TEACHER-STUDENTS BONDING IN MATHEMATICS LEARNING: AN EXPLORATION OF PAST, PRESENT AND FUTURE

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Abstract: This piece of writing describes my lived experience as journeying of my educational practices as teacher(s), teacher educator and novice researcher high lightings on the bonding between teacher(s) as facilitator(s) in past, present, and future aligned with possible transformation from conventional to modern methods in teaching mathematics for 21st-century learners. As per the experiences as a teacher of mathematics in various institutions in distinct time, the ambition of this piece of writing is basically intended to study and investigate profound settled conventional practices in past, present and future-looking forward to the expected transformation towards modern/constructivist way of teaching and learning in relation to bonding between teacher and students for quality in facilitating the 21st-century learners in Nepal. Endorsing interpretive, critical, and postmodern research paradigms to grasp multi- paradigmatic research design (Taylor, Taylor & Luitel, 2012 as cited in Dahal, 2013); I used auto-ethnography as a noble and emerging research methodology for this inquiry. In addition, auto-ethnographic research has assisted me to study the pedagogical and cultural learning from various outlooks in relation to teachers, educational researchers, and educator-educators, in acting so whatever offers the room for interpretation, transformation and envisioning. I concluded by means of the thoughts that students' energetic involvement in learning and transformative pedagogy assists the practice(s) to be more significant and learner-centered which in move results in better bonding in understanding the learners. My vision to develop a better bonding is highlighted a bit uniquely in this piece of writing with the possible implication(s) for mathematics facilitator(s).

Keywords: Lived experiences, bonding, pedagogical practices, transformative learning, noble and fusion.

1. INTRODUCTION

This article is extracted from one of the sections of the author's master's degree dissertation in mathematics education at Kathmandu University School of Education, Hattiban, Lalitpur, Nepal. This article describes the experiences and is a journeying of educational practices of the author as a teacher, teacher educator and novice researcher pinpointing on the bonding between teacher(s) as facilitator(s) and learners in past, present, and future changing from conventional to transformative method in teaching and learning mathematics for 21st-century learners in Nepalese context. In this article, I have also included introduction, supporting literature(s), theoretical referent(s), method, discussion, conclusions, and implications.

I have faced different ups and downs in relation to teaching and learning as a learner and a facilitator of mathematics in general and in mathematics education (Pant, 2017). Further, as a student, it's hard to understand the mathematical concepts in simple and easy ways with the

help of relevance teaching aids and methodologies by the teachers but, on the other hand, as a novice teacher of mathematics of high school to university level while facilitating the students, it is hard to demonstrate the concepts in the easiest ways, this could be because of various reasons, among others, bonding between teachers and students in one of them. As novice teachers, we are here in this world to contribute in the knowledge world, we always seek for change and transformation in teaching and learning for 21st-century learners, by developing an innovative approach to understanding the feeling of the learners and strengthening their understanding accordingly. For that, it is necessary to change our teaching and learning process according to the demands of the learners aligned with a specific curriculum, thereby develop easy ways to understand and to enlarge better bonding between teachers and students in mathematics classrooms while teaching and learning for quality education. While coming to this stage, right after my master's degree graduation in mathematics education, I realized, I was struggling in my professional life as a mathematics teacher. Even more, I was not satisfied with my own methodologies of teaching as well as preparation for teaching and learning. Further, it has only enlarged the level of the gap between teachers and students with different forms of bonding during classroom teaching. But now, styles of teaching and learning have been slowly changing to expand better bonding in the mathematics classroom and I am getting a little more satisfaction. As a novice researcher, I knew from my action(s), as a teacher and even educational researcher that there was big blame for mathematics teacher(s). It was actually presumed that many mathematics teachers were frightful persons, they always frightened students in various ways in their during math lessons. Each class continued to be so where normally mathematics teachers entered the class with a stick, probably to beat the students. That time, they were not considered or respected as teachers, at all, in my school level. In those days, as a learner, it was hard for me to understand the languages followed by the behaviors of teaching. In those days, many of my friends used to deliberately miss some mathematics classes just to escape from the mathematics teacher(s).

In the previous paragraph, I discussed all the critical and reflective thoughts towards mathematics and in particular mathematics teacher(s) in general, are differing in the time frame and context with various bonding(s) between teachers and students (Dahal, 2013) such as student, teacher, and novice researcher. While the students secure good marks, they become happy at that time, and their reflective and critical thoughts were considered positive even though for mathematics teachers and if they secured below-average marks in the examination that time their thoughts were not as expected. These all situations depict the pedagogy of mathematics, reflective and critical thoughts of an average student towards mathematics which may be different for each individual in the present context of Nepal. In addition, mathematics is a subject that was considered a difficult one in the context of Nepal (Luitel & Pant, 2019); this could be the same situation in other countries as well. These problems could be the same in mathematics for creating a bond to understand the feelings between teachers and students while teaching or learning to develop rapport (Dahal, 2013). In my view, it is easy to discuss and hard to define which part is creating a gap between teachers and students in mathematics learning. These ideas were articulated in this research article differently with possible insights for novice teachers, educational researchers, teacher trainers with possible implications.

1.1 Purpose and Research Questions

The rationale of this inquiry was to discover the problems and challenges incurred in learning and teaching mathematics in the classroom in various forms of bonding of teachers

and students from the initial stage of my learning and teaching journey. The purpose was not only to tell the story but this research article also enabled me to suggest the viable pedagogy so as to enrich the present mathematical pedagogy to enlarge bonding between teachers and students in mathematics. To study more systematically and completely, the following research questions work as the guideline for this study: how have I developed bonding(s) with my students as a teacher? and how do different approaches in teaching enable to develop cordial relationships with students in mathematics?

2. LITERATURE REVIEW

2.1. Teacher-students Bonding(s)

Bonding whether negative or positive in quality but in general have thoughtful chattels on the worth of life of the learners. As Akiyama (2015) states that the success is frankly aligned to personal bonding, with starting consideration of the noticeable requirement and significance of bonding in my mentality, this part, target more purposely on the significance as well as the impact of student-teacher bonding(s) on mathematics learning and teaching. Further, strategies for effective learning and teaching are many, maybe extensive and diverse catalog for this. The catalog might be included but not be restricted to, a tutor's understanding of the content, academic ability, didactic efficiency, and/or classroom managing ability. In addition, Banner and Cannon (2017) illustrate the complexity in deciding accurately what will be factors to be a valuable educator, "We believe we discern grand coaching when we meet it, yet we find it unfeasible to say truthfully what has gone into emergent it exciting" (p. 3). The circumstances in additional complicated when allowing for even if tutoring is a science or an art, or continuing the same methodology throughout the career.

2.2 Creating Progress in the Mathematics Classroom

Teacher-students bonding(s) has revealed to be a significant foundation in students' achievement in mathematics. In this alignment, Pianta (2010) demonstrates that student-teacher bonding is significant in students' achievement in the mathematics classroom, and Lee (2007) initiated, the belief expands between the teacher and the students could sign up to learners' educational achievement. Further, it was contributed that learners construct knowledge a high preference and therefore put the fullest energy for instructors whom they worry about and distinguish as also appealing their scholarship (Noddings, 2008; 2009). Consequently, several flourishing signposts followed by actions imitate that the teacher-students bonding would affect learners' opportunity against educational achievement and was absolutely connected with learner's educational achievement. Last but not least, teacher-students bonding show an essential responsibility in serving to decrease the likelihood of future needless achievement (Miller, 2000). Similarly, a student whose feelings of fairness in their communications with their tutors are rationally flourishing schools (Silins & Murray-Harvey, 2015). In this ethos, Hughes (2016) found "tutors who recognize and abode learners' requirements" in the best institution. Hence, achievements from active teacher-students bonding are not bounded to the domain of success in academics. Additionally, student-teacher bonding is a forecaster of physiological than scholarly achievements (Pianta, 2009). Lastly, I found numerous researches appearing particularly at instructor-learners bonding in academics settings for both low achievers and a high achiever. The bonding between teacher-students helps to strengthen the self-esteem and confidence of the learners, as well as advancement in their academics.

3. THEORETICAL PERSPECTIVES

I will re-examine the underpinning beliefs I hold towards teacher-students bonding in mathematics while teaching, for making my theoretical standpoint clear. I have used some theories as theoretical referents. With the help of some theories and literature, I have tried to make my narratives clear. Those theories are discussed in brief below:

3.1 Radical Constructivism

Constructivism, though it began as a theory of learning, has been used as a framework of research to improve teaching practices, particularly those of science and math (von Glasersfield, 1995). As reported by Treagust, Duit and Fraser (1996), the pedagogical framework has made an impact on education particularly on learning theories and teaching methods in mathematics and science. A constructivist view of learning emphasizes that students create their own understanding using their own previous knowledge and experiences (Gunstone, 1995). As a referent, I shall embrace the four essential criteria to characterize my constructivist teaching practices to enlarge bonding between teachers and students in teaching mathematics in the classroom as extracting previous knowledge, constructing cognitive disparity, use of the facts with feedback and view on scholarship (Hubbard, 2012). Using these criteria, I believe, will allow me to recognize whether or not our pedagogical practices are worthwhile. As interpretive researchers and writing as self-inquiry, the activities I will be involved in assembling research questions, building sense of my understandings, writing the research information are enclosed. As I make sense of the beliefs I hold towards teaching and learning classroom practices I call on my lived experiences and the continuous learning process. In addition, Taylor (1996), the quality of knowledge I may produce in embracing this theoretical referent lean on: (1) capability to prolong and resolution puzzlement, (2) the feature of conversational bonding; and (3) talent to connect in important self-reflective opinion concerning the feature of the understanding building progress to enlarge bonding between teachers and students in classroom of mathematics.

3.2 Transformative Learning

Transformation comes from understanding the system of profound knowledge (Daszko & Sheinberg, 2005). The transformed individual perceives novel explanation to their well-being, to the actions, to the facts, to the communications between citizens as mentioned by Mezirow (1991) and used continuously by Nepali mathematics educators (Dahal, 2013; Pant, 2019). Once the individual understands the system of profound knowledge, they will apply its principles in every kind of bonding(s) with other people. Further, transformation occurs when people develop an idea for transformation and a structure to frequently inquiry and challenge thinking, suppositions, patterns, habits, and paradigms with a plan of regularly rising and concerning organization assumption, through the lens of the scheme of intuitive understanding (Daszko & Sheinberg, 2005). In my research, I have used this learning theory to develop bonding between teachers and students in mathematics classes by understanding profound knowledge.

4. METHOD

I used auto-ethnography as a noble and fusion research method (Ellis, Adams & Bochner, 2010). Perhaps, it seems to be one of the appropriate methods to study self-practices through the lens of the narratives. This auto-ethnographic research is also a very useful tool for the improvement of personal and professional practice (Dahal, 2013; Dahal, 2017; Dahal, Luitel & Pant, 2019b). In this regard, the concept of the debate becomes significant only within a

promise to liberation, one that seeks to release in individual and object terms. In an effort to relate the lived experiences as a learner of mathematics and a classroom teacher of mathematics, I strongly believed that a narrative inquiry as a research approach was the appropriate method to be used. Stories and conversations have been the way of unfolding and finding meaning in lived experiences asserted that a storyline research design focal point on study a single individual, gathering data through a compilation of stories, reporting individual experiences, and discussing the meaning of those experiences for the person (Miller & Salkind, 2002). Using narrative inquiry in this article, it supported me to reveal on the didactic actions and uncover the construction and reconstruction of the personal and social stories in a more meaningful way.

5. DISCUSSIONS

Based on the research questions and constructed a methodological map, this section discusses the spirit of the research. As an author, I am going to explore some of the possible bonding with my students as facilitator(s) as per my experiences. Thus, I think it is very important to explain the factors which influence and restrained learning and bonding with my students as teacher/facilitator. I have passed different stages of life as a teacher teaching in various private institutions in Kathmandu Valley, I was suffering from different problems. I would like to present lived experiences ranking from starting of my career to the date today considering how I facilitated the mathematics learners in different situations by recollecting the nodal moments of teaching experiences as a teacher, teacher educator, and novice researcher. Thus, I am going to explore the following narratives as a teacher, teacher educator, and novice researcher as follows:

5.1 Journey as a Novice Mathematics Teacher in a Government School

It could be in December 2009, I got a job of a secondary mathematics teacher in one of the government schools in the birthplace, Dolakha District of Nepal, which was my first experience in the teaching career. It was very difficult for me to adjust with the students. At the very beginning of my classroom teaching, I was unable to understand my students' interests which craved bad bonding with my students. Nepali was the medium of instruction and I was from the Nepali language background, but the society of that area was Tamang, so they hardly responded to my question. My spoken Nepali was satisfactory in terms of teaching and the students understood my explanation easily. I felt that my students were frustrated with me. One day, one of the ten graders said to me "Sir, we cannot understand your teaching." I perceived that word and that moment as a very much important incident in my life.

After that, I started thinking about myself and my teaching style. I was very much concerned about my language of teaching time and again. Before joining that school as a secondary level mathematics teacher, I never spoke confidently. However, I appeared to have improved gradually with my hard endeavor and regular practice after some days of teaching. Then my students gradually started enjoying my class and liking my teaching style and having good bonding now and again. Sometimes, I would tell them to write a reflection about mathematics, mathematics classroom, mathematics teacher and behavior of mathematics teacher for developing better bonding. From those reflections, I generated some critical points for the improvement of my personal teaching and learned about my student's interests.

After getting their reflections, I made plans to address their problem and started teaching them through different teaching method which could help to enlarge better bonding so they could easily be engaged in learning. During the initial stage, it was difficult for me to think

about activity for each and every class. But after some days of teaching, I started feeling easier than my traditional teaching styles. Persistent and continuous reflections within the practice of teaching are effective for teacher-researcher and they help develop teachers' professional development also as research is associated with writing papers and making my 'findings' open for public discussion and critics. After some classes, I started writing a reflection on my own teaching approaches and it helped me to develop my teaching skills. My recent concept of researcher-developed thereby is helping me to become a critical teacher-researcher.

I have come to know that critical research critically examines the positivistic perspective of rationality, objectivity, and truth. Critical social science promotes self-reflection which results in attitudinal change, and thus critical teacher-researcher challenges the current educational system that puts emphasis on using students as numbers rather than persons. It helps to develop as a reflective thinker. Self-reflection and self-questioning are the key terms of critical teacher-researcher. I started walking a transformative journey in the teaching profession by applying different teaching methods and becoming one of its critical users. It is aligned on scholarship as a structure of thoughtful facts and delightful experiences foundation on principal with facts and bravery.

5.2 As a Novice Teacher in a Private School

It could be any day of August in 2012. While I was planning a Module for seminar issues in mathematics education, one of my friends called me to meet him. I went at the same time as he proposed me a teaching job at another colleague's school in Lalitpur. However, I was not thinking about a job because I wanted to complete M.Ed. program first. I told him to wait for three days for my eventual decision. Finally, I decided to join asserting that I could manage my M.Ed. study and my dissertation writing project. I requested the principal to provide time for my research after completing my class. He agreed upon my request and then I started teaching. It was my second formal teaching in an established institution at Kathmandu Valley in a private school.

In the beginning, I found it quite difficult to adjust to the formal teaching process in a private school. Since I had already changed my direction; it was a challenging task for me. I wanted to teach them through activity-based pedagogy. I started teaching them by using instructional teaching materials in mathematics which I borrowing some from my university ideas. I was using different approaches for them to teach mathematics. Before that, I was unaware of the theories and epistemologies that underlined the teaching of mathematics (Ernest, 1991). I have learned it could be ok to allow students to explore and discover thoughts on their own accord.

Also, I assume it might be excellent for learners to great effort with thoughts. Sometimes, my teachers believed in the mathematical mind. They would say for good mathematics learners, the mathematical mind is necessary. But I do not think it exists. I think everybody can do mathematics if they try to link it with their socio-cultural aspects.

Being able to think mathematically is also the political word because mathematics is linked with power and social status. Real-world is attached and everything is interrelated, so mathematics and our societies are also interrelated. Mathematics all-time support culture for problem-solving (Keitel, 2009). So, as a novice teacher, I faced those kinds of an environment as I was simply like a 'man with no name' (Kincheloe, 2003). As a novice teacher, I committed to experiencing the research procedure in traditions that allocate me to expressive and reveal on my individual descriptions of teaching rather than purely replicating

(McWilliam, 1994). Traditional mathematics teachers try to make mathematics a powerful subject to exercise their own vested interests. To my experience, they actually wanted to make mathematics a tough subject for society because they wanted to sell it according to their way. My colleagues were making mathematics a tough subject but I wanted to break such myths about mathematics followed by the characteristics to enlarge better bonding between teachers and students. I was feeling uncomfortable with my colleagues because of their rigid beliefs about mathematics. They would go to corporal punishment for the students and I was just against their attitudes and behaviours. At the moment, I always tried to motivate students through different techniques. I was a more flexible mathematics teacher for my students. I never prescribed any rigid way of writing and doing mathematics. Elasticity is one of the key attributes to convince any type of learner. Learning to be elastic in your daily activities prepares us to meet life's greater threats (Kanar, 2011). However, my colleagues were thinking mathematics teaching-learning process was a kind of a Jug and Mug process whereas the students' mind is not tabula rasa (Paudel, 2008). So, we need to think about alternative solutions to each and every problem. I think it is not better to consider anything absolute. Different societies can give different solutions to problems. Mathematical scholarship should be envisioned both as a course of action of dynamic personal building and the procedure of enculturation into the mathematical practice of wider the public (Cobb, 1994). So, mathematics teachers should think about multiple solutions by understanding the level of students to enlarge better bonding(s).

5.3 Vision: Who are Teachers?

There's a great probability that the teaching profession is compared to other professions. We human beings adopt different professions in our society. The professions can be chosen according to our needs, interest, and confidence. In the context of Nepal, people evaluate the professions in terms of earning, the security of job and confidentiality. A doctor earns much money with a great personality then an engineer but a teacher does not earn that much money. It's the reason why people do not give accurate respect to the teachers' jobs and teachers as they do to doctors or engineers. The role played by the teachers is more significant than the role played by other professionals because the teachers are working in every corner of the country where doctors, engineers, and lawyers have never reached to such areas.

In terms of role, a teacher has many faceted roles; to actively promote inclusion, equality, and diversity; to create a safe learning atmosphere for all students; to work within the legislative requirements and codes of practice. Teachers normally do not think of themselves as role models, however, unintentionally they are. Students expend a great deal of time with their teacher and therefore, the teacher becomes a role model for them. This can be a helpful or unhelpful consequence depending on the tutor. Teachers are there not only to teach the children but also to love, care and support to be well being human. Teachers are normally appreciated by their parents in the community and therefore become role models to students and parents so there should be always positive bonding(s) with teachers and students in the learning process. Mentoring is an expected role taken by teachers, whether it is intended or not. This again can have positive or negative effects on children. Mentoring is a way a teacher encourages students to strive to be the best they can. This also includes encouraging students to enjoy learning with better bonding(s) with their teachers.

Part of mentoring consists of listening to students to understand them. By taking time to pay attention to what learners speak, tutors convey to learners an intelligence of tenure in the school hall. This supports to construct their self-assurance and supports them desire to be

flourishing. I believe that the teacher should also be someone who guides student rather than someone who is authoritarian in the classroom. The teacher needs to have respect towards the students so the students also respect the teacher. The teacher must not forget that s/he teaches different students who bring different cultures, traditions, and customs because the students come from different backgrounds but more than the role of doctor, the teachers' role is important, the doctors only care the patients for a short time but teachers have to care for a greater span of time which includes not only social but also emotional aspect. Over the past decade, teachers have been largely taught as technicians. The teachers have an important role than that of the doctors, engineers, lawyers because they all are the product of teachers since they are all taught by teachers. A medical or law or engineering student should take a class from a teacher educator.

I think the importance of a teacher's role as educator and researcher to mere problem solver is that teachers are expected to reflect on what the students' is awareness. As a teacher, one of the excellent approaches to do this is to look back in our school years and remember what we went through when we were students. We will comprehend that most of the children have problems with their teachers. I do not believe that there are students who have not encountered a problem with any of their teachers. Therefore, I do not imagine there is a perfect bonding between students and teachers.

Comparing to the role of technicians and clinicians, the teachers have some crucial roles to play. The technicians only solve the immediate problems in current time but the teachers are not merely the problem-solvers rather they are the facilitators and on top of that, they are the motivators of the students. I also believe that as a researcher the teacher has to find out new methods according to the situation and needs of the time and modify their practices and provide much more time for students to develop new ideas. They need to motivate the students for learning and they mold them into positive thinkers with lots of positive works. In this way, teachers play a significant role in the reformation of society from the school area. We can get lots of opportunities in the field of teaching and if the teachers are not well-aware of those things then the students cannot be satisfied with them. The technicians and clinicians are also professionals, but they can change their work anytime. They don't hold the responsibility of reforming society instead they just solve the immediate problems, so the role of the teachers is more important than the role of technicians and clinicians.

5.4 My Vision on Lesson Plan for Developing Better Bonding

As a novice teacher, I decided to implement the constructivist approach of teaching-learning environment in my traditional classroom hoping that to some extent it can enlarge better bonding(s) between teachers and students. So, I first prepared a lesson plan which I have given here:

Lesson Plan
Subject: C. Mathematics **Topic:** Mensuration **Time:** 10:00-10:45
Teacher: Niroj Dahal **Grade:** IX **Date:** 26th Nov.2014
Material Required: Measuring Tape, Pencil, Paper
New Vocabulary: Ceiling, Floor.**TSA**
Learning Objectives:
i) Students will be able to find the area of floor, ceiling and four walls by measuring.
ii) Students will be able to establish the relationship of finding the area of floor, ceiling and four walls.
Aim:

After the completion of this topic, students will be able to apply the gained skill in their real-life problems i.e. student may be able to even find the area of books, copies, etc.

Motivational Activities: First students are given an unrelated problem like suppose a room has 9m by 4m dimension, what should be its length and breadth so that it becomes a square room?

1) **Engage**: In this session, Students are made to concentrate by asking some questions related to the topic like, how many rooms are there at your home? What type of carpet is there paved on the floor of your room? Who bought the carpet? How much did it cost? Do you know how much you need to pay to a painter if you asked to paint the four walls of your room?
2) **Explore**: In this session, I will divide students into four groups then they will be instructed about their works and students will be sent out to measure the length, breadth, height of one room of the building. I will help them with any difficulties if encountered.
3) **Explain:** In this stage, students are requested to discuss in their respective groups or with other groups about their collected data. They are guided to discuss the shape of each face and to find the area of each face.
1) **Elaborate:** In this section, students will elaborate some more about the topic like there are six faces in a rectangular room which is like cuboids where there are 6 faces and opposite faces are equal. So, I will motivate them to find the total area by using the relation 2(lb+ lh + bh). They will explain to themselves how to find the area of carpet required to carpet in their room and finding the area of four walls.
2) **Evaluate**: Here first students' data are evaluated and they are asked to find the area of the room from the data by exchanging with other groups. Here students themselves get an opportunity to evaluate their observation and conclusion.

Home Assignment:

1. Find the area of the floor and four walls of your room. Then go to the market and find the cost required to carpet your room.
2. Write a short essay in today's classroom activities.

The outcome of this approach: Really this approach was different from what I used to use in our pedagogy. I found some positive as well as the negative impact of this approach. When I applied my lesson plan in the classroom most of the students were found very eager, curious, interested. Especially those students, who almost used to sit in the class in a motionless manner, were actively participating in the group work. Most of the students found to have more responsibility in their exploration. Many students were enjoying themselves, on the day they felt that they were not doing mathematics but the teacher has given them free time for getting rid of mathematics. This meant they actually participated in their projects. When I suggested them to find the area of the four walls and floor, they realized how to find the area of the room and its walls. When I assigned their assignment, they were much interested in doing that work. But at the same time, I found some difficulties in the classroom. The number of students was 44 so managing them in a group and involve them in their work was quite challenging. Some students were not engaged but just roaming here and there. The time framework was not supporting to complete the work within the specified period. Many of the other teachers and the school administration team were found uneasy about our work.

Conclusion: Though the constructivist approach of teaching and learning in our context is challenging for its implementation due to our chronic system in education, nevertheless as a

teacher I found that this approach will be much effective and meaningful in teaching mathematics which can bring a radical change in the system. Before this, a rapid change of traditional methodology along with the psychology of students, teachers, principals, and policymaker as well as whole curriculum based on the traditional system should be changed believing that frustration created by mathematics due to traditional system of teaching-learning activities can be addressed if we apply constructivist's approach of learning.

Extending the text…

Here, I have tried to portray how our mathematics classroom practice was dependent on the textbook, prescribed curriculum, and transmission of knowledge rather than creation. In my experience, throughout elementary school life, I took our textbook as the key foundation of guidance for practice and the role of the instructor is active for the transmission of knowledge. It was a reference for teachers to teach in the classroom and for students to use as the main source of practice. In my view, learning mathematics or doing mathematics is different. As a student, our perception was the same about mathematics learning or doing. Teachers also viewed mathematics teaching as the responsibility to finish the prescribed syllabus in time. However, they are not worried about students learning outcomes. I also determine myself at the level of satisfaction if I am able to do the problems form the book. For learning mathematics, Lax (2018) writes good teachers, at any level, rarely follow a textbook faithfully, even if they have authored it. Analyzing and constructing pedagogical practices as a student throughout my journey, I think probably most (if not all) of my learning journey was oriented to drilling mathematical problems from textbooks and to be prepared for the examination to achieve a label of the pass or fail through the paper-pencil test.

In addition, doing this self-study has provided me insights, knowledge, and experiences on how I can improve my classroom practices especially practices geared towards constructivist teaching and learning. In this journey, I came to realize that knowledge is not static and thus continuously evolving. Opening my eyes to new possibilities of knowing (inspiration, intuition, analogy/metaphor) (Fleener, Carter & Reeder, 2004) was also a way of making me reflect on my pedagogical practices – teaching and learning practices which have always been governed by the established and proven, perceives, ways of acquiring knowledge and doing things in a classroom. There were instances in this journey that I have felt a sense of guilt. I remember the days when I have felt teaching was just a way of passing knowledge found on books to my students, days when memorizing facts and rules were more important than making the students experience learning which might have helped them make sense of what they learn in my classroom. However, it is never too late. Learning is a journey and along the journey, I picked up bits and pieces of experiences which I can weave and which help me envision my classroom. As a teacher educator, perhaps one way of encouraging the new breed of teachers in promoting this type of classroom is by giving them the chance to reflect on their practices as students and as teachers (Afonso, 2000). Perhaps encouraging them to consider the new perspectives in doing educational research will be a stepping stone in improving their views towards their practice.

Possible shift…

Arriving at this stage, I have experienced few transforms in my thinking, viewing, perceiving, and behaving including my teaching and learning after this exploration. I came to know that reformation and transformation of a deep-rooted mindset are not easy within a

short period of time in my educational scene but I have been able to join an alternative approach as an end in the continuum of the continuing same frame in practices.

Here, my shift does not necessarily mean complete transformation in my practice; to me, it is my commencing of transformation. I do not mean totally deleting, erasing or neglecting our long-rooted practices, which is not easy and possible to do within a short time and with little effort. Context is the key factor to enhance the students learning. Learning occurs by the interaction between teacher, students, society and other cultural phenomena. Knowledge and knowing are different from to person and time to time and place to place. I hold this view that knowledge is to understand the environment and to make the sense of the world around us.

6. CONCLUSION

In conclusion, teacher-student bonding has to be considered a vibrant feature in the school hall of both remote and urban institutions in Nepal where Nepalese mathematics teachers have not been able to link bonding of teachers and students not as such. Bonding(s) is one of the tools for strengthening students learning. This article emphasized the teacher's deep-rooted behaviors highly on student-teacher bonding. These emphasize discovered the intensity of significance and admiration learners had for hard work on the division of their tutors' expand individual and profound bonding. This article has revealed to be a helpful mechanism for capturing learner awareness of the teacher-student bonding and allocates for the examining and appraisal of the resiliency features, as well as an individual expression by tutors concerning teacher-student bonding inside their classrooms. The implication of this research article ought to aim behaviors and attitudes tutors be able to shift their focal point to further efficiently expand bonding with their learners, as they struggle to afford a helpful surroundings that assemble upon elevated prospect, optimistic support, and a vigorous amount of humor, which was appreciated by learners, may also provide to help administrators to more efficiently hire tutors. A further conclusion is that the student results on Basic Level Examination (BLE) and Secondary Education Examination (SEE) grades, tutor responsibility, and institution performance have received the focus stage in today's didactic scenery in Nepalese education in school level. The need for on-going professional development through continuous teacher's professional growth in which tutors discover the newest research-based techniques of direction, as well as how to employ the latest skills is more essential now than ever before. Student-teacher bonding(s) are assembling from side to side focused and recurrent attempt, above all on the part of the tutor. It is in the bonding of tutor and learner where scholarship takes origin and starts to cultivate, and the extent to which a tutor spends in those communications not only influences scholarship outcomes and learner performance in the school hall but also possibly strengthening each learner's outlook success and achievements.

7. WINDOWS OF POSSIBILITIES

In the research article, I clearly highlighted that this self-study research holds the interpretive paradigm. However, the inclusion of my critical reflection at the end of each narrative, although this does not hold true throughout the article, where I infuse a bit of ideology critique (Brookfield, 2000), has added a 'touch' of critical paradigm to this inquiry. Whilst being able to present my data text in multiple genres is made possible by taking on a constructive postmodern approach.

These three paradigms helped me weaved my experiences and present them in an unconventional manner, yet, in a very powerful way. As a true depiction in doing this type of research, one cannot be certain of the multiple realities that might emerge along the process of writing. At times it may reveal results other than what the researcher has expected to find and oftentimes interpretation of this result will depend on the readers. Hence, nearing to an end I am compelled to ask: Was I able to provide adequate opportunities for transferability? Was I able to captivate your thoughts? Were my experiences represented somehow similar experiences of yours? In other words, have I engaged you in the act of pedagogical thoughtfulness? In this article, I have touched on the language and cultural issues of the mathematics curriculum in the Nepali context but not at a great length. I believe that these issues deserve much more attention and further educational research.

8. IMPLICATIONS

This research article can offer some insights to the readers, novice teachers, novice teacher educators, and novice educational researchers. I do not claim that I have used very ironic referents in the research but some of the insight for inclusive pedagogy. I have used constructivist ideology which could be some empowering referents to the future generation for better understanding and developing better bonding(s) between teachers and students.

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