

## Secondary Level Teachers' Professional Development through Research and Development Project

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This study explores the lived experiences of Nepali public secondary-level school teachers in taking initiatives for their professional development, and the support they received in research and development projects. The data were collected through conducting in-depth interviews with five teachers teaching in public schools run under the education trust of Pokhara and Kathmandu in Nepal. Findings revealed that the Research and Development Project introduced in these selected schools turned out to be supportive of teachers' professional development in several ways. Their involvement in the Research and Development Project offered them opportunities to form a new identity and have developed skills in self-reflection. This opportunity has contributed to creating a positive impact on improving classroom practices and enhancing teachers' professional development. Future research might explore modes of effective interventions for helping teachers to grow in their professional practices.

**Keywords:** Research benefits, professional development, improved classroom practices

### Introduction

Teachers need opportunities for professional development. Activities such as training, workshop, excursion opportunities, and research

can enhance teachers' professional knowledge and skills. Teachers' involvement in research activities not only develop research skills but also benefits them for self-enrichment (Pring, 2000). Teachers' involvement in activities like that helps them develop a new knowledge base as well as sharpen their reflexive learning experience (Wood & Bennett, 2000). More specifically, research provides teachers with evidence-based practice opportunities. Due to such benefits, scholars (e.g., Cochran-Smith 2001; Grisane, 2010) claimed that research is a mandatory move in education for the professional growth of teachers. Teachers' engagement in research, more specifically action research, helps them find solutions to the problems they are facing in their workplaces. Participation in research addressing their workplace problems helps them develop new insight and that ultimately contributes to higher performance in their instructional practices.

Morales (2016) elaborates on the case of the Philippines mentioning that research that teachers do has been useful for their self-development as they explore the issues encountered during their professional practice. Similarly, Hine (2013) believes that research helps teachers and other stakeholders to find a solution to the conditions faced in the teaching period and further enhances lifelong learning (Ulla et al., 2017). Thus, research and professional development of teachers are interlinked issues.

In Nepal, several initiatives have been taken to improve the quality of education. The development of teachers' professional knowledge and skills has remained one of the important areas of quality enhancement initiatives. Most of the teacher professional development programs are training-based. The research component in teacher professional development is still neglected in Nepal's case. Many studies have been done on the professional development of teachers like mandatory action research for promotion, but how teachers' engagement in research contributes to teachers' self-

development and institutional strength has not been documented by research yet.

As teachers are involved in reflection on their experiences and intentional practices, it plays a transformative role in their professional life (Ilisko et al., 2011). Shrestha (2018) carried out research on the topic of teacher professional development in Nepal. He reviewed existing professional development activities in Nepal and brings out some opportunities and challenges connected to them like consultation with the teachers priorly while selecting the topic. He suggested some improvement mechanisms. Bhattarai and Tudu's (2019) case study on the perception and practices of professional development in Nepal revealed teachers' positive and negative perceptions of the professional development activities they were involved in. Likewise, Pokhrel and Bhera (2016) have talked about the expectation of teachers from TPD programs and Dhungana et al. (2021) have talked about the contextual TPD framework required for teachers to enhance their knowledge and skills. All of the research studies do not cover the issue of the connection between research and the professional development of teachers in Nepal. But this is a must-do topic as the literature suggests that there exists a connection between research and the TPD of teachers. The research component must be made one of the core parts of the professional development of teachers. Kennedy (2016) highlights that research-based approaches are to enhance the professionalism of teachers as they help to upgrade practice and that is possible only when policymakers offer such opportunities. Research directly helps in teachers' professional growth as it allows them to collaborate among them, opening the door for them building with the reflection of their practice (Desimone, 2011). Likewise, Hammond et al. (2009) argue that research is a mandatory approach for the best professional development of teachers. When research is done by teachers it helps to enhance their learning (Kennedy, 2016). In this connection,

understanding how teachers perceive the Research and Development Project's relevance in their professional growth and development is important. As there is limited research in this issue, this study on the exploration of teachers' experiences of their engagement in a Research and Development project conducted by a school will contribute to fulfilling the gap that exists in the literature.

### **Professional Development of Teachers through Research and Development Project**

The engagement of teachers in research and development projects has been widely discussed in the research literature. Some studies have also reported that involving teachers in research helps them to develop a deeper understanding of the problems they face in their respective workplaces. The World Bank conducted research in 2019 about the effectiveness of TPD in Nepal and reported that the training has been beneficial in improving classroom management, applying student-centered techniques, and assessment management. Their findings also relate to what Messiou and Ainscow (2015) earlier claimed by stating that teacher development should emerge within the classroom, having close connections and getting expertly available within the school for common practice. In improving school practice, action research is the best tool for such an opportunity. For teachers' growth, professional development through their experience-based research sounds useful and timely and can add value to their profession (McNiff, 2011; Vaughan, 2020).

In this changing world of academic growth and quality concerns in education, teachers are the change makers. They are potential agents as they engage in classroom teaching and what they do makes a difference (Morales, 2016). They can realize, reflect, explore, solve, and apply what is found through their research to improve education. This can ultimately result in improvement of the skills in teaching and increased productivity of teachers and

students, (Hine, 2013). Another research in Nepal by Adhikari and Bista (2019.) critically reviewed the present condition of the professional development of teachers in Nepal and recommended better plans and improvements informed through research. At the policy level, the School Sector Development Plan of Nepal 2016 – 2023 aimed at strengthening the different measures of PD of teachers through various approaches (Ministry of Education Science and Technology, 2019). Teachers are expected to identify their problems and seek solutions to them through research which can improve their pedagogical practices (Grima & Farrell, 2017). Morales (2016) has also stated that teacher-initiated research also makes them more accountable for teaching and students' performance. Research can result in rewards and uplifting tools for teachers as its mandatory in promotion as they reflect and restart teaching (Burns, 2010; McNiff, 2010). Furthermore, classroom research provides teachers with professional skills and competencies, which are crucial for transformative education (Johnson and Johnson, 2012; Hine & Lavery, 2014).

### **Teacher's Quest for Positionality as Researchers**

Studies have reported that teachers face challenges in doing research, and this creates constraints for them to upgrade their professional path. For instance, Ulla's (2018) study focused on the perceived benefits and challenges of doing research in the Philippines and revealed that teachers did research out of self-interest unlike for professional carving and they found financial load, over-allocated teaching load, and lack of research competencies in them to do research. In the same way, the research carried out by Dehghan and Sahragard (2015) in Iran found that teachers had a good sense of the meaning of research and its values but could not do research because they believed research meant only for experts and not concerning classroom purposes.

Moreover, a study in Malaysia by Norasmah et al. (2016) concluded that despite having a positive response towards research, teachers faced the problem of finance, time, and lack of adequate support in carrying out research. So, before presenting a research agenda to teachers, consideration of time, money and usefulness should be made. As many ideas are mixed, the studies presented above did not highlight the experiences of teachers' professional growth through research and development projects in Nepal on which the present study focused on. Similarly, Poudel (2022) explored the efforts made for improving the quality of teacher education and found that limited (and largely absent) coordinated plans among teacher education institutions, schools, and regulating bodies negatively affected the professional development opportunities for teachers. There exists a research gap in exploring the experiences of teachers in being engaged in Research and Development projects. Therefore, this study has attempted to answer the research question: What are the experiences of teachers regarding their professional growth through the yearly research and development projects in Nepal?

### **Theoretical Framework**

This study is based on Stenhouse's (1975) framework which aims at making the classroom the center of inquiry demanding joint ventures of teachers and researchers uniformly this opines the role of teachers just like researchers for the improvement of educational practices and setting benchmarks in course of mobility in schools where research is the engaged practices. Liddicoat (2016) puts forth that when teachers in school are engaged in research that results in higher productivity the research they do is factual and evidential. Rodgers (2002) asserts that this framework proves the role of teachers as potential researchers as they have enough experiences to understand the in-depth reality of school (Darling-Hammond, 1999). Though it's quite contributing teachers as researchers have

to undergo some obstacles developing them as researchers ranging from lack of confidence to availability of resources (Peterson, 2004), and this further contributes to making teachers empowered to do classroom research relying on their varied practices and encourages them to reflect and apply from unlearning and relearning (Cochran-Smith, 2006). I have garlanded my research in this framework as a research and development project is introduced to unpack the existing problems in school and inside the classroom as well as growing teachers uplifting them to change their role of teachers-to-teachers researchers as teachers when they use classroom and beyond the subject of study, they prove to be the key persons in the school ensuring better learning environment and their growth too.

### **Research Context, Method, Participants, and Data Generation**

#### **Context of the Research**

This study outlined teachers' experiences of classroom research and its role in their professional development through their Research and Development (R & D) Project. The research was carried out in two schools run by the Nepal government under an education trust where an R & D project is launched for ensuring teachers' growth which is carried out every year with equal payment seeking proposals from teachers. This project allowed teachers to carry out research on their own as per their interest area with the course of action in purpose to the research and development cell without disturbing their teaching load and other responsibilities.

The present study was carried out within the framework of qualitative research with purposive sampling. Participants were selected with the assumption that they have rich experience in the point of research interest (Patton, 2002). Through interviews (Creswell, 2007), the narrative inquiry method was used to unfold teachers' experiences of professional growth with research and development projects (Clandinin & Connelly, 2013). All participants

were from two public schools run under the education trust of Nepal teaching at the secondary level from 9-12. Two males and three females are taken to maintain the diversity of teachers. Those who were involved in the research were chosen from all four departments, namely Mathematics, Social Studies, English, Science, and Nepali. The main method in analyzing the interview data was qualitative as it explores, describes, and analyses lived experiences, interests, and concerns (Phillion, 2002). The participants of the study were Rama, a Mathematics teacher, with more than ten years of experience, Mutu an English teacher, with more than twenty -two years of teaching experience evidence; Shalu, a Social Studies teacher, with fifteen years of experience, Raj, a Science teacher, with twelve years of experience; and Raj, a Nepali teacher with fourteen years of experience. Teachers from Kathmandu and Pokhara participated voluntarily, and all the names are pseudo-names. All the participants were interviewed at their convenient time and the interview data were subjected to thematic analysis (Hsieh & Shannon, 2005; Braun & Clarke, 2019) to do justice to the research question. The length of each interview was between 30 minutes to one hour. All the interviews were transcribed, coded, categorized, and analyzed in different ways for theme generation. Initially, each of the relevant data was provided with appropriate codes, the codes were analyzed and put into appropriate categories and finally, the categories were further combined into themes. The same themes were presented as broader findings of the study and were elaborated through sub-themes and data extracts. In this process, the data were gathered using a multi-step and cooperative procedure (Gelman et al., 1995).

### **Findings and Discussion**

This study has generated four major themes and subthemes based on the research question. They include identity construction, the opportunity to learn through reflective practice, and burden. These



themes have further sub-themes as illustrated in the section that follows.

### *Identity*

This study found that engagement in research and development work was one of the components for them to develop their identity.

### *Professional Identity*

In the interview, most of the teachers revealed that the research and development training is giving them a sort of recognition and identity for them. Though they are part of it for the first time in their professional career. Rama, one of the participants said;

*“I was part of it and obliged to do it as it is asked by the school authority and was an academic program for teachers. I did it with ups and down and now I realize it is somehow useful for me as my research work has been compiled in the book and I am benefiting too. It will support my promotion and other recognition concerning work and competence.”*

This study also finds that teachers are creating their identity in their workplace via this R & D project and that directly aligns with the finding of (Owen, 2015) as he utters that research is a supportive pillar of identity creation and career finding for teachers and those who involve in it. Similarly, another participant, Mutu said;

*“I am happy with it as it is to create my competence by revealing my potential and practices which could be useful for me and my colleagues and of course, it is giving me a new identity as a researcher.”*

*“Time has changed. I am finding it useful as it has added one more brick to my learning ladder and is, of course, making me known in the school community. It further provided me with a platform for showcasing my practices and the problems I faced. I could explore and be part of the learning community and enhance my professionalism.” (Raj)*

From the interview excerpts, it is obvious that teachers were initially not aware of what they are going to get but later they realized its worth in making them able to get identity. The data presented above also align with other scholars. In the case of identity, they have positive responses towards the research project in their professional development and have demonstrated their new identity as a researcher. This has similarities to the findings of Ulla (2018) who argues that research has a positive impact on the lives of teachers and participants. It is so as because of research they can add their profile. My participants also expected that it will help them to create a professional identity with varied opportunities.

Likewise, one of the participants, Raj shared

*“It is useful for me as it added one more brick in my career...”*

This viewpoint also coincides with the findings of Hine (2013) who asserted that research helps teachers to tackle their classroom issues and offers the opportunity to grow and help them to have growth in their professionalism.

#### b. Promotional help

Another subtheme I generated was promotional help. Many participants opined its relevancy in their promotion in the days to come. They have a positive response regarding promotion. Rani said;

*“I think it can be useful in my promotion as it is liked to academic research and obviously will count .it has enhanced my capacity and my practice too.”* (Rama)

Likewise, Mutu asserted:

*“I am working so hard as one day is counted toward my promotion. These days action research is mandatory even appraisal forms too.”* (Mutu)

*“As you sow so shall you reap? I think it will award me in getting higher points than the friend in other arenas too as it’s a call from the school.”* (Rama)

The findings drawn from the interview revealed that after the completion of the R & D project, they are hopeful of getting a promotion and further expect to have high points in the appraisal form. It is noted that research is helpful in the job promotion of teachers. The R & D project also dealt with classroom issues. Teachers are hopeful of getting a promotion as it adds a brick to their success ladder. Likewise, participants' perceptions also match with the ideas of (Desimone & Garret 2015). They believe PD is more rated when it is connected to classroom lessons. As participants revealed that they got to explore their classroom problems and issues they could find solutions and mastery of classroom issues is seen. After exploration of classroom issues and addressing the issues in action research, it helped them to get promoted. From this, it is seen that research is also helpful in adding promotion in teachers' careers which helped them to grow professionally.

### *Opportunity*

Two sub-themes have been drawn from the data I collected concerning their responses to the opportunity brought by their involvement in the R&D project.

#### *a. Access to collegial community*

The teachers said that they got access to the collegial community while they were involved in the R & D projects. Mutu, Rama, Raj, and Salu's opinions below illustrate this concern.

*"I had mixed opinions regarding this project as it was new and going together with normal teaching would sound not that easy. But when I started getting into it, I knew it was worth it when I got to be in contact with friends and colleagues and it paved the way for the formation of a community of friends with a caring and sharing culture. It brought integrity and kept me away from isolated practices."*

(Mutu)

*"I am thankful to the organization as I got the opportunity*

*to earn, learn and speed up my potential as a teacher-researcher.” (Rama).*

As Rani also said;

*“In my case, I am quite positive as this project supported me in developing my professionalism. I learned something new than before and have opened the door for future learning as I am involved in many professional communities. Secondly, I got ideas for exploring my classroom practices and identification of such issues is also easy for me.” (Raj).*

*“In my research journey as a teacher, I came in contact with a higher professional community and could attain workshops and seminars which was beyond the teaching career as a teacher only.” (Salu)*

From the excerpts, it's obvious that the R & D project has turned out to be contributing as they got a professional community, explore their potential, and door to further learning is opened. From the interview experts it was found that research is helpful in the professional development of teachers as it bridges them to professionalism and learning is open for them. It has offered them many opportunities.

Doing research and involvement in professional communities helps teachers to grow professionally and offers them opportunities (Owen, 2015) and the study has also the same findings as most of the teachers opined that the R & D project allowed them to fit themselves in the professional community and could learn more and it is worth being in such communities. Farrell (2017) found that teachers get benefited when involved in research workshops, meetings, and professional circles and this study also aligns with their words as teachers experienced professional growth in R & D projects. This made them involved in meetings and workshops and offered various other opportunities to explore themselves.

## *Reflections*

Self-reflection on the practices they had was one of the major concerns raised by teachers that emerged due to their engagement in R&D activities.

### *Self-reflection on practices*

While working in the groups involved in the project, the teachers had opportunities to self-reflect on the pedagogical practices they were undertaking for long in their professional careers. Roji, Mutu, Raj, and Salu's opinions illustrate this concern.

*"I found it worth practicing. I got to learn about learning by doing. I explored, and I realized where I lacked and could find solutions. While doing research I was able to have flashbacks of my B.Ed. days and M.Ed. classes, indeed it is reawakening me."* (Rosy)

*"During the project, I sensed, realize and recall my practices and got through with some new practices. I could posit myself self-rating and I have my new positionality of teacher-researcher and have a deeper reflection of my inner me and could sense where I lacked and where I am aligned through this project right for proposals to final submission journey."* (Mutu)

*"Though it is helpful to us to improve our classroom practices and to reenergize us. I feel that it's time-consuming but useful this or that way. Not only academic excellence I deeply got to sense that research will pay for us in different ways even monetary gain. On the top, I realize and unlearn and relearn from this project in case of dealing with the cases and doing action research regarding topics of my interest and need."* (Raj)

*"I got to improve my teaching styles after doing research. I was able to apply the findings of my study in a real classroom setting as a pure researcher. I believe that is the*

*most demanding benefit I could ever get.” (Salu)*

From the interview experts of Mutu and Raj, it is found that the research project they were involved in made them reflect as the study has traced out some reflections. Many participants have reported that they could reflect on their practices and rate themselves where they are and where they lacked in the research they carry out. This matches with the findings of Steeg (2016) and (Philpott & Oates, 2017) who opined that self-reflection opens the door to new. TPD is the tool for “equipping and enabling” teachers (Prabhu, 1987, as cited in Wajnryb, 2002, p. 12). Teachers were able to enable them as they reflect and adapt through research and have feelings of being enabled.

From the aforementioned interview excerpts, I found that teachers found the R & D tools as a means of reflective practice, a learning platform, and reflection and flashback of their college life and specialization. This concludes that research is helping teachers to reflect and adapt. Similarly, Rosy shared;

*“I got to improve my teaching styles after doing research. I was able to apply the findings of my study in a real classroom setting as a pure researcher. I believe that is the most demanding benefit I could ever get.” (Rosy)*

While going through the data it is found that the research project is helping teachers find out solutions to their classroom issues and teachers are able to rethink and reflect and apply in their teaching. This strongly aligns with Stenhouse’s (1975) framework which keeps the classroom as the center of study bringing out solutions related to teaching and students. As like Stenhouse ‘s remarks R & D projects also offered this sort of opportunity as of the participants’ concerns and that is reflected even in the interview experts presented above.

### *Burden*

When teachers were asked about the difficulties they met being involved in research, a few of them shared that they had to

do the research alongside their teaching load, which made them feel further burdened and it also created higher moral pressure for them as if they do not complete there will emerge a moral issue.

#### *Teaching load*

*“It was quite challenging to finish the project as we were taking it with a normal teaching load. Beyond it, we were just exposed to it just after a few webinars. Doing it with lesser knowledge we struggled a lot.” (Raj)*

*“I was under pressure. It was introduced at the last of the session. I am finished with hustles and bustles. Further, I found it as a tool of tension in the name of growth as of limited competence and resources in my access.” (Salu)*

Despite the positive responses toward professional growth, the study revealed some negative assumptions they had felt while being part of the project. Under this theme, the experiences of teachers align with those (Gjelaj et al,2020). Gjelaj found that teachers encountered difficulties in becoming researchers as they do have limited resources and research skills during their courses in universities, and applying them in the classroom was tough, under the research and development project in this study also teachers have opined that they took it as a burden. They felt the project was a burden as they had to do it in a rush as of the late announcement of the project by the administration. They were also not provided with resources and they lacked better ideas. They did it just to be away from criticism and obstacles in promotion tasks in the future

#### *b. Moral pressure*

Findings revealed that some participants were taking the project as moral pressure .in this regard Mutu asserted;

*“I am taking it a bit differently. This project was introduced and launched unanimously and we did it. But the payment is done on an equal basis. So, in my case, I did meet the research ethics but some very raw research*

*also got the same recognition and payment. This forced me to do it just for formality as no recognition is made of high performers. So, professionally growing but no fair competition. I am sensing it as a moral burden.”*

Just like Mutu, Shalu asserted;

*“I did it just to escape judgment though it is professional strength. I believe I did this to be away from judgments. We didn’t get any supportive training and did sensing as a burden and somehow, I did.”*

They did it just to be away from criticism and obstacles in promotion tasks in the future. Another concern was the teaching load. This finding has a similarity with Vasquez (2017), who believed teachers with higher loads do not perform quality work as they have no time for family and friends. The study finding aligns with him as they did it at random and without competencies with the fear of not being promoted and the pressure of not following the crowd. They don’t know whether it helps them to grow professionally or not. Some of the participants opined that the training provided for action research was not enough and they couldn’t understand the core principles of it but did it for doing purpose only. This goes with Matheson and Windle’s (2017) ideas that the trainers and training and projects always do not meet the classroom issues and expectations of teachers and their needs and do not have successful ratings over the program. Like them, participants of this study also felt the same.

This finding also has a connection with Stenhouse’s (1975) framework which also says teachers have to undergo some difficulties while incorporating classroom problems and that is also faced by teachers as they revealed sorrow of doing the project. Many participants revealed. From the findings, it is clear that teachers were finding it a burden in case of resources, competency, and recognition lapses. But experts revealed that their growth, professional enhancement,



reflection to realization, and adoption are notably welcoming things brought by the R & D project. The study has highlighted the more positive response to the research and one negative finding under theme burden as few participants did it but sensed it as an academic burden. This study has sampled only five participants and it's not possible to generalize the findings in other contexts other research with varied methodologies and participants is encouraged. This is an implication in our context and other nearing regions.

### **Conclusion**

The integration of research for academic growth in the world has been common as it's found to be crucial for teachers' rich professionalism and classroom improvement. This present study tried to unfold the narratives of teachers regarding support of R&D projects in their professional development embedding into four themes consisting of identity, opportunity, reflection, and burden with the narratives of five school teachers of public schools in Nepal run under educational trust. The study has revealed low dissatisfaction among teachers as they were not confident whether it supports their growth. Because of it, they took it as a burden practice.

The findings revealed some more positive support towards their professional development as they found it more beneficial for their growth. It advocates the necessity of research in teachers' growth and it is expected that it can be of higher value in the Nepalese context as research helps teachers grow professionally and derive good academic performance exploring classroom issues. They could reflect, learn and get the opportunity and can have a unique identity and can contribute to academia.

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