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## **My First Time: Narratives of Beginning Non-Biology Majors Teaching Living Things and Their Environment**

**Ma. Aelyn Joy G. Jaleco\***

*Ramon Avancena National High School, Arevalo, Iloilo City, 5000, Philippines*

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### ABSTRACT

Teachers journey in the world of teaching always begin with their 'first time'. The many firsts in the teachers' life include all the memories of the subjects they handled, the people they meet, the curriculum they're working with and the various challenges, coping techniques and wonderful new stories they have in the four corners of the classroom. Their experiences touched all parts of their teaching world inside and outside the classroom. This study aimed to explore the teaching experiences of beginning non-biology majors in teaching living things and their environment. The primary participants of the study were five science teachers who are teaching Living Things and Their Environment but are not specialized in Biology. A set of secondary informants for each participant were also interviewed. It includes the department head and the co-teacher in science department. This study is a qualitative research which utilized Narrative Inquiry. Triangulation was employed to further strengthen the narratives of the participants. Thematic Analysis was used to analyze narratives gathered from transcribed data. The findings revealed that beginning non-biology majors had diverse experiences such as first time stance, which includes the feeling of excitement, career fulfilment and dismay; culture shock and difficulty with classroom management. Challenges were further aggravated and resulted to the travails which are themed as lack of mastery in the content knowledge and pedagogy; difficulty in lesson planning; insufficient learning, facility and materials, and emotional struggles like frustrations and guilt feeling. In order to cope with these travails, various mechanisms were employed creativity and resourcefulness as skills unboxed; innovative teaching, peer mentoring and professional growth; and diligence and flexibility for teacher's adjustments. Finally, stories of successes were also explored as the participants move towards their growing years in teaching. The experiences of the participants imply a great impact on their growth as a teacher. Despite the issues on suitable placement of teachers and the mismatching of the subjects they handle, the participants have embedded the positive effect of teaching learning areas in diversity. Further studies which would investigate how each success stories are maintained and nurtured after another five years must be considered. The quality of learning gained was worth all the trials. Now their horizon was broadened and made them quality teachers in their own special way

Keywords: Beginning Teachers, Travails, Coping Mechanisms, Narratives, First Time

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### Introduction

Filipinos have deep regard for education. Education occupies a central place in our life. It has always been strongly viewed as a pillar of national development and a primary avenue for social and economic mobility (UNESCO, 2015). Science Education has always played an important role in the development of a country. It has been an instrument in imparting the 'hard' skills and knowledge to our learners, to enable them to make a living (Alabastro, 2007).

In today's global education system, Science Education is much more than a fact-based knowledge. Science education becomes meaningless and incomprehensible for learners if they are unable to relate it with their lives. For this reason, Science Education in the Philippines has been struggling as proven by the current placement of the country in the Trends International Mathematics and Science Survey (TIMSS), National Achievement Test (NAT), and Programme for International Student Assessment (PISA) ranking results. But through the years it has undergone modification and is strengthened in order to attune it to the changing environment and keep up with the latest developments in the fields, as well as to develop scientific literacy among the Filipinos which aims to enable them to participate actively and effectively in the modern society.

The Department of Education never gives up on making possible ways in improving the system. The implementation of the K to 12 Basic Education Curriculum is considered to be one of the most significant educational reforms in the country. It introduces programs and projects that aim to expand and improve the delivery of Basic Education in the country. It seeks to provide the Filipino learners with necessary skills and competence to prepare them to take on the challenges of the 21st century. It will make the Basic Education System in the Philippines at par with international standards by ensuring that it is appropriate, responsive, and relevant to the learners (DO 21, s.2019, Policy Guidelines to the K to 12 Basic Education Program).

One of the programs introduced by the K to 12 Curriculum is the Spiral Progression Approach in Science subjects. It exposes learners into a wide variety of concepts/topics and disciplines, until they mastered it by studying it over and over again but with different deepening of complexity. Spiral progression can also be anchored to discovery-based learning. This type of learning requires longer hours and fails without sufficient guidance. Thus, this becomes attainable when the teacher guides the learners as they explore and discover. Teachers, being the key in achieving the vision of the K to 12 education

curricula, are considered to be critical players in the said curriculum, thus their support is necessary to bring the vision of the K to 12 closer to reality (K to 12 Toolkit Reference Guide for Teacher Educators, School Administrators and Teacher 2012).

Consequently, the introduction of spiral progression in the K to 12 programs indeed brought many changes in the system. Aguirre and Faller stated that in August 2013, 61,500 teaching positions were unfilled in the Philippines and this resulted in massive hiring of new, beginning, inexperienced and fresh graduate teachers. They were distributed to fill in the vacant positions of almost all schools which lack teachers due to the two years addition of the Senior High School level. Newly hired beginning, inexperienced and fresh graduate teachers were assigned to various public schools such as those in the cities, barrios, islands and far flung areas.

With this set-up, some schools had a hard time implementing the spiral progression approach especially in assigning teachers on their specific area of specializations due to insufficient number of teachers. Some teachers were then forced to teach outside their area of specialization. Just imagine Biology teachers teaching Chemistry or Physics where they have less background and trainings. Adanza (2015) stated that Science teachers are having hard time adapting to the new approach, particularly those who have specializations. This might be due to lesser understanding of the concepts on some discipline, where teachers oftentimes do not explain thoroughly or deepen the concepts— worse, resort to skipping difficult ones.

Furthermore, these beginning teachers may acquire remarkable or traumatic experiences. These experiences may lead them to understand the situation in the field. Some may enjoy their first time enthusiastically, some may not. Some may love to explore and go beyond their responsibilities to provide a productive and conducive learning set-up to their learners; some may get bore and just quit.

This incited the existence of this study, to give an in depth understanding of how are the beginning non-biology majors in the field could provide possible ways to fill in gaps in pedagogical and content knowledge provided to learners and the quality of teaching they can give even if they are teaching in other fields of Science subject.

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## Methods

This qualitative investigation used narrative inquiry research method to gain a deeper understanding of the teaching experiences of five beginning non-biology majors in teaching Living Things and Their Environment, as supplemented by their respective department heads and co-teachers in Science Department. An in-depth interview was very useful in exploring perceptions, understanding needs and identifying benefits, barriers and outcomes on the participants' first-time experiences.

The intent of this study was to elicit stories of the teaching experiences of beginning non-biology majors through narrative inquiry approach. Connelly and Clandinin (2000) described the narrative inquiry approach as inquiry into narrative. This means that narrative is both a phenomenon and a method. Narrative inquiry was the researcher's way of understanding and inquiring into the lived experiences of the participants. Hence, there was collaboration between the researcher and participants, over time, in a place and in social interaction with milieus.

The study was conducted in five selected public schools of the Department of Education (DepEd), Division of Iloilo City. DepEd Division of Iloilo City is composed of 7 districts with fifty complete elementary schools, two integrated schools and eleven secondary schools. The participants were only taken from schools which implement Spiral Progression Approach in Science subjects, with teachers who are not focused only on their field of specialization. The set-up consisted of one science teacher to teach all four (4) science subjects, each vary every quarter, for one school year. Purposive sampling was utilized in the selection of the respondents. Five beginning non-biology majors met the criteria for primary participants. The participants are all Science teachers in the five chosen public schools in the Division of Iloilo City. They belong to the schools which are handling Science subjects under the new curriculum which uses Spiral Progression Approach. All of them are teaching in the Junior High School. These are new Science teachers who are in service for more than a year up to five years. Three of these beginning teachers graduated in a non-biology specialization during college while the other two graduated in nursing and chemical engineering. They only took up diploma or certificate in teaching to be able to transfer in the field of education.

**Table 1** Criteria in Choosing the Beginning Non-biology Majors as Participants of the Study

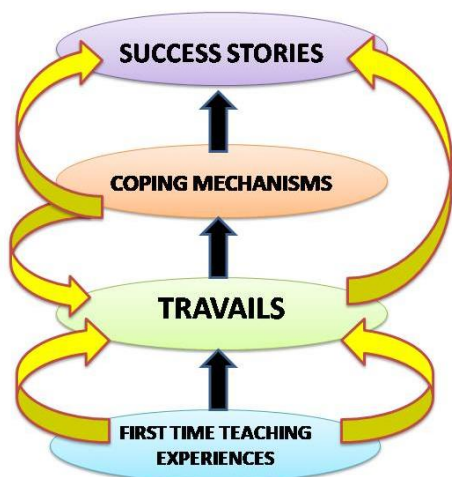
Inclusion Criteria
<ul style="list-style-type: none"> <li>In-service for one year to five years in a Public School in the Division of Iloilo City which are not implementing the carousel type of teaching Science.</li> <li>Graduated in Bachelor in Science of Secondary Education Major in (General Science, Chemistry, Physics or Physical Science) or other courses.</li> <li>Science teacher teaching Living Things and Their Environment.</li> </ul>

**Table 2 Summary Background Profile of the Participants (Beginning Teachers in Science - BTS)**

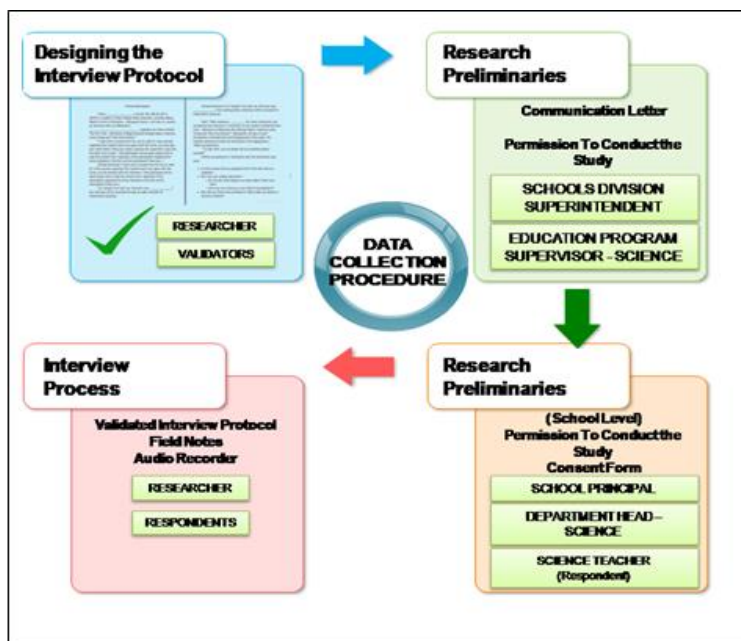
Participant	Subject/s Handled	Bachelor’s Degree/Specialization	No. of Years Teaching in Public School
BTS 1	English 7, MAPEH 7, Science 7 and Science 8	BS Education – Physical Science	3
BTS 2	Filipino 9, MAPEH 9, Science 7, Science 9	BS Education – Physical Science	3
BTS 3	Science 8	BS Education – Physical Science	5
BTS 4	Science 7, Science 8	BS Nursing – DIT in General Science	4
BTS 5	Science 8, Science 10	BS Chemistry – Certificate in Teaching	3

A set of secondary informants were likewise purposively selected. The teacher respondents were referred to as CT, CT2, CT3, CT4 and CT5 in the study. They were the selected co-teachers who happened to witness the experiences of the participants. The department heads were referred to as DP2, DP3, DP4, DP5, and ST1. ST1 refers to seasoned teacher. She was interviewed in lieu of the department head because they do not have it due to school’s small population. In this study, interviews were conducted in an informal conversational manner which also encouraged the participants to reveal their individual stories. During the conversation, the researcher listened to what they tell about their world, heard them express their perspectives, listened to the stories of their beginning years, the travails, the way they managed to survive and snoopied in to their memorable stories of success. A schematic diagram was made to show a clearer flow of how data were collected from the participants.

**Figure 1 Research Paradigm**



**Figure 2 Data Collection Procedure Scheme**



**Data Analysis**

Narratives gathered were analyzed and then re-storied into a framework that makes sense. Re-storying is the process of reorganizing the stories into some general type of framework. A schematic flow shown in Figure 2 detailed how gathered stories were analyzed through transcription of verbatim recorded interview responses to forming themes, triangulate with other informants and wrap up with narrative reports.

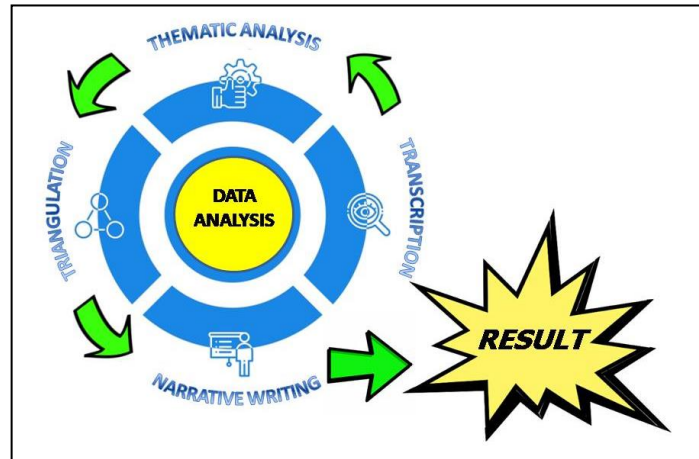


Figure 3 Data Analysis Schematic Flow

Thematic Analysis was utilized in identifying, analyzing and reporting patterns (themes) within the data gathered. It minimally organized and described data set in rich detail. Specifically, the thematic analysis of the narratives employed the 6-phase guide of Braun and Clarke (2006).

Figure 4 Six Phase Guide of Thematic Analysis Scheme

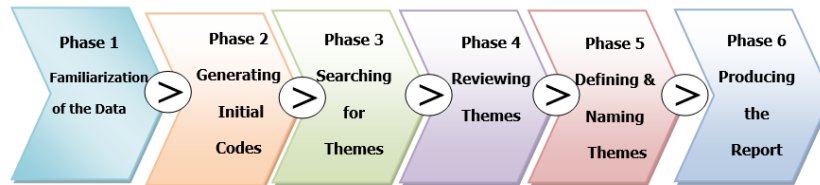
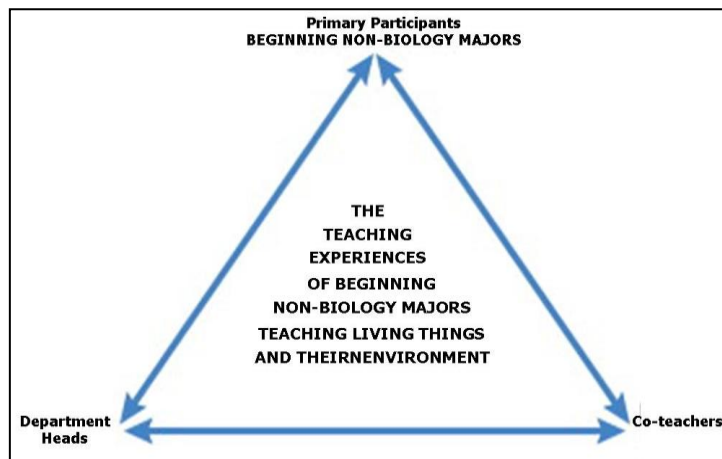


Figure 5 Triangulation



Triangulation was beneficial in this study because information gathered from other participants supported and validated the stories of the main participants. This process gave the study a wider view on the experiences of the beginning teachers which also led the triangulates to looking back on past stories and relate to the present ones.

## Results

The main focus of this study was to explore the lived experiences of non-Biology majors who teach Living Things and Their Environment in their respective schools. These were remarkable episodes of their teaching career when tasked to teach subjects or topics outside their expertise. Specifically, this study sought to highlight the narratives of their teaching experience on four different aspects: (1) teaching experiences, (2) travails, (3) coping mechanism, and (4) success stories.

As a result, themes were drawn from the narratives of the five (5) beginning non-biology majors expressing their teaching experiences, travails, coping mechanisms and successes. The narratives gathered were plot together and was given the title “The Journey of Beginners” .The journey of the beginning non-biology majors was patterned to the Phases of New Teacher Growth of Moir (1990).

**Anticipation Stage.** Just like all other teachers, everyone passed through the starting point in the field of teaching. And as the journey begins, the stories of beginning non-biology majors being the main voyagers were discussed in five different stages. The first two stages represent their first time in teaching. The many firsts they have met when they finally became a public servant ready to serve the Filipino learners. First set of themes were mapped accordingly in Figure 6. These themes were interpreted as positive and negative first-time experiences. This stage is known as the Anticipation Stage. The first part of this stage reflects the positive reactions of their first time in public school as a teacher, while the second part shows how such happy thoughts become a frustration when reality in teaching sinks in.

**Survival Stage.** The second stage in the life of beginning teachers is a more challenging chapter of their lives. Stories of the everyday ups and downs were organized in themes shown in Figure 7 emphasizing that not all ‘first times’ ends each day well. As these teachers continue to survive each day of their beginning years, they were thrown by various challenges coming from all corners of the school. As shown in the thematic map, new set of themes were

reflected as they go beyond the four walls of the classrooms. These are the travails they encountered as they enter another stage of their beginning years.

Figure 6 Thematic Map of First Time Teaching Experiences

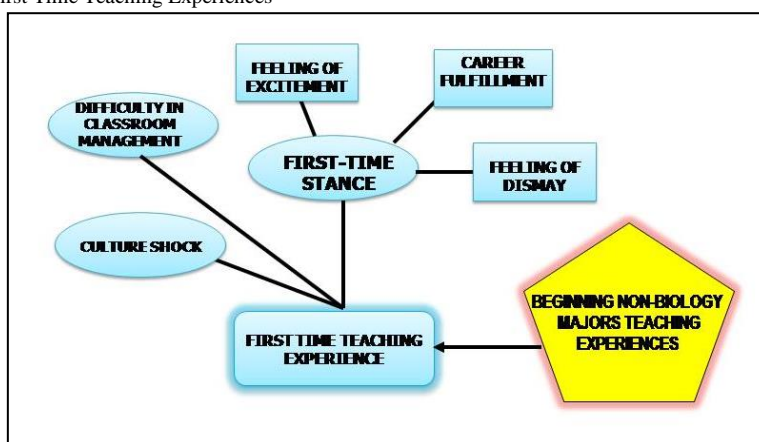
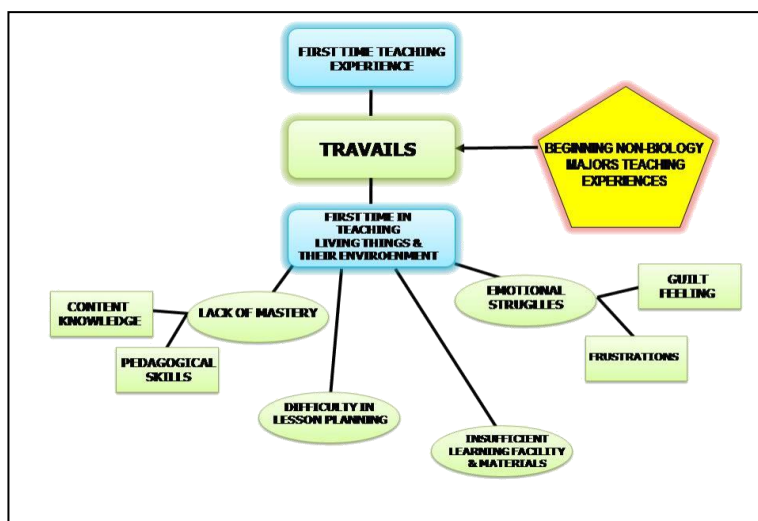


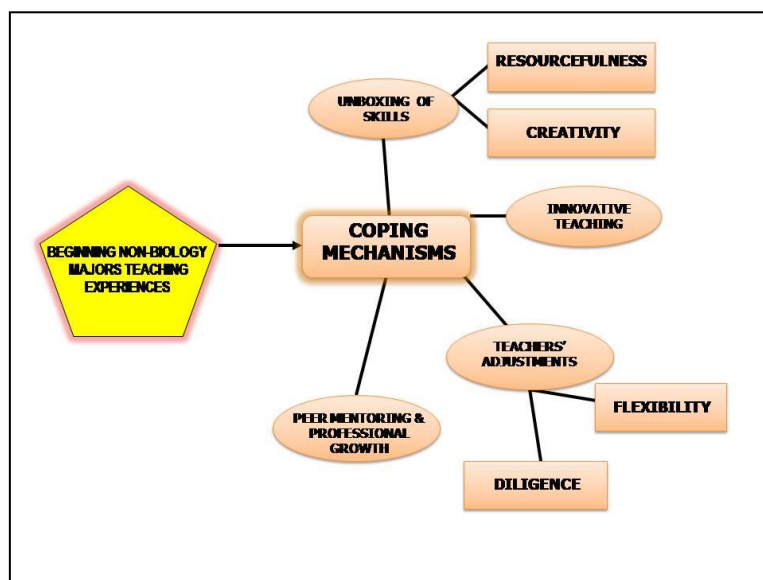
Figure 7 Thematic Map of First Time in Teaching Living Things and Their Environment



**Disillusionment Stage.** After a few months of work and stress, beginning non-biology majors enter the disillusionment stage. The intensity and length of this stage varies among beginning teachers. The extensive time commitment and the realization that things are probably not going as smoothly as they want, triggers low morale which contribute to this period of disenchantment. Teaching loads assigned to beginning teachers sink in when the feeling of exhaustion and stress intervenes. Teachers often start complaining to their school head if given load assignment not their main area of expertise because it is wearisome and outcomes could be serious. This is the stage that continues from the Survival Stage. Teachers stories gave emphasis on the emotional struggles they encountered as they try to survive all the challenges brought by classroom instruction as well as outside factors like the administration, the facility and materials and the difficulty in dealing with the field that is not aligned to your craft.

**Rejuvenation Stage.** As the beginning non-biology majors voyaged to the sea of challenges, their journey became more meaningful. They themselves considered this stage as the turning point of their lives. As they uncover their individual magical powers to unleash the spirit of a great teacher, themes were gathered and were organized in the next figure. Figure 8 shows the coping myriads discovered and used by the beginning teachers to be able to cope with the travails they dealt with. It represents a clearer picture of what their rejuvenation phase have evolved over the years.

**Figure 8** Thematic Map of Coping Mechanisms of Beginning Non-biology Majors



**Reflection Stage.** The reflection stage begins as the beginning non-biology majors looked back from the beginning. This is a particularly invigorating time for them. Repeatedly happening every year, they reflect back and highlight events that were successful and those that were not. They think about the various changes that they plan for the next year. The end is in sight, and they have almost made it; but more importantly, a vision emerges as to what their incoming new year will be. The rewards of teaching are immediate and long-term. This time they would get to hear students talking about scientific problems, doing scientific investigations, getting well in knowing the organelles of the cell as well as mastering many other objectives. Thus, if not for the environments created by teachers and the nurturing they provide, the students would not have these experiences to call their own. They emphasized the great feeling of may have not reached all the goals they have set but each year as they grow in teaching, is enough to sustain and feed their faith in the power of teaching.

As each stage goes back to the very beginning each year, the teachers were now confident of the learnings and the improvements they have had gained along the way. These stories paved way to the discovery of the many successful stories they have. The Framework of Success in Figure 9 shows the themes that were formed.

#### BTS2 – The Grown-Up Beginner

*“As I grow in the pillars of this institution, thrown with too many battles, I can proudly say, I have fully grown! I have gained skills which I often neglect before; I became resourceful, creative, and productive. I can still recall my beginning years, a newbie, filled with fear and struggles, now I have become a better teacher. I have mastered speaking in Tagalog. Magaling na akong magsalita! (I am fluent in speaking tagalong now!) My experience had given me so many lessons not only in teaching but in life itself. My experience had brought beauty to my profession. I can now stand with pride and teach lessons in various subjects. I don’t master all of them but I can muster experiences and teach with confidence.”*

#### BTS4 – The Adventurous Beginner

*“Take a leap and conquer the world with a smile. “As a newbie turning 4-year-old in teaching, many have changed. I have passed the metamorphosis process. I have now become a beautiful butterfly, ready to spread its wings and fly high in the meadow of quality education. I entered this school without anything at hand, now I am carrying with me a bag full of survival skills. Skills which are very useful to my profession. I can now render a holistic learning to my students. Now, I am able to explain my lesson with confidence, no more books to glance in front of me. My experience has given me the chance to know myself more and examine my true love in teaching. In teaching science, indi gale applicable ang stick to one, (‘stick to one’ is not applicable) I learned to be flexible and started loving all four of them at the same time. My adventure as a beginning teacher has not yet ended, now I am more than ready to take more steps in venturing to another chapter in a teacher’s life.”*

#### BTS1 – The Goal-Focused Beginner

*“Teaching not our major or field of specialization is very challenging...at first. It was not very normal to me. However, as years go by, this experience had taught me one great lesson in life. That is to contain strength amidst all the struggles. This experience given to us by Science Curriculum is one great opportunity to become agile. Thus now, on my fourth year I am beginning to see the beauty of change in my teaching career. I learned that teaching*

various subjects is no longer a burden but instead an opportunity to integrate one lesson to another. Learning therefore spreads not contained. My experiences had taught me to become more focused to my goals in life. Now I am pursuing my master's degree and will continue to learn so that I can transfer that learning to my students too."

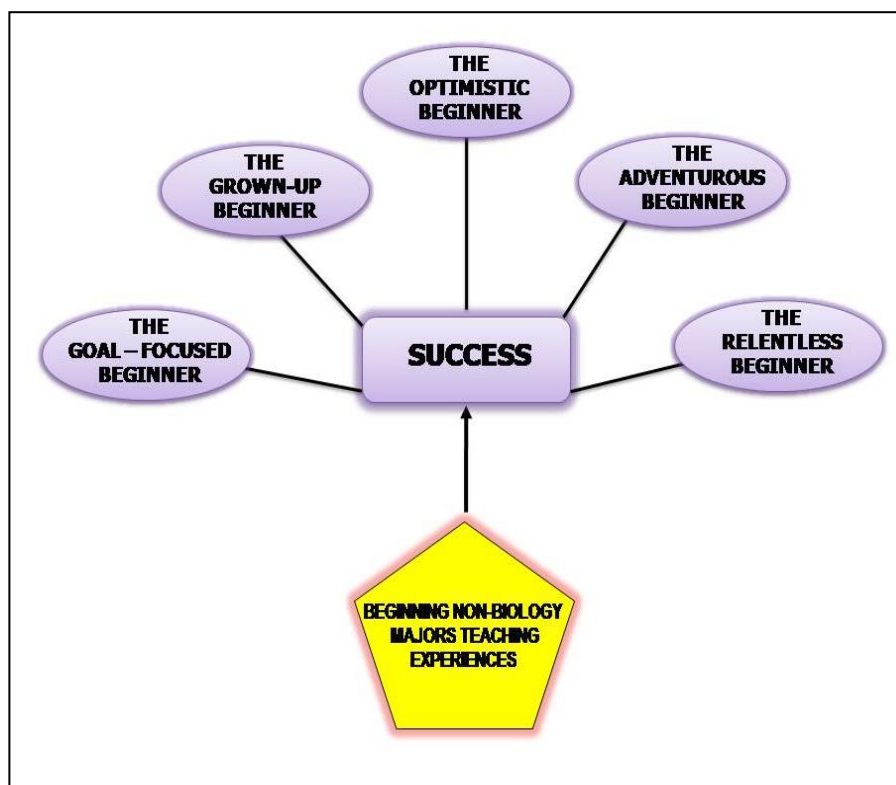
#### BTS2 – The Relentless Beginner

"My life took a sudden 360 degree - turn when I entered the field of teaching. From scratch to a beautiful sketch, that's how I describe my growth as a teacher. I am very happy now that I have become successful in my own way. I have overcome the challenges I faced every day of my life during my beginning years. I surpass them and I survived. Kanami gid sang journey. (The Journey was nice.) It was very inspiring and continuously inspires me to do well and promote quality education even to future learners. The helped I got from my colleagues and supervisors was indeed worth the effort. I use them now in my class, even during our online class. As we face a new challenge in this new normal, I believe that I will be able to cope, just the way I did before. I will continue giving my students the quality of teaching that they deserve, so that someday, they too will give back to the society the quality of service they could ever give."

#### BTS3 – The Optimistic Beginner

"I give myself a high five! In my five-year journey in teaching Science 8, I have become a master of my own learning. The hidden beauty of teaching four branches of Science in a year is awesome. It enabled me to teach anything under the sun. The result of integrating one lesson to another lesson is effective. My experiences had made me a better version of myself as years go by. Now I'm five times better. All the knowledge I gained and the skills I acquired are very useful to my present year and even to the future. I believe I will be using them to be able to always provide fun and quality education to my students."

**Figure 9** Framework of Success

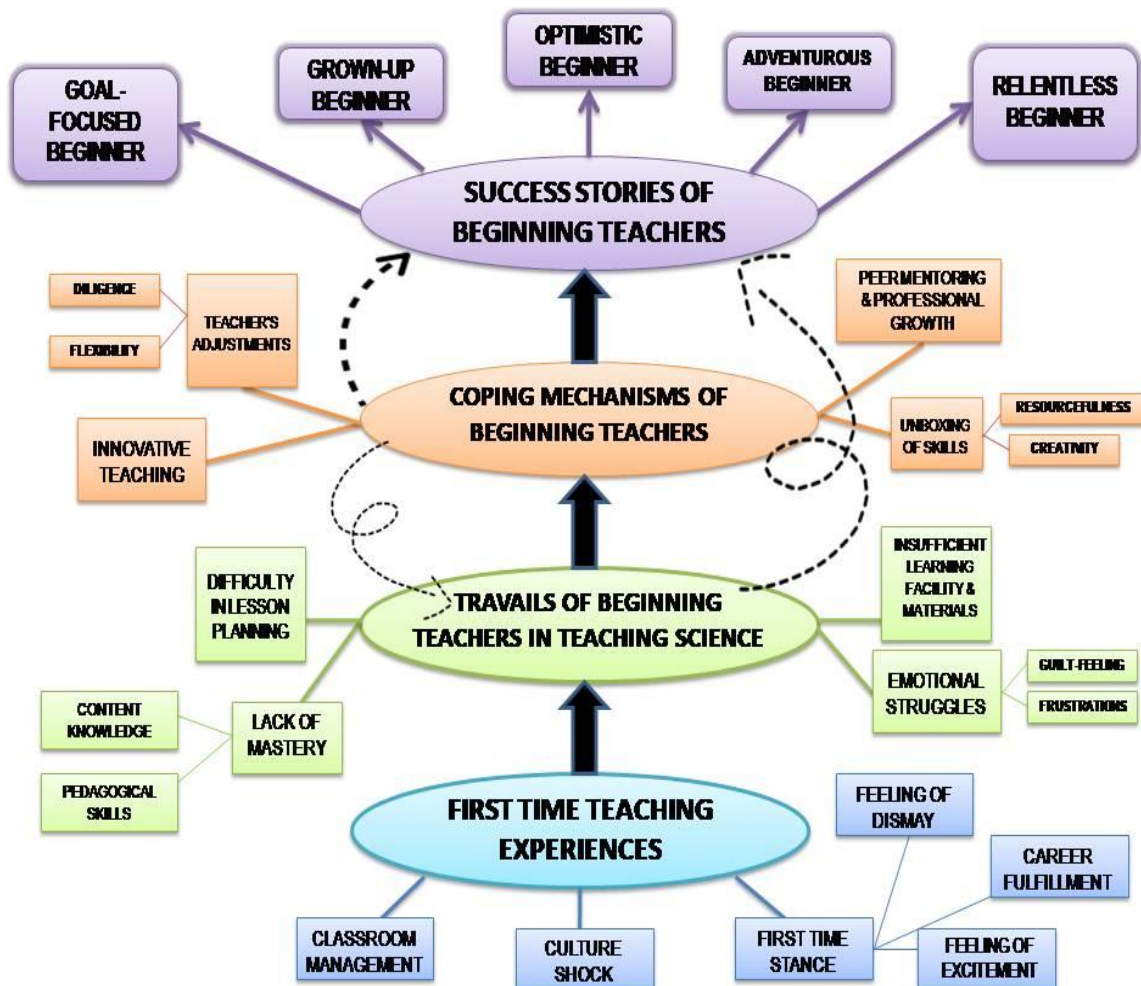


This journey was never made easy for the beginning non-biology majors. They have been through up and down since day one. The unforgettable events in their lives as beginners made a wonderful story to tell.

Further, Figure 10 was created and established to visually explain how the participants evolved through their experiences. This is entitled as the Schematic Structure of The Teaching Experiences of Non-biology Majors. Each structure is characterized by the important details being investigated in the study. The oval shapes represent the four important phases experienced by the participants. The quadrilateral shapes correspond to the themes created after all narratives were analyzed and identified. The black arrow at the center shows how their experiences progressed. The broken arrow going down shows how they developed coping myriads to manage and survive their travails. The broken arrow going up (right) shows how each travail became an inspiration to attain success. The broken arrow going up (left) shows how their coping mechanism led them to betterment and be successful. At the top of the structure, rounded rectangles characterized each of the participants. The purple arrow entails that each of them became successful and that they were characterized according to their success stories.

The diagram simply shows how the beginning non-biology majors started in the field of teaching through their first-time experiences. This is known as their first-time stance, the various first-time reactions when they entered the field of teaching. These various reactions were coupled with the feeling of being cultured shock due to newness in the environment the people and the culture. Being new to the system had also brought difficulties in dealing with classroom management. Though many argued that these experiences were common to newly hired teachers in public school, the participants were never spared from stress and struggles it brought them. These were then further aggravated by many other factors and brought various travails in their teaching life. They have had to deal with the pressure of mastering the lesson which they are not familiar, lesson planning, insufficiency of learning materials and the negative emotions that encompassed the effect of teaching outside one's area of specialization.

**Figure 10** Schematic Structure of the Teaching Experiences of Beginning Non-biology Majors



Indeed, the beginning years of non-biology majors was a complete set of joyous, scuffle, genuine and even candid moments. From the excitement of entering the real world of teaching in public school to making beautiful memories, the participants did conquer it all. They were able to cope and manage things graciously. Despite the fact that the road was never easy, there were ups and downs and even thoughts of giving up, the teachers learned best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they learn. They also learned how to establish routines and adjust their pace throughout the day to make it through the week.

Now, they were already embracing the good news of becoming more efficient in lesson planning, more accurate in timing, more comfortable in their relationships with students. They have known the climate of the school and make connections in the community. They have found the resources that are available to them and their students and enlist the aid of others. Above all they have noted the progress, just like making a graph of baby steps as well as giant leaps; like students who are making and gaining knowledge, and increasing confidence in their role as a teacher. This kind of learning evolved in their lives with a purpose. They have grown from it and eventually they managed to make a turning point to have a better future in providing quality education.

Narrative inquiry had beautified the life experiences of the participants. Their untold stories were given emphasis and now being heard. Since the beginning, in the search of truth on how to bridge the gap of learners and quality education, beginning non-biology majors have proven that they can be that bridge to provide a strong hold impact in promoting and enhancing learning.



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## Implications

The inquiry to the lives of beginning non-biology majors teaching living things and their environment have led to certain implications for theory and practices.

### For Theory

The narratives of the beginning non-biology majors which pertain to the findings of the study contended to the epistemological stance of Crotty's constructionism. The stories of the participants' travails and coping mechanisms together with the created themes imply to the construction of meaning through lived experiences they encountered. Constructionism incorporates and builds upon its connections to experiential learning, the trial and error that teachers do in order to improve. In their own little way of constructing meaningful coping mechanisms they are able to promote creative experimentation and the make their battle worthwhile. Henceforth, the findings of the study imply to the researcher's view of the meanings brought by various experiences.

On the other hand, the themes created which leads to understanding the travails of beginning non-biology majors, imply to the theory of transition. The theory of transition conveys the process of moving in, moving through, and moving out of a situation. This implies to the adaptive characteristics of teachers as they deal with results of change, routines, assumptions and roles. Their experiences from beginning teachers to struggling teachers and to successful teachers are the implications of their transition in teaching living things and their environment. Thus, that's where their unique stories evolve.

In lieu of understanding stories through experiences, the study also implies to the Theory of Experience as it prop ups the coping mechanisms of the beginning non-biology majors. Experience does not simply go on inside a person, but experience is what influences the formation of attitudes, desires, and purposes and that each experience has educational impact. The experiences shared by the participants in this study argue with the nature of human experience that focused only on the principles of continuity and interaction. Aside from these two principles, the participants reflected the principle of learning. They consider themselves as the students of their own experience. Their learning serves as the consequence of their experiences.

However, they agreed to Dewey that each experience that a person has will influence his or her future experience, creating continuity between past, present, and future experiences.

### For Practice

The experiences of the beginning non-biology majors have created a wonderful story about the unheard voices of the first timers. As the study uncovers their journey, findings were discussed through themes and it led the story to their travails, coping mechanisms and success stories.

Hence, the findings of this study imply to the life to be of incoming beginning teachers. They are challenged to make a difference in the field of teaching Science Education. They can make use of the stories gathered in the study and make it as their guide if they encounter similar circumstances.

Also, the study implies that for Science teachers to overcome the obstacles of teaching not aligned to area of specialization, they should devise their own coping techniques in order to survive. The study realized that harmonious working relationship among colleagues is an essential solution. Also, a harmonious relationship between co-teachers and department heads paves the way in minimizing problems in the teaching scenario, for they can also provide abrupt help to beginning teachers who need their help. Thus, peer mentoring is known to be primary way for the teachers to cope when they are confused and unfamiliar with the subject matter. In addition, in order for the teachers to indeed acquire versatility in teaching various subjects, the study implies the need of sending teachers to appropriate seminars and trainings relevant to their needs and role in school. Crafting worthwhile workshops and pieces of training that can enhance the teachers' needs across their specialization is a very effective intervention.

Moreover, the findings also imply that the presence of internet, technology and other science materials needed in class are also considered as administrative accountabilities in the school. Insufficiency of these resources makes the roles of the beginning non-biology majors more challenging.

In order for the teachers to indeed acquire versatility in teaching various subjects, the study implies the need of sending teachers to appropriate seminars and trainings relevant to their needs and role in school. School heads, therefore, should consistently instigate department meetings as a venue for coaching and peer tutoring among the teachers.

On the other hand, success stories of the beginning non-biology majors have shown findings that depict positivity. This should therefore be a lesson not to the teachers alone but also to the Department of Education as the source of root of this issue. The agency should give priorities in acknowledging the cries of these teachers during the time they are at stake of battling with their travails. The support and the guidance of the agency would matter.

The success stories of the participants in the study may serve as a motivation to all not as a threat that beginning teachers have no choice but to cope along the way. Through the knowledge gained from deeper understanding of the experiences of the beginning non-biology majors, teachers will be able to become successful in providing Filipino learners the skills and competence in preparation to the challenges of the 21st century.

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## Recommendations

Based on the findings of this study, the following recommendations are advanced:

1. The Department of Education could make use of possible Research or Action Research to give emphasis on the situation of teachers who are assigned to teach subjects outside of their area of specialization. This is applicable not only to science teachers but to all teachers, especially those who are teaching in far flung areas or the barrios.

2. Science Curriculum Planners may look into the content of the curriculum guide that in order to prevent unfinished topics, they must trim down the number of competencies and make it suitable to the time frame given every quarter. In this way, beginning teachers and teachers not familiar with the topics will also have ample time to study, prepare the lesson and deliver quality education.
3. State Universities and Colleges may reconstruct their course program by exposing college of education students to various science subjects from first to fourth year instead of focusing only on their major field of specialization. This would train them well in various science areas as preparatory so that it would be easy for them to teach using the spiral progression approach in science.
4. School and Department Heads of Junior High School may do intensive planning before and during the process of hiring the teachers. They have the full control of assigning teachers with their teaching loads, in so doing; they are the ones who can simply avoid mismatching of teacher's subject assignment. In Science department, due to Spiral Progression Approach, this may not be applicable. Yet, the school head and the department head may plan out procurement of science materials and provide teachers with a learning environment that would help them in implementing science competencies. Sending teachers to seminars and trainings will also be very helpful.
5. Science Teachers are encouraged to enthusiastically embrace the challenges brought by the new curriculum. This study may serve as an inspiration to them. They may submit themselves to various programs for the enhancement of their professional growth through post-graduate studies on other fields or subjects which could be helpful to them. Science teachers may also conduct team teaching and plan out activities that will ease their struggles in science topics.
6. Beginning Teachers, the soon to be 'newbies' in the field of education may gain inspiration from this study. They may become inspired and motivated instead of being threatened when they become a science teacher and assigned to unexpected subject areas. Through this they will be informed. They may have positive perceptions in the realities of teaching profession.
7. Junior High School students, may give feedbacks about the performance of the beginning teachers when tasked to teach subjects not aligned to their area of expertise. This will further improve teaching and learning experiences. Through corrections and immediate actions, students' feedbacks can be a bridge to the learning gaps caused by out-of-field teaching.
8. Future researchers may conduct parallel study with other field of specialization since this study is only limited to teachers in science subject. Future research may also be conducted on the travails of teachers teaching outside their area of specialization throughout the province of Iloilo including teachers who are in the barrios. And also, future researchers may conduct a re-interview with some participants to find out if their views and insights on their experiences have not changed over time or by the time they are considered seasoned teachers. Lastly, same study may be done to investigate the same phenomenon among the teachers in private school since the study is limited only to teachers in public schools.

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