

Newly qualified teachers' perceptions and experiences about portfolio assessment in Wa Municipality, Ghana

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Abstract

Portfolio assessment is a tool that enables professionals to reflect on their development. Despite the popularity of portfolio-based assessment among educators, little research has been conducted in Ghana to establish how newly trained teachers view portfolio assessment as a learning and assessment tool. A survey of newly qualified teachers was performed to learn about their experiences and perceptions of portfolio assessment as a tool for continuing professional development (CPD) and obtaining a full teaching license in Wa Municipality, Upper West Region of Ghana with a total population of 187. Out of the total population, 58 newly qualified teachers (NQTs) were selected using a simple random sampling procedure. The researcher used a questionnaire as the predominant instrument to obtain data. Quantitative data were analyzed using descriptive statistics such as tables, charts, and bar graphs. Qualitative data were also analyzed using content analysis. This was based on analysis of meaning and implications emanating from the respondents' information. The portfolio was deemed a good learning tool by the majority of the research participants, the newly qualified teachers. They did, however, believe that creating a proper portfolio is stressful and time-consuming. According to the study's findings, the system will not succeed unless students receive proper direction from academic professionals like National Teaching Council (NTC), in-service teachers, and headteachers, etc.

Keywords: Newly qualified teachers (NQTs), colleges of Education, Portfolio assessment, National teaching council (NTC), experiences and perception.

INTRODUCTION

In recent years, there has been a shift away from using portfolios to assess student learning toward assessing both pre-service and in-service teachers' professional development. The usage of portfolios as a tool for capturing the intricacies of teachers' work and learning in authentic contexts has grown significantly and continues to grow (Brennan & Lennie, 2010). One reason is the potential for the professional portfolio to provide teachers with an opportunity for thoughtful and reflective dialogue.

Wolf and Dietz's definition of professional portfolios is used in this study: a personalized, dynamic, and interactive collection of instructors' works that stresses ownership, self-evaluation, accomplishments, and progress. Both active and pre-service teachers can use the portfolio to plan, monitor, and reflect on their teaching, as well as to identify concerns, engage in dialogue, cooperate, and enhance their skills (Muiruri, 2020). Changes in educational philosophy and practice also imply that education has shifted from being a teacher-centered process to being a student-centered process. Similarly, there has been a movement in assessment away from testing knowledge toward assessing competency and performance (Komatsu et al., 2021; Shah, 2020). Portfolio-based learning and assessment is becoming more popular among educators (Brennan, 2010).

A portfolio is a journal-style collection of written records of events and activities that an individual has participated in. The portfolio serves as a valuable learning tool as well as a document of evidence. Portfolio-based learning is based on the principles of experiential learning, which is a cyclical process of recording, reflecting on, and learning from events. The portfolio does not become a mere collection of event narratives, but contains reflections on these events and the lessons learnt. Evidence of learning is collected in the portfolio showing that reflective learning has taken place (MLS, 2015). The portfolio may also include details of learning objectives, learning resources and strategies, and how that learning might be accomplished and assessed (Black & Wiliam, 2018). Portfolio-based learning has a number of benefits. First, it helps students to act and learn independently, as well as assess their own strengths and weaknesses. To add, it also assists them in identifying and meeting their educational needs as well as developing a long-term educational strategy.

Today's teachers' job is not so much to deliver knowledge as it is to ensure that learning has occurred. Portfolios have become an acknowledged learning and assessment tool in

education because they allow teachers to assess what students have learned and how well they have improved professionally as teachers (Darling-Hammond, 2020).

Development of portfolio assessment

In the 1990s, portfolio assessments rose in popularity in the United States as part of a broader interest in alternate assessment methods. The 1980s saw a surge in norm-referenced, multiple-choice examinations designed to gauge academic proficiency, owing to high-stakes accountability (Mahoney, 2017). However, towards the end of the decade, there were growing concerns about the use of these examinations which opponents claimed only tested a narrow range of knowledge and favored a "drill and kill" multiple-choice curriculum. Teachers and schools, according to proponents of alternative assessment, patterned their curriculum to match the limited norm-referenced tests to ensure that their students did well, "teaching to the test" rather than teaching knowledge relevant to the subject matter. As a result, it was critical that assessments were useful educational experiences and that they replicated the types of substantial teaching and learning activities that would prepare students for future, real-world success (Murchan & Shiel, 2017; Lam, 2018).

Portfolio assessment

A portfolio is a collection of students' work that can be used to demonstrate their efforts, development, and accomplishments across the curriculum. A portfolio assessment can examine student-selected samples of work experiences and documentation linked to the outcomes being assessed. It can address and support progress toward academic goals, such as student efficacy and professional competence. Portfolios are commonly used for large-scale assessment and accountability (e.g., the statewide assessment systems in Vermont and Kentucky, USA), school-to-work transitions, and certification (Holloway, 2020; Krawczyk, 2017). Portfolio assessments, for example, are utilized as part of the National Board for Professional Teaching Standards' assessment of expert teachers, which in Ghana, it is overseen by the National Teaching Council (NTC). The NTC is an agency of the Ministry of Education mandated by the Education Regulatory Bodies Act, 2020 (Act 1023) to promote teacher professionalism in Ghana. Its key mandates include to License and Register teachers, keep up-to-date database of teachers, develop and periodically review professional standards and code of ethics, conduct teacher Licensure Examination, and provide the framework for Continuous Professional Development (CPD) of teachers

The purposes of portfolio assessment

First, portfolio assessment can be used as a formative and summative tool for tracking progress toward certain goals. Second, portfolios can also provide precise information about what is expected of students in terms of content and quality of performance in certain curriculum areas. It can also provide a mechanism to measure their progress along the way.

Portfolio writing is becoming more popular in the teaching profession as a way to keep track of learning/teaching activities for continued professional development (Hamilton, 2020; Tyagi & Misra, 2021) and as part of obtaining a full or renewed teaching license in Ghana. Portfolios are widely used in colleges of education, particularly at NTC-accredited Ghanaian colleges of education. The process of creating a reflective portfolio is not without challenges, and it is a tough and time-consuming task. Also, despite the popularity of portfolio-based assessment among educators, there are still some unanswered questions, such as how newly qualified teachers feel about it and how it affects their education (teaching profession) (Soifah & Pratolo, 2020.; Mukhopadhyay, 2021). The purpose of this study was to learn about the viewpoints of newly qualified teachers on portfolio assessment.

Portfolio requirement(activities)

Portfolio writing is utilized as a learning or assessment approach (Lam, 2018) in colleges of education for newly qualified teachers who are supervised by NTC during their national service period in Ghana. Throughout their national service time of 1 year, newly qualified teachers are given a set of key learning outcomes in teaching and are obliged to amass evidence of their teaching in the form of a portfolio. The portfolio contains;

- teaching philosophy,
- scheme of learning,
- learning plan,
- teacher training logbook (copy),
- copies of learner activities,
- photos/videos/audio of you [the teacher] during a lesson(teaching),
- a series of case summaries,
- case reports,

- action research (limited to one student in class),
- co-curricular activities report and
- a record of other activities as evidence of teaching like confirmation letter from the headteacher as evidence of teaching for at least more than 900 minutes per semester (Junior high school level) more than 600 minutes per term (Primary school level) and reports from their mentor, headteacher or lead-mentor etc.

Portfolio is one of the requirements to gaining a full license certificate to practice as a professional teacher in Ghana. The mentors at school of national service, the National Teaching Council (NTC) and portfolio assessors provide guidance on writing the portfolio for teachers passing through the national service.

It must be stated that the participants in this research were the first batch of newly trained teachers to build portfolio. The national service period is earmarked for clerkship during which the newly qualified teachers (NQTs) function as teachers (mentees) with mentors guiding them in their teaching professions before, during and after an instructional period. During this period, portfolio building and mentorship forms the main mode of curriculum delivery and an important component of the final assessment for full license. Newly qualified teachers (NQTs) are expected to write complete activities of cases that they follow. These reports must be developed over time as part of the ongoing teaching and learning in which they are involved. A case report like the short research will include a set of learning issues, which the newly qualified teacher needs to identify and which in their opinion will lead to better understanding of learners' need in and out of classroom for a ratification of such problem identified. The portfolio assessment issue is organized under the major outcome domains of the teacher license processes in Ghana and includes the newly qualified teachers (NQTs) building a portfolio for assessment by National Teaching Council (NTC) on their national service period in teaching. The newly qualified teachers (NQTs) are also expected to critically appraise the teaching and write evidence-based reports as they apply to the teaching that they have been engaged in. During this period, the portfolio development is continuously monitored and the final assessment involves a portfolio assessor assessment.

RESEARCH PROBLEM AND OBJECTIVES OF THE STUDY

The use of portfolio assessment is relatively new in teacher education and teacher assessment in Ghana. The NTC started with the newly qualified teachers for the portfolio assessment as part of licensing of 2020/2021 batch. While its significance has assumed a front burner status,

the success or failure of a portfolio assessment largely depends on the in-depth knowledge or experience of educators (pre-service and in-service teachers, NTC and other educational bodies). The current study was thus conducted to discover newly qualified teachers' perceptions and experiences about portfolio assessment in Wa Municipality, Ghana.

Research Questions

The researcher was guided based on the following questions:

1. What are the newly qualified teachers' perceptions about portfolio assessment?
2. What were the preparations towards portfolio building by NQTs?
3. Were NQT engaged in others duties?
4. Were NQT mentored by in-service teachers?
5. Were NQT engaged more in lesson activities?

RESEARCH METHODS

A descriptive survey design was employed for this study. This design was considered most appropriate since questionnaire was the main instrument that was used for data collection from the segment of the population of interest. Also, the researcher was only interested in describing and collecting data on facts about the newly qualified trained teachers' perceptions and experiences about portfolio assessment in Wa Municipality, Ghana. Feedback was obtained from an entire batch posted to Wa Municipality for national service for 2020/2021 academic year newly qualified teachers (NQTs) by asking them to write down what they felt about writing a portfolio and portfolio assessment. Based on their feedback, a questionnaire consisting of 24 questions were designed by the author using google form. This questionnaire (google form) was used because, the NQTs were scattered across the municipality, so funding difficulties made it impossible for the researcher to contemplate moving from school to school to administer questionnaires.

The entire newly qualified teachers (NQTs) posted to Wa Municipality, Upper West Region from all colleges of education in Ghana with a population of one hundred and eighty-seven (187) in the national service period from January 2021 to December 2021. These pre-service teachers were given an information sheet with details about this survey and were given the option of participating in the study. The newly qualified teachers (NQTs) (58) who were selected for the study were asked to sign a written consent form after using a simple random

sampling procedure to select these participants. The newly qualified teachers (NQTs) who gave their consent for the survey were requested to complete the questionnaire anonymously. Of the 58 NQTs (representing 100%) who were selected to take part in the survey, only 19 NQTs returned the questionnaires through google form representing 32.76%. 39 NQTs (67.24%) did not return the questionnaires.

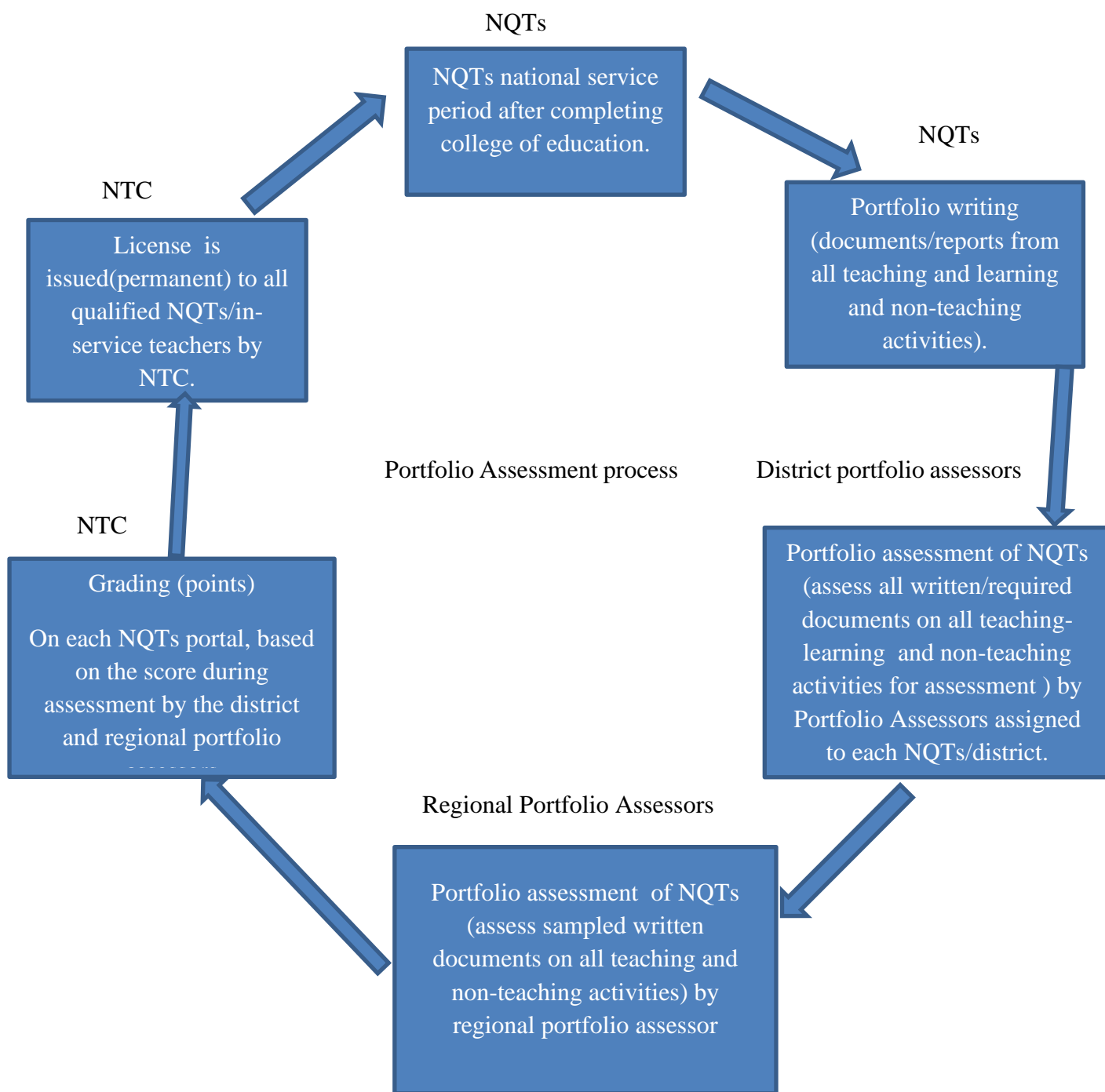
For each of the 24 questions, students had to respond on a 5-point Likert scale, ranging from strongly agree to neutral. The responses to the questionnaire were analyzed to determine the overall views (experiences and perceptions) of the newly qualified teachers (NQTs) on the different aspects of portfolio building for assessment.

Theoretical Framework

This study theoretical framework was based on portfolio. The idea of the portfolio continues to evolve based on history in higher education. It observes how portfolios have transformed from a file collection of artist's work to practice as assessment in education. This also deliberates how technology has formed and influenced the intent, use of and engagement with portfolios assessment in the late twentieth and early twenty-first centuries. Portfolios were known as the collection of arts before it deliberated into higher education in early 1970 in various ways such as exchanging from standardized testing, increased target quality assurance, and new research and theories of learning (Mackh, 2018). The origins concept of the portfolio introduced in Renaissance Italy; where the architects and artists collected their artwork. The meaning of portfolio developed from its original function as a case for holding loose papers to be used in broader contexts like government, finance and education. Within the context of art, portfolios were the way of presenting a set of the best work of an artist like a catalogue for a selected audience.

The concept of portfolios in literature is actually sort of like its practicality in an art context. As it is the portfolio as a system that entails the disinterested judging of each student's work, collected, like the best representative work of an artist. This was somewhat such as its original artistic purpose (Hayati, 2021). One of the considerations within the introduction of portfolio assessment in higher education came from the dissatisfaction with quantitative standardized testing. As a result, portfolio assessment was seen as another to the testing tradition (Rukmini & Saputri, 2017). For this reason, a portfolio in this context is considered as the mean collection of texts ranging from drafts of their national service period of teaching to represent a newly qualified teacher teaching and learning activities.

PORTFOLIO ASSESSMENT PROCESS CHART AS IN GHANA BY NTC.



Source: Author, 2021.

LITERATURE REVIEW

Portfolio uses with pre-service teachers

Studies focusing specifically on the use of professional portfolios with in-service and pre-service teachers (Hosseini, 2021; Evişen, 2021; Haghighi Irani et al., 2020) have found that constructing a professional portfolio and reflecting on one's teaching tend to improve teaching methods. For example, content examination of the participants' portfolios in Doty's study on science teaching revealed a gradual shift from a teacher-centered to a student-centered approach. Further, as the professional portfolio allows pre-service teachers to demonstrate their teaching competence (Beka et al., 2021; Tyagi & Misra, 2021), Wajda, (2018) shows that it also provides evidence of their reflection on their progression in the profession (Cusack & Smith, 2020; Cui et al., 2019). This can lead to sustained knowledge building and professional growth (Alajmi, 2019; Bartleet et al., 2019).

Studies also report confusion about the scope, nature, and value of professional portfolios when well-defined guidelines, clear structure and examples of past portfolios are lacking (O'Connor et al., 2020). Pre-service teachers seem to be concerned with showcasing their portfolios to obtain employment while educators aim at promoting professional development (Saavedra Jeldres & Campos Espinoza, 2019; Pegrum & Oakley, 2017; Buchholtz et al., 2018). In stressing the need to use portfolios specifically for professional development purposes, Alt (2018) and Cirocki & Farrell (2019) maintain that the focus be placed on the process of portfolio construction where learning takes place rather than on the end product.

Moreover, Vigeant (2021) claims that the professional portfolio is generally not used to its full potential. They explain that, despite its recognized impact on teaching, little is known regarding its long-term benefits and the change in the nature and quality of the reflections as the pre-service teachers mature.

Reflective practice

Reflective practice emphasizes the use of reflection in professional activities as a way of questioning assumptions and the habitual practices that are formed very early on in teachers' careers. For example, new teachers in need of stability feel increasingly more comfortable teaching once they settle into their routines. At that point, they may no longer think much about their practice (Wetzel et al., 2018). Ploeg & Piet (2020) postulated that 'experience may increase a person's automatic skill in a particular direction and yet tend to land him in a groove

or rut, the effect again is to narrow the field of further experience. This is due to the fact that habitual practice prevents individuals from seeing and trying out new experiences (Kudesia, 2019).

Furthermore, teachers tend to also be selective in giving attention to aspects of experience that are self-confirming, which distances them from becoming aware of possible deficits in their teaching skills (Robison, 2021; Kester et al., 2019). Consequently, teachers may not see the need to improve their practice because of tacit knowledge and habitual routines that in turn prevent growth and development, and breed ignorance (Åberg, 2021). It is argued that through reflecting and questioning their knowledge of practice they can begin to change their habits (Hofer, 2017; Saric & Steh , 2017). Lenz et al. (2020) argued that 'We do not learn from experience but we learn from reflecting on experience'. Building on this statement, Aldahmash et al. (2021) and Farrell (2019) viewed the professional portfolio as a reflective bridge that enables teachers to pause and to reflect on prior experiences that have facilitated their learning. In that sense, professional portfolios serve as conduits that connect teachers to both the theory base of education and the practice base of the workplace. Like a bridge that requires a traveler to expend energy to move from one end to the other, the professional portfolio requires teachers to use their cognitive skills to make connections between themselves and their professional life. Teachers can accomplish this by concentrating their thoughts to gain a clearer picture of lived experiences (Vass and Kiss, 2021; Buchbinder et al. 2021).

Finally, the literature on reflection also focuses on its role, such as reflection on and in action (Quintana et al., 2021), reflection for and about action (Moghaddam et al., 2020), and on its application using learning journals (Moghaddam et al., 2020) and professional portfolios (Beka et al., 2021). Svendsen (2020) and Yurkofsky et al. (2020) suggested that teachers engage in ongoing enquiry to improve their practice. This can be achieved by placing teachers in a supportive culture where their practice-oriented enquiry is valued. Research also shows that teachers need to further structure the process of portfolio development for their reflection to be long-lasting and to result in professional growth (Hamilton, 2020 ; Tham, 2021). In this study, pre-service teachers (NQTs) used the Wolf and Dietz (1998) framework to organize their professional portfolios as they examined their growth (Harun et al., 2021; Laraba & Boukhedimi, 2021) within a reflective National service period context.

NTC Portfolio assessment framework for Newly Qualified Teachers

Purpose

Wolf and Dietz's framework provides pre-service teachers (Newly Qualified Teachers) with a structure to identify issues related to their teaching practice and to set goals for improvement.

Problem recognition is central to reflection. The primary purpose of a professional portfolio is to advance learning by allowing teachers to reflect on their work and knowledge acquisition, and to set goals for themselves as learners/teachers. For example, pre-service teachers (Newly Qualified Teachers) are required to work on all classroom-related issues and co-curricular activities in the school of posting within the service period of one year, they monitor their progress by collecting artefacts/information that are part of the process.

Process

Newly qualified teachers are asked to build their professional portfolios around stated teaching philosophy, objective, learning indicators and reflect regularly on the level of attainment of these objectives/goals. They are also asked to seek feedback or guidance from peers, instructors and in-service teachers (mentors).

Audience

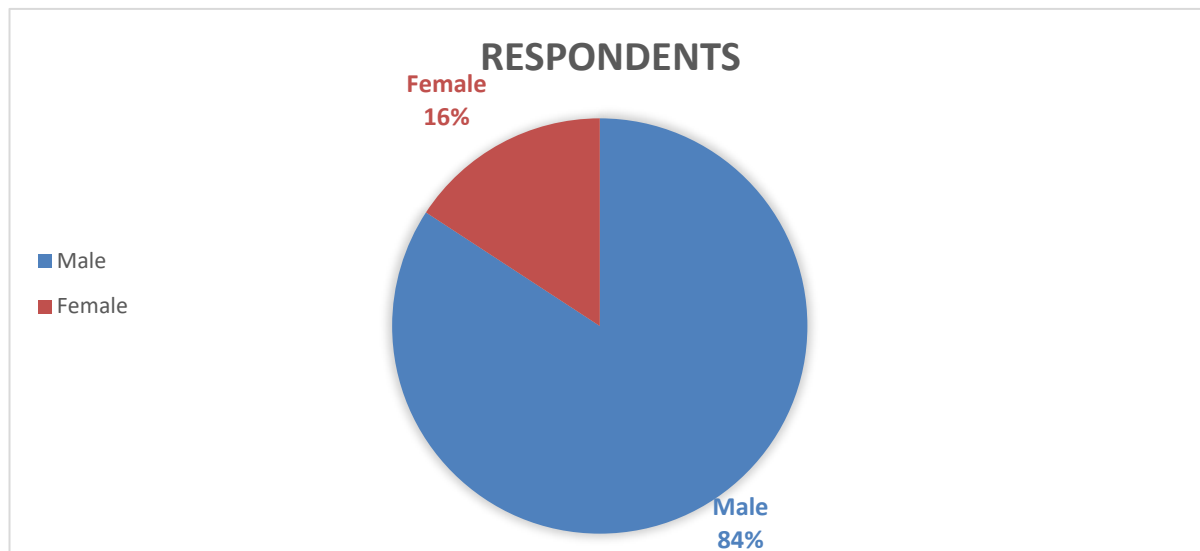
The purpose of the professional portfolio is for teachers (Newly Qualified Teachers) to reflect continually on their work in order to make decisions about what they want to achieve and how they have achieved it (Cirocki & Farrell, 2019). Wolf and Dietz's professional portfolio framework stresses teacher ownership. Pre-service teachers (Newly Qualified Teachers) are solely responsible for the selection of the contents of their professional portfolios.

Content

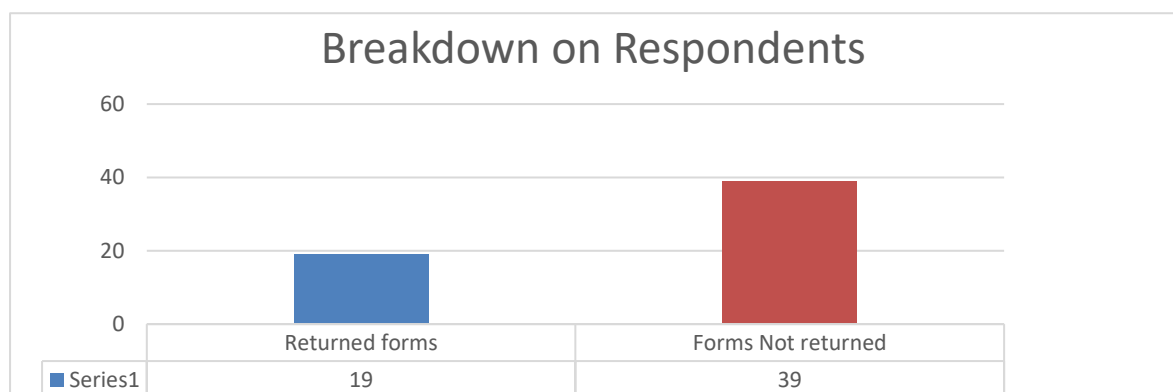
Espinoza & Medina (2021) refer to the content as a collection of products, such as lesson plans and notes, teaching evaluations, photos of students and/or teacher engaged in classroom during an instruction, sample of assessed learners work, action research work (limited to one identified student) and self-reflection aimed at the attainment of their selected goals, report on co-curricular activities engaged in, report from a mentor, headteacher and a confirmation letter of evidence of attendance to work from the headteacher. The NQTs organize the contents (portfolio) in chronological sequence for reflection on their growth and for assessment by national teaching council (NTC). For example, the portfolio is presented to the headteacher which district portfolio assessor will go for and assess using a portfolio assessment rubric.

RESULTS AND DISCUSSIONS

Demography of respondents



Out of the total respondents of 19 (100%) 3 females participated representing 16% and 16 males took part which also represent 84%.

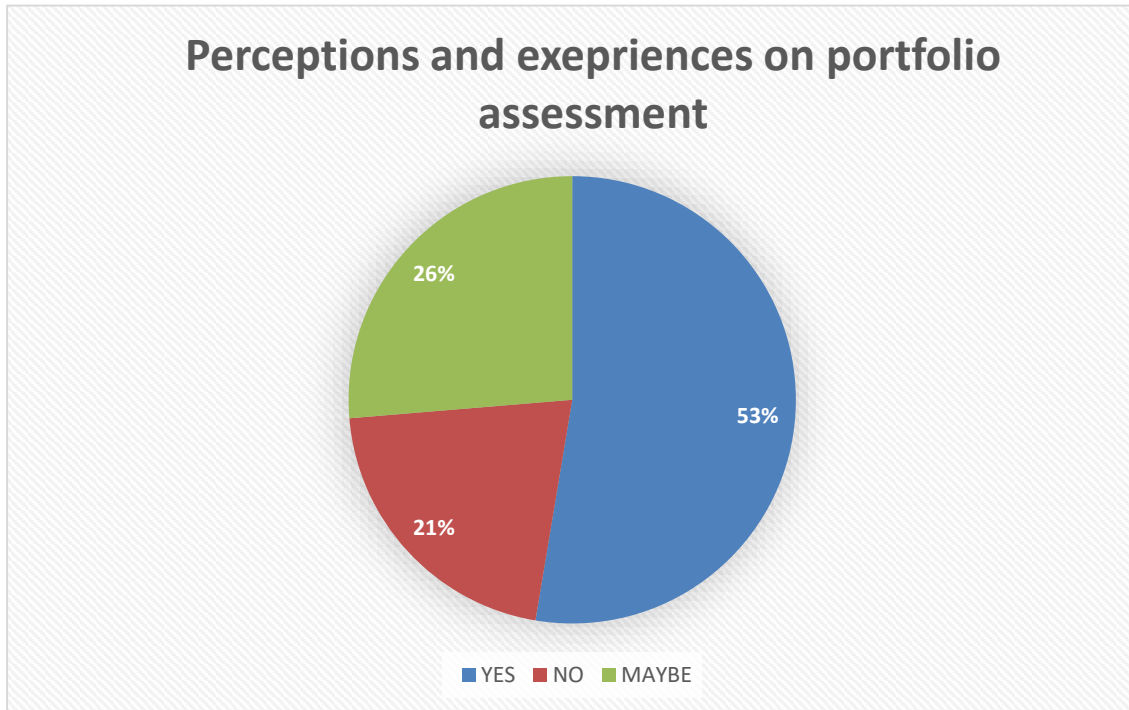


The total number of NQTs who were selected and accepted to take part in the survey were 58 representing 100%. Out of which, only 19 NQTs returned the questionnaires through google form representing 32.76% while 39 NQTs did not return(submit) the questionnaires which also represents 67.24%.

ANSWERS TO RESEARCH QUESTIONS

1. Newly Qualified teachers' perceptions about portfolio assessment

Per your experiences about portfolio, would you like it to be made compulsory in teacher training colleges as a course during final year before the practical aspect?"

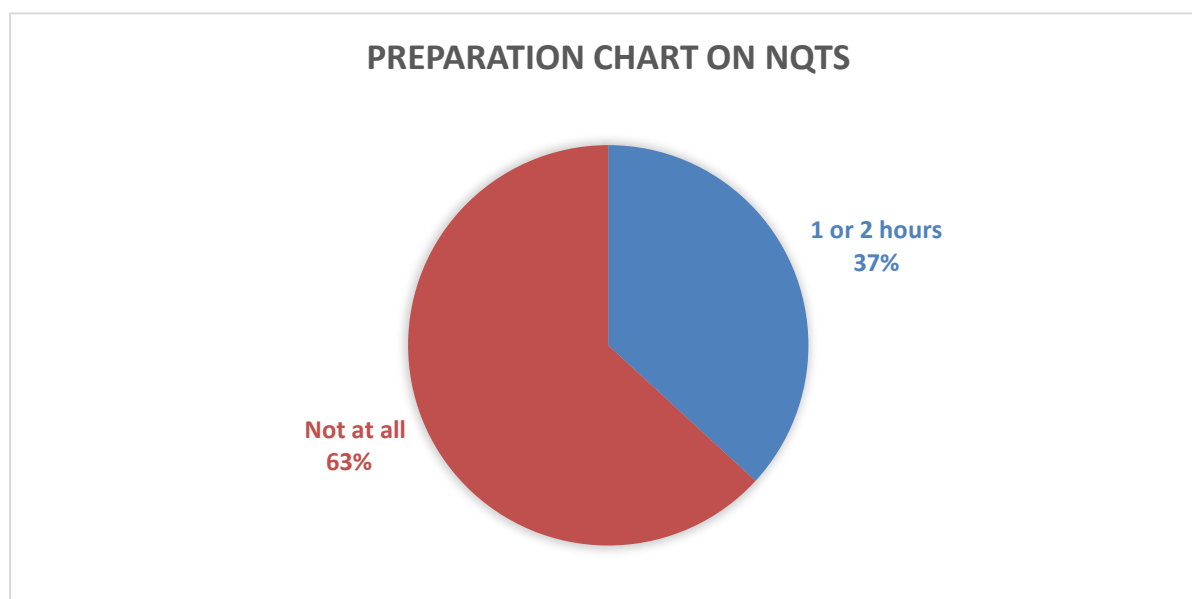


YES	NO	MAYBE
10	4	5

From the chart and table, NQTs responded to question #1, “Per your experiences about portfolio, would you like it to be made compulsory in teacher training colleges as a course during final year before the practical aspect?” and were required to respond either yes, no and maybe. 53% (10) responded yes, 21%(4) no and 26% (5) were not certain. This means that NQTs would be more interested (that is almost 100% yes) in portfolio writing and assessment when there is a pre-requisite knowledge on almost all of portfolio writing and assessment.

2. Preparing towards portfolio building by NQTs.

The number of times NQTs were guided by NTC or their school (college)



1 or 2 hours

Not at all

7

12

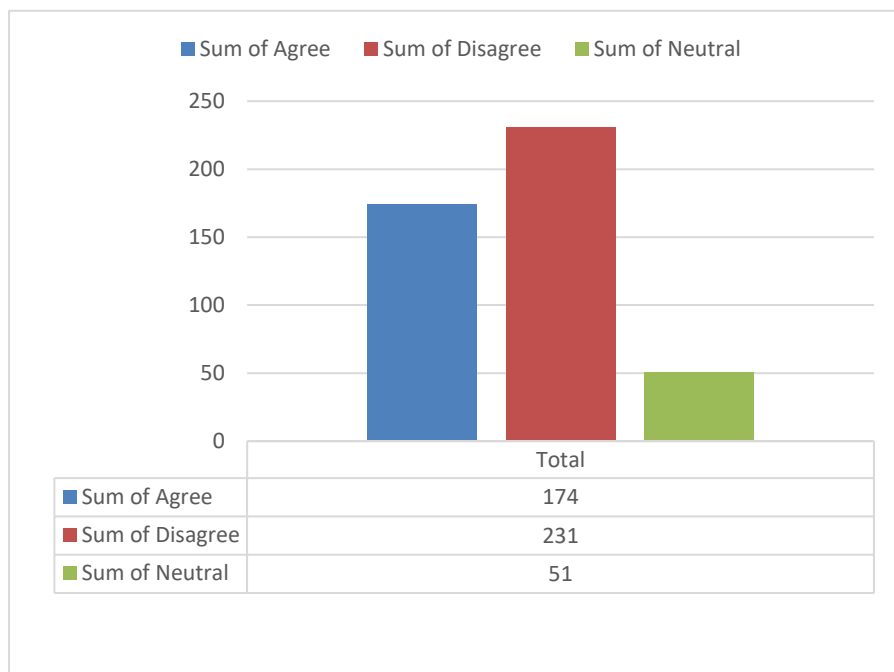
This chart and table show that 7 NQTs (37%) received some guidance for 1 or 2 hour(s) from NTC or their school prior to their building of portfolio for assessment during national service period while 12(63%) were not given any guidance at all by either NTC or their school prior building of portfolio for assessment.

Newly Qualified teachers experiences and perceptions in building/writing of portfolio

Questions	Agree	Disagree	Neutral
1. I enjoy writing the portfolio	8	11	0
2. I can appreciate that my written and communication skills have improved	6	12	1
3. It has helped me in self-directed learning as I can analyze problems on my own	6	10	3
4. Reviewing others' portfolios is very useful	10	6	3
5. Writing the portfolio is a stressful process	7	9	3

6. Writing the portfolio has helped my personal and professional development	6	11	2
7. While I write the portfolio, I usually think about the teaching philosophy objectives and learning indicators.	6	11	2
8. The portfolio encourages self-reflection	10	8	1
9. I normally write the portfolio on a regular basis during my national service period.	7	12	0
10. There is adequate guidance to write the portfolio	10	7	2
11. I use resources other than textbooks to write the learning issue	9	9	1
12. I have started to use the same principle (of writing the portfolio) in problems that I encounter in teaching	7	11	1
13. Writing the portfolio has given me an insight into outcome-based education	8	8	3
14. The portfolio should be part of every teacher trainee programme	10	9	0
15. I usually reflect on the problems/teaching activities during my national service period as a newly qualified teacher.	8	8	3
16. Whenever I write the portfolio, I think of the outcomes(assessment)	7	9	3
17. The portfolio is a useful additional learning and assessment tool	8	9	2
18. I usually read the relevant chapter in books before I write the portfolio	4	13	2
19. The portfolio has changed the way I think when I encounter problems	5	12	2
20. The portfolio writing has changed my approach to learning and teaching	5	11	3
21. Writing the portfolio has helped me to monitor the learning goals	8	8	3
22. Writing the portfolio has helped me to recognize my strength and weakness in teaching, learning and assessment of students	7	10	2

23. Writing the portfolio has helped me to revise my work (lesson note, lesson plan, teaching methods/strategies, mode of assessment etc.)	8	11	0
24. To what extent do you agree with this statement “NTC assists me much towards achievement in writing portfolio”?	4	6	9



Sum of Agree	Sum of Disagree	Sum of Neutral
174	231	51

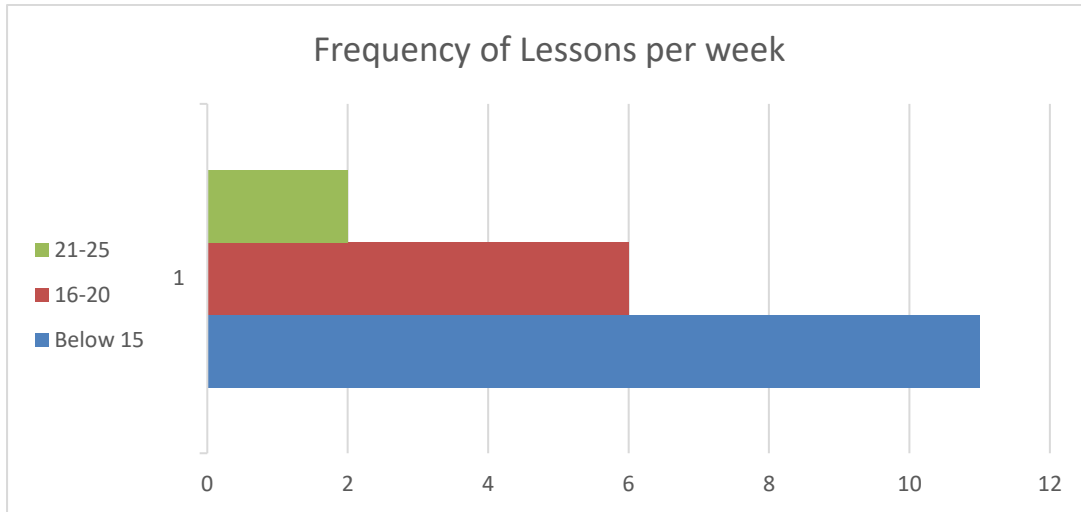
The scale was re-grouped into 3 as agree (strongly agree and agree), disagree (strongly disagree and disagree) and Neutral. In all the responses by the nineteen (19) participants to a total of twenty-four (24) questions on ‘Newly trained teachers experience in building/writing of portfolio’, 174 (one hundred and seventy-four) agreed were recorded, 231 (two hundred and thirty-one) disagreed recorded and there were fifty-one (51) Neutral responses.

The use of portfolios in continuing professional development in teaching profession is still in its infancy in Ghana. The portfolio has been shown to be a worthwhile addition to the existing learning and assessment tools for NQTs from colleges of education. It has been shown that students/teachers using portfolios obtain higher professional development in factual knowledge and practice.

Even though only 42.1% of students agreed that the portfolio was useful as an additional learning and assessment tool in comparison to the 50% reported by Lonka et al., a revamped

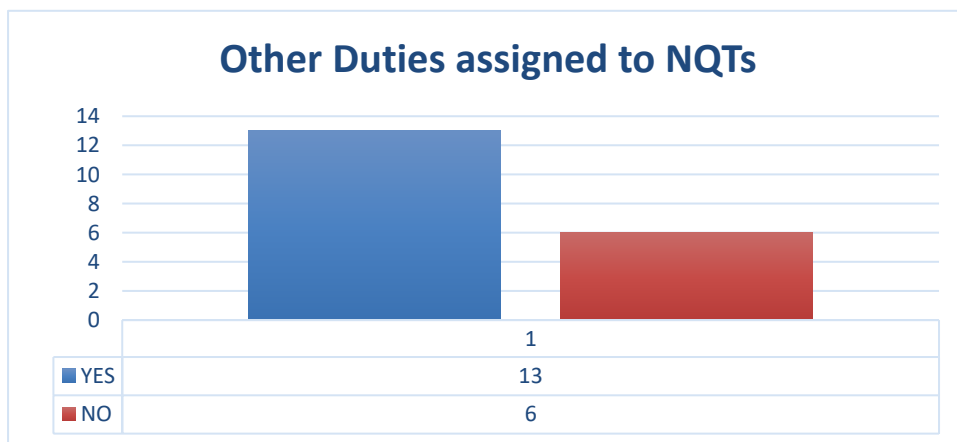
second phase is most likely to achieve better popularity. In respect of the importance of understanding of portfolio, for instance, 52.6% of respondents in this study agreed that portfolio writing should be part of every teacher trainee's programme.

3. The frequency of lessons per week by NQTs in their respective school of service.



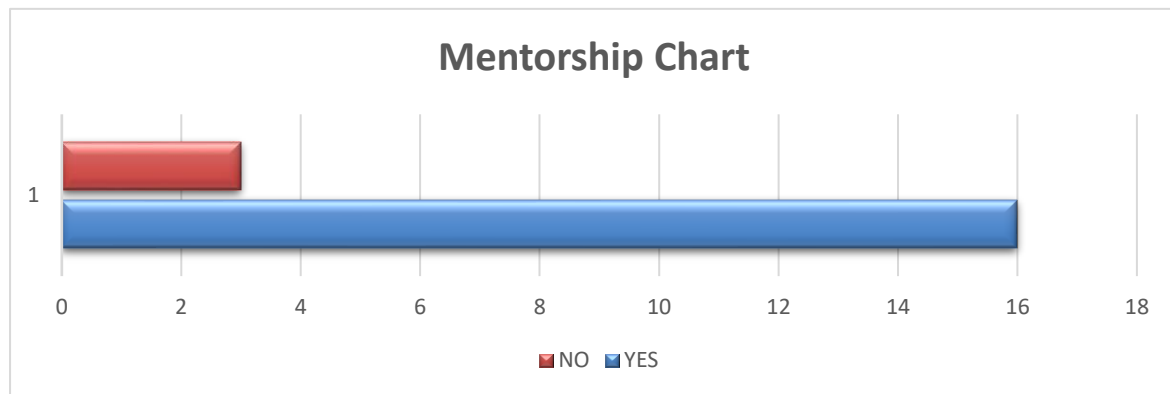
The above Bar Chart #3 shows that 11(58%) of NQTs were allowed to teach less than 15 times a week per school timetable. 6 (32%) NQTs also taught lessons between 16 to 20 times a week per the school timetable while only 2 (10%) NQTs also had lessons between 21 to 25 times a week. This makes a total of 19 (100%) NQTs (respondents). This might indicate that in-service teachers had less or no trust in NQTs in teaching maybe due to inexperience or less/no pedagogical knowledge on the subject matter.

4. Other duties performed by NQTs aside teaching



As shown in the above chart #4, 13 (68.42%) NQTs were assigned to various forms of task in the school aside from teaching comprising of co-curricular activities among others. Only 6 (31.58%) NQTs were not assigned to any duty during their one-year service period. This means that 68.42% of NQTs would have produced a report on co-curricular activities as a requirement while 31.58% NQTs would have not had a report on co-curricular activities as a requirement.

5. Mentorship



A total of 16 (84.21%) NQTs were assigned to in-service teachers mentors while 3 (15.79%) NQTs were not assigned to mentors as required. This means about 84.21% (16) of NQTs would have a report from their mentor as a requirement.

CONCLUSION AND RECOMMENDATIONS

Pre-service teachers (newly qualified teachers) in Ghana perceived the portfolio writing and assessment to be an effective tool to encourage self-reflection. This validates research studies that have emphasized that it is very effective for assessment as well. The conclusions from the study show that portfolio writing should be part of every teacher trainee program. This would make it possible for NQTs to be more familiar with portfolio writing for the final assessment. The study noticed that NQTs were not adequately prepared before the start of the portfolio assessment by the NTC and their colleges. This would partly account for why students generally disagreed that the portfolio was useful: they were not familiar with and remained unaware of the importance of portfolio writing and assessment.

Notwithstanding that the entire portfolio assessment process initiated for the 2020/2021 batch of newly qualified teachers (the first batch) was called off in the latter part of the exercise due to agitations and opposition to it by both newly qualified teachers and the executives of the

teacher trainee's association of Ghana, it is clearly a process that could be made to work. Hence, based on the responses, observations, and conclusions from this study, it is recommended that:

- Portfolio writing and building should be made part of all colleges of education. After 10 years, about 80% of trained teachers would be teachers who have gone through portfolio building. This would translate into professionalism and competence for both teachers and the NTC's work as a regulator.
- portfolio assessors should be engaged as lecturers (those with MPhils) in various colleges of education to teach students the building of portfolios. The alternative could be to train the existing lecturers (at least two from each college of education) on building a professional portfolio.
- NTC in collaboration with various teacher unions and continuing professional development (CPD) service providers need make it a priority to hold a training session for all in-service teachers across Ghana in each district/regional capital on the building of a portfolio and its importance to their profession at least twice a year.

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