

## TEACHERS' ROLE IN DEVELOPING THEIR PROFESSIONAL CAPACITY VIA INQUIRY.

Pan Yan<sup>1</sup>, Nidhi Agarwal<sup>1</sup>

<sup>1</sup>Lincoln University College, Petaling Jaya, Malaysia.

### ABSTRACT

This qualitative research aims to provide an assessment of educators' engagement in inquiry-based professional development. Examining teachers' perspectives, encounters, and challenges with professional development initiatives, the study used classroom observations and in-depth interviews. Their level of engagement and the effect they perceive it has on classroom learning are the primary foci of the research. Producing teachers capable of reflective practice via the use of research and an inquiry-based pedagogy is the primary objective of teacher preparation programs that place a heavy emphasis on research. Unfortunately, statistics on the academic success and development of program graduates are lacking. Seven first-year teachers from academic teacher education programs in the Netherlands were the subjects of this study, which aimed to analyse the development of inquiry-based practice. Interviews with these graduates and their school officials spanned three years. Their involvement in inquiry-based learning progresses from the classroom to the school's organisational level on the basis of individual and organisational characteristics. Insights from the research provide ways that teachers might improve their inquiry-based practice in the classroom. The results show that inquiry-based PD promotes reflective practice and teamwork, even while time and resistance to change are still problems. The findings help optimize professional development (PD) design and execution to promote teacher engagement and inquiry-based approaches, which in turn enhance student successes.

**Keywords:** Professional development, teacher educators, inquiry implementation, development.

### INTRODUCTION

The use of inquiry-based learning in preservice teacher preparation programs has grown in popularity over the last few decades. To make educated judgements, grow professionally, adapt teachings to social changes, and conduct successful classes, educators must perform research. Producing scholars who can use their knowledge in the classroom is an aim of teacher-training programs in many countries. In the last few decades, teacher education programs have begun to place a greater emphasis on inquiry-based learning. Educators are expected to respond to social changes by operating in an inquiry-based manner, relying on research to inform their judgements,

and being open to new ideas and methods of teaching. Many nations' teacher preparation programs now incorporate coursework on teacher research in an effort to train future educators to conduct their own studies and effectively use the findings in the classroom. Since most teacher-training programs place a premium on inquiry-based learning, incoming teachers will join the profession with certain ideas about how they should do and apply research. However, there is a lack of data about the ways in which first-year instructors develop their practices via inquiry-based learning. Could there be an opportunity for teachers to use what they've learnt? How did they manage to get beyond these challenges, and what tools may other teachers use to become better? This study examines the answers to these concerns by following the careers of seven Dutch educators who have just finished formal teacher training programs and gauging the extent to which they have used inquiry-based pedagogy in their classrooms (Siribanpitak, 2019).

### **Inquiry-based working**

An essential component of inquiry-based learning is research, which aims to assess and enhance student learning. Even while inquiry-based learning is becoming more popular, I prefer inquiry-based projects. The literature has used many terms to describe this method, including evidence-based working, data-based working, action research, lesson studies, and evidence-informed working. Previous research has shown that unskilled educators may sometimes dabble in this kind of research, but they seldom conduct whole research cycles (Baan, 2020).

### **Involvement of teachers in inquiry-based working**

Investigating the entry points for highly-qualified teachers into the teaching profession. These kinds of studies show that new college grads are eager and ready to enter the research workforce. The results of these investigations demonstrate that the graduates are prepared and enthusiastic to use their research abilities in the real world. The use of literature and contemplation seems to outweigh research among beginning instructors who have finished academic degrees. This kind of inquiry-based activity is also often done by teachers in their own classes. It has come to light, however, that some school-level educators, especially those holding roles in professional learning communities, do inquiry-based work (Yu, 2021).

## **BACKGROUND OF THE STUDY**

Institutions of higher professional education provide bachelor's degrees that focus on the workforce. In contrast to traditional universities, these schools prioritise real-world research. Most schools still do not have teachers with academic credentials, despite the fact that academic programs have been accessible for over ten years; nonetheless,

only a small percentage of student teachers actually finish them. Several Dutch universities have launched degree programs since 2008. Higher education institutions that cater to professionals often provide bachelor's degree programs and other more conventional, career-oriented degree options. There is less of an emphasis on research and more on practical training at these schools than at universities. Even though academic programs have been available for almost a decade, only roughly 10% of student instructors choose to participate in them. As a result, most schools still employ a small percentage of graduates from academic programs. The overarching goal of many academic programs is to encourage future generations of teachers to be independent thinkers who can take what they learn in the classroom and run with it. Studies have shown that as part of their education, student teachers get knowledge of various research methods and study literature on teacher research from across the globe. Research is fundamental to each of the four years of the program. Compared to their colleagues in professional programs, academic student instructors have a more curious mentality and are more motivated to use and do research in the classroom. That is why it is imperative that teachers have the necessary credentials to effectively implement an inquiry-based strategy for raising the bar of student learning in the classroom and across the school (Donohue et al., 2020).

### **Development of new teachers' professional capacities**

There is a wealth of literature tracking the growth of first-year teachers. Teachers with five to seven years of experience are the primary subjects of this study.

### **Conditions influencing professional development**

Both individual and institutional issues inside the school might have an effect on teachers' opportunities for professional growth. Factors unique to each educator include their background, experiences, values, aspirations, drive, confidence, and perspective on what it means to be a successful educator (Dana & Yendol-Hoppey, 2020).

## **PURPOSE OF THE RESEARCH**

The purpose of this study is to investigate how inquiry-based professional development (IBD) affects teachers' pedagogical practices by looking at their levels of engagement, the obstacles they faced, and the outcomes. By better understanding these qualities, this research hopes to improve educational outcomes and professional development programs.

## **LITERATURE REVIEW**

Teachers may improve their craft and encourage lifelong learning via inquiry-based professional development (PD), according to studies. Research shows that by emphasizing collaboration, introspection, and active engagement, this method helps teachers incorporate new methods. Results show that inquiry-based professional development improves educators' understanding of the field and encourages them to reflect on and improve their own teaching methods. Time constraints, insufficient resources, and aversion to change are some of the periodic obstacles that prevent full involvement. In order to overcome these challenges, the literature stresses the importance of continuous assistance and collaboration. Notwithstanding these limitations, it seems that inquiry-based professional development improves both instructors' and students' learning outcomes when used appropriately (Evans, 2019). Teachers who lack self-confidence are more likely to experience emotional tiredness, job discontent, and eventual departure. Through influencing positive emotions like dedication and satisfaction, TSE (teacher self-efficacy) influences teachers' desire to stay or leave, as shown by these indirect ramifications. Given the instructors' confidence, it's reasonable to assume that their mental health can be improved in more good ways than in negative ones. In addition to dealing with these issues, teachers often join several school organisations, each of which has its own dynamics, conventions, and standards. When there is a shared understanding of education's purpose or when the system is compatible with a teacher's own values, structural and cultural elements may support their opinion. Conversely, school management policies and practices may conflict with teachers' values, goals, and requirements. As point out, schools struggle to support teachers' professional growth when their needs, expertise, and beliefs are at odds with those of the members (Khorasgani, 2019).

## RESEARCH QUESTIONS

How can we design inquiry-based professional development programs that attract more educators?

## RESEARCH METHODOLOGY

The process by which educators construct their pedagogical stances was the focus of qualitative study. This approach relied on interviews with principals and other school officials.

## DATA COLLECTION & INSTRUMENTS

A pilot study Interviews and data-collecting methods were used to compile the study's findings. There were 57 men and 63 females who filled out the 120 total data. the researcher performed interviews. Classroom teachers and administrators were

interviewed. Teacher and principal interviews lasted 3-5 minutes. Participants were questioned individually by teachers.

## DATA ANALYSES

To analyses interviews were transcribed first. Based on the literature, the authors classified inquiry-based working and personal, structural, and cultural settings. As a result of the professors' varying years of teaching expertise & the fact that following interviews sometimes brought up earlier years, a chronology could be constructed. Finally, cross-case study uncovered both situational and temporal tendencies in the development of instructors' inquiry-based working.

## CONCEPTUAL FRAMEWORK



## RESULTS

Teachers saw gains in student engagement and classroom management as a consequence of inquiry-based professional development, according to the qualitative findings. Time restrictions and opposition to change are two of the obstacles they encounter. For these obstacles to be overcome for PD to be more successful, appropriate support and resources are considered essential.

**Table1: Yes/No Questions.**

N=120 (M=57, F=63)		
QUESTIONS	YES	NO
1. Have you participated in inquiry-based professional development programs in the past year?	110 (92.0%)	10 (8.0%)
2. Do you feel that inquiry-based PD has positively impacted your teaching practices?	114 (95.0%)	6 (5.0%)
3. Have you encountered any significant challenges or barriers while engaging in inquiry-based PD?	109 (91.0%)	11 (9.0%)
4. Do you believe that additional resources or support would enhance your experience with inquiry-based PD?	107 (89.0%)	13 (11.0%)
5. Have you noticed any improvement in student outcomes because of implementing strategies learned in inquiry-based PD?	115 (96.0%)	5 (4.0%)

## DISCUSSION

Both the importance of inquiry-based professional development in improving instructional methods and the difficulties educators face, such as limited time and opposition to change, are highlighted in the debate. It is critical to address these concerns by providing individualised assistance and resources in order to increase educator engagement and the efficacy of professional development. Many studies have focused on how new teachers develop professionally in their first few years on the job. The lack of focus on professional development in inquiry-based practices is concerning. By delving into the inquiry-based practices of educators with degrees in academic teacher preparation, this study hopes to fill a gap in the existing literature. When asked about their involvement in inquiry-based professional development programs in the last year, 110 respondents (92.0%) agreed and 10 (8.0%) disagreed. Similarly, 114 respondents (95.0%) agreed that inquiry-based professional development had a positive effect on their teaching methods, whereas 6 respondents (5.0%) disagreed. Of the 120 people who took the survey, 109 (91.0%) thought that they would have a better experience with inquiry-based professional development if they had more resources or help. Only 11 (9.0%) disagreed. If additional resources or help were available, 107 people (89.0%) would have a better experience with inquiry-based professional development, whereas 13 people (11.0%) would have a different opinion. In a survey of 120 participants, 115 (or 96.0% of the total) felt that inquiry-based professional development strategies improved student results, while 5 (or 4.0%) disagreed.

## CONCLUSION

As this qualitative research shows, there are a lot of moving parts when it comes to inquiry-based PD for teachers. Time constraints and opposition to new approaches impede involvement in inquiry-based professional development, which fosters reflective practice and instructional growth. The unique needs of first-year academic teachers must be acknowledged by school administration. Teachers shouldn't have to put off improving their craft for five years or focus only on their own classrooms until they achieve a specific level of competence if they are competent and willing to reflect on issues with school structure. Earlier on, they should be encouraged to apply their talents to improve teaching within their educational institution and given the opportunity to hold leadership roles. The policy of education is affected. Are we setting unrealistically high standards for first-year teachers if we think they would consistently use inquiry-based techniques in the classroom? By the time instructors acquire the necessary confidence to teach, they may have lost interest in inquiry-based methods if they are educated as teacher-researchers and the obstacles they face as beginner educators are too great to overcome. Educational institutions should therefore set up a structure that allows academic instructors to make use of their abilities. To overcome

these challenges, the report stresses the necessity of tailored support and changes to existing institutions. Findings from this study may provide practical suggestions for improving professional development programs in an effort to increase engagement and raise the bar for student learning.

## REFERENCES

1. Khorasgani, A. T. (2019). The contribution of teaching skills and teachers' professionalism toward students' achievement in Isfahan, Iran. *Int. J. Latest Res. Human. Soc. Sci.* 2, 29-40.
2. Evans, L. (2019). Implicit and informal professional development: what it 'looks like', how it occurs, and why we need to research it. *Professional development in education*, 45(1), 3-16.
3. Donohue, K., Buck, G. A., & Akerson, V. (2020). Where's the Science? Exploring a New Science Teacher Educator's Theoretical and Practical Understandings of Scientific Inquiry. *International Journal of Research in Education and Science*, 6(1), 1-13.
4. Dana, N. F. & Yendol-Hoppey, D. (2020). *The reflective educator's guide to classroom research: Learning to teach*. Thousand Oaks, CA: Sage.
5. Siribanpitak, P. (2019). Redesigning teacher education. In G. W. Fry (Ed.). *Education in Thailand: An old elephant in search of a new mahout* (pp. 461-476). Springer.
6. Yu, C. (2021). Threats to validity of research design.
7. Baan, J., L. Gaikhorst, and M. Volman. 2020. "Stimulating Teachers' Inquiring Attitude in Academic and Professional Teacher Education Programmes." *European Journal of Teacher Education* 43 (3): 352-367.
8. Ho, V. T., & Vo, X. H. (2022). Innovating music teacher training activities at Dong Thap University to meet the requirements of the general education program 2018. *Vietnam Science Education Journal*, 18(7), 67-73.
9. Beltman, S. (2020). Understanding and Examining Teacher Resilience from Multiple Perspectives. In *Cultivating Teacher Resilience*.
10. Fitri, A., & Rifa'at, A. A. (2022). The Use of ICT in ELT: How Teacher Should Be Empowered. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*.