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ORIGINAL ARTICLE

Determining Science Education Students' Career Aspirations and Future Career Perspectives: A Narrative Inquiry

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ABSTRACT

Despite achieving similar college degrees, students venture into different paths post-graduation. Having a career plan with career aspirations and future career perspectives is essential for an individual to have a more straightforward career path. This qualitative narrative inquiry research determined science education students' career aspirations and future career perspectives. Nineteen college science education students in a state university in Zambales, Philippines, were asked about their written narratives describing their career aspirations and future career perspectives. Data from the participants were subjected to thematic analysis following Braun and Clarke's (2006) framework. Findings showed that science education students' career aspirations were (a) to teach and inspire students, (b) to pursue advanced studies, (c) to take licensure examinations, (d) to work abroad, and (e) to shift career. Meanwhile, the science education students' perspectives toward their career after 10 years were (a) to become successful in the teaching field, (b) inspiring and teaching the students, (c) contented in the chosen profession, and (d) willing to embark on another journey. Based on the findings, researchers recommended the creation of career guidance and career management programs among graduating students to provide more apparent career aspirations and career perspectives among them as they become future professionals.

KEY WORDS: Career path; Philippines; qualitative research; science prospective teachers; science teaching; STEM career

INTRODUCTION

Plans after graduation are vital as they provide a clearer view of what new graduates will do post-graduation. Students with more detailed plans will more likely show positive outcomes concerning careers 2 years and a half after finishing college (Shury et al., 2017). Career planning education is vital, particularly for tertiary students, as it helps them create a more precise direction toward their career development (Jiang, 2019). It also assists them in comprehending themselves, decreasing confusion about their profession, and planning academic and career goals by improving their employability (Jiang, 2019). With that, not having a career plan results in a limited vision for new graduates on how their careers unfold after college graduation.

Career planning can be manifested in education-related courses. In South Dakota, a study by Moeller et al. (2016) determined the plans of teacher candidates. The study revealed that 20% of the respondents were unsure about their post-graduation plans. In addition, career planning was intimidating for those who were not sure how their career direction would go (Careers in Insurance, n.d.). Cretu (2017) mentioned that most students in the education program saw their future in the teaching field; yet, few did not see themselves in the said field. A recent research study found alarming findings about students' present career prospects toward the end of their education, highlighting the need for more career orientation in schools where almost half of all students assessed had no definite career aspirations yet (Spitzer, 2022).

Due to this, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics (2016) stated that more than 70% of nations face shortages of primary teachers, increasing to 90% for secondary education. Without immediate and sustained intervention, the situation will degenerate in the face of growing demand for education. Member countries of ASEAN experienced this shortage in teaching staff. In Malaysia, numerous states experienced a teacher shortage (Free Malaysia Today, 2018), and Indonesia plans to hire 100,000 teachers by 2024 to address this deficiency (TheirWorld, 2018). Nevertheless, as different nations face the consequences of declining professional teachers, Taiwan has successfully encouraged students in recent years, especially science graduate students. Based on the result of the study, through their early exposure to science teaching in informal settings and their impressions of beautiful material rewards, commending conditions of works, and the high social status concerning teaching, these students were attracted to teaching (Wang, 2004).

In the Philippines, despite experiencing a shortage of teachers (Association of Southeast Asian Nations, 2013), graduates of education courses and other college courses did not end with the job they pursued on. In an article written by Habito (2020), half of bachelor's degree comprise the 70% who experience job mismatch, including nursing, business administration, commerce, and elementary and secondary education. One of the factors that cause job mismatch among graduates was the

incapacity to create long-term plans. Other factors included irregular and insufficient salary, career identity, and deficit in terms of dignified social status (Ntemngweh, 2016). With that, it is crucial to determine students' career aspirations and future career perspectives to track their post-graduation plans and create interventions to encourage more to pursue STEM teaching.

Every student who enters a course during college aims to graduate and hold their diplomas; yet, every student's career path after graduation varies despite graduating and achieving similar degrees. Limited studies tackling the career plans of education students' post-graduation and factors affecting their decisions have been conducted. Hence, the present research study determined the career aspirations and future career perspectives of education students, especially the science majors.

Students' Future Career Perspective

Having a career plan post-graduation is crucial as it gives students an outline of how their career unravels after graduation. It is essential to know, especially for the institutions, as universities and colleges, to look for ways regarding how students' learning to be with a par and connected with the student's future career paths (Stokes, 2017) as it is an integral part of a system of integrated human resource (Greenhaus and Kopelman, 1981). A study by Sowers and Swank (2017) shows that career planning self-determination interventions provide young adults with positive life outcomes and more remarkable careers, especially those with mental health challenges. Despite that, most students are unsure regarding their career plans and decisions (Hollender, 1971), making career decisions a dilemma across different students and various courses.

Various factors are affecting why students are undecided regarding their career planning. According to Elkins (1975), the factors contributing to the planning of undecided students are opportunity, skills, interests, satisfaction, and salaries. In addition, a study by Briel and Getzel (2014), which focused on determining the career planning of students on the autism spectrum, shows that four themes are considered when planning a career. These themes include the usage of career centers, self-disclosure, the choice of specialization, and career-related services and support.

Aside from indecision concerning career, variation regarding career development is also observed regarding students' career future perspectives. Across different college courses, the variety of career plans among students is also distinct. The study by Ro (2011) shows that the post-graduation plan of engineering students is to be self-employed in the field, practice engineering, work in sales or management engineering, and continue in graduate school for a professional or academic career. The study also shows that various factors influence the plan of the students. Another similar study focusing on plans of engineering students was conducted by Ugwu and Adamuti-Trache (2017), stating that various factors affect the post-graduation plans of engineering students and international science students.

THEORETICAL FRAMEWORK

The research study is anchored on the Career Motivation Theory of London postulated in 1987. They define career motivation as a multidimensional concept divided into three domains: career resilience, career insight, and career identity, where it forms a pattern that represents it (London and Noe, 1997). This study is anchored to this theory as its sought to determine students' career aspirations and motivations for pursuing such a career.

The research study is also anchored to Donald Super's Career Development Theory, emphasizing the idea and importance of self-concept on career development, which changes over time and develops through experiences (Super, 1953). Furthermore, the research study is also based on Social Cognitive Career Theory (SCCT), proposed by Lent et al. (1994). Their theory explains three interconnected aspects of career development: (a) How career-related interests are elaborated and formed; (b) how career and academic options are selected; and (c) on the persistence as well as the performance toward education and occupation (Lent et al., 2002). This career theory is related to the current study as it ascertained participants' career perspectives and the factors affecting them.

METHOD

Research Model

The study adopted a qualitative research approach using narrative inquiry to determine science education students' career aspirations and future career perspectives. A narrative inquiry is a new method of qualitative methodology in which it primarily studies and understands the participant's experience narratively. This method pursues a reflexive and recursive procedure to field texts up to the actual and final text in research, emphasizes ethical matters, and molds new theoretical understandings of the people's experiences (Clandinin et al., 2010). The researchers utilized this research design to better examine the ideas and experiences of the respondents through their written narratives.

Selection Criteria and Participants

The study was conducted in a state university in Zambales, Philippines. The study involved Bachelor of Secondary Education (BSED) Science students as participants of the study. The participants of the study were chosen based on the following criteria: (a) Bona fide students at a state university in Zambales, Philippines; (b) currently enrolled as BSE Science; and (c) 1st-year to 3rd-year students. The participants of the research study were chosen through purposive sampling.

The researchers initially included 30 participants, but due to data saturation, 19 participants served as final participants of the study. Of 19 participants, 11 (57.89%) were females, while three were males (15.79%). Meanwhile, seven of the participants were 19 years old (36.84%) and 20 years old (36.84%), 4 (21.05%) were 21 years old, and only 1 (5.26%) was aged 22. The mean age of the participants was 19.95 years

old. Furthermore, 9 (47.37%) of the participants were 2nd-year college, 7 (36.84%) were 3rd-year college, and 3 (15.79%) were 1st-year college students.

Instruments

The research study used a written interview and triangulated with focus group discussion (FGD) to gather the needed data. According to Nightingale (2009), triangulation is a technique used in numerous research designs that are often used in cross-checking to validate the obtained results. It is also used to compare the results to look over and determine their degree of overlap.

The written interview was composed of two parts. The first part contains the participants' information, including the participants' age, gender, year level, and specialization. The second part of the interview form was an open-ended question concerning science education students' career aspirations and future career perspectives. The researchers created the questions indicated in the written interview form to determine the future career plan of science education students and the factors affecting their decision. The researchers sent the interview form through Google Forms due to the current COVID-19 pandemic. An informed consent that states the written interview guidelines and guarantees the participant's right on participating in the written interview was attached to the interview sheet.

The written interview was subjected to validation using an instrument validation tool by three experts in research and science education to ensure the instrument's content validity, quality, and appropriateness.

Data Collection

The four-phase procedure which guided the researchers in data collection was as follows: In the first phase of the study, the researchers emailed the campus director and college program chairperson asking for their approval before implementing the study. After that, in conducting the written interview, the researchers utilized a formulated research tool, subjected to expert content validation, which is implemented using an online gathering data tool.

The researchers used the written interview form and FGD protocol. Google Forms was used in conducting the written interview and Google Meet for the FGD. After completing the interview, informant feedback followed to ensure the study's credibility and accuracy. In informant feedback, the researchers asked for clarification concerning the participants' responses as a form of validation techniques for the study.

Data Analysis

The data analysis process followed by the researchers includes six processes in thematic analysis based on Braun and Clarke's (2006) model. Researchers coded the collected participants' qualitative responses into similar groups and categories and identified a constant pattern and relationship among the resulting themes to develop a theoretical explanation parallel to the study (Figgou and Pavlopoulus, 2015). The thematic analysis describes a broad range of approaches for analyzing qualitative (Clarke et al., 2015). It is a tool for analyzing the principles underpinning empirical understanding and a quantitative measure of cognitive complexity. Many types of research questions may be addressed through thematic analysis, such as analyzing a wide range of qualitative data, qualitative surveys, focus groups, and interviews.

Following Braun and Clarke's model, the participants' responses underwent thematic analysis, which includes six phases: (1) Familiarizing with the collected data; (2) creating initial codes; (3) finding themes; (4) reviewing themes; (5) labeling and defining the reviewed themes; and (6) creating the report (Braun and Clarke, 2006).

Manual coding was done using MS Word. The frequency of codes was counted with the aid of the Statistical Package for the Social Sciences (SPSS) version 26. The emerging themes were initially identified by the researchers and were validated by an expert using a theme validation checklist. An expert approved the theme before inclusion in the data interpretation. The researchers also assigned codes to protect the participants' identities and responses. The codes used were GS (General Science) followed by the participant's number (e.g., GS-08).

FINDINGS

Students' Reasons for Choosing Science Teaching as a College Course

Table 1 shows the students' reasons for choosing science teaching as a college course.

Theme 1: Interest and inclination to science

Almost all the participants mentioned that their interest and inclination to science were the underlying reasons for choosing science teaching as their college course. As mentioned by one participant, "I chose Science because since I was in elementary, I started to love this subject. For me, it is very enjoyable and interesting (GS-07, F)." In addition, one of the participants also stated, "I chose science because it is related to my senior high strand, which is science, technology, engineering, and mathematics (STEM)" (GS-02, F).

Theme 2: Opportunity for knowledge and skills enhancement

Less than half of the participants stated that they chose science teaching as their course in college because they wanted to enhance their scientific knowledge and skills. One of the participants said, "I chose this not just as a job but an instrument in broadening my knowledge in science" (GS-17). Another participant mentioned, "I took this opportunity to overcome my fear of public speaking and my shyness" (GS-03).

Theme 3: Inspired by educators and scientists

The influence of teachers and famous scientists is another reason given by the participants for choosing science education. As stated by one of the participants, "Many science teachers of mine influenced me to go with this path. Their

excellence and passion for teaching motivated me to love science teaching" (GS-11).

Theme 4: Influenced by family

Some students mentioned enrolling in this field due to their family influence. One of the participants said, "My older sister is very great that is why I am inspired by her" (GS-18).

Theme 5: Passion for teaching

One of the participants mentioned, "I want to become excellent and passionate in inculcating knowledge to young minds, especially students" (GS-11). This statement indicates that a person's intense desire for the profession itself can affect the choice of the specific career path that they want to pursue.

Students' Reasons for Pursuing and Not Pursuing Science Teaching as a Future Career

Table 2 displays the students' reasons for pursuing science teaching as a future career.

Theme 1: Fulfill personal aspiration

One of the reasons given by the participants for pursuing science teaching as a future career is to fulfill their personal aspirations. One participant said, "I will pursue this because I want to become a successful teacher" (GS-03). Other participants also mentioned that "the reason that I will continue teaching career on the future is for me to help our school" (GS-02). Furthermore, as said by the participant "I think the most important thing that pushes me to pursue teaching is the path that God creates for me. And with this, I am confident to be on this field today" (GS-01).

Theme 2: Influenced by external factors

Some participants revealed that the external factors influenced them to pursue science teaching. According to the participants, they want to pursue this course because their teachers inspired them. "My inspiration in taking science is because I was inspired by my high school teachers" (GS-16). Other participants also revealed that they want to pursue this course to achieve their parent's dream. "I want to pursue it because it is my parent's dream. (GS-18)."

Theme 3: Secure a stable career

Another identified reason by the participants for pursuing science teaching is to secure a stable career. One of the participants stated, "I want to pursue science teaching to help my parents and to get out of poverty" (GS-14). Other participants also revealed, "My reason for pursuing this is that I want a job in the future which will help me to support the needs of my parents (GS-10)."

Table 3 shows the students' reasons for not pursuing science teaching as a future career.

Theme 1: Planning to take other career path

Among the participants, three expressed that they do not want to pursue science teaching because they plan to take other

Table 1: Students' reasons for choosing science teaching as a college course

Theme	Significant statement	Frequency	Theme description
Interest and Inclination to Science	I choose this because I truly love Science on how it is so exciting and it is full of diverse topics that would nurture the world around us. (GS-01)	15	It pertains to the preference and curiosity of the students in science courses.
Opportunity for knowledge and skills enhancement	Science is my chosen course because I want to enhance my skills on laboratory experiment. (GS-08)	6	It refers to avenues of student to enhance their scientific knowledge and skills.
Inspired by educators and scientists	I love science since I met my teacher in biology when I am in high school (GS-05)	4	It deals with the teachers' and scientists' influence in pursuing science education.
Influenced by Family	I am inspired by my older sister who is very great. (GS-18)	2	It refers to the support of parents and relatives to the students.
Passion for teaching	I want to help students to learn and master the topic about science because when I was in high school and now in college, I want to learn as a learner. (GS1-10)	2	It pertains to the love and commitment of the students to teaching.

Table 2: Students' reasons for pursuing science teaching as a future career

Theme	Significant statement	Frequency	Theme description
Fulfil Personal Aspiration	I pursue teaching because this is what I want and what I dreamed of. (GS-07)	7	It pertains to the achievement of students' personal dreams and standards, such as personal desires, career aspirations, and calling.
Influenced by External Factors	To achieve the dreams of my mother for me. (GS-02)	6	It refers to the factors such as family and teacher's influence as well as gaining of skills necessary for teaching with the help of external factors.
Secure a Stable Career	One of the reasons is to give my family a better life and repay all their sacrifices. Additionally, I will pursue teaching to support my younger sibling's education. (GS-09)	6	It refers to the opportunities of the students to achieve career and financial stability and professional growth.

career paths after graduation. One of the respondents said, "I will not continue teaching because I want to pursue another career. If I have a chance, that is what I want, BFP [Bureau of Fire Protection]. (GS-06)."

Theme 2: Underpaid profession

Of the participants, only one said that he would not pursue science teaching because it was an underpaid profession despite having heavy workloads. From his statement, he stated, "my personal reasons for not pursuing this teaching as my future career are heavy workloads, and this profession is underpaid. (GS-11)."

Students' Plan Towards their Chosen Career

Table 4 reveals the future plan of students toward their chosen career.

Theme 1: To teach and inspire students

Nine of the participants want to stay in the profession and to effectively teach and provide knowledge to their future students after they graduate. "My plans toward my chosen course are to teach and impart knowledge to the students who need the right guidance. (GS-09)" Added also by a participant, "I plan to inspire and admire a lot of people by this career. (GS-02)" Participants also revealed that they plan to teach in various educational institutions. "I am also planning to teach in college. (GS-03)."

Theme 2: To pursue advanced studies

Among the participants, six plan to continue studying to achieve a higher degree in the profession. One of the participants stated, "After I finish my bachelor's degree, I pursue next of becoming a Master Teacher or higher than that position in DepEd. (GS-01)" Added also by one of the participants, "I will took my masteral to achieve higher position as well I am also planning to be a principal someday (GS-02, FGD)."

Theme 3: To take licensure examination

Five of the participants immediately plan to be licensed professionals. As the participants said, "My plan is after I graduate is to take immediately a licensure examination (GS-12)."

Theme 4: To work abroad

Another plan of participants for their careers is to work overseas. Three participants stated that they would have work experience in the country and then fly abroad to work after specific years of earning work experience. As one of the participants said, "to graduate, earn experience and work abroad. (GS-17)"

Theme 5: To shift career

Some of the participants revealed that they plan to shift careers. They stated that after they graduate with an education degree, they will pursue other careers. One of the participants revealed that after they help their family through teaching, they will continue their other career dream. "I will pursue it until my siblings graduated and continue my dream of being a Mechanical Engineer (GS-05)." One participant also added, "I will not pursue teaching. After I graduate, I will pursue navy. (GS-08)."

Table 3: Students' reasons for not pursuing science teaching as a future career

Theme	Significant statement	Frequency	Theme description
Planning to Take other Career Path	I will not continue teaching because it is like a stepping stone for me to become a full-fledged naval (GS-08)	3	It pertains to the plans of the students to pursue another field of profession.
Underpaid Profession	My personal reasons for not pursuing this teaching as my future career are heavy workloads, and this profession is underpaid. (GS-11)	1	It deals with the low salary compensation of teachers despite having heavy workloads.

Table 4: Students' plan towards their chosen career

Theme	Significant statement	Frequency	Theme description
To teach and inspire students	To teach effectively my future students (GS-16)	9	It refers to the plan of the students to stay in the teaching profession, to teach in different educational institutions, and to inspire individuals.
To pursue advanced studies.	I want to give my best and have a higher rank as a teacher. (GS-03)	6	It pertains to the plans of the students to achieve a higher position in the teaching profession and to continue studies related to the field.
To take a licensure examination	After studying, I will take the LET exam. (GS-04)	5	It refers to the plans of the students to take the Licensure Examination for Teachers (LET) after graduation.
To work abroad	After college and as I pass being a teacher, I will get 2–3 years of experience, and then I'll move to the US; that is my plan. (GS-13)	3	It pertains to the plans of the students to teach in foreign lands.
To shift career	I will not pursue teaching. After I graduate, I will pursue the navy. (GS-08)	2	It refers to the students' plans to pursue other professions after graduation.

Students' Career Perspectives After 10 Years

Table 5 shows the career perspectives of the students after 10 years.

Theme 1: Successful in the teaching field

Among the participants, 11 said that they see themselves achieving success in teaching after 10 years. "I will pursue science teaching with dedication and am confident I will be a successful science teacher. (GS-18, FGD)." They envision themselves achieving a higher degree in the teaching field, encompassing from being a master's degree holder to being a doctorate holder. One participant said, "I see myself 10 years from now as a successful professional teacher and having a higher degree (GS-15)."

The participants also said that they see themselves as successful, contributing significantly to science education as effective science teachers. As the participants said, "I see myself as a pioneer of strengthening science as a wondrous subject than others (GS-01)."

Theme 2: Inspiring and teaching the students

Participants indicated that they see themselves as teachers who not just teach but inspire and influence their students to be better. They see themselves molding students to be a competent professional in the future and even to be a science teacher like them after 10 years in their career. As the participants stated, "Teaching and inspiring students to be science teachers. (GS-18)" One of the participants also said, "continue to inspire and be a good role model to her students" (GS-03).

Theme 3: Contented in the chosen profession

Some participants view themselves as achieving career satisfaction in their chosen profession after 10 years. Participants stated that they are content with their careers and are pleased and passionate about their current employment. As one of the participants said, "I will be a Science teacher and Math teacher. Also, teaching is my passion and I love this career (GS-10)." One of the participants also stated she could envision retiring in this career. "Maybe I see myself retiring from teaching profession as I will really pursue a teaching career (GS-09, FGD)." Furthermore, one participant also sees that they will not shift into another career while teaching. "I am confident I will not shift career (GS-01, FGD)."

Theme 4: Willing to embark on another journey

Some participants revealed that they see themselves in another career or are leaping to another life journey. As stated by one of the participants, "I am ready to enjoy another journey of my life (GS-05)." Correspondingly, one of the participants also stated, "After 10 years from now, I see myself in Public Service in line with Bureau of Fire Protection (GS-06)." This shows that some students are ready to venture into other life and career opportunities after 10 years in teaching. Some also see themselves in other professions despite taking science education as their college course. Furthermore, participants also stated that they see themselves venturing into different career opportunities such as business while still in the teaching field after 10 years in teaching.

Students' Expected Challenges in Journeying their Future Career

Table 6 showcases the students' expected challenges they might encounter in journeying to their future careers.

Theme 1: Work-related challenges

Most participants foresee work-related challenges as one of the major challenges they might face once they are journeying in their careers. They stated that challenges in interacting and developing a bond with students, their parents, as well as with fellow teachers, and other school officials are difficult to achieve due to various factors such as differences in attitude and the pressure brought by the surrounding individuals. "May be handling the attitude of the student, especially 21st-century student who is more serious and has less humor" (GS-12).

Furthermore, the pressure faced and the amount of workload done by a teacher are two of the possible challenges. As stated by one of the interviewed prospective teachers, "Yes, maybe because numerous works is already anchored on being a teacher. It is a part of my life as a professional (GS-01)." Meanwhile, those who will not pursue teaching as a career also foresee work-related challenges in their chosen profession. This includes hazards brought by their chosen profession that

Table 5: Students' career perspectives after 10 years

Theme	Significant statement	Frequency	Theme description
Successful in the teaching field	Maybe 10 years from now, I will be a principal and a successful person. Being able to become an effective science teacher. (GS-02)	11	It pertains to the achieving of different accomplishments related to the teaching field.
Inspiring and teaching the students	I will continue to inspire and be a good role model to my students. (GS-03) Teaching and inspiring students; to be a science teacher. (GS-18)	6	It refers to serving as a role model in the profession and teaching and touching the students' lives.
Contented in the chosen profession	I will be a Science teacher and Math teacher. Also, teaching is my passion, and loving this career (GS-10)	4	It refers to the feeling of satisfaction achieved in the chosen profession.
Willing to embark on another journey	"I am ready to enjoy another journey of my life. (GS-05)"	3	It pertains to the student's openness to various job and life opportunities.

can endanger them. "Yes, and I think since BFP [Bureau of Fire protection] risk their life most of the time, it could be my one concern (GS-06)."

Theme 2: Personal challenges

Eight participants identified personal challenges that they might encounter in the future. They described that their personal characteristics that are integral parts of their chosen field, such as level of patience, confidence, and effectiveness as a teacher, can affect their performance as a teacher in the future. One participant said, "Yes, there are challenges that we may face/encounter, such as how to become an effective teacher and be creative (GS-02)." Moreover, the participant revealed that time management could serve as their challenges.

Theme 3: Financial challenges

Another challenge the students anticipate in their career is the financial challenges within the career. The burden of late salary and using their own money on work-related spending worries them a lot. "Yes, one of these is the late salary. (GS-04)." One participant also cited that managing their income is one problem they can encounter once they are in the profession.

Figure 1 shows the framework developed based on the themes formulated from the participants' responses.

The Career Aspiration and Future Career Perspective (CAFCP) Framework for science education students illustrates the interconnections of the students' reasons for pursuing science teaching as a future career, career aspirations, and future career perspectives. It also accentuates the expected challenges that students might encounter in their future career as science teachers. The developed framework may serve as a guide to teacher education institutions (TEIs) offering science education courses to guide prospective science teachers to pursue science teaching and contribute to quality science education in the Philippines.

DISCUSSION AND CONCLUSIONS

This narrative inquiry determined the science education students' career aspirations and future career perspectives. For the first research question on the students' reasons for choosing science teaching as a college course, the person's interest, and the strand that the student took in senior high school is a major contributing factor that influenced students

Table 6: Students' expected challenges in journeying their future career

Theme	Significant statement	Frequency	Theme description
Work-Related Challenges	Yes, lack of support between students, lots of paperwork, and pressure between school administrators/faculties (GS-16)	11	It deals with the problems in the working environment such as adapting appropriate teaching modalities, dealing with students, lack of instructional resources, occupational hazards, and work pressure.
Personal Challenges	The efficiency of my work or myself because my confidence is not much as strong as they have. But I was willing to learn, and there's room for improvement. (GS-10)	8	It deals with the student's problems such as low self-esteem, height, and time management issues.
Financial Challenges	Yes, one problem is income management. (GS-19)	4	It deals with financial-related problems, including low salary income and income mismanagement.

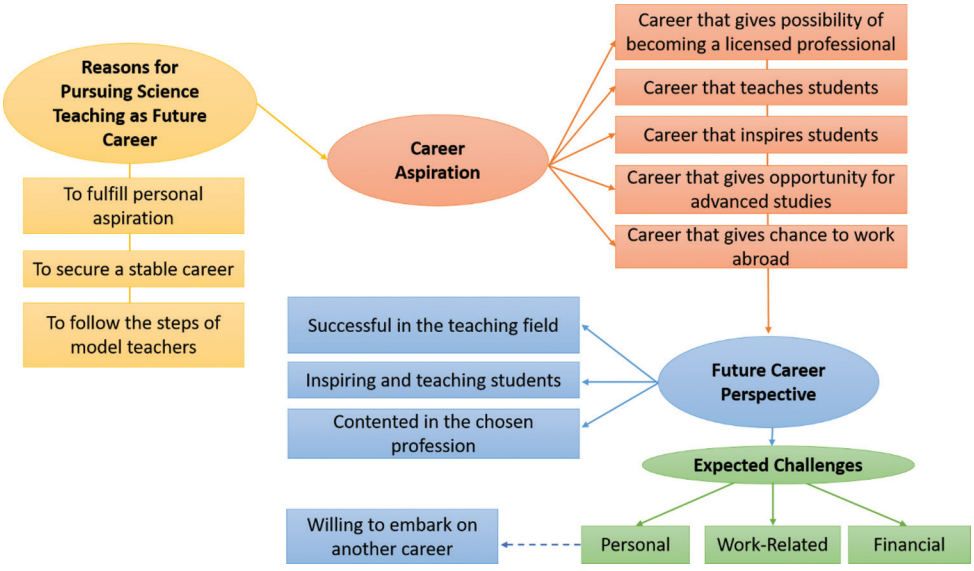

Figure 1: Career aspiration and future career perspective (CAFCP) framework for science education students

in choosing the said course. The study by Palmer et al. (2017) revealed that the student's interest in science significantly affects their intentions to continue studying science. Personal interests are said to be substantially connected to academic choice and subsequent future careers among the students. According to the participants, choosing this course will give them the opportunity for knowledge and skills enhancement. The findings of the study of Rafanan et al. (2020) state that skills relevance is a significant factor in choosing a career.

The good experience of the students with their teachers and the inspiration that they get from their favorite scientists are also one of the reasons that they aspire to follow in their footsteps. The study by Dela Fuente (2019) noted that family influences a person's career choice since students have direct connections with parents and relatives due to the Filipino culture of close family ties; they significantly impact students' choice of career path.

For the second question, participants were asked of their reasons of pursuing or not pursuing science teaching as a career. With the gathered responses, it is identified that a person's desire to fulfil personal aspirations could influence their future career choice. These are consistent with the findings of Rafanan et al. (2020), stating that personal preference, passion, and career goals drive individuals to pursue STEM-related careers such as science teaching. Furthermore, in their study, Kovalcikiene and Daukilas (2018) revealed that a third of every vocational teacher chose a teaching career as a career calling. According to Manalansan et al. (2020), inspiration from teachers and parents is that some of the primary reasons students choose the teaching profession as their career. The finding also implies that prospective science teachers want to pursue science teaching to attain security in their careers, such as financial stability.

Some participants also plan to take other career paths. Another participant mentioned that they chose teaching as their stepping stone to other careers. According to Siddiky and Akter (2011), students who want to pursue the jobs undergo numerous job preparedness strategies, such as the selection of mode of study to seek the career of their preference. Due to being an underpaid profession, one participant will not pursue teaching career. This suggests that the workload done by teachers is not given adequate compensation, thus, causing prospective teachers not to pursue the teaching profession. The finding supports the study of Thompson (2018), revealing that low pay is the primary factor for attrition among former experienced K-12 teachers. Furthermore, Sekerci (2019) discovers that workload is one of the main reasons for experiencing burnout among newly qualified teachers who depart school before starting their teaching career.

Students' plan toward their chosen career is the focus of the third research question. Based on the themes generated, they plan to teach and inspire students, they will pursue advanced studies, take a licensure examination, work abroad, and some will shift career. The prospective teacher's plan is focused on teaching and inspiring the students. This can be associated with the study of Richardson-Spears (2018), which revealed that the desire to teach, inspire, and empower the students is one reason individuals chose the teaching profession, especially among female STEM majors. The participants also plan to enter a graduate school to further develop and deepen their knowledge and pedagogy in the teaching profession and to achieve a higher rank or position in teaching. According to Jung and Li (2021), students pursue advanced studies such as master's degree due to various motivations depending on students' specific characteristics. Intrinsic and extrinsic motivation, such as growth and satisfying students' insufficiencies, respectively, primarily motivates them to pursue said studies. Education students also plan on preparing and taking licensure examination for teachers after they achieve a bachelor's degree in education. Aquino and Balila (2015) state that most education students aim to take Licensure Examination for Teachers (LET) in the soonest and most immediate possible time.

According to Remhof et al. (2014), the individual's openness, extraversion, and intention to work overseas are fully facilitated by cognitive constructs. Specifically, Toraman et al. (2020) reveal that a specific driving force pushes teachers to work abroad, which is embodied in their curiosity and pride in being chosen to work overseas. Some participant's immediate plan for their career is to shift to another job which is caused by the participants' various considerations, such as their dreams and fulfillment. According to Towers and Maguire (2017), numerous professional, personal, and situational factors linked with the teacher's identity are contingent on the teacher's decision to leave or stay in a teaching career.

For the fourth research question, the participants were asked of their career perspectives after 10 years. The prospective science teachers have a positive outlook regarding their teaching career. This supports the findings of Karakis (2020), revealing that prospective teachers want to achieve success and progress in terms of their job based on their obtained motivation throughout the career development process. Furthermore, they also see themselves giving back to people by teaching at a public school and helping those who help them to be a teacher. This implies that the prospective teacher envisions continuing teaching, inspiring students and individuals, and even giving back and serving others throughout her teaching career.

The prospective science teachers see themselves to have high regard, respect, and interest in the field of science teaching even after 10 years in the career, leading them to attain contentment and satisfaction while working on the said career. According to Üredi (2017), studies stated that there is a great indication of the teacher's satisfaction with the profession given to the students if it is in accord with their abilities and interest. Salary, flexibility in terms of work, satisfaction toward career, change in life goals and philosophy, and discontent in career leadership are cited as common reasons for a career change.

For the last research question, students' expected challenges in journeying their future career were probed. Participants stated

insufficient instructional materials and adapting to educational changes caused by the advancement of the academic field as some work-related challenges that they might face in the teaching profession. They stated that trials such as adapting the teaching style to more upgraded technologies and innovation could challenge teachers in the future. These are consistent with findings of various studies stating that the indicated work-related challenges are present and possible to experience by the teacher once in the teaching field. (Bekmezci and Ates 2017; Ergunay and Adiguzel, 2019; Safta-Zecheria et al., 2020; Tack and Vanderline, 2019).

The main reason the students pursue science teaching as a college course is their interest and inclination to science. The students' major reason for pursuing science teaching as a future career is to fulfill their personal aspiration. On the contrary, the primary reason students do not pursue science teaching as a future career is their plan to take other career paths after graduation. The students' leading career aspiration toward their chosen career is to teach and inspire students. The participants see themselves as successful teacher in the teaching field after 10 years as their future career perspective. The prospective science teacher mostly expects to face work-related challenges as they journey in their future career.

Research Ethics Protocol

The researchers followed various ethical considerations to ensure honesty, confidentiality, respect for intellectual property, social responsibility, and non-discrimination among the participants. The researchers secured and kept the personal data and responses of the participant confidential, as securing and safeguarding the data gathered from the participants are the researchers' primary responsibility (Sutton and Austin, 2015). The researchers also allowed the participants to withdraw their participation if they did not want to continue and ensure that they would not be harmed. Furthermore, data and information given by the participants were kept and handled by the researchers in compliance with the Data Privacy Act of 2012. According to Republic Act 10173 (2012), the researchers must protect the personal information and data of an individual.

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