

The Antecedents of Teacher Efficacy: The Case of Two Teachers in a State University Laboratory High School in the Philippines

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Abstract: *This deductive-qualitative case study aimed at describing how school factors influence teacher efficacy based on the accounts of two efficacious faculty members of a laboratory high school in a state university in the Philippines. Data from in-depth interviews were analyzed thematically. Findings revealed that both research participants wanted to become teachers when they were younger; perceived that students' excellent academic achievement after graduation from their school as having a positive impact on their teacher efficacy; agreed that administrators, influential graduate faculty, peers, and aspiring teachers positively impact their teacher efficacy; and considered increased workload as negatively affecting teacher efficacy. Both research participants noted school culture as enhancing teacher efficacy, mainly by offering holistic development for both students and teachers. Attending seminars and doing research were also regarded as potentially creating a positive impact on their teacher efficacies, provided they be given more support by school administrators and peers. Results of this study may be used as basis for human resource interventions that could help enhance teacher efficacy. A similar study could be implemented among academics from other units of the university to observe the effect of varying organizational structures and cultural contexts, among others. Furthermore, a comparative analysis of teacher efficacies between public and private school teachers may offer interesting perspectives on the intricacy of school culture as determinant of teacher efficacy.*

Keywords: *Teacher efficacy; teacher efficacy antecedents; laboratory school*

1.Introduction

Bandura (1997) defined self-efficacy as the belief in one's ability to set a course of action to accomplish a specific task or produce a desired outcome. It is central to a teacher's success, since it determines the degree of effort exerted on a task as well as the kinds of aspirations and goals that they will set for themselves (Bandura, 1986; Gist & Mitchell, 1992). Despite its importance, it has been relatively unstudied (Gareis & Tschannen-Moran, 2005).

In 1977, Bandura attributed four possible sources of self-efficacy: mastery experiences, modeling aspect of social cognition, social persuasion, and people monitoring their somatic and emotional states about a definite task. A study by Anderson and Betz (2001) revealed that interventions grounded on the four information sources of efficacy would influence personal and career development.

Teacher self-efficacy is a construct developed within the context of Bandura's social cognitive theory (Gavora, 2010). Bandura defined self-efficacy as the belief about one's own capabilities and to organize and execute a certain task (Bandura, 1997, as cited in Gavora, 2010). According to Bandura, it has two components: efficacy expectation and outcome expectancy. Efficacy expectation is the belief that one has the ability, knowledge and skills to successfully perform the behavior or actions required to produce the desired outcomes. Outcome expectancy, on the other hand, is the individual's estimate of the likely consequences of performing a task at the self-expected level of performance, i.e., the belief that a given behavior will indeed lead to expected outcomes. Hence, to be successful, a teacher must have both efficacy expectation and outcome expectancy (Gavora, 2010).

Teacher efficacy is a strong self-regulatory characteristic that allows teachers to use their potentials to enhance the learning of students (Gavora, 2010). Efficacious teachers view failure as a lack of effort, or an implementation of an incorrect strategy rather than a lack of skill. They also use internal power to build relationships and set examples. Inefficacious teachers, on the contrary, regard failure as something beyond their control, or blame another person or the environment for low performance. They are also slow to implement innovations. They also use external power sources like management rights to force others into action (Bandura, 1994, as cited in Friedman, 1998).

Hoy (2000) mentioned that "mastery experiences during student teaching and induction year" are among the significant factors that influence teacher efficacy development. Mastery experiences are also a factor hypothesized to be the most effective among the sources of teachers' self-efficacy beliefs (Bandura, 1997 as cited in Tschannen-Moran & Hoy, 2007).

New teachers with high self-efficacy were more satisfied, viewed teaching more positively, and were less stressed (Burley, Hall, Villeme, & Brockmeier, 1991; Hall, Burley, Villeme, & Brockmeier, 1992, as cited in Hoy, 2000). Meanwhile, higher self-efficacy beliefs for experienced teachers are reflected in their efficacy for instructional strategies and efficacy for classroom management. However, novice and career teachers had the same efficacy for student engagement (Tschannen-Moran & Hoy, 2007). Experienced teachers show higher mean scores of self-efficacy than novice teachers (Hoy & Tschannen-Moran, 2007).

It is estimated that a 28 percent improvement in job performance can be attributed to self-efficacy (Stajkovic & Luthans, 1998). Bandura (2000) found that there are three conditions that support self-efficacy development: guided mastery, cognitive mastery, and

self-regulation. Gareis and Tschannen-Moran (2005) claimed that monitoring these three conditions may help develop an understanding of not only how to augment student achievement but also the educational leaders' persistence to attain that goal.

A teacher's sense of efficacy is the result of his or her capabilities to make a course of action to produce desired outcomes in the school he or she leads (Bandura, 1997). His self-efficacy beliefs have a significant impact on his level of aspiration, persistence, goal-setting, effort, and adaptability (Bandura, 1986; Gist & Mitchell, 1992). It is also needed to maintain the productive attentional focus and persistent effort needed to succeed at organizational goals (Wood & Bandura, 1989). Furthermore, self-efficacy beliefs of leaders were shown to largely impact the attitude, performance, and commitment of their followers (Chemers, Watson, & May, 2000; Paglis & Green, 2002). Leadership behavior of teachers in the classroom has thus been linked to teacher efficiency beliefs.

The theoretical rationale discussing the relationship observed between teachers' sense of efficacy and their performance is explained by theory of triadic reciprocal causation of Bandura (1997) where there is mutual influence among three factors namely personal factors (cognitive, affective, and biological events); environment; and behavior.

While teacher efficacy evidently plays a role in effective teaching practices, little is known about the kinds of context variables linked to cultivating a higher sense of efficacy (Labone, 2004)—hence, the need to explore these variables. Thus, this case study sought to determine how length of school service, educational attainment, research activity, extension activity, school culture, and teacher burnout contribute to teacher efficacy. Using a deductive-qualitative approach (Gilgun, 2011; Whitley & Crawford, 2005), this study aimed to examine how school factors contribute to teacher efficacy from the perspective of two faculty members who have high self-efficacy. This study is a component of a two-part study that initially determined the self-efficacy of selected teachers in a laboratory high school in a state university in the Philippines.

2. Deductive Qualitative Research Design

In-depth interviews were conducted with two teachers who through a survey were found to have high self-efficacy. Interviewing teachers about their experiences and self-efficacy development provided information regarding how factors such as length of service, educational attainment, research activity, extension activity, and school culture affect teacher efficacy.

This qualitative study involved inquiry, which occurred in a naturalistic setting and involved creating understanding out of information obtained from others. The sample size in this study while small was adequate to provide thick, rich descriptions of teacher efficacy development. This study was designed to identify common themes and topics regarding how different factors and human interactions contributed to their teacher efficacy development.

The purpose of this qualitative research was to gather information that could not be gathered from responses in the survey questionnaire. The interview protocol connects the questions with Bandura's (1997) four sources of self-efficacy development. Several questions were coded with more than one self-efficacy source. The fact that a single protocol question can identify more than one teacher efficacy source indicates the importance of the interplay between and among specific efficacy sources.

The last item in the survey questionnaire from the first stage of this study asked for the participants' consent to be included in a qualitative interview. After the analysis of

quantitative data, two teachers who fit the criteria of rating themselves as having high teacher efficacy were chosen. The two teachers were contacted and were sent an e-mail detailing the rationale of the research study. Aside from requesting their participation in the interviews, the research participants were also informed that their participation was voluntary and that they could withdraw from the interview any time. They were also informed that they would be protected with pseudonyms during the analysis and reporting stage of the study.

Data gathered through key informant interviews were transcribed carefully by the researchers. The recorded interviews were transcribed in verbatim and later translated into English. After finishing the transcriptions of the two interviews, the data gathered were presented in the form of narratives which is descriptive in nature. This allowed the researchers to present the story of teacher's self-efficacy in a deeper and more detailed form.

3. Teacher Efficacy

Andrew, an Assistant Professor is a teacher at heart as he has viewed himself a teacher as early as when he was in high school. He spent his spare time as a tutor and he enjoyed teaching: "Even before, I already view myself as a teacher. Ever since high school, I was tutoring during my spare time in the evening. I enjoyed it."

Therese, also an Assistant Professor, wanted to become a teacher even when she was still young. She attended a university known for quality teacher education. She started teaching in the state university laboratory high school as a fresh graduate, and it was her first job. She said that the skills and the performances that she got from her alma mater and her innate abilities and talents helped her during her first year of teaching.

Andrew believes in having a model. He shared that in high school and college, there were several teachers whom he looked up to on being a teacher. He said: "*In terms of advising, even back in college and when I was already a professional, when I had time, I really would come back to my former adviser when I was in high school... And then with my music teacher, I guess he instilled my love for music and the discipline that comes with it. In a way, those teachers had a very large impact on me.*"

Furthermore, Andrew emphasized the importance of a support system through his co-faculty, whom he can consult through casual talks. His principal also had a great influence on him in administrative matters. They have been a big help, since there were times when he was reflecting if he really belongs to teaching in high school. He narrated: "*If you don't have a steady support system... and without colleagues you can consult about the problems you face, I don't think one can really last long in this profession. I also have a co-faculty who serves as my mentors in terms of pedagogy, how to teach and how to handle things... Our principal on the side of management and administration, on looking at the larger perspective.*"

As a teacher, he wanted to replicate the graduation of level of tasks given to him. He said: "*What I observed from my first year until now is that the level of tasks being assigned to me gradually increases... I learned a lot of valuable things which I can use for the next level of challenges.*"

Andrew added that he will continue mentoring the student teachers assigned to the school. He also emphasized the importance of reflection. He said, "*I will just continue mentoring student teachers besides innovating how I teach and then continuously reflecting. I guess that's it; one must devote much time for reflection... I think it is because*

not one formula works for every year.”

Meanwhile, Therese revealed that she believes that students are better than their teachers. She added that her students ought to be better than her as learning is a continuous process. This personal belief helped her to be humble and to keep in mind that she should prepare rigidly for her lessons. She takes it as a pressure to study her lessons, as she believes that the students should learn from her. She narrated: *“My belief really, is that in the future our students will be better than us teachers. It is difficult if the teacher is the only one who is great. If the teacher sets this standard, and then the student will not surpass the teacher, everyone will be dull... I believe that learning is a continuous process. I have many things that I don't know but my students will have a better chance of learning it... It really helped me a lot to be humble, learn a lot, to prepare, rigorous preparation... This belief helped me a lot, because it really forces me to study.”*

In a study by Perrone, et al. (2002) on role model influence in the career decisiveness of college students, it was found that role model supportiveness and quality of relationship contributed to the career choice of students. In addition, Gareis and Tschannen-Moran (2005) argued that education leaders' beliefs in their self-efficacy influence the level of effort and perseverance they exemplify daily as well as their persistence amidst encountering setbacks. In addition, McCormick (2001) noted that beliefs about self-efficacy affect the development of functional strategies and their skillful execution.

4.Length of Service and Efficacy

Andrew considered every year a new window for challenges. He mentioned that teaching is the kind of job that always has challenges. He said that his most dreaded subject was Physics, which he also taught. He added that his level of confidence in teaching Biology was higher compared when he would teach Physics, since he needed to study extensively and read several books. He also has to search the Internet for Youtube videos on best practices and modalities that would engage his students.

According to Andrew, he has been mentoring future math and science teachers for 10 years. Having no background in education, he was forced to critique lesson plans. He said that during teaching demonstrations, he could reflect whether he was also practicing what he has been commenting or suggesting to student teachers. This was also an avenue for him to learn something new from the student teachers—from their problems and to the solutions to their problems. He said: *“For ten years already, I have been handling a group of Math and Science Teaching (MST) students... What is inspiring about them is that they are idealistic. The challenge it poses for me is how to maintain that sense of idealism; how do I not drown myself with the many challenges I face... At the same I am also inspired by student teachers who really love teaching. And when you see their improvement from the time they started until their final demo, when you see them acting like a real teacher... that, for me, increases my self-efficacy.”*

Andrew mentioned that high school teaching is different from college teaching. The college teachers' contact time with students, for instance, would not be that long. According to Andrew, the greatest challenge for a teacher would be the one that happens beyond the classroom. He said that in the classroom, conditions are controlled. However, the cases he handled in terms of student behavior were outside the classroom. As a homeroom teacher and later a year level coordinator, he had to deal with parents whose children got injured or have cases of misbehavior or academic delinquencies. These

experiences molded him.

Andrew emphasized that teaching through the years has been challenging and daunting, especially when they had to integrate and master content for several sciences within a year level. He also shared that his greatest teachers are the students, because their experiences allowed him to find ways on how to teach them better, on how to innovate using technology in teaching science.

On the other hand, Therese has been teaching in the school for 12 years. In that span of time, interaction with students and colleagues have developed. She considers her interaction with her students and colleagues as contributing to her efficacy beliefs.

Therese said that her belief that the students will be better than their teacher comes with the challenge that students should learn from her. What is more challenging is that music should be appreciated. For Therese, if one is a boring teacher, students will not learn from him or her: *“In teaching, there really is an intrinsic pressure within yourself for the student to learn. For me, my challenge is to let them appreciate music... If you are boring, they will not listen to you.”*

In addition, attending seminars outside the school contributed to the enhancement of her teaching efficacy, the highlight of which was when she was chosen to participate in a national training for K-12. Therese narrated: *“My training for K-12 really helped me a lot to mature. When we were sent to Baguio for the national training, we then served as trainers in the regional sessions where we taught other teachers. That was a big break for me... When I attend trainings, that is positive for my class, because I really apply whatever I learned.”*

Therese also mentioned that at first, she had no plans of staying in the school. She kept telling herself each year that it was time for her to leave, but the more she utters it, the more she stays. She revealed, however, that it was not because of the school that she wanted to leave. The reason is her attachment to Manila where she studied. She shared: *“Every year, they would hear that I was going already as I really did not have the intention to stay very long... When I studied in a university in Manila, I became too attached; I didn't want to teach in my hometown... Every year, whenever I'm being asked, 'What's your plan?' I always tell them, 'If you are not satisfied with my teaching, you can opt not to renew me.' I felt my heart was not at the right place, but I love teaching. I did my job well, worked harder... But my heart wasn't just in my hometown before.”*

Mastery teaching experiences are situations in which teachers demonstrate their own teaching success, thus proving that they are competent teachers (Gavora, 2010). Bandura (1997), as cited in Gavora (2010), noted: *“Enacted mastery (teaching) experiences are the most influential source of [self-] efficacy information; they provide the most authentic evidence of whether one can muster whatever it takes to succeed. Success builds a robust belief in one's personal efficacy.”*

5. Educational Attainment and Efficacy

Andrew graduated with a degree in Biology from the state university to which the laboratory high school is a unit. After graduation, it was in his psyche to become a teacher, but not a high school teacher. He applied for a teaching position in the state university; however, his application was not considered, because an affiliate faculty was preferred for the position. He then accepted the opportunity to teach at the state university's laboratory high school, since he already wanted to work.

Andrew taught Biology and Research subjects, even though his only research

background was from his thesis. He also handled one course in statistical research design. His fear before he started was that he had no pedagogical techniques, because he had no courses in education. He said: *“I have no education units, but from time to time, I do attend seminars and workshops... I acknowledge that that is where I am lacking, strategies and techniques.”*

During the first three months of his teaching, Andrew was quite nervous, since he started teaching Biology and Research subjects to 2nd and 3rd year high school students. He had no problem teaching Biology. In Research, however, he had to adjust. There were times when 3rd year students were required to defend their research outputs, but he was not the one who handled them during their 2nd year. Thus, he was not familiar with their research.

Andrew shared that he did not only learn about content from his university professors, both undergraduate and graduate mentors. He also learned about discipline—from critiquing his thesis to learning independently. He added that he also learned about shifting focus from content to pedagogy. He said that that was how his teaching style and his mindset on teaching evolved. From giving information his focus shifted to how his students learn. Troubleshooting was also one important skill he honed during his graduate studies.

Andrew mentioned what he wanted to replicate from his educational experience: *“...that sense of going through optimization and trouble shooting. For both my undergraduate and graduate theses, I was always asked to choose between a study with a standard protocol or a pioneering work... The kind of learning that you have is just very different... I think even when I pursue PhD I will still choose to be pioneering.”*

The following experience may not be from Andrew’s educational attainment, but he shared that the educational attainment of his former students (with him as the former source of knowledge) contributed to his efficacy: *“Incidentally, during the time when I graduated with my Master’s degree, the class valedictorian was a former student graduating as summa cum laude with a degree of BS Biology... And then just this year, the valedictorian for this class was again my former student, now graduating as summa cum laude with a degree in Agriculture... I bred two summa cum laudes in my lifetime... It offers me a different level of confidence and added on my self-efficacy... It served as validation to the kind of work I do and what I contribute to the learnings of my students.”*

Moreover, Andrew shared that he gets inspired to pursue his Doctoral degree in Genetics by 2018 and to get education units after his PhD. He plans to earn his PhD and units in education in another country. He said that studying abroad for his PhD would prevent “in-breeding” as mentioned by his advisers. He added that he also has vested interest on establishing linkages with institutions abroad for the state university laboratory high school while he is studying abroad.

Furthermore, Andrew said: *“So that I can also relate it to my teaching, after finishing PhD, I’m planning on taking some units on educational psychology... More on curriculum development. I think that would add more to my efficacy, making sure I’m on the right track.”*

Thus, Andrew plans to take educational psychology to better understand learning styles. He also aims to address the challenge in dealing with the students’ behavior, concerns, and needs.

Therese, on the other hand, graduated with a degree of Bachelor of Secondary Education major in Music Education from an esteemed university for teachers. She took her master’s

degree in the same university, with specialization in Music Education.

Therese's coursework in Professional Education during her undergraduate program prepared her for the path that she wanted to pursue and contributed on developing her efficacy as a teacher. It also helped her understand the things she will be experiencing as a teacher. She narrated: *"My Professional Education courses during my undergraduate year really influenced [me and my classmates] during our first year, because we were always asked, 'Are you really a teacher Maybe you just didn't have a choice?' In Professional Education, it is like discovering who you are as a teacher... so I understood better, this is really something I would like to do."*

When she was taking her master's degree, what helped her improve her efficacy was enhancing her talent: *"When I was taking my masters, it is particularly about music... But it was also about foundations in education, not too lax nor too strict... But it enforces one to hone one's talent and not be stagnant."*

When asked who was the person who influenced her during her graduate studies about her self-efficacy beliefs, Therese said that it was her adviser who encouraged her to finish her thesis: *"My thesis adviser... We evaluated the curriculum of [the state university laboratory high school] through a case study. I learned a lot from my adviser. I learned a lot of theoretical knowledge, although not in music. My adviser encouraged me to do research..."*

Therese shared further that she wanted to pursue a doctoral degree. She was inspired by her graduate professor to never stop learning. *"My teacher was an esteemed music professor, and I looked up to him... He inspired me to never stop learning. That's why I am considering pursuing PhD, because in music you always must enhance yourself... I was inspired by him when he was my teacher. He was 77 then, turning 78, and yet he was still teaching, driving, and holding lectures... The pay is not that good, but he just loved us music majors... You will really learn from him..."*

Therese added that she wanted to pursue Ethnomusicology for her PhD; however, she is uncertain if this is connected to music and if this track will be approved. She is particularly interested in notating tribal songs. She revealed: *"For my PhD, I was also not planning on pursuing Music but Anthropology, specifically Ethnomusicology. I think having a background in anthropology will help me pursue it. I don't really know if it is in line with music; that's why I'm still undecided. But that's what I want. I got the idea while I was notating tribal songs... I still am just planning to pursue PhD... Hopefully."*

Hoy and Woolfolk (1990), as cited in Coladarci (1992), reported that there was higher personal efficacy among practicing teachers who took extra graduate courses in education. Coladarci (1992) cited that teacher efficacy is related to academic achievement and teacher behaviors known to foster academic achievement (Ashton & Webb, 1986; Berman & McLaughlin, 1977; Gibson & Dembo, 1984; Greene, Anderson & Loewen, 1988; Woolfolk & Hoy, 1990b; Soar & Soar, 1982; Ashton, 1984; and Dembo & Gibson, 1985). Professional learning can also be viewed as a method of improving teachers' perceptions of their efficacy, thus improving their performance (Armor, et al., 1976; Bandura, 1993; Caprara, et al., 2006; Minett, 2015). Developmentally, professional efficacy implies that teachers' sense of personal efficacy increases with experience (Soodak & Podell, 1996).

6. Research Involvement and Efficacy

Andrew's first research involvement was when he was a student. Recalling the

time when he was in graduate school, he said: *“Studying in the university really trains you in doing research, even if it is just a subject you teach. It gives you perspective of a research framework.”*

As a teacher-researcher, he said: *“It gives me openness to engage in educational researches... I had several research collaborations... Here in school we have many data as a laboratory school, but we never get the chance to process them... That is where we currently are lacking when it comes to promotion opportunities... In the academe that is how one rises in terms of rank... That is where we should also try to concentrate.”*

Andrew also mentioned that the science department always makes it a point to supplement their research capability through seminars and trainings. *“Sometimes, I attend symposia about qualitative research where I don’t have prior experience, and there are social science researches that we conducted. As a department, we make it a point to attend at least once a year... Sometimes we attend conferences in Davao, Negros, Manila, and Tagaytay... They serve as a refresher.”*

Though teachers in their school have very busy schedules and thus have limited time to pursue research, Andrew does not want to use this excuse to not do research. He said that one must excel in both research and teaching. He cited their current research on the flipped classroom with three of his colleagues.

Andrew also highlighted the importance of collaborations. He said that in the senior high school, they have made collaborations with 15 to 20 institutions within the state university. They have also established three collaborations with Japanese high schools.

On the other hand, Therese mentioned that during her graduate studies, what enhanced her efficacy is the validation of the curriculum, especially the curriculum of the state university laboratory high school. She also said that it is helpful to do more research: *“During my graduate school days, when it comes to research... I was really influenced to check on the curriculum... I’m contributing my skills or knowledge when it comes to validating my school’s curriculum...”* She thus encourages teachers to do more research.

Therese also mentioned that a research experience she will never forget was when a former Dean helped her in doing statistical analysis for her paper to be published, to which, she was always grateful. She said: *“In doing research, I really want to remember the help our former dean extended to me. She did the statistics... And she did not ask for a fee... She did it and sent it via email very early in the morning.”*

Meanwhile, the administration influenced Therese’s confidence and proficiency in doing research. Personally, it was also self-motivation that influenced her to do research. Therese shared: *“Our principal and our dean [motivated us]. In the state university, you really are pressured to publish research papers. Sometimes, self-motivation... I think one limiting factor in doing research is the schedule and the [many] activities that we have.”*

For Therese, it is quite difficult for them to publish research, since the school follows a different set of activities as compared to the state university. In addition, teachers also have accountabilities with their students. Therese said: *“The school also compels the faculty to produce research papers. Our principal always articulates the disadvantage high school teachers have in writing research papers as compared to our college counterparts... It is difficult for us to publish, and I really hope they can understand our uniqueness.”*

Academic institutions, especially those linked with higher education institutions, usually adhere to a trilogy of functions: instruction, research, and extension. As such,

research and extension play a huge part on the dynamics academicians navigate through. Vaccaro (2009) mentioned that journal publications of faculty members enhance both the position of the researcher and the status of the university. Successful record of scholarly publications was often the basis of promotions in the academe (McGrail, Rickard & Jones, 2006; Vaccaro, 2009).

7. Extension Involvement and Efficacy

As a teacher, Andrew is not only involved in instruction and research but also in extension activities. This occurs mostly by advising the science club during their outreach activities, where they also learn extensively about organizational skills. Andrew shared: *“I was the club adviser of the science club, and we have this large activity every October, the Science and Math Fair. ... It offers a great deal of learning in terms of organizational skills.”*

Their outreach activities also involve influencing local elementary kids in pursuing science by holding educational trips to nearby institutions fostering the scientific culture. Hence, Andrew believes that their extension activities also give their students learnings that they could not teach within the classroom such as reaching out, helping others, and being aware of what others need.

In addition, Andrew has also served as adviser of a church-based choir in the university. They hold outreach activities annually that cater to diverse beneficiaries such as the hearing impaired, prisoners, and cancer patients through the funds they gather from their evangelical concerts.

Meanwhile, Andrew noted that most of their students have feelings of entitlement. Some students, when not allowed to do something, think that they were being robbed of something already. They fail to realize that decisions were made with bases. He thus seeks to teach students the concept of delayed gratification, that not everything can be attained instantly as in problem solving. Andrew said he wants to expose the students to situations wherein they could see how other students are trying to study even with limited means. This might let them compare their present setup and encourage them to study and to have intrinsic motivation.

In relation to handling a music ministry, Andrew shared that the one who handles the school's Glee Club mentors him. She helps him on how to sustain the commitment of the students, since Glee Club is not within the confines of the classroom. She also mentors him on how to handle students. He shared: *“At times, when the conductor of the Glee Club is not around, I handle them... Then, there were two times when the Glee Club competed outside the country. The challenge was managing the students despite their number.”*

Therese was particularly involved with the Alangan Tribe in Mindoro. She said that she wanted to help the tribe by writing a research about their culture, as she already has the data. Through such research, Therese believes that the future generation will be able to read their culture when the elders are gone. She said: *“Beyond research, that is a tool. But the passion for helping native tribe indigents, this is what I hope they understand... Do research and then teach it also to the kids... They will read, and they will think: ‘So this is our culture’.”*

Additionally, she said that the Glee Club was also involved in outreach programs as they sing for a cause. She even called for the help of the alumni. She shared: *“In terms of public service, our choir usually sings for a cause. We held a concert for the Habagat*

victims, wherein our school and our local church collaborated. Then we gave the proceeds to the typhoon victims. Knowing that these kids, including some alumni joined forces and very rapidly mobilize... When the money came in, we bought rice and then we distributed..."

At the state university, as with any university, extension activities or public service is of paramount importance. In universities, extension education continues to play an active role in learning societies, modifying direction of development so as to address the urgent needs of the citizens (Lin, 2009).

School Culture and Efficacy

Mattingly (2007) viewed school culture as consisting of the attitudes and beliefs of the people within and outside the school; the cultural norms; and the ways different persons relate to each other. Tableman and Herron (2004), on the other hand, defined school culture as the sum of the values, culture, safety practices, and organizational structures within a school that cause it to function and react in particular ways.

Andrew mentioned that in the state university laboratory high school, there is balance in terms of academics and co-curricular activities. He noted: *"With reference to school culture, I want to replicate, as in the school's case, the balance between academic and co-curricular activities... Replicate systems which are working, like, for example, during SciMath Fair, in terms of mentoring students."*

During the interview, Andrew also emphasized the relevance of mentoring MST students of the university and building the research culture of the state university laboratory high school: *"First, building research culture... Because we have already established a system in terms of mentoring student teachers... Another very good opportunity I see is the students doing their special problem about education together with some of our faculty who have master's degree in education serving as mentors... As this will build the self-efficacy of our teachers in doing research."*

Andrew also highlighted the contribution of the culture of giving the teachers tasks at increasing levels of difficulty. He said: *"If it were not for the seemingly stepwise manner in terms of relegating tasks, with increasing difficulty and scope, thereby opening opportunities for international linkages, I wouldn't have built my self-efficacy as a teacher. Even if one is given enough resources, but if one does not resolve within oneself how to provide solutions to problems of great magnitude, and if not experienced in a stepwise fashion... It wouldn't be as possible... The challenge of the 'up or out' and the 'publish or perish' rules that the system imposes really pushed me to do research and come up with a publication."*

Meanwhile, Therese considers the state university laboratory high school as an ideal school. She noted that the culture of being balanced and holistic of the school made it conducive for the students as well as for the teachers. She stated: *"Maybe it is being an ideal school, because our school is a laboratory school which is strong in the sciences... Our school really puts premium for science and math, but one good thing about our principal is that, she wants to achieve balance... One good thing about the totality of the school program is that it is holistic. Everything should be balanced... Holistic development is generally seen among students..."*

Therese also mentioned that she learned a lot from the school, including the hardships of balancing teaching and doing committee works. She said that it depends on how a teacher will take it, either positively or negatively: *"I learned a lot from our school,*

the culture of toiling for something, you will really learn a lot. I think it lies on how a person takes it... if you perceive it negatively, you will end up resenting, but if you take it positively, you will be thankful."

Furthermore, Therese said that what enhanced her teaching efficacy was being pressured to always be the best since the school is part of the state university where the standard is excellence, not only when it comes to teaching but with competing internationally where they bear the name of the country. She shared: *"In our school, there's quite a lot, especially when there's pressure. When there's pressure, it helps me improve, especially when adhering to the university standards. When we are in a competition, part of mentoring is the rigid training... The pressure when you realize you are bearing the name of your school and the university, or in case of international competitions, even the country..."*

Also part of the school culture is the interaction with students, colleagues, and the administration. Therese considered her interaction with students as a factor for staying in the school. She narrated: *"When I am asked, 'What will make you stay?', I reply, 'My students...' I guess when you really love teaching, that's your primary consideration. You can't teach when you don't have students, right? When this is not true for a teacher, it is easy to say 'I don't want to teach anymore; they are quite a nuisance and unruly'. I really love my students... Some are humble, although some are also quite troublesome."*

Therese is likewise proud of her relationship with her colleagues. She stressed that it makes her happy to be with them. *"Yes, I'm very very proud to say that we have good working relationships among our colleagues, with some exceptions. I am happy. If you are going to ask me, can I leave our school because of my colleagues, it's hard to say... It's fun to be a teacher when you have colleagues such as mine."*

Therese also said that there is no problem working with colleagues when there is good working relations and when everyone is doing their tasks. She added: *"Sometimes, because of the high rate of faculty turnover, it is difficult to establish new bonds... When you don't have a problem with your colleagues, most of the time they reciprocate. Given certain tasks, you won't have any clashes."*

Moreover, Therese's professional relationship with the school's principal has contributed significantly to her teaching efficacy since the time that she started teaching. Therese acknowledged that that standard that the school maintains is for the students and teachers, and not for personal intention of their principal. She shared: *"In terms of administrators, I am proud to say I learned a lot from our school principal, especially when it comes to setting standards. She always cautions us about our school's standard. If you don't look at it as an educator, you won't understand her... She's a complete package; she is well versed in teaching... And she has a sense of the arts."*

Therese also reported that during her first year of teaching she was told that it is all right to sleep late so long as you can prepare materials for teaching. *"Before, I described my first year of teaching as a period when I lacked sleep. So long as you teach well, you accomplish tasks on time, just sleep later so that you can comply. Sometimes, you just get used to sleeping less."*

When it comes to aspiring teachers, Therese said that it had a positive impact on her teaching efficacy. She sometimes wishes that she also learned new teaching principles that aspiring teachers have learned. She revealed: *"New graduates usually have fun tales and many developments from the university I graduated from. I asked them, 'How is this?' They will reply, 'Oh, the curriculum already changed.' I also see updates in terms of*

principles. On our side, we also teach them a lot of things, and sometimes, we can't relate much because of the age gap."

School culture poses a significant effect on teacher's self-efficacy (McLeod, 2012). Literatures suggest that collaborative school cultures have been found to improve member (teacher and student) motivation, learning, achievement, commitment, and capacity for innovation (Demirtas, 2010; Jurasaitė-Harbison & Rex, 2010; Louis & Wahlstrom, 2011; Sezgin, 2010, as cited in McLeod, 2012).

Burnout and Efficacy

For Andrew, being a teacher could be difficult. There were times when he also experienced stressful moments in graduate school while teaching full-time, in his teaching career, and in the state university laboratory high school as an organization. Balancing his graduate studies and teaching career was thus a great challenge for Andrew: *"Balancing graduate work and teaching... In my case, it always led to the detriment of my graduate studies. Because the priority is understandably my work as a teacher."*

Andrew noted further that the challenge was that his MS on Genetics appears irrelevant to what he is teaching which is not higher level of genetics. He also said that there were bad days and good days, but he tried to make all as good days. When he goes to class as a teacher, he leaves behind his problems. He thus reminded himself that "what happens in graduate school, [stays] in graduate school," so his teaching will not be affected. At the same time, he made sure that what happened at work would not affect his graduate studies. He learned how to effectively shift roles, since it would be counterproductive if he would think about something that he could not do anything about.

Another stressful event was his last year in graduate school wherein he was already covered by the "up-or-out policy" of the university. As per university policy, the maximum number of years to finish one's master's degree is five years. He shared: *"My last year in graduate studies was my 'up or out' year. This policy, which dictates that I should get my degree, else I would be driven out of the university, plus the fact that it is also part of my adviser's project which is terminating that term, really pushed me hard to finish... The good thing about it is that my advisers were very supportive. They even pushed me during times when I'm already giving up." Specifically, on his teaching career, he mentioned: "During times when activities are held one after another, going home to my family really recharges me. If I don't go home, I lack fervor and energy... Also, there are times when there are conflicts with my co-faculty, but they are just very transient..."*

He added that at present, his stress comes from his students, particularly when he is dealing with students' changing behavior. Andrew shared: *"Some of my recent major stresses involve my students. It's just so difficult, because sometimes you feel it's beyond your control... Academic delinquency or ranting especially in social media or sometimes even to my face, that's when I get nervy... Also, sometimes, when I am forced to stay up late and my health suffers."*

He said that, in sum, he could do different kinds of work like developing a curriculum, creating learning modules, and doing some research. However, when it comes to discussing why students behave that way and what their stressors are, it sometimes depletes him, since to a certain extent he could not do anything about them. Nevertheless, even if there are such problematic students, Andrew still has not lost his confidence, as there are also students who can be considered a "saving grace." Furthermore, Andrew suggested engaging students on how they could contribute to the solution.

Aside from teaching, Andrew also had some workload that somehow challenged him: *“Sometimes, the teaching load just does not translate to overall workload, as there are also non-teaching duties which are not registered in the official document called the faculty service record... At times, everything just seems to happen all at once... During Intrams week or integration week or submission of final grades...”*

Despite these difficulties, Andrew said that there are helpful levels of challenges. One of these is expanding in terms of linkages. He mentioned that the school has collaborators outside the country. They have at least six Japanese high school students visiting every year. Now, they have a Memorandum of Understanding (MOU) with four high schools outside the country.

Andrew shared that such linkages have contributed to his efficacy, since he and their principal were able to forge agreements with three high schools in Japan. This exposed them to meaningful collaborations in other countries. He is also able to travel during Glee Club competitions. He said that he realized that one of the greatest benefits from traveling is that one can see that the world is small and that they can explore so many things. He said: *“In terms of experiences, [teaching in the state university laboratory high school] is complete in all aspects.”*

Challenges, however, will always be there. To lessen the stress, in terms of conflicts with faculty, he said that they must build a culture wherein when there is disagreement, they have to leave it and not dwell on it. For the students, he said: *“Maybe continuous reflection on the amount of workload of the students... That’s always the subject of their rants. What can be removed? What can serve as alternatives? In efforts to reduce student workload, sometimes we merge requirements.”*

Andrew suggested that the students should be empowered for them to create solutions. He realized that since he has no control over things, the solutions should also come from the students’ end. Furthermore, he said that serious reflection is needed to see if the students’ concerns are valid and have to be acted upon. Andrew suggested having a system in addressing problems to be effective and efficient.

For Andrew, his level of relationships also counts. His friends and his meaningful relationships help tremendously. His family has been supportive of him as well, except his father who was a retired colonel and really wanted him to become a soldier as well. In a way, his father tried to influence him during the first few years of his teaching career. His father often belittled his profession, since it offers a lower salary and takes up much of his time. However, Andrew took this as a challenge. After several years of working, he has also somehow invested. On the practical side, teaching in the state university laboratory high school may not be fulfilling in terms of benefits compared to other schools, but at the end of the day, Andrew always perseveres.

On the other hand, Therese could not recall any stressful experience during her graduate studies. When asked about it, she said, “It’s nothing.” However, it was during her teaching career that she encountered stressful experiences, particularly when she was still young. To which she asked, *“Is this how it is to be a teacher?”* During those times, she would always say that she does not want to continue teaching in the state university laboratory high school; however, as years passed by, she ended up still teaching in the same school: *“There are some teachers who threaten... In all honesty, I had experiences like that when I was in my first or second year of teaching.”*

Therese revealed that she does not consider the school, as an organization, as a source of her stressful experiences. Rather, she thinks of how long can she grow

emotionally and mentally in the organization, since she occupies different roles: a mother, a wife, and a teacher. She narrated: *“Our school is just so small, very conducive and friendly. But if you just limit yourself to this box, you won’t grow. I don’t exactly know if there are minimal instances for us to go out. I just can’t blame it on being stressed, [but] in a way, I still can’t see myself fully, and in what capacities I can still grow. And then I relate to my life as a mom, of being married... It is to be expected for me to grow—emotionally, mentally. Sometimes you feel stagnant... You are put in thought... How far can you still grow as an individual?”*

For Therese, competing internationally helped her lessen the stress and meet new friends. It is important for her to enjoy and go out if needed. The outing sponsored by the organization also breaks the stress of the teachers. It is also her belief that if one is no longer happy in teaching, he or she needs to go so that the students will not be affected. She revealed: *“Just enjoy. Try to find avenues for seminars. It is also helpful if you meet other people. It frees you from being stuck... I guess competing internationally kind of helped... You get to have a break, get to meet new people. Try to be patient, just try to vary perspectives, sometimes there are insecurities... Try to understand. I also believe if you are not happy anymore, then move out... Because if you are not enjoying, that will be to the detriment of your students.”*

Through the course of the interview, Therese mentioned that she is willing to leave the school if she is needed in public schools. She said: *“My calling is to teach; I’m willing to leave my current school if DepEd needs me... Maybe they really need music teachers in public schools. What if there is none?”*

A study by Brouwers and Tomic (2000) reported that depersonalization in the classroom affects teacher’s accomplishment. Therefore, importance should be given to perceived self-efficacy in classroom management when developing interventions for avoiding and handling teacher burnout. Moreover, they suggested that interventions geared toward increasing perceived self-efficacy in classroom management should also consider other factors such as disruptive students to address the burnout syndrome.

Meanwhile, teacher burnout may not only occur during the actual teaching career. In a study by Fives, Hamman, and Olivarez (2007), teacher efficacy, teacher burnout, learning climate, and cooperating teacher support were correlated. Results revealed that “as student teachers’ levels of efficacy increase, their degree of burnout decreases.” Fives, et al. (2007) also concluded that student teachers who got high levels of cooperating teacher support had higher levels of efficacy.

8. Conclusions and Recommendations

The two teachers who served as research participants of the study already saw themselves as teachers even when they were still young. They also perceived that students performing excellently in their chosen courses in college, particularly when they pursue similar careers as their teachers, affect and validate positively their teacher efficacy. For the two teachers, new approaches and pedagogies need to be implemented to sustain their students’ needs especially when it comes to the use of technologies.

In separate interviews, both teachers also agreed that their current principal has a great influence on their teaching efficacy and the accomplishment of their tasks. The presence of aspiring teachers, mainly because the institution is a laboratory school, also has a positive effect on their teaching efficacy. Despite their interest in increasing research productivity, however, both teachers perceive committee workload as a hindrance to their

research outputs. The two teachers also noted that school culture could enhance teacher efficacy, particularly by offering holistic development not only for students but also for the teachers mentoring them.

For the interviewed teachers, the school culture wherein there is a balance between academics and co-curricular activities enhanced teaching efficacy, as such school culture offers a holistic approach not only for the teachers but also for the students. Attending seminars and doing research were also regarded as potentially creating a positive impact on their teacher efficacies, if they would be given more support by school administrators and peers.

In sum, findings of this study support Bandura's (1997) argument that in teacher efficacy there is mutual influence among personal factors, environment, and behavior. This is evident in the research participants' stories about what enhances their teacher efficacy: their attitude towards teaching and their perceptions of their work; their mentors, colleagues, students, and school culture; and their efforts to improve their ability to teach.

Results of this study could therefore be used as basis for human resource interventions that may help enhance teacher efficacy in the concerned state university and its laboratory high school. It is highly encouraged that a similar study be replicated among other units in the state university, as these institutions may have different organizational structures and cultural contexts. Moreover, it is worth exploring other factors that could be influential to the development of teacher efficacy. A comparative analysis of teacher efficacies between public and private school teachers may also offer interesting perspectives on the intricacy of school culture as determinant of teacher efficacy.

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