early studies of cells when Religion becomes the core of the curriculum.	3.09	Effective
3.7	It helps me to understand our lesson in meiosis when RCC is incorporated.	3.06	Effective
3.13	Biological concepts on the basis of Taxonomic Classification is best understood when a bible verse is integrated.	3.06	Effective
3.17	Biological concepts about Cell Organelles are understood when a bible verse is integrated.	3.05	Effective
3.5	Biological concepts of Mitosis is best understood when a bible verse is integrated.	3.03	Effective
3.12	It helps me a lot to understand concepts in Biology such as Taxonomic Hierarchy when it is related to particular bible verse.	2.87	Effective
3.16	It helps me to understand topic in Biology such as Prokaryotic and Eukaryotic Cells when it is related to particular bible verse.	2.86	Effective
Average		3.10	Effective

In the aspects of developing of critical and thinking skills as shown in table 3, the respondents said that it is effective and they understand their lessons about the characteristics of life when Religion becomes the core of the curriculum (3.30), effective and helps them to understand their lesson in the Six Kingdoms of Life when RCC is incorporated (3.30), effective and help them a lot to understand concepts in Biology such as cell specialization when it is related to particular bible verse (3.22), effective and easily understand their lessons in branches of Biology when Religion becomes the core of the curriculum (3.18), effective and help them a lot to understand concepts in Biology such as Scientific Method and attitudes when it is related to particular bible verse (3.14), effective and they easily understand their lessons in the role of the cell when Religion becomes the core of the curriculum (3.11), effective and they understand their lessons in the early studies of cells when Religion becomes the core of the curriculum (3.09), effective and help them to understand their lesson in meiosis when RCC is incorporated (3.06), effective and Biological concepts on the basis of Taxonomic Classification is best understood when a bible verse is integrated (3.06), effective and Biological concepts about Cell Organelles are understood when a bible verse is integrated (3.05), effective and Biological concepts of Mitosis is best understood when a bible verse is integrated (3.03), effective and help them a lot to understand concepts in Biology such as Taxonomic Hierarchy when it is related to particular bible verse (2.87) effective and helps them to understand the topic in Biology such as Prokaryotic and Eukaryotic Cells when it is related to particular bible verse (2.86) effective and they easily understand their lessons in branches of Biology when Religion becomes the core of the curriculum (3.18).

Table 4 Distribution of the Respondents Perception in terms of Understanding Human Interactions and their Relationship with the Environment

	Understanding human interactions and their relationship with the environment	WT.MEAN	INTERPRETATION
2.4	Concepts in Biology such as Types of Ecosystem can be related to a particular bible verse.	3.27	Effective
2.6	My teacher easily relates bible verse in our discussion of Biological concepts such as Ecological Succession.	3.27	Effective
3.4	It helps me to understand topic in Biology such as Components of Ecosystem when it is related to particular bible verse.	3.21	Effective
3.11	I easily understand our lessons in Ecological Succession when Religion becomes the core of the curriculum.	3.16	Effective
3.8	It helps me to understand our lesson in Types of Ecosystem when RCC is incorporated.	3.14	Effective
2.7	I can see the relevance of the study of Components of Ecosystem to Religion.	3.11	Effective
3.6	Biological concepts about Energy Flow in the Ecosystem is understood when a bible verse is integrated.	3.00	Effective
	Average	3.17	Effective

In terms of understanding human interactions and their relationship with the environment as shown in table 4, the respondents said that it is effective when concepts in Biology such as Types of Ecosystem can be related to a particular bible verse (3.27), effective and their teacher easily relates bible verse in their discussion of Biological concepts such as Ecological Succession (3.27), effective and help them to understand the topic in Biology such as Components of Ecosystem when it is related to particular bible verse (3.21), effective and they easily understand their lessons in Ecological Succession when Religion becomes the core of the curriculum (3.16), effective and it help them to understand their lesson in Types of Ecosystem when RCC is incorporated (3.14), effective and they can see the relevance of the study of Components of Ecosystem to Religion (3.11), effective and Biological concepts about Energy Flow in the Ecosystem is understood when a bible verse is integrated (3.00).

Table 5 Distribution of the Respondents Perception in terms of Applying Human Interactions and the Relationship with the Environment

	Applying human interactions and their relationship with the environment	WT.MEAN	INTERPRETATION
2.10	God's love for us as taught in RCC is manifested in the topic about caring the environment.	3.65	Very Effective
2.15	God's love for us as taught in RCC is	3.61	Very Effective

	manifested in the topic saving our wildlife.		
2.9	God's love for us as taught in RCC is manifested in the topic Protecting and Conserving Ecosystems.	3.59	Very Effective
3.20	Values derived in the topic protecting our wildlife are understood because they are also taught in Religion.	3.59	Very Effective
3.10	Values derived in the topic Caring for the Ecosystems are understood because it is also taught in Religion.	3.50	Very Effective
3.9	Values derived in the topic Protecting and Conserving Ecosystems are understood because it is also taught in Religion.	3.47	Effective
Average		3.56	Very Effective

An examination of the data in table 5 would show that in terms of applying human interactions and their relationship with the environment, the respondents said that it is very effective and God's love for them as taught in RCC is manifested in the topic about caring the environment (3.65), very effective and God's love for them as taught in RCC is manifested in the topic saving our wildlife (3.61), very effective and God's love for them as taught in RCC is manifested in the topic Protecting and Conserving Ecosystems (3.59), very effective and values derived in the topic protecting our wildlife are understood because they are also taught in Religion (3.59), very effective and values derived in the topic Caring for the Ecosystems are understood because it is also taught in Religion (3.50), effective and values derived in the topic Protecting and Conserving Ecosystems are understood because it is also taught in Religion (3.47)

In the principle of teaching science, Staver support the findings of the current study when he stated that teachers should connect science with students interest, personal lives, societal issues, cultural background and other school subjects. Science teacher must remember that their own intrinsic motivation to learn science is likely not shared by many of their students, whose motivation is more likely activated instrumentally, by connecting science to things that are already familiar and important to them. The paper of Robert T. Pennock (2007) supported the findings of the current study when he stated that the historical, conceptual, and cultural interplay between biology and religion involves a complex and philosophically fascinating set of relationships. Certainly the simple view that religion has uniformly been a hindrance to biological research is an unfair caricature. Religion has sometimes had a positive effect, often indirectly stimulating or even directly encouraging scientific research of the biological world. This is also supported by the idea of Kluger (2009) and Pennock (2007) that topic in Biology or some biological concepts is related to some bible verse or passages. In her paper, Sarah J. Carrier (2011) support the finding of the current study when she said that teachers should help the students understand that science is all around us, influenced by human uncertainties, judgments, values, and interests. It is also important to emphasize the human side of science. These well-established ideas about the nature of science have a lasting effect on students, so we need to be sensitive about the messages we communicate. Science is creative and science is tentative, which means that scientists recognize that we understand things based on current research.

Issues and Concerns Encountered by the Students when their Teacher Implement RCC in Biology class

The study also reveals some issues and concerns that the students encountered when their teacher implemented Religion as the Core of the Curriculum in their Biology class such as; (1) Negative attitude towards Science and Religion as both have conflict. (2) There is uncertainty of theory between Science and

Religion. (3) No fine distinction between religious idea and scientific reasoning. (4) Science and Religion are not related because they address different questions. (5) Religious statement is not designed to verify scientific explanation. (6) Overlapping of religious and scientific idea in the lesson. (7) There is no connection of the bible used and their lesson in Biology.

The result of the study was supported by the paper of Lawson (2005) and Covalleskie (2008). Sappington (2001) also added in his study that science need not support religion and that there are differences between science and religion which make it unreasonable to expect that the two would support each other. Sappington (2001) also added that the discussion so far has centered on a single issue, if science can prove or disprove religious teaching. In the end of his paper he also added several possible relationships between science and religion. Here are some other possibilities: (1) Science can raise new issues that must be addressed by religion. (2) Scientific findings may help achieve religious purposes. (3) Religion may provide new variables for science to study. (4) Science may make certain specific interpretations of a scriptural passage out of the many possible more or less likely. (5) Science could serve as a source of new analogies or ways of thinking that facilitate the understanding of religious concepts. The study also identify other concern of the students when RCC is implemented in their Biology class such as: frequent and continuous integration of RCC such as usage of bible verse to make the lessons easier and interesting, use of RCC to strengthen their relationship to God and the improvement of their behavior through the values thought and reflection paper as one of the output of the integration of RCC.

Implication Drawn from the Findings of the Study

Based on the findings of the study the following implications may be drawn to improve further the learning of biological concepts as RCC is integrated:

1. Integration of RCC in Biology class motivates and arouses the students in their interest in the study of biological concepts. The bible verse used by the teacher serves as the motivation to the students that will lead to their discussion of biological concepts.
2. Students see the connection of the bible verse used by the teacher and their lessons in Biology. We need to recognize the ways in which religion and science are not separated that divine presence (Religion) and everyday life (Science) are fused.
3. Integration of RCC in Biology class helps strengthen the students' relationship with God. Students become familiarize with some stories in the bible every time the teacher used bible verse in their Biology lesson. This may help strengthen their Catholic identity and may lead to improvement in the behavior of the students and may inculcate positive values towards the students.
4. A student – centered activity with the integration of RCC that will emphasized deep learning and understanding and increased responsibility and accountability on the part of the student. The student will have a full responsibility for her/his learning since involvement and participation are necessary for learning to take place.
5. Students' reflection paper as the outputs of RCC integration which will serve as the basis for the teacher if the students really understand their lessons in Biology as bible verse is integrated.
6. Continuous integration of RCC in their learning of Biology concepts.

VI. CONCLUSION

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

1. The students perceived that it is effective to integrate RCC in their learning of biological concepts.
2. The type of grade school where the respondents graduate from is not a hindrance whether the students will appreciate the integration of RCC in their Biology class. Majority of the respondents graduated from public school but still they appreciate the integration of bible verse in their learning of biological concepts.
3. The religious background of the respondents does not hinder the integration of RCC in learning Biology concepts. Majority of the respondents are Catholic and find it interesting and motivated when bible verse is integrated in their lessons in Biology.
4. The top three issues and concerns that the students encountered when their teacher integrate Religion as the Core of the Curriculum in their Biology class are as follows: There is uncertainty of theory between Science and Religion , Religious statement is not designed to verify scientific explanation and No fine distinction between religious idea and scientific reasoning respectively.
5. Based on the findings, the following implication are derived: frequent and continuous integration of RCC such as usage of bible verse to make the lessons easier and interesting, use of RCC to strengthen their relationship to God and the improvement of their behavior through the values thought and reflection paper as one of the output of the integration of RCC.

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