

Study on Newly Qualified Teachers' Teaching Experience

Research report

July 2018

**Research Trust Limited: Bernardin Senadza, Hayford M.
Ayerakwa, Abigail A. Mills & George Asare**

Contents

List of Figures	iii
List of Tables.....	v
Acronyms and Abbreviations.....	vi
Executive Summary.....	vii
1 Introduction.....	1
1.1 Background.....	1
1.2 Objectives of the Study	1
2 Methodology.....	2
2.1 Research Design.....	2
2.2 Sampling and Fieldwork.....	2
2.3 Response Rates.....	2
2.4 Characteristics of respondents.....	3
3 Findings	5
3.1 Initial teacher training.....	5
3.1.1 Overall quality of training.....	5
3.1.2 Promote good progress and outcomes of pupils.....	6
3.1.3 Demonstrate good subject and curriculum knowledge.....	7
3.1.4 Plan and teach well-structured lessons	9
3.1.5 Adapt teaching to respond to the strengths and needs of pupils.....	10
3.1.6 Make accurate and productive use of assessment.....	10
3.1.7 Manage behaviour effectively to ensure good and safe learning	11
environment.....	11
3.1.8 Fulfil wider professional responsibilities.....	12
3.2 First-year teaching experiences.....	13
3.2.1 Induction	13
3.2.2 Planning, preparation and assessment (PPA) time	18
3.2.3 Professional development and other supports	21
3.3 Professional development and expectations	25
3.3.1 Professional development priorities.....	25
3.3.2 Participation in professional development training.....	26
3.3.3 Teachers' professional development priorities for next year	31
3.3.4 Happiness as teacher and teacher licensing	32
3.4 Newly qualified teacher lesson observation.....	34

3.4.1	Levels and subjects observed	34
3.4.2	Newly qualified teacher competencies.....	35
4	Conclusion and Recommendations.....	38
4.1	Conclusion.....	38
4.2	Recommendations	38
	References	39
	Appendix A: Survey Questionnaire.....	40
	Appendix B: In-depth Interview and Focus Group Discussion Guides	48
	Appendix B: In-depth Interview and Focus Group Discussion Guides (continued)	51
	Appendix C: Teacher Lesson Observation Tool.....	54
	Appendix D: Selected Districts, Sample Sizes and other statistics	61

List of Figures

Figure 1: Percentage of NQTs teaching at various grades	3
Figure 2: Percentage of NQTs teaching various subjects	4
Figure 3: Percentage ratings of NQTs of the overall quality of their training	5
Figure 4: Percentage ratings of NQTs of how their training equipped them to promote good progress and outcomes of pupils	7
Figure 5: Percentage ratings of NQTs of how their training equipped them to understand the national curriculum	8
Figure 6: Percentage ratings of NQTs of how their training equipped them to plan and teach well-structured lessons	9
Figure 7: Percentage ratings of NQTs of how their training equipped them to adapt teaching to respond to the needs of pupils	10
Figure 8: Percentage ratings of NQTs of how their training equipped them to make accurate and productive use of assessment	11
Figure 9: Percentage ratings of NQTs of how their training equipped them to manage behaviour effectively to ensure good and safe learning environment	11
Figure 10: Percentage ratings of NQTs of how their training equipped them to fulfil other professional responsibilities	12
Figure 11: Percentage of NQTs who underwent induction	14
Figure 12: Year and month in which NQTs had their induction (% NQTs)	14
Figure 13: Percentage ratings of NQTs of usefulness of induction	15
Figure 14: NQTs rating of length of induction training (% NQTs)	17
Figure 15: NQTs assessment of induction received	18
Figure 16: Percentage of NQTs benefitting from PPA time	18
Figure 17: NQTs rating of adequacy of PPA time (% NQTs)	19
Figure 18: Percentage of NQTs introduced to personal development programmes	22
Figure 19: Percentage of NQTs receiving mentorship support	23
Figure 20: Percentage of NQTs benefitting from observation reviews by mentors	24
Figure 21: Percentage of NQTs receiving reviews and feedback from mentors	25
Figure 22: NQTs' percentage ranking of three top-most professional development priorities	25
Figure 23: Percentage of NQTs participating in a professional development training in the subject they teach	26
Figure 24: NQTs' percentage ratings of usefulness of professional development training in taught subject	27
Figure 25: Percentage of NQTs who participated in training on student discipline and classroom management	27
Figure 26: NQTs' percentage rating of usefulness of training on student discipline and classroom management	28
Figure 27: Percentage of NQTs who participated in training in teaching students with special needs	28
Figure 28: NQTs' percentage rating of usefulness of training on teaching students with special needs	29
Figure 29: Percentage of NQTs who participated in other trainings to enhance teaching	30

Figure 30: NQTs' percentage rating of usefulness of other trainings aimed at enhancing teaching	30
Figure 31: Percentage of NQTs who embrace the concept of teacher licensing.....	33
Figure 32: Percentage rating of overall competence of NQTs by subject.....	37
Figure 33: Percentage rating of overall competence of NQTs by level/grade.....	37

List of Tables

Table 1: Teachers' professional priority in the next year	32
Table 2: Reasons for supporting teacher licensing or otherwise	33
Table 3: Scores for NQT competencies.....	35
Table 4: Overall competence of NQTs by sex.....	36

Acronyms and Abbreviations

BDT	Basic Design and Technology
CAPI	Computer-Assisted Personal Interviewing
CBIS	Cluster-Based Inserts
COE	College of Education
DBE	Diploma in Basic Education
DDE	District Director of Education
GES	Ghana Education Service
FGD	Focus Group Discussions
ICT	Information and Communications Technology
IDI	In-Depth Interview
ITT	Initial Teacher Training
JHS	Junior High School
MOE	Ministry of Education
NQT	Newly Qualified Teacher
NTC	National Teaching Council
PPA	Planning, Preparation and Assessment
RME	Religious and Moral Education
RTL	Research Trust Limited
SBI	School-Based Insert
SHS	Senior High School
TLMs	Teaching and Learning Materials
T-TEL	Transforming Teacher Education and Learning

Executive Summary

The Diploma in Education (DBE) is the basic qualification that a majority of Ghana's basic school teachers enter into the teaching profession with. Upon completion of the DBE at the designated colleges of education (CoEs), the newly qualified teachers (NQTs) are posted to schools across the country to commence teaching. There are factors that influence their preparedness to start their teaching careers which border on the training they received from their CoEs, as well as the experiences they have upon reporting to their first teaching stations.

To ascertain the preparedness of NQTs to teach in public basic schools in Ghana, Research Trust Limited (RTL) was commissioned by Transforming Teacher Education and Learning (T-TEL) to undertake a study on the teaching experiences of NQTs. The objective of the study was to assess all aspects of NQTs' first-year experiences in the classroom. It was of particular interest to capture their views about the preparation they had received as teacher trainees as well as how that training had equipped them to function as teachers after their posting.

This report documents the findings of the study, which focused on NQTs posted in the 2016/2017 academic year. Using a mixed-methods design, a survey was conducted among 647 NQTs across the 10 regions of Ghana, while in-depth interviews (IDIs) and focus group discussions (FGDs) involving 36 NQTs and 13 key informants were carried out in five selected districts. In addition, 60 teaching observations were done across the country.

Key findings

Perceptions of initial teacher training

NQTs' overall perception of teacher training in Ghana is high. NQTs rated highly several aspects of their initial teaching, including the quality of the assessment and feedback they received during training, the guidance and support they received to achieve qualified teacher status, and equipping them to plan their teaching to be pupil-centered. However, the findings also point to the need to strengthen the aspect of preparing NQTs to have a full appreciation of the national curriculum. Generally, NQTs were less optimistic about how well their training had prepared them to integrate the theoretical elements of their programme with practical experiences.

First-year teaching experiences

Induction and mentorship

Another important finding was that induction training and mentorship by seasoned teachers were much anticipated by NQTs. For NQTs who had the benefits of both experiences their preparedness to carry out their teaching responsibilities was boosted. Conversely, NQTs who did not get the opportunity to experience either induction training or mentorship functioned with certain levels of anxiety.

Planning, preparation and assessment time

A major challenge cited by NQTs as affecting their output was the lack of, or limited teaching and learning materials (TLMs) to support teaching and learning. While the majority of respondents were satisfied with their planning, preparation and assessment (PPA) time given them by their schools, the lack of TLMs and textbooks to enable them to prepare adequately was a primary concern.

Professional development needs

Upon assessing the professional development needs of NQTs, it emerged that issues pertaining to student discipline and classroom management; methods of teaching; and handling children with special needs are major areas they require help with. On the issue of teacher licensing, both quantitative and qualitative data indicated that most NQTs do not really understand what teacher licensing entails, implying that the education about teacher licensing has not been adequate so far.

Recommendations

In the light of the findings, some of the recommendations made are that: 1) CoEs need to address the training gaps related to equipping NQTs to apply theory to practice in their teaching; 2) measures should be put in place to ensure that all NQTs receive timely induction training and mentorship; 3) the Ghana Education Service (GES) and Ministry of Education (MoE) should ensure that NQTs receive the needed TLMs, textbooks and other resources to help them perform their responsibilities effectively; and 4) ongoing professional development programmes should be continued, paying attention to the needs of NQTs, particularly, student discipline and classroom management; methods of teaching; and handling children with special needs.

1 Introduction

This report presents the findings from a research on NQTs in Ghana. In May 2018, Research Trust Limited (RTL) was commissioned by Transforming Teacher Education and Learning (T-TEL) to undertake a study on the teaching experiences of NQTs to inform policy, particularly the design and implementation of a new curriculum for the colleges of education (CoEs) in Ghana.

1.1 Background

The majority of teachers in Ghana's basic schools are graduates of one of the country's 40 CoEs. These graduates after completing three years of study, which includes practice teaching, are awarded a Diploma in Basic Education (DBE). It is the expectation of the MoE, National Teaching Council (NTC), the GES and other stakeholders that teachers who graduate from the CoEs are professionally qualified and suitably prepared to teach any subject within the basic education curriculum.

NQTs in their first year of teaching may however be less sure that their DBE has prepared them adequately for all or even most of the conditions or situations they encounter in the classroom. Research (He & Cooper, 2011; Liston, Whitcomb, & Borko, 2006; Mckenzie, 2005; Senom, Zakaria, & Shah, 2013; Sunde & Ulvik, 2014; Wang, Odell, & Schwille, 2008; Watson, 2006; Boakye & Ampiah, 2017) has shown that first-year experiences are among the most challenging that NQTs encounter in their careers. Some of the challenges cut across subject areas. Others are peculiar to the school, while others are peculiar to the individual (Boakye & Ampiah, 2017). For some NQTs these challenges can be overwhelming and lead to disillusionment, and in some circumstances flight to other less-demanding professions outside the education sector. Disillusionment is most likely when teachers feel themselves to be poorly prepared or when they encounter unfamiliar situations they did not expect or with which they were not adequately equipped to cope.

1.2 Objectives of the Study

The overall objective of the study was to ascertain the preparedness of NQTs with DBEs to teach in public basic schools in Ghana. Specifically, the study sought to assess all aspects of a teacher's first-year experiences in the classroom, including lesson planning, time management, student assessment, coping with disciplinary problems, in-service training, seeking guidance, and meeting the needs of children with special needs.

2 Methodology

2.1 Research Design

The study employed a mixed-methods approach. A sample of NQTs who had completed their teacher training programme and had been posted in September 2016 were surveyed using structured questionnaires. In addition, a subsample of the NQTs participated in in-depth interviews (IDIs), focus group discussions (FGDs), and lesson observations. The survey questionnaire included questions on the quality of the various aspects of initial teacher training (ITT), the NQTs' induction and first-year teaching experiences, their professional development, as well as future plans and expectations. The interview and FGD guides used for the IDIs and FGDs captured similar themes. Apart from NQTs, head teachers, mentors and district directors of education (DDEs) were also interviewed. The study instruments are presented in appendices A, B and C.

2.2 Sampling and Fieldwork

The survey covered 24 districts across the 10 regions of Ghana, with the aim to capture any regional differences in the experiences of NQTs. The lesson observations were conducted in one district from each of the 10 regions, while the IDIs and FGDs were conducted in five districts (one district in each of five regions) (See Table D1 in appendix D for the selected districts).

The Municipal/District Directorates of Education at the selected districts across the 10 regions provided the database of all eligible NQTs, i.e., those posted in September 2016. From these lists, NQTs were randomly selected for the study. The fieldwork took place from 4th to 14th June, 2016. Data for the quantitative study was captured using computer-assisted personal interviewing (CAPI). All IDIs and FGDs were recorded using digital audio recorders, except in two cases where participants declined permission to be recorded. Thorough notes were therefore taken during the interviews with these participants. Printed observation sheets were used to capture data from the lesson observations.

2.3 Response Rates

The achieved sample size for the quantitative survey was 647, more than 2 percent higher than the planned sample size of 632. A total of 22 of the 25 envisaged IDIs and FGDs with NQTs, mentors, head teachers and DDEs were conducted. This comprised five FGDs with NQTs, four NQT IDIs, five head teachers, four mentors and four DDEs. The shortfall was a result of the fact that one head teacher doubled as a mentor, while one DDE was unavailable. Sixty NQTs were observed during lessons in 10 districts across the 10 regions, implying a 100 percent success rate. A summary of the districts surveyed is in appendix D, Table D1.

2.4 Characteristics of respondents

The mean age of respondents in the survey is 26 years, ranging from a minimum of 20 years to a maximum of 45 years. With standard deviation ranging from 1.4 to 3.4 years, there is little variation in the mean age across the regions. Forty-nine participants were involved in the qualitative phase (IDIs and FGDs). Thirty-six NQTs, constituting 16 males and 20 females, participated in either the IDIs or FGDs. The remaining 13 participants comprised five headteachers, four mentors, and four DDEs. The five districts from which these participants were sampled were: Ahafo Ano South (Ashanti region); Asikuma-Odoben-Brakwa (Central region); Kassena-Nankana (Upper East region); Savelugu-Nanton (Northern region) and South Dayi (Volta region). NQTs who were sampled for IDIs or FGDs were not included in the wider quantitative survey. Thirty-five percent of the lesson observations were for English lessons, 27 percent covered mathematics lessons while 15 percent and 23 percent were for science and, other subjects, respectively. Included in other subjects are Ghanaian language, religious and moral education (RME), French, social studies, and basic design and technology (BDT).

The process of posting NQTs appears to be efficient as a majority of NQTs surveyed were posted in the year they completed their programme. About 98 percent of NQTs completed their training in 2016 and were posted in the same year; only 2 percent had completed their training earlier than 2016.

The NQTs teach multiple classes at the kindergarten (KG), primary and junior high school (JHS) levels. However, the majority teach at the JHS level (Figure 1). Similarly, although NQTs teach multiple subjects, this is concentrated around mathematics, English language, RME, information and communications technology (ICT), integrated science and creative arts (Figure 2).

Figure 1: Percentage of NQTs teaching at various grades

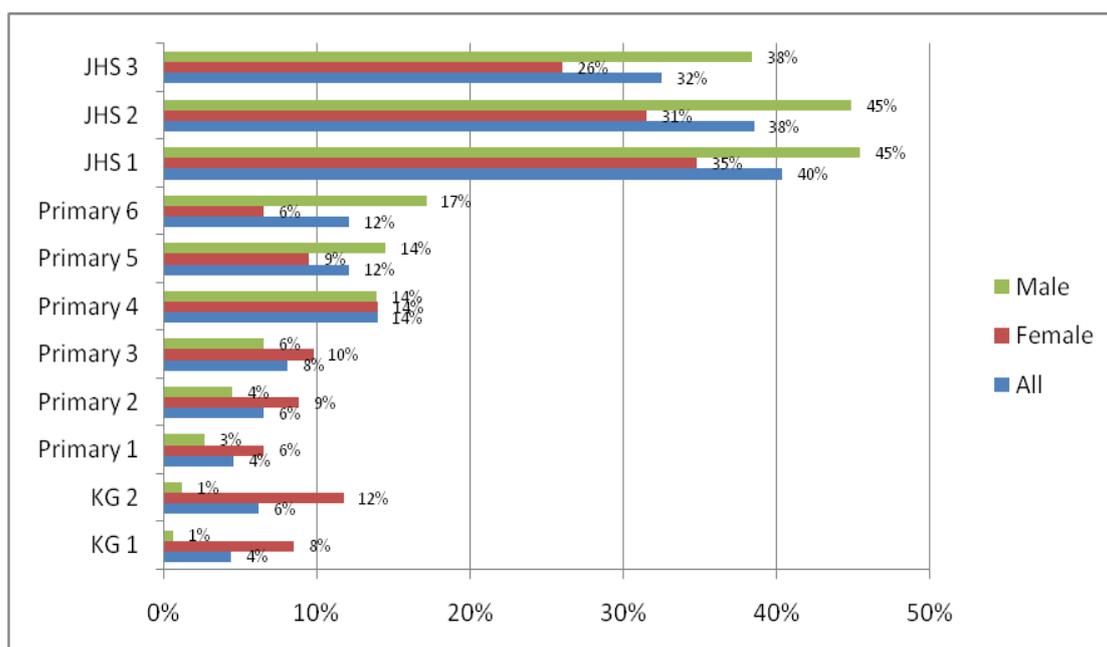
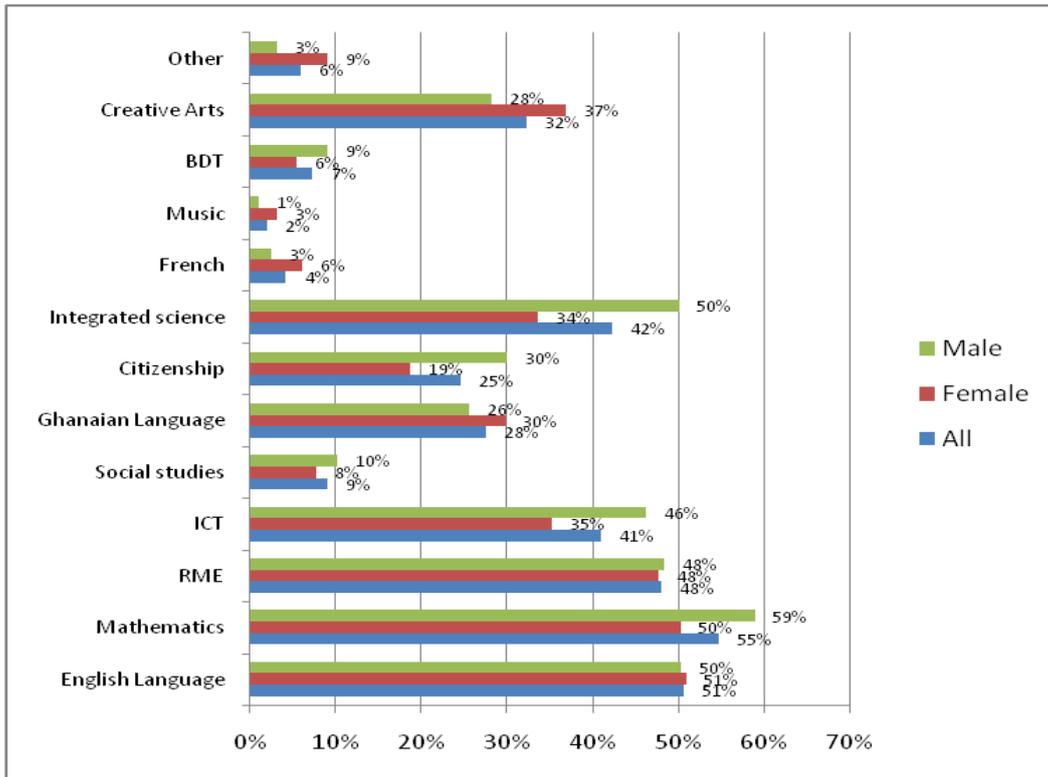


Figure 2: Percentage of NQTs teaching various subjects



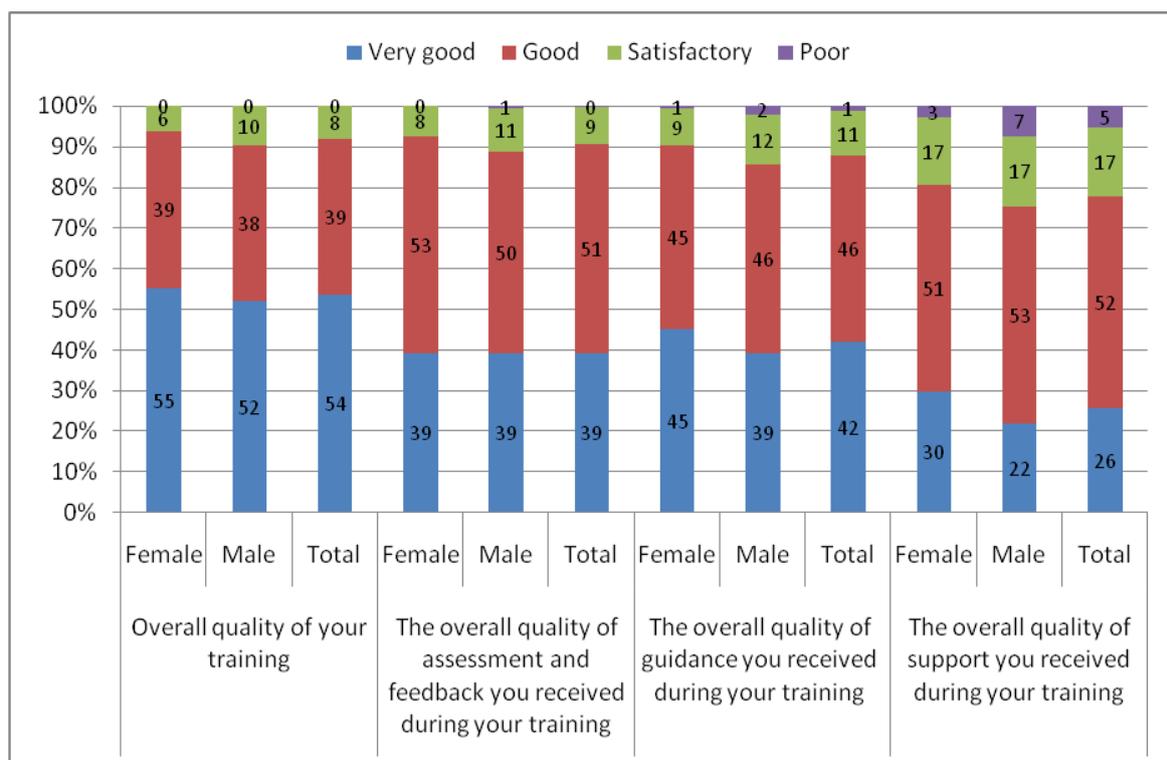
3 Findings

3.1 Initial teacher training

3.1.1 Overall quality of training

The overall perceived quality of teacher training in Ghana is high. Figure 3 shows that 91 percent of all NQTs sampled rated the overall quality of their training as very good (54 percent) or good (39 percent). The NQTs were also asked to rate the overall quality of the assessment and feedback they received during training as well as the guidance and support they received to achieve qualified teacher status. The percentage ratings were nearly as high as the overall quality of training, except for support received; about 14 percentage points fewer NQTs rated it as either very good or good. Seventeen percent of NQTs considered the support they received during training as satisfactory, while 5 percent rated it as poor. More male than female NQTs rated the support they received as poor, and this difference is statistically significant.^{1,2}

Figure 3: Percentage ratings of NQTs of the overall quality of their training



¹ Since these are perception ratings with the likelihood of overrating or underrating, we report any significant differences between the sexes. Men are generally found to be less candid than women (Grosch and Rau, 2017). This could explain any significant differences in the ratings between the sexes and thus have implications for taking the ratings of ITT at face value.

² Any differences are reported only when statistically significant at the conventional .05 level.

NQTs who participated in the FGDs and IDIs, although not as upbeat as the survey respondents, expressed general satisfaction about their ITT especially with regard to what they were taught as student teachers in the classroom and during teaching practice. The following snippets summarise some of such experiences:

You are trained in an institution to be able to impart knowledge to the future kids. And when we went too, that is what we were taught. And most times, more of the attention is on the content of the subject because if you don't have the content, I don't know how you are going to impart anything to the children. So it [training] was okay. *(FGD participant, Kassena-Nankana)*

Actually the training went well... It was really not my wish to get into the profession but as I entered the training college with the interactions from our teachers ...and those things, I was developing the interest in the teaching profession. It was not easy though but that is why it is the training ground; you just have to cope with everything *(IDI participant, South Dayi)*.

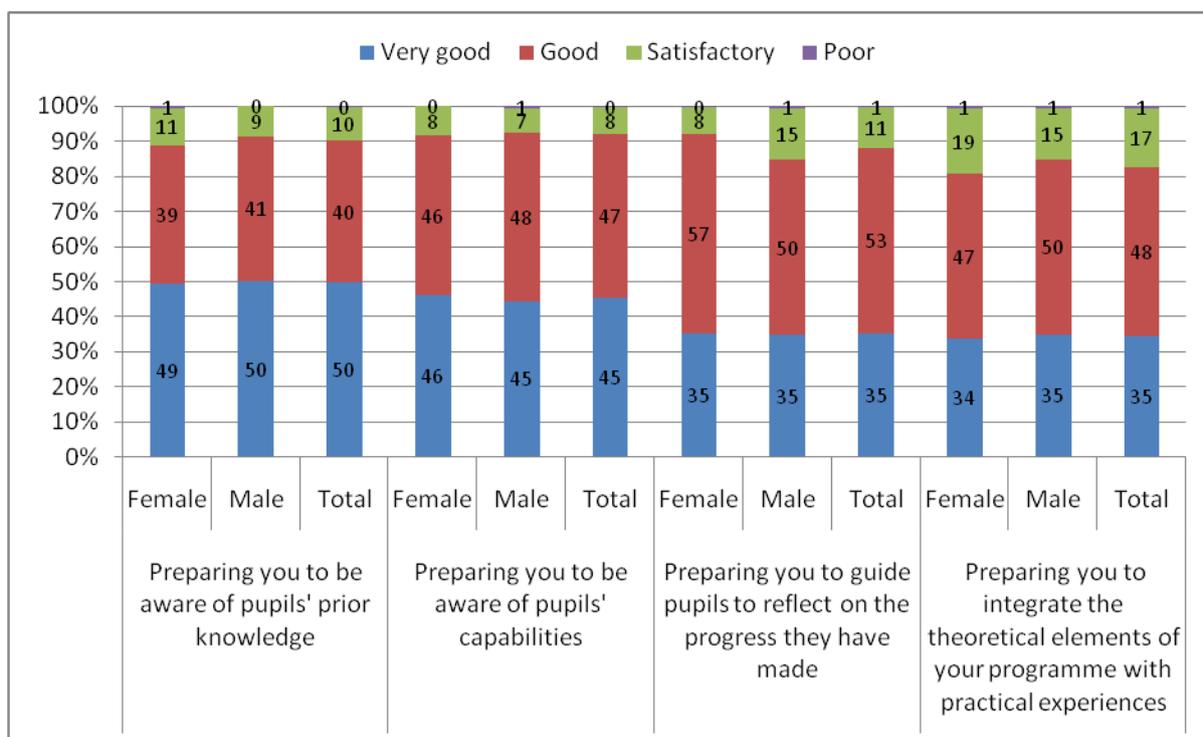
While the above extracts reflect the opinion of majority of NQTs who participated in the IDIs or FGDs about their ITT, a few participants expressed disappointment about the mode of training. For example, a participant indicated that she expected the teacher training to be more practice-oriented but was disappointed when she realised it was a continuation of the taught subjects in senior high school (SHS). She had offered catering at the CoE because she offered home economics at SHS. This participant did not recount any single activity that she enjoyed at her CoE.

3.1.2 Promote good progress and outcomes of pupils

When asked how well the training prepared them to be aware of pupils' prior knowledge, 90 percent of NQT respondents rated this aspect of their training as very good (50 percent) or good (40 percent) (Figure 4). Ninety-two percent also rated the training as very good (45 percent) or good (47 percent) in preparing them to be aware of pupils' capabilities.

In terms of preparing them to guide pupils to reflect on the progress they have made, a higher percentage of female NQTs (92 percent) than male NQTs (85 percent) rated the training as either very good or good. This difference is statistically significant. Over four-fifths of the sampled NQTs perceive their training to have prepared them well enough (rating it as good or very good) to integrate the theoretical elements of their programme with practical experiences. However, 17 percent see this as only being satisfactory while another 1 percent rated it as poor.

Figure 4: Percentage ratings of NQTs of how their training equipped them to promote good progress and outcomes of pupils

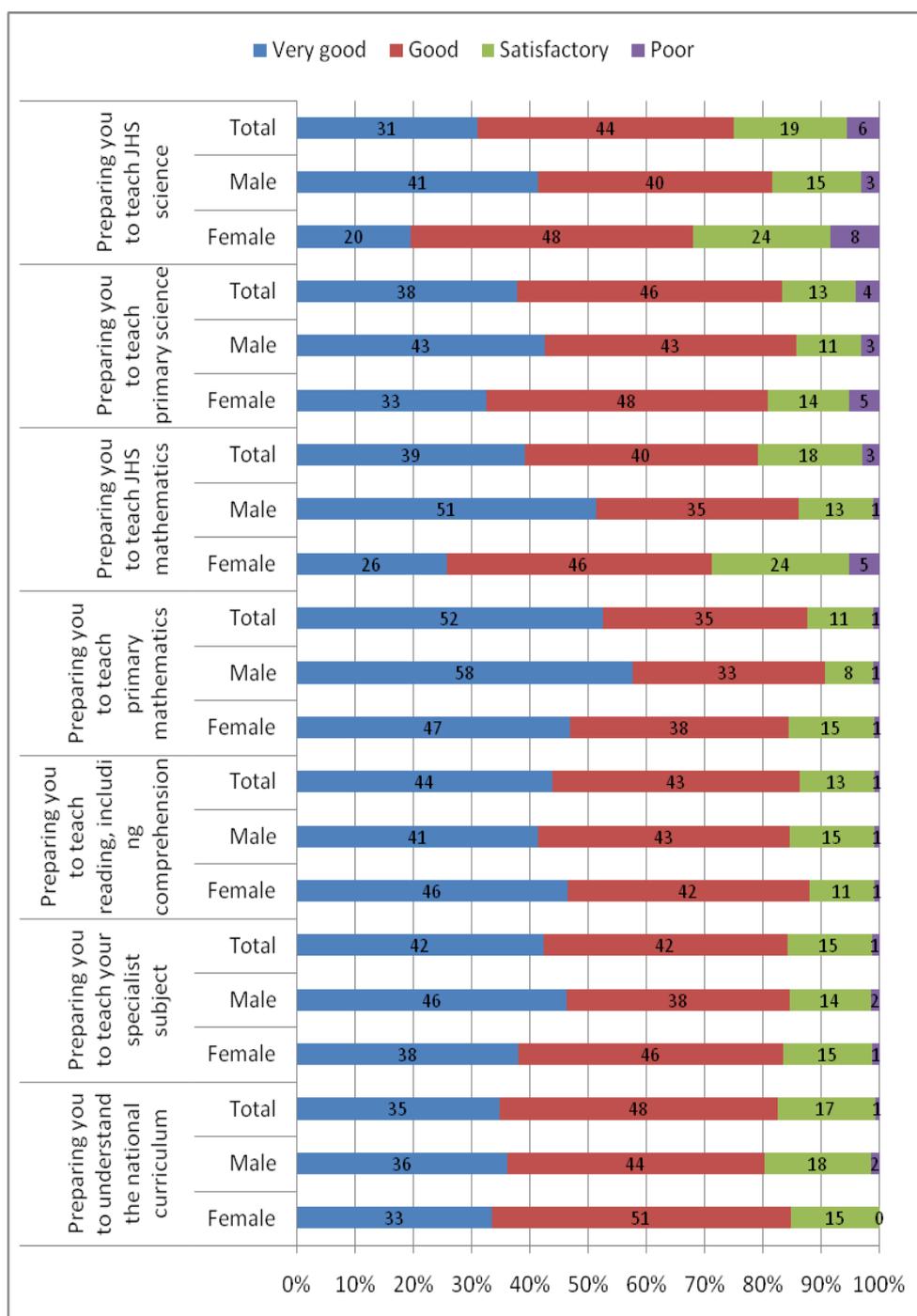


3.1.3 Demonstrate good subject and curriculum knowledge

Respondents were asked whether their training helped them understand the national curriculum. About 83 percent of NQTs rated their training as very good or good; 35 percent and 48 percent, respectively (Figure 5). Seventeen percent considered it satisfactory. While no female NQT did, some 2 percent of male NQTs rated it as poor.³ In terms of how well their training had prepared them to teach their specialist subject, 84 percent of the respondents rated their training as good or very good. Eighty-seven percent of NQTs rated the quality of their training in preparing them to teach reading, including comprehension, as very good (44 percent) or good (43 percent). When asked about their preparation to teach primary mathematics, 87 percent of the respondents rated their training as very good (52 percent) or good (35 percent). A higher proportion of male NQTs (93 percent) than female NQTs (85 percent) perceived their training as having prepared them well enough to teach primary mathematics. This difference is statistically significant. The male-female disparity in the extent to which the training had prepared NQTs to teach mathematics widens at the JHS level. More than 86 percent of male NQTs perceived their training to have prepared them well to teach JHS mathematics compared to 72 percent of female NQTs. This difference is significant at the .01 level. Similar male-female NQT disparities are also observed for the teaching of science, with the disparity increasing in grade level (Figure 5).

³ This however is only marginally significant (at the .06 level).

Figure 5: Percentage ratings of NQTs of how their training equipped them to understand the national curriculum



These findings correspond to what the majority of the FGD and IDI participants stated although challenges were also noted. NQTs who had graduated from private colleges of education explained that they did the general programme⁴ because that is what most of the private colleges offered, and therefore did not specialise.

⁴ Education studies programme in CoEs is mainly grouped into two, namely, general programme and early childhood programme. The general programme enables graduates to teach in primary and JHS levels. Early childhood students with the same certificate in DBE are geared towards teaching in kindergarten and basic one to three.

However, for NQTs who specialised, some indicated being taught topics that were far above what they were expected to teach pupils in the classroom (e.g., calculus). Complaints were also made about the lack of teaching and learning materials (TLMs) and the limited utilisation of tools and equipment for practical work even when they were available at the college. Below are some excerpts from the IDIs/FGDs.

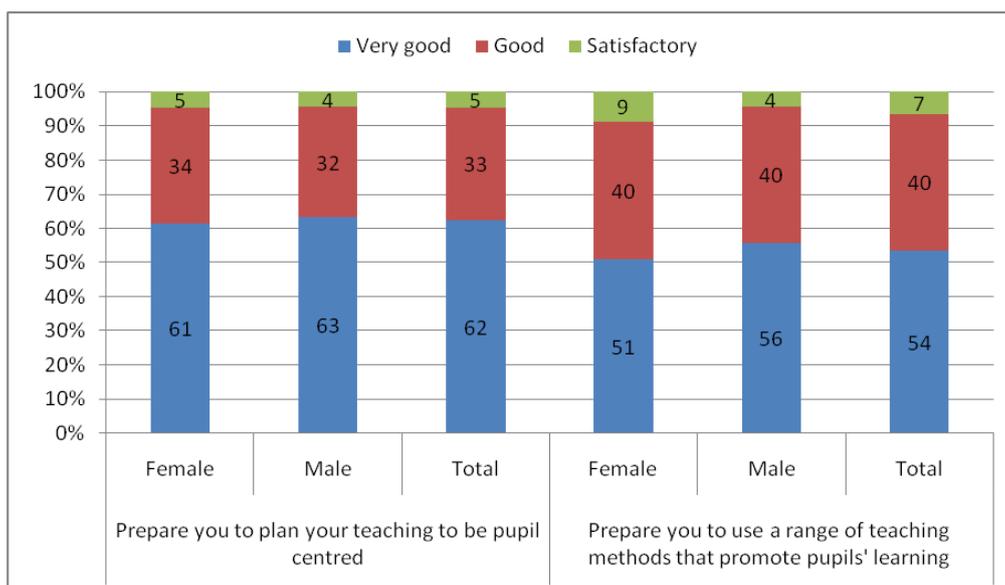
For some of us our course of specialisation [mathematics and technical], for my college there were tools and materials yes, but most often those things are packed in the workshop and then we only do theory and then once a while before you are asked to go to the workshop. So I would have loved that ... classes go on where the tools are; so that as we learn along we do practicals; and we have experience about how to handle the content (*FGD participant, South Dayi*).

My area is mathematics and science. We began specialisation right from level 100. My experience was that for content it was more like the courses we did back in SHS, which meant that we didn't learn anything new. The content too when it comes to the methodology, where we learn how to teach mathematics and science, for some areas they didn't give us the methodology. We only learnt them when we came to field. For example, we did not learn methodology in ratio and proportion. That is my experience concerning my area (*FGD participant, Asikuma-Odoben-Brakwa*).

3.1.4 Plan and teach well-structured lessons

Ninety-five percent of the NQTs rated their training as very good (62 percent) or good (33 percent) in equipping them to plan their teaching to be pupil-centered. Only 5 percent rated it as satisfactory (Figure 6). When asked how well their training prepared them to use a range of teaching methods that promote pupils' learning, 94 percent of the respondents rated this as very good (54 percent) or good (40 percent). The remainder of the respondents rated it as satisfactory.

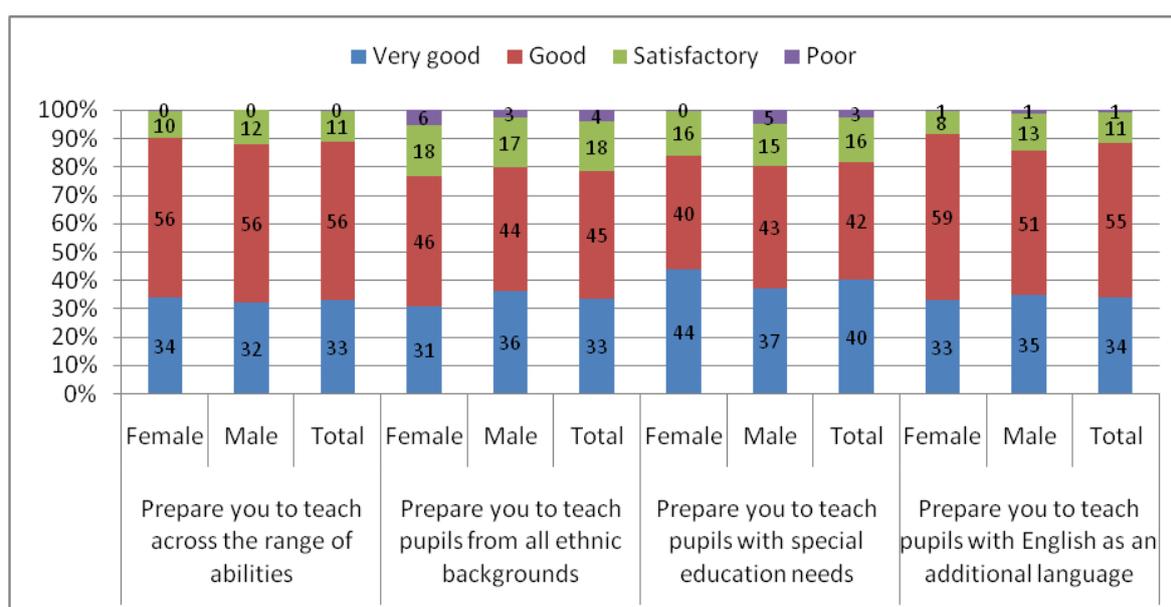
Figure 6: Percentage ratings of NQTs of how their training equipped them to plan and teach well-structured lessons



3.1.5 Adapt teaching to respond to the strengths and needs of pupils

Eighty-nine percent of the NQTs rated their training as either very good (33 percent) or good (56 percent) in preparing them to teach across a range of abilities. The remainder 11 percent rated it as satisfactory (Figure 7). The ratings of NQTs on how well the training had prepared them to teach pupils from all ethnic backgrounds (78 percent rated it as good or very good) or to teach pupils with special education needs (80 percent rated it as good or very good) is not as high as the rating for ability to teach across a range of abilities. Variations however exist across the sexes. For instance, while no female NQT rated as poor how well the training equipped them to teach pupils with special education needs, 5 percent of male NQTs considered this aspect of their training as poor. The difference between male and female NQTs' perceptions in relation to how well their training equipped them to teach pupils with special education needs is significant at the .01 level. When asked about their preparation to teach pupils with English as an additional language, 89 percent of the newly trained respondents rated this aspect of their training as very good (34 percent) or good (55 percent).

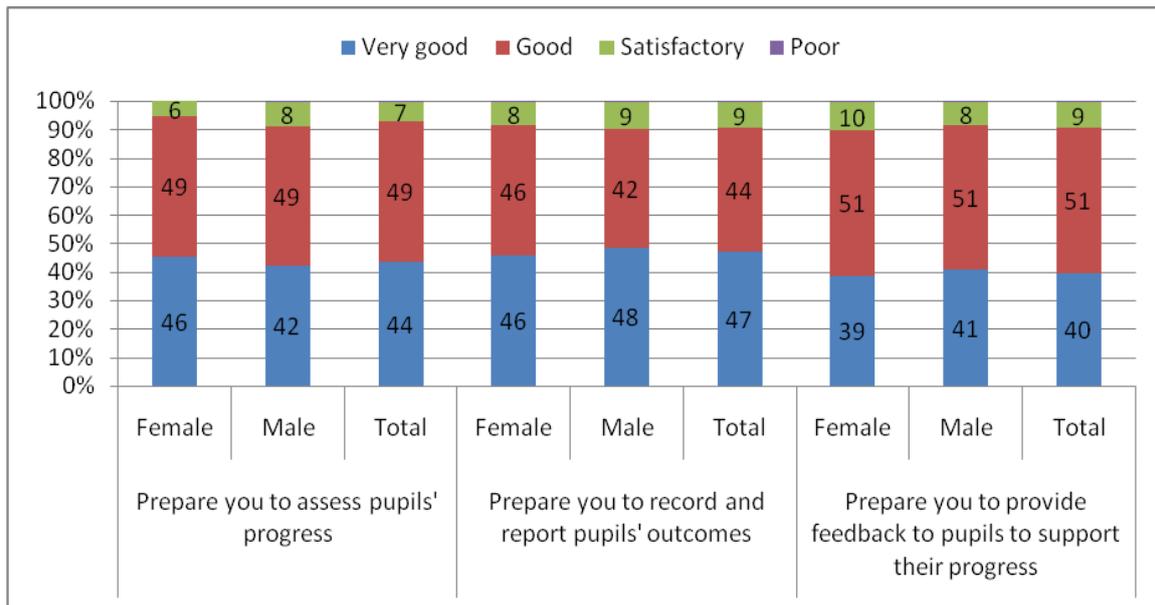
Figure 7: Percentage ratings of NQTs of how their training equipped them to adapt teaching to respond to the needs of pupils



3.1.6 Make accurate and productive use of assessment

Ninety-three percent of the NQTs (Figure 8) rated their training on how to assess pupils' progress as very good (44 percent) or good (49 percent). When asked about their preparation to record and report pupils' outcomes, 91 percent of the respondents rated this aspect of their training as very good (47 percent) or good (44 percent). In terms of providing feedback to pupils to support their progress, again 91 percent of the newly trained teachers rated this aspect of their training as very good (40 percent) or good (51 percent).

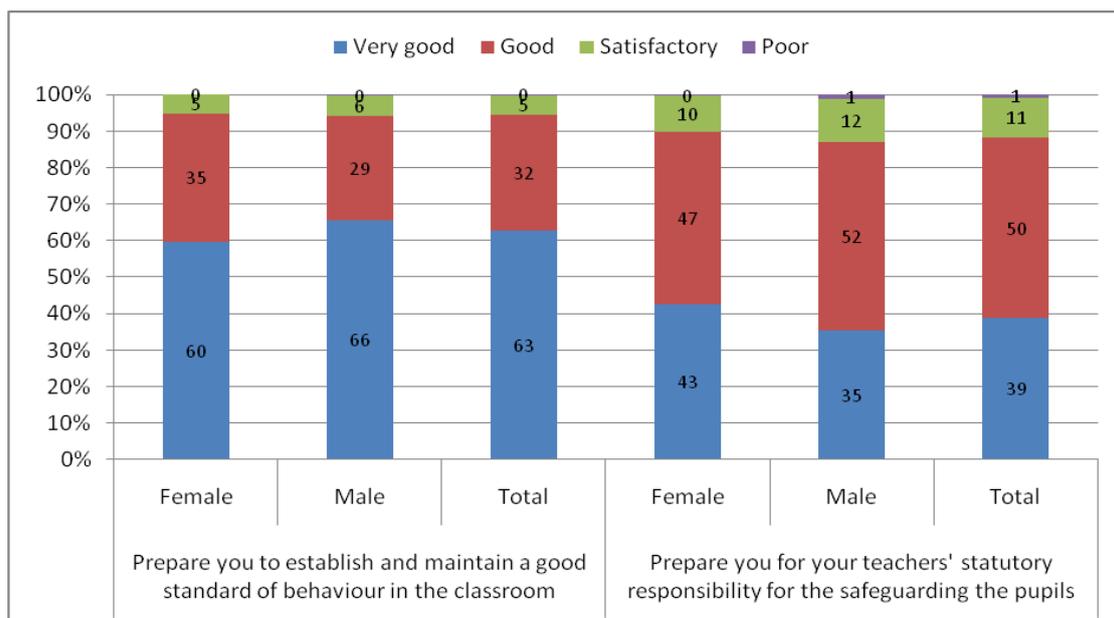
Figure 8: Percentage ratings of NQTs of how their training equipped them to make accurate and productive use of assessment



3.1.7 Manage behaviour effectively to ensure good and safe learning environment

Respondents were asked how well their training had prepared them to establish and maintain a good standard of behaviour in the classroom. Ninety-five percent of the NQTs surveyed rated this aspect of their training as very good or good (Figure 9).

Figure 9: Percentage ratings of NQTs of how their training equipped them to manage behaviour effectively to ensure good and safe learning environment

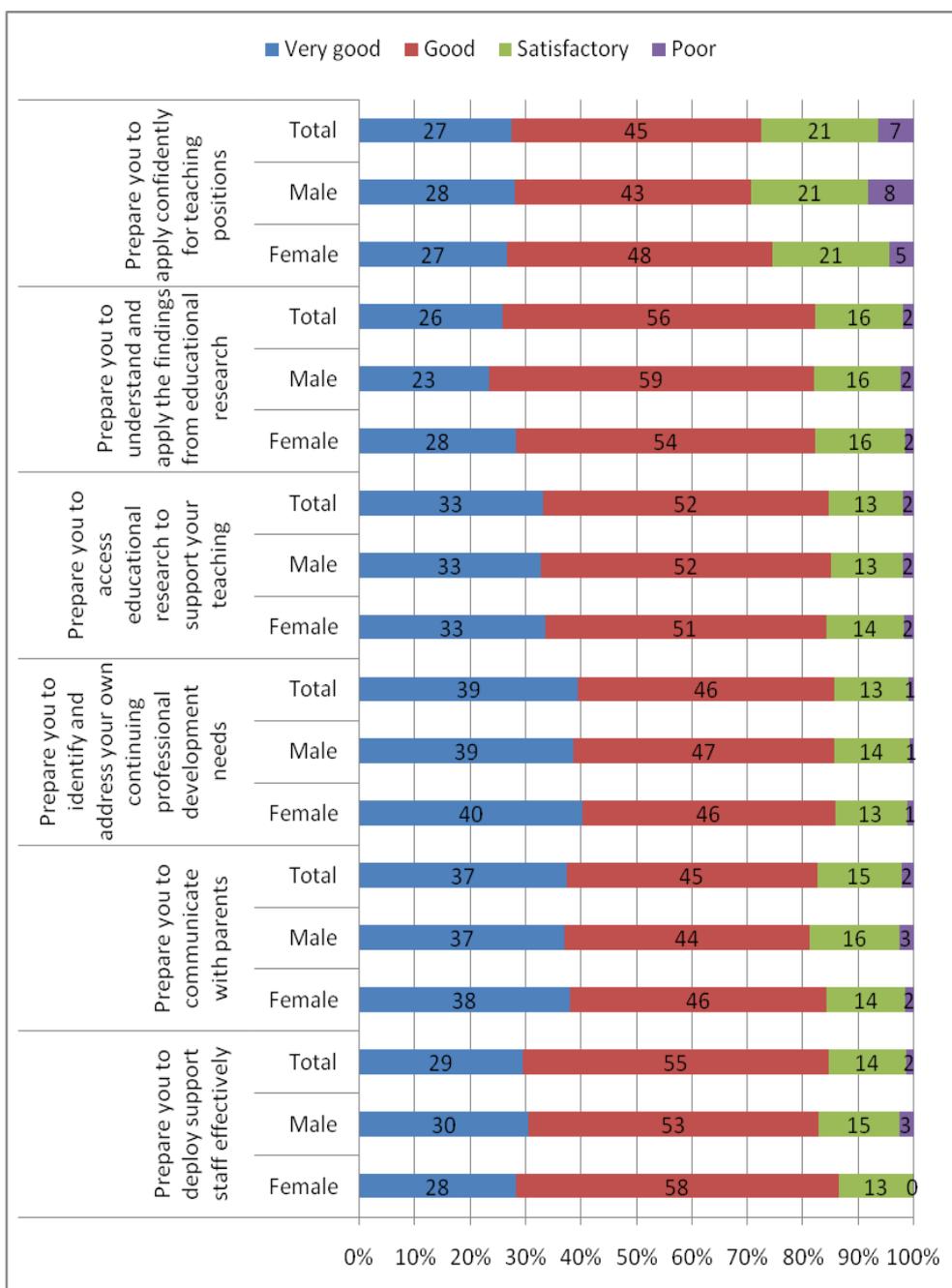


The remaining 5 percent rated it as satisfactory. In terms of their preparation for their teacher’s statutory responsibility for the safeguarding of pupils, 89 percent of respondents rated it as very good or good. Nevertheless, 1 percent (five respondents) rated this aspect of the training as being poor.

3.1.8 Fulfil wider professional responsibilities

When asked how well their training prepared them to deploy support staff effectively, 84 percent of the NQTs rated their training as very good or good (Figure 10), while another 14 percent considered it as satisfactory.

Figure 10: Percentage ratings of NQTs of how their training equipped them to fulfil other professional responsibilities



Eighty-two percent of the respondents rated their training as very good or good in preparing them to communicate with parents. In the area of identifying and addressing their own continuing professional development needs, 85 percent of NQTs rated this aspect as very good (39 percent) or good (46 percent). When asked to rate how well their training had prepared them to access educational research to support their teaching, respondents answered very good (33 percent) or good (52 percent). In terms of how well their training had prepared them to apply the findings from educational research, respondents rated this as very good (26 percent) or good (56 percent). Sixteen percent rated it as satisfactory, while 2 percent considered it as poor. Compared to other aspects of their training, the NQTs were less optimistic about how well their training had prepared them to confidently apply for teaching positions. While the majority considered this aspect of the training as either very good (27 percent) or good (45 percent), 21 percent rated it as only satisfactory and 7 percent indicated it as poor.

3.2 First-year teaching experiences

3.2.1 Induction

Induction in the lives of employees is essential to facilitate integration into their environment while providing them with adequate information that will make them effective at their places of work. In this section, we seek to understand how NQTs are oriented into their new roles by the various schools. More important, we seek to understand how these orientation sessions help NQTs in the performance of their duties as teachers as well as in integrating them into the sociocultural settings in which they find themselves.

To begin, we find the proportion of NQTs who benefitted from induction. About 82 percent of NQTs were inducted (Figure 11).⁵ A point noteworthy is the share of NQTs who did not undergo any form of orientation. This is highest for districts in the Upper East region where over a third of NQTs were not given any form of orientation prior to the start of their professional work as teachers. Similarly, districts in Upper West, Northern, and Volta regions had a fifth or more of NQTs who had not been inducted. The regional differences is significant at the .01 level.⁶ Thus the proportion of NQTs that underwent induction was lower in relatively poorer regions.

⁵ Where necessary observed differences among regions are reported. While some regions of Ghana are more endowed than others (for instance, Northern, Upper East and Upper West are among the poorest while Greater Accra, Western and Ashanti are among the richest) and therefore this could play a role, we also expect any regional differences in the experiences of NQTs (such as whether or not they received induction, its duration, etc.) to be explained by the peculiar human and organisational capacities of the district directorates of education and schools NQTs are posted to. These are in turn affected by the effectiveness of the provision of educational logistics and financial resources from the centre (GES/MoE) to the periphery (districts and schools). The regional differences will also help in highlighting best practices or issues requiring attention to facilitate teaching at the basic level in the country. The findings however indicate that the regional differences are not consistent. For instance, relatively more endowed regions did not witness consistent rankings by NQTs of the variables investigated such as whether or not they received induction, participation in professional development training as well as the benefits of planning, preparation assessment time.

⁶ The test is based on Pearson's chi squared test instead of the Bonferroni test since the variables are categorical. The Bonferroni test is applied to discrete and continuous variables.

Next, we gauge the year and month in which the inductions were done . This in a way guides us to know how long it takes on average for a NQT to be oriented prior to the start of work or shortly after commencing work. The results suggest that orientation for the majority of NQTs took place during their first term⁷ of teaching (i.e., between September and November) with more than two-thirds of NQTs undergoing orientation sessions within that space of time (Figure 12). A noteworthy exception is Upper East region, and to a lesser extent Ashanti region.

Figure 11: Percentage of NQTs who underwent induction

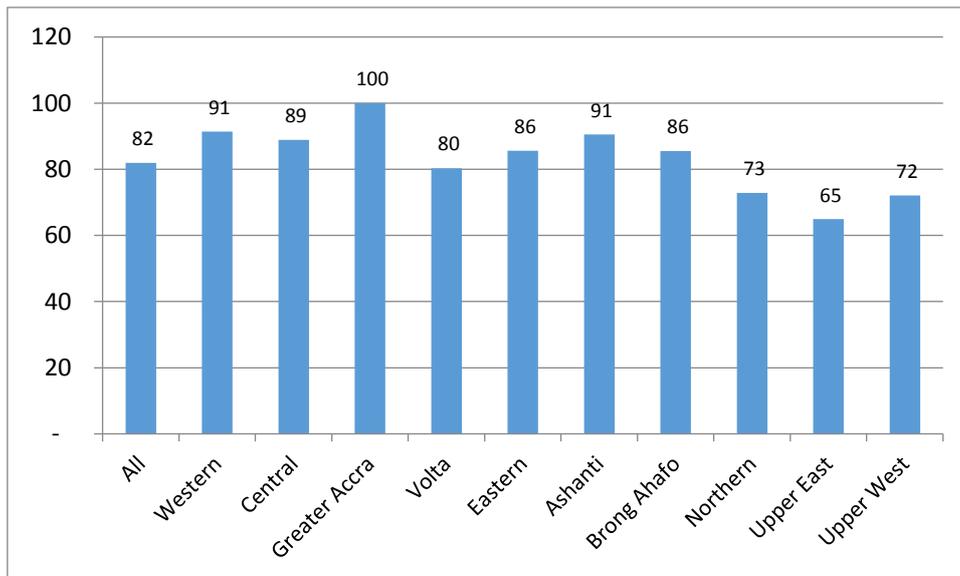
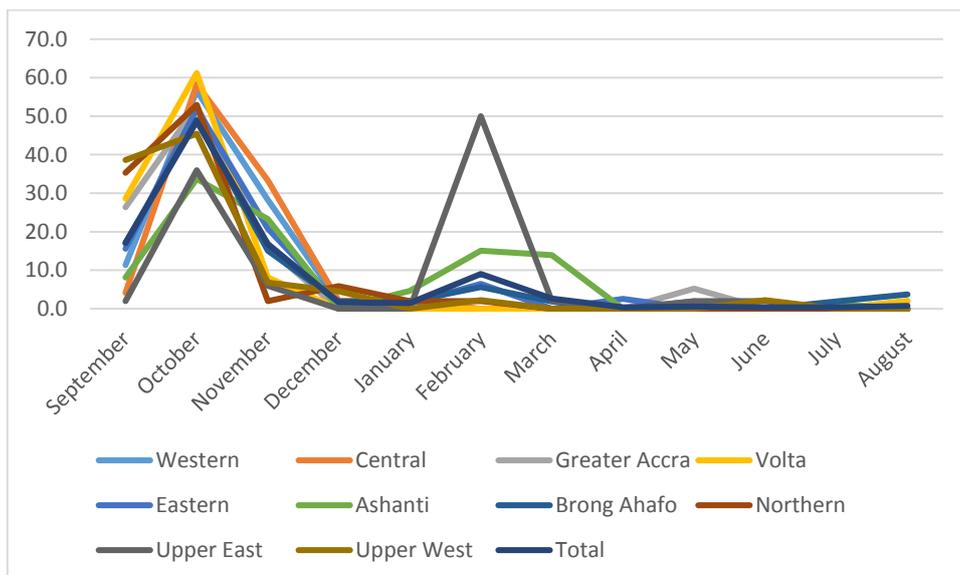


Figure 12: Year and month in which NQTs had their induction (% NQTs)



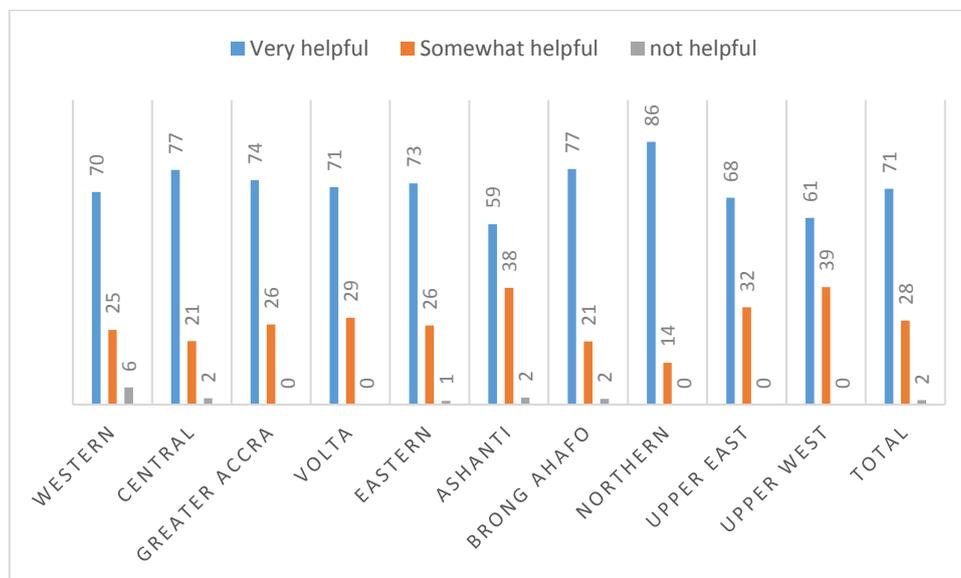
⁷ The basic school academic calendar is divided into three terms, which runs from September to July. The first term is from mid or late September to mid December. The second term runs from mid January to mid April, while the third term is from May to end July, approximately.

Contrary to the survey findings, all the FGD and IDI participants mentioned that they had received some form of induction training. Some of them were given the induction training either at the school they had been posted to or at the district level. Others had received induction training at both levels.

Usefulness of inductions

Generally, NQTs found the orientations useful as more than two-thirds (71 percent) of NQTs who underwent induction rated it as being very useful in the discharge of their duties with the remainder ranking it as somewhat helpful to them (Figure 13). There are variations across regions in terms of the usefulness of induction. For instance, the highest was recorded in the Northern region while Ashanti region recorded the least.⁸ This potentially is indicative that, while all regions are encouraged to ensure that induction sessions are organised for NQTs, less endowed regions could use these sessions to assist NQTs to settle into their new roles.

Figure 13: Percentage ratings of NQTs of usefulness of induction



Similar to the findings from the survey, NQTs in the FGDs and IDIs found the induction training they had received useful. The following were some of their responses:

The headmaster conscientised us about the work and then the challenges ahead of us. He also motivated us concerning the performance of the kids that we should give out our best in training the children and then he also spelled out rules and regulations concerning GES and that one I think has kept us moving (*FGD participant, Asikuma-Odoben-Brakwa*).

[The induction training helped] in so many ways. Though I was a little bit prepared but after the induction I was so confident in teaching (*IDI participant, Kassena-Nankana*)

[The induction training] prepared me to know what to do in the GES. As a teacher they taught us about dos and don'ts about the GES and what a teacher must do, what a teacher must not

⁸ Only marginally significant (p-value of .07).

do. And even how to organise your children in the class. And also they taught us how to fill some forms like the log book and appraisal form. And as I was saying, the appraisal form helps you to set a target. And so far as you have set a target and at the end you need a result, you need to work hard to meet your target. So due to that I was able to do extra work that I can meet my target at the end of the day (*IDI participant, Savelugu-Nanton*).

To me it helped me to fill assessment. I didn't know what assessment was all about. And I didn't understand that teachers were having a log book. So at the end of the induction training I was able to know the conduct of teaching and how you should be able to set a target for yourself as a teacher. So with the induction training I learnt so many things. It has really helped me (*FGD participant, Savelugu-Nanton*).

It has helped me a lot. We call something survival skills, how to live in the community. Because you have come to a different region, ...their custom or tradition will be different from where you are. You have to live in the community in order to enjoy your teaching. So I enjoyed that (*FGD participant, Savelugu-Nanton*).

When I came first my head teacher gave me a mentor; so like one week though I was assigned a class but he was there in the preparation of the notes because what we used at our teaching field was different from the teachers book that we are having here so they had to guide me with some of them and with the science notes there are some places that we don't write over there but when I came because that was what I was taught in the training college, my mentor said I should have an introduction, so he guided me throughout all those ones and I started picking from there.... (*IDI participant, South Dayi*).

Key informants also commented on the content and usefulness of the induction training:

They [NQTs] are introduced to what is expected in the classroom or in the field. And then they are also taken through this big document from the public services commission on teacher appraisal. They do that. They are also taken through some other document called the log sheet and those things regarding what they are going to do once they start the teaching in terms of their own professional development. It is a whole package that they go through (*DDE 3*).

The report that I get is that because they have been inducted there is some level of improvement in terms of lesson preparation, lesson delivery and so on. But I haven't sat in to assess them in all these areas (*DDE 1*).

It [induction training] prepares them very well. Because unlike our time when as teachers, you report and they just send you into the classroom, nobody tells you exactly what you are supposed to do, this system is different. Before they go into the classroom, even though sometimes it is before the induction is done, they are told what is expected of them. And I'm happy. I understand in the colleges they are pre-informed. They are aware of this induction thing, the significance of the induction. So it's done to prepare them for the classroom and also to prepare them for the profession that lies ahead of them (*DDE 2*).

Length of induction

Nearly two-thirds of all the NQTs surveyed perceived the duration of their induction training as adequate while about a quarter of NQTs perceived the time as being too short. On the other hand 13 percent of NQTs considered the duration as being too long (Figure 14).

Figure 14: NQTs rating of length of induction training (% NQTs)



In Ahafo Ano South, FGD and IDI participants complained that the one-day induction training was too short and stressful, although it was somehow helpful to them. They suggested that in future more days should be added. In the South Dayi district, participants had received a two-day residential induction training. While they found it useful, they complained about not being informed about making their own accommodation arrangements, which plunged them into some difficulties.

Overall, individual NQTs in the various districts also received induction training at their respective schools for periods ranging from one day to one week. The length of the training determines what type of topics are treated and the time allocated to each session. If adequate time is allocated for the training, NQTs are introduced to a number of topics that helps them to take up their new roles. Some key informants also suggested that the timing of the induction training should be early enough following their postings:

I think maybe I would have suggested that induction course should always be done immediately after the teachers are posted into the schools, not when they have reported or started teaching. Sometimes they start teaching for at least a week or two before the induction course. Or it could be done the very week that academic year begins (*Head teacher, Kassena-Nankana*).

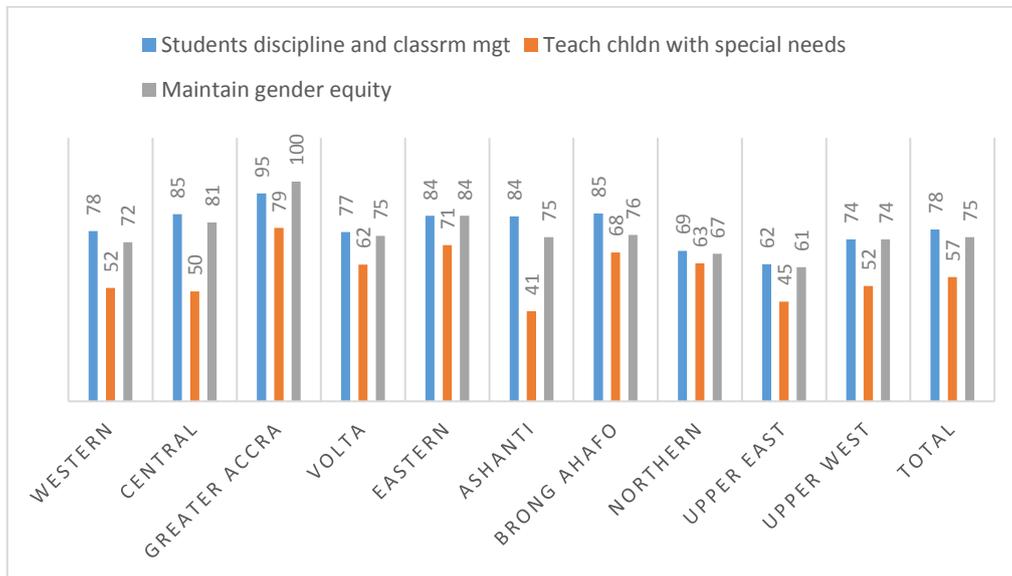
Assessment of the impact of induction

More than two-thirds of NQTs reported their participation in the induction prepared them to maintain student discipline and manage the classroom (Figure 15).⁹ In addition, about 75 percent of NQTs reported the induction training had prepared them to be mindful of the gender needs of the pupils in their care. A little over half of

⁹ Figure 15 captures the proportion of NQTs who have acquired some skills from induction sessions.

NQTs reported their induction training prepared them to handle children with special needs. .

Figure 15: NQTs assessment of induction received



3.2.2 Planning, preparation and assessment (PPA) time

In this section, we focus on understanding whether NQTs are provided with planning, preparation and assessment (PPA) time in their first year of teaching. Overall, about 43 percent of NQTs reported being allocated PPA time in their respective schools (Figure 16). However, NQTs in the Ashanti region had a lot more hours of PPA time than their Western, Central and Northern region counterparts. These differences are statistically significant at the .01 level from the Bonferroni one-way ANOVA test. A majority (81 percent) of NQTs with PPA time consider the time allocated them as adequate (Figure 17).

Figure 16: Percentage of NQTs benefitting from PPA time

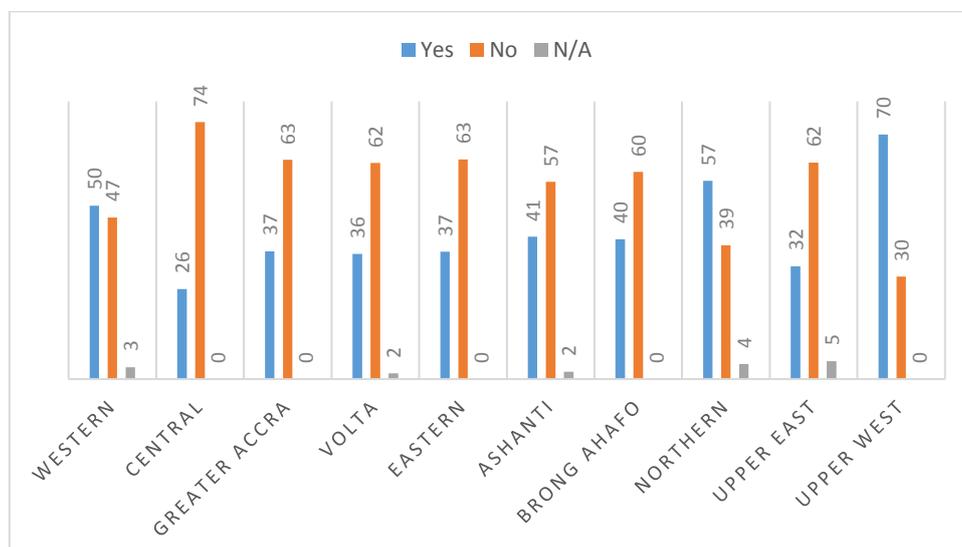
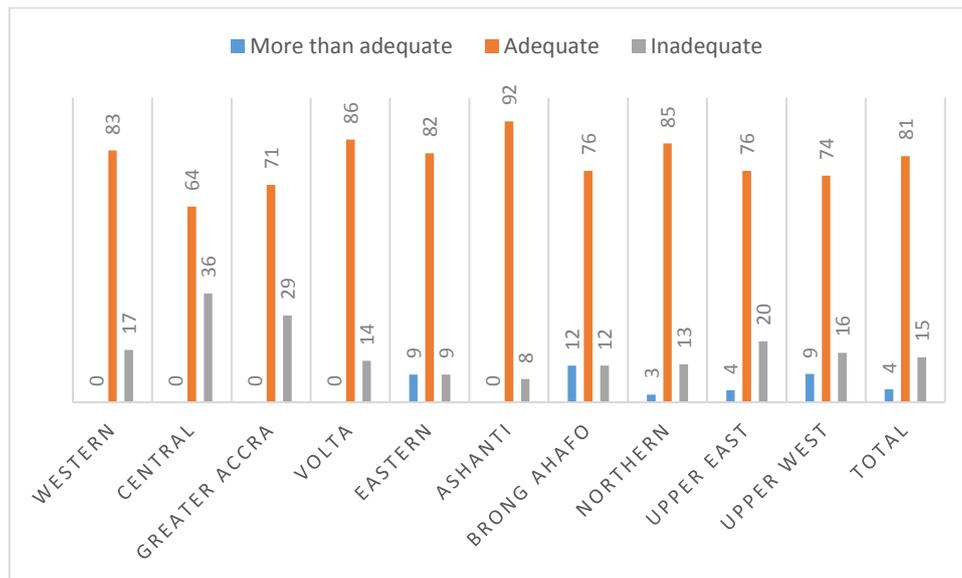


Figure 17: NQTs rating of adequacy of PPA time (% NQTs)



Altogether, most NQTs in the FGDs and IDIs had no major issues regarding their PPA time. None of the NQTs also mentioned any specific duration allocated to them. They simply shared the strategies by which they plan, prepare for, teach, and assess their lessons. For example, one NQT shared:

I was lucky back at our teaching practice, my mentor took me through various ways that I can manage my time so what I normally do is that just after school now when I get home whatever note I have written for the next day if am going to teach I sit down I take books I read through this now for some time before I do other things before the next day, so the next day when I wake up and I come to class I can deliver that was what he taught me (*IDI participant, South Dayi*).

Key informants such as head teachers and mentors affirmed that generally, the NQTs used their time well in terms of planning and preparing for lessons. Those who exhibited laziness or challenges with time management were spoken to and helped to get on track:

In terms of time management. We have [activities] that we do in school and those that we do outside the contact hours. For instance, looking for your teaching and learning materials (TLMs), organizing your TLMs and then planning your lessons, those ones are done after school, and I think my people [NQTs] are doing well. You can tell from their lesson notes and presentations. It means they are making good use of their time. They are not wasting their time doing things let me say “unnecessary”. In that regard, I think they are making good use of their time. Yeah (*Head teacher, South Dayi*).

In the training college they always said demarcate [the time] allocated to you. For instance, introduction, how many minutes can you use for that. Then lesson presentation, how many minutes can you use for lesson presentation. Then to the conclusion the time you use for conclusion. The teacher is supposed to know that. Just that you will not put that in the lesson notes but he should know that. I don’t have to use more than 3 minutes for introduction (*Head teacher, Kassena-Nankana*).

One critical issue regarding the experiences of these NQTs was the lack of or inadequacy of TLMs and text books. This concern was widespread across all five

districts where IDIs and FGDs were conducted. When asked what their challenges have been since they were posted as NQTs, some of the responses that were provided were as follows:

Limited TLMs and text books. We have problems with text books and some teaching materials too. To me, I know every teacher is supposed to have a teacher's guide in all the subjects but we don't have any teacher's guide for all the subjects in this school. So sometimes we have to use the text books and other books that you may buy for yourself and research on it to do your lesson (*IDI participant, Kassena-Nankana*).

They [text books] are not even there! Two classes almost 100 and we are using 4 text books! Demonstration school! (*FGD participant, Kassena-Nankana*).

There are no computers in the school. Some of the children have not even seen a computer before! There are no TLMs for ICT and some other science topics. We have been taught to improvise but you can't even get certain materials to help you improvise, especially with ICT (*FGD participant, Asikuma-Odoben-Brakwa*).

The most annoying part is we don't have TLMs. I am teaching science and for science the students have to interact with the materials around. We went for cluster teaching at a nearby village and a child was given a test tube to name. To the surprise of everybody the child just rose up and said "big cylinder"! Just imagine! So the only thing we need is just materials to deliver our lesson. (*FGD participant, South Dayi*).

The subjects that were mentioned as having the least or no TLMs were creative arts and ICT. The challenge with TLMs and text books were highlighted not only by NQTs but also by key informants. To corroborate what the NQTs pointed out, the following are some excerpts from key informants:

I think the TLMs are the problem. Because you know when they start teaching they don't take salary; and sometimes too when capitation grants are not disbursed on time to get the TLMs, it poses a challenge. (*Head teacher, Kassena-Nankana*).

The challenges [include lack of] TLMs, including text books... I learnt GES gives [text] books every five years. So that is also a challenge; because the books might not last for up to that five years (*Mentor, Savelugu-Nanton*).

Another challenge that some of the NQTs spoke passionately about was how some of them were posted to teach subjects and levels in which they had not specialised. Those who offered the general programme at their CoEs did not have much of a problem with this except with TLMs and text books as previously discussed. However, NQTs who had specialised in specific subjects at either kindergarten (KG), primary or JHS levels opened up about their struggles with their assigned subjects and levels. Some of the sentiments expressed are as follows:

We were made to understand that if you are a maths and science student, after your three years stay on campus, you were going to be posted to the junior high to teach maths and science. But after our graduation, we were just jammed up and mixed everything. You can be a maths and science student and be posted to primary and you are made to teach religious and moral education (RME) (*FGD participant, Kassena-Nankana*).

Sometimes what we study back at college is not what we come to teach on the field sometimes maybe someone has gone to do early childhood; someone has gone to do general science and maths; maths and technical; and you come to the field and someone who did maths and science is being given the early childhood classes, class three, class two, to the KG to teach. Sometimes it's very difficult. It's not that maybe you cannot handle the

kids but sometimes it's very, very difficult in the choice of subject to teach so am suggesting that ...at least when the vacancies are coming they should at least know the number of maybe science and math teachers needed in this school, and send science and maths teachers there so that we will not come and be facing challenges in the classroom (*FGD participant, South Dayi*).

Another NQT who had trained to teach at the JHS level and was also not proficient in the local language used in the community shared the following:

When I came [to the school], I was posted to the KG. That's where they posted me! And I was not able to teach because when I talk the children were not able to understand. They just look at me. Even a child will come and complain something and you don't know what the child is after. I have to leave the class and go and call another teacher. Before I will come other students are fighting in the class. So the class was not well organised. Sometimes you will be speaking English and the small children will be laughing. They will be repeating what you are saying as if it is a joke for them because they don't understand the English. An NQT and being posted to a new region to a lower level is a big problem.... I informed the head master how the thing is going.... So he understood me and changed me to the JHS level (*IDI participant, Savelugu-Nanton*).

The problems associated with postings came up during key informant interviews as well. For example, this is what one of the district directors of education had to say:

A major difficulty is with the online posting, we know the vacancies in the district and we know the various subjects that are lacking in the school. And we realize that sometimes there are schools that are already over-staffed and teachers are posted there. Meanwhile a school that is lacking teachers may not get even one NQT. When we want request for reposting at our [district] level here they say we should wait for one year because their [NQTs'] appointment letters are coded. And where they [the NQTs] are being sent too, their subjects and the vacancies in the school don't match. So we need a Mathematics teacher, and a French or a Ghanaian language teacher is posted, and the teacher is made redundant (*DDE 4*).

To curtail some of the challenges associated with NQT postings, some DDEs and head teachers took it upon themselves to have direct interaction with the NQTs:

What I normally do is that I have individual interactions with them. Then I have a group interaction with them because sometimes the way the postings are done, it is very difficult such that you cannot tell who did an early childhood program or who did a general program or who offered a specific program. They are just posted to the school just like that and that time too their certificates are not available for you to ask for them so I normally have interactions with them to know their interest (*Head teacher, Asikuma-Odoben-Brakwa*).

When they send us the posting you will see teacher A, mathematics, Teacher B, general, Teacher C, technical. Good. So when we have that and I look at my declared vacancies; this school says they need mathematics, I put teacher A there. This school says they want technical I will put teacher C there. The specialisation is helping me to send them to where they are needed. But where they put general, I have to interact personally with the teacher to find out, can you teach science in this school? If the teacher says no, I did not do science that means you cannot send. But if I take that teacher, the NQT who has the general programme, I can put that teacher straight at the primary school because he supposed to teach all the subjects (*DDE 2*).

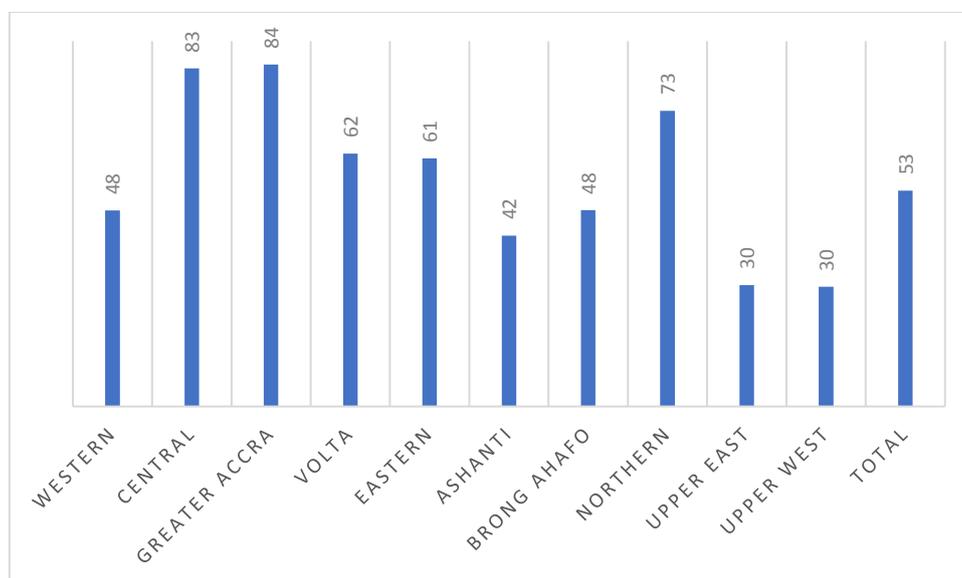
3.2.3 Professional development and other supports

The study also sought to learn whether schools had any programmes to promote the professional development of NQTs, including the provision of mentorship support

such as classroom observations and reviews, and the provision of feedback by mentors. The results are presented in Figures 18-21.

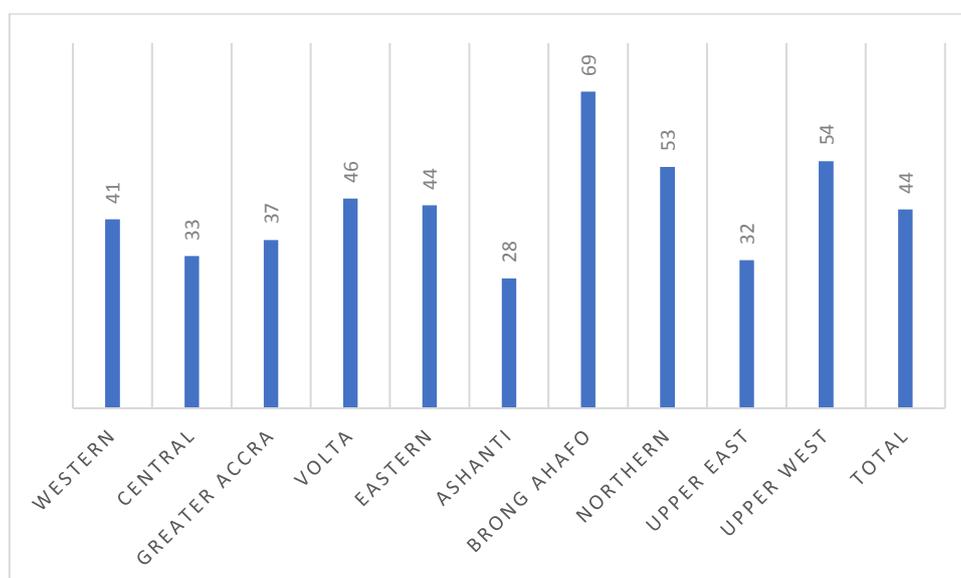
More than half of NQTs indicated their schools had introduced them to professional development programmes over the past one year of being at post. The proportion of schools providing personal development programmes vary across regions (Figure 18). Less than a third of NQTs in districts in the Upper East and West regions were introduced to professional development programmes since their postings. This may be attributed to the lack of resources and the general difficulty in linking communities and districts in the regions in question, making such programmes expensive. On the contrary, more than 80 percent of NQTs in districts in the Central and Greater Accra regions had been introduced to professional development programmes since assuming duty. The differences across regions is significant at the .01 level.

Figure 18: Percentage of NQTs introduced to personal development programmes



Less than half of the NQTs surveyed reported that their schools was providing them with mentorship support (Figure 19). NQTs in districts in the Ashanti, Upper East and Central regions received the least mentorship support. The variations across regions is significant at the .01 level.

Figure 19: Percentage of NQTs receiving mentorship support



Mentors obviously play a critical role in the successful integration of NQTs into their first teaching stations. Many of the NQTs interviewed had benefitted from the help of a mentor who helped them to function well as NQTs. Interestingly, all NQTs in the FGD and IDI at Ahafo Ano South indicated that they had not received any mentorship support of any kind. In other districts, such as Kassena-Nankana, one NQT with whom an IDI was conducted was full of appreciation for having had a mentor when she was newly posted whereas those who participated in the FGD had a different experience altogether. During the IDI with the NQT at Kassena-Nankana, she had this to say:

We were taught how to collaborate with mentors. I for instance, I got a very experienced and good mentor and indeed I did collaborate well with her. Though she is no more here. She was very supportive ... I never faced any challenges with her (*IDI participant, Kassena-Nankana*).

The following conversation however ensued among her colleague NQTs during the FGD:

Interviewer: What about support provided by the school and the mentors?

Participant 2: You as a mentor?

Interviewer: No you as a trained teacher.

Participant 6: When you come you are a mentor on your own

Participant 5: at least the organisation of SBI [School-Based Insert]

Participant 1: Yes SBIs and CBIs [Cluster-Based Inserts] .

Interviewer: Ok so have they been doing it?

All Participants (Chorus): Yes

Interviewer: Ok so have they been adding something to it or they are just sticking to SBIs and the CBIs.

Participant 5: we have the SBIs and the CBIs and at times workshops

Interviewer: Ok have you been attending workshops?

All Participants (Chorus): Yes

Participant 3: ...Sometimes it is difficult for you to organise SBIs and CBIs when you are looking for a resource person and you are not getting.

Interviewee 6: Especially when the topic is very critical....

(*Excerpt from Kassena-Nankana FGD*)

As observed from the foregoing conversation, in the absence of direct mentorship support, NQTs in the Kassena-Nankana FGD depended on the various inserts and workshops organised as part of in-service training for their professional development. In another scenario, one person was not necessarily designated as a mentor to a particular NQT, but the head master and other teachers offered their support to the NQT as and when needed. For example, one NQT from Savelugu-Nanton shared the following experience:

When I came new [the experienced teachers] gave me advice. Sometimes you enter the class and it is like half of the people did not come to school so I was surprised. That was my first experience. But they advised me that that's how [the pupils] are in this community so whenever I enter the class I should start even if it is two people, three people I should teach because their families have been sending them to farm especially when it is rainy season. So I took advice from the head master and other teachers (IDI participant, Savelugu-Nanton).

While the mentorship programme was generally considered as good, one mentor raised some issues regarding the mentor-mentee relationship.

They [NQTs] are aware they are to receive the help of mentors and there are mentors to assist them. Some have challenges with their mentors because of youthful exuberance and they feel they are old enough. Some of the mentors too are quick-tempered and they also stop mentoring them. They [NQTs] should be ready to learn (Mentor, Ahafo Ano South).

For NQTs benefitting from mentorship support, the study sought to know if their mentors observe their lessons and if so, whether they receive any form of feedback on the observations. The results suggest that nearly half of NQTs with mentors had their classes observed by their mentors (Figure 20) even though there are variations across regions, which is significant at the .01 level. Nearly 60 percent of NQTs receive feedback from their mentors after lesson observations (Figure 21).

Figure 20: Percentage of NQTs benefitting from observation reviews by mentors

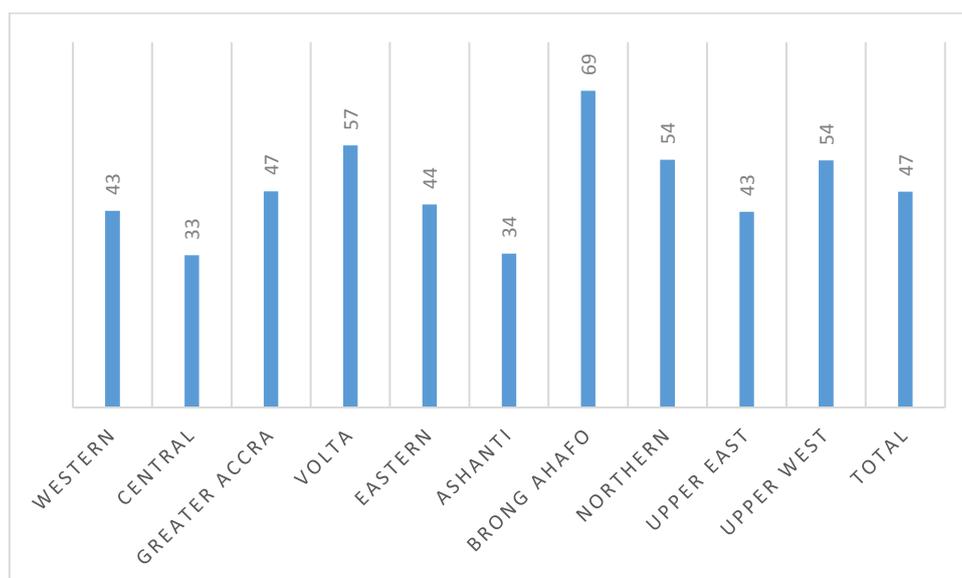
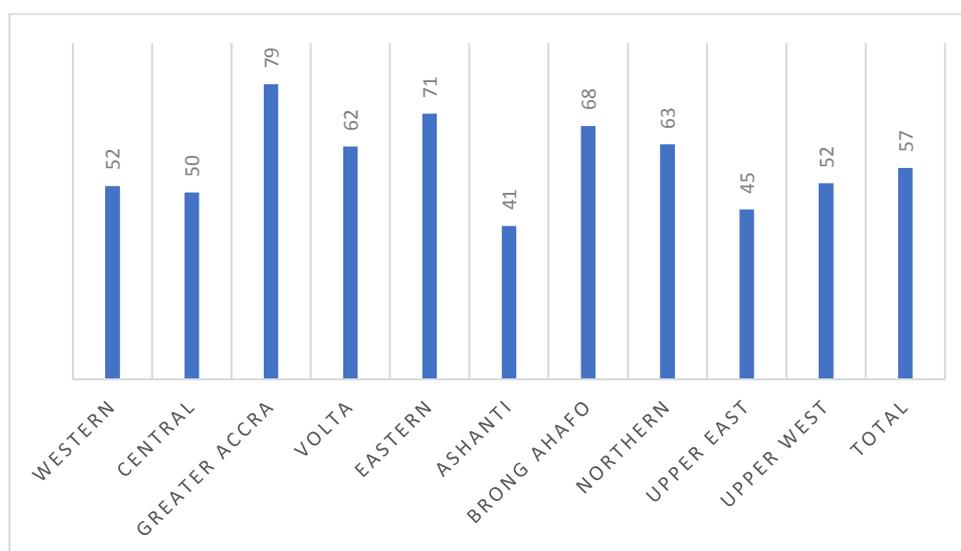


Figure 21: Percentage of NQTs receiving reviews and feedback from mentors

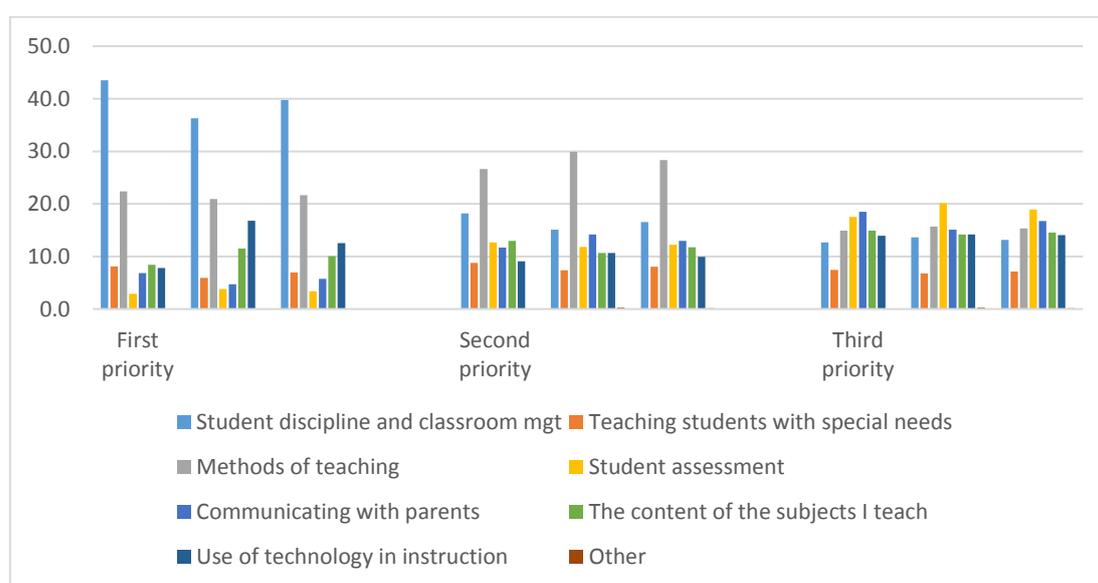


3.3 Professional development and expectations

3.3.1 Professional development priorities

This subsection explores the professional development priorities of NQTs. From a list of professional development options NQTs were asked to select the ones they considered their top three priorities. Two main areas emerged as the topmost priorities for the NQTs, namely, student discipline and classroom management, and methods of teaching (Figure 22). The preference pattern is similar for both male and female NQTs.

Figure 22: NQTs' percentage ranking of three top-most professional development priorities



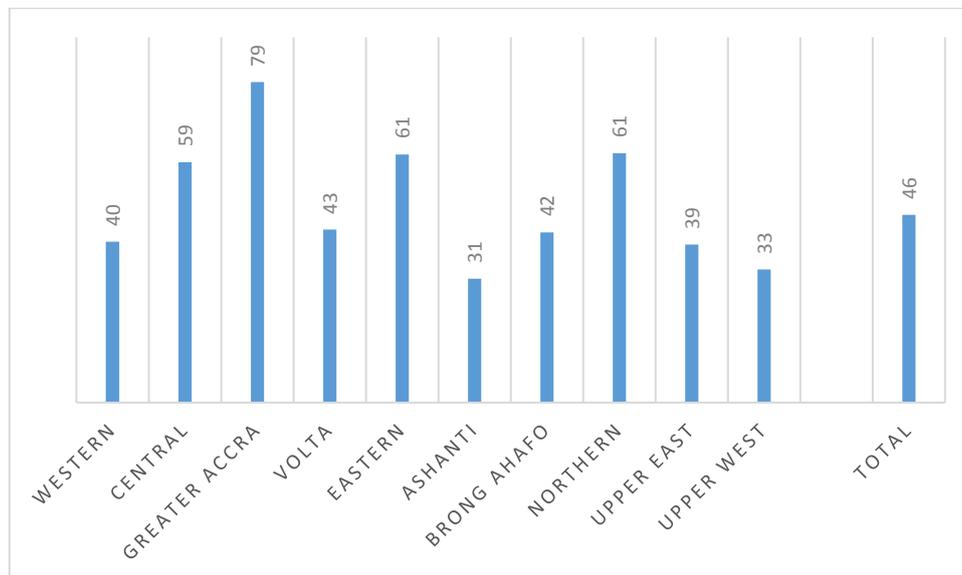
3.3.2 Participation in professional development training

Having identified the various professional development needs of NQTs, the study sought to find whether NQTs had participated in any professional development programme in the 12 months preceding the survey. The results are presented in Figures 23-30.

Training in taught subject

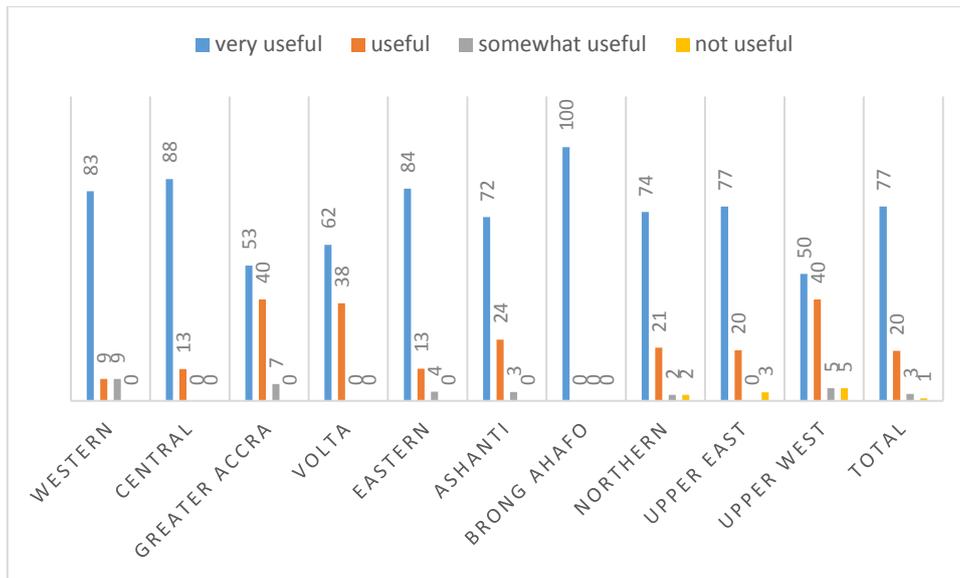
First, a look at the proportion of NQTs who participated in a professional development training in the subject they presently teach. Nearly half of NQTs have participated in such training (Figure 23). However, there are variations across regions, which is statistically significant

Figure 23: Percentage of NQTs participating in a professional development training in the subject they teach



More than 95 percent NQTs considered the training they had received in their taught subject area in the past 12 months as being useful or very useful (Figure 24). The variations across the ratings for the usefulness across the regions is significant at the .05 level.

Figure 24: NQTs' percentage ratings of usefulness of professional development training in taught subject



Training in student discipline and classroom management

About 30 percent of NQTs participated in training on student discipline and classroom management in the 12 months preceding the survey (Figure 25). Higher percentages of NQTs in the Northern and Greater Accra regions participated in the training compared to the other regions, which was statistically significant at the .01 level. Again, nearly all NQTs perceived the training received as useful or very useful (Figure 26).

Figure 25: Percentage of NQTs who participated in training on student discipline and classroom management

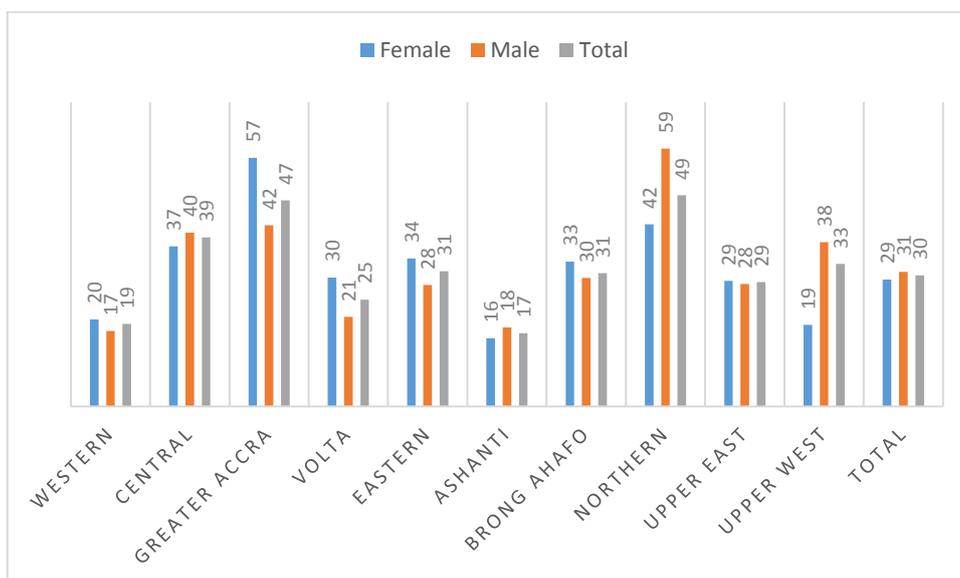
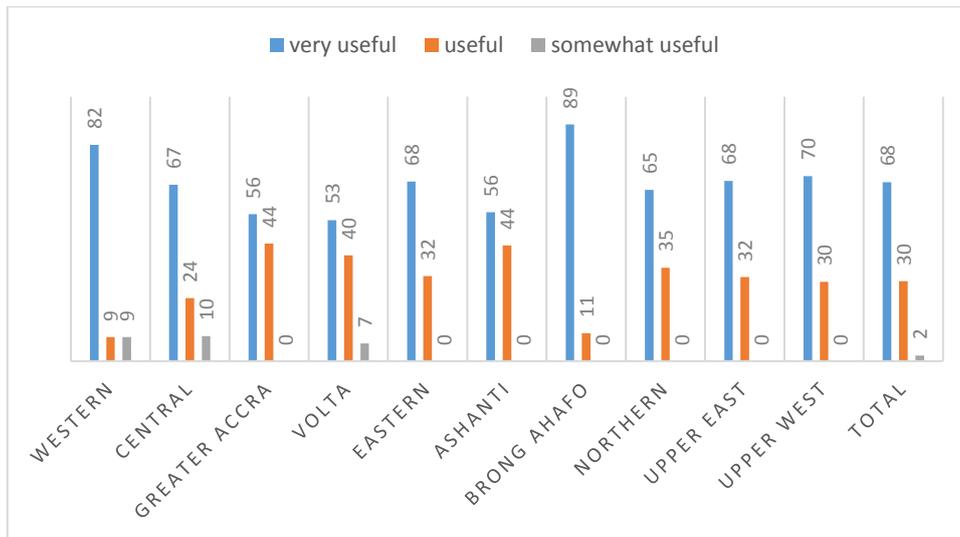


Figure 26 NQTs' percentage rating of usefulness of training on student discipline and classroom management



Training in teaching children with disabilities

Ten percent of NQTs had participated in some form of training in teaching children with disabilities in the 12 months preceding the survey (Figure 27). The variations across regions is significant at the .01 level. Over 90 percent of the NQTs found the training useful or very useful (Figure 28).

Figure 27: Percentage of NQTs who participated in training in teaching students with special needs

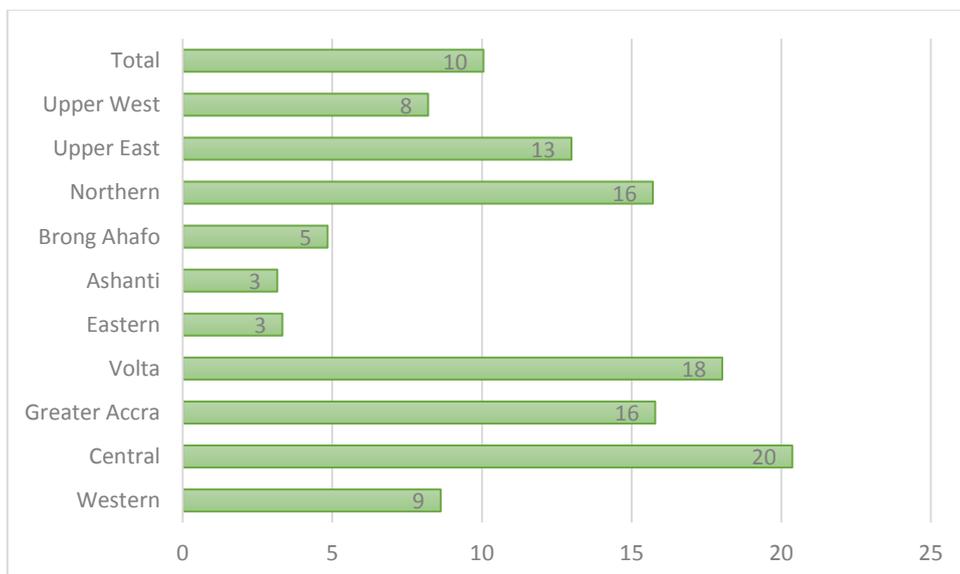
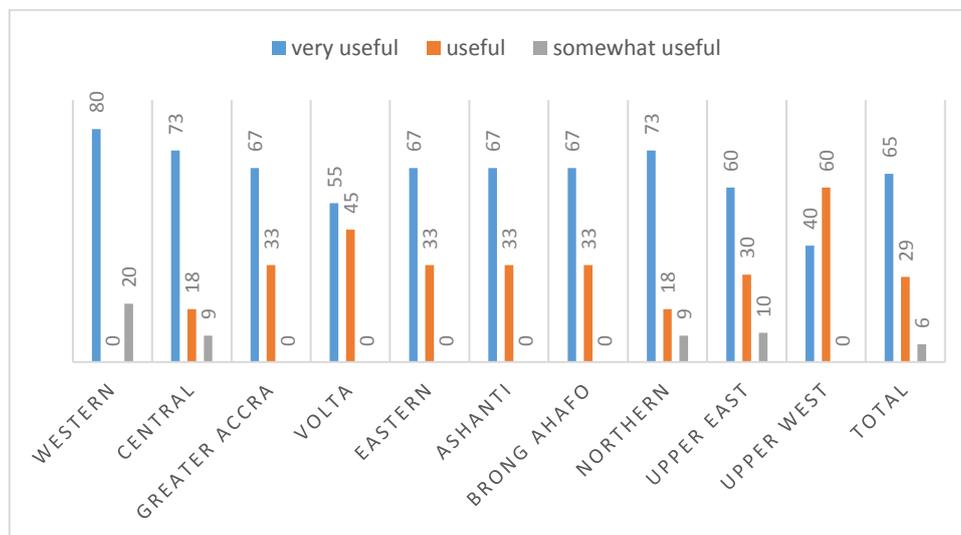


Figure 28: NQTs' percentage rating of usefulness of training on teaching students with special needs



During the FGDs and IDIs, participants traced their training on identifying children with special needs back to their colleges of education.

For exceptional children way back at college we were taught how to identify them. We were given some guidance on that but we were not taught how to teach them to know what we are teaching. There are a lot of exceptional children in this school but we find it difficult to impart [knowledge] to them. Back in college we were only taught [how to detect] the signs [that a child may have special needs]; where to place the child; and maybe sometimes how to talk to them (FGD participant, Asikum-Odoben-Brakwa).

Few of the participants noted that they had participated in some inserts that were focused on children with special needs, although they had not yet had children with special needs in their classrooms. NQTs who had some experience with children with special needs in their classrooms shared as follows:

My experience is that sometimes when you are talking to the children, as if their mind is not in the class. And when you prompt them and you ask 'what did I say?', the child will not say exactly what you said. That means that child is having a problem with the ear. Some of them will also say that, 'madam I can't see what you have written on the board'. So through that I was able to observe their weaknesses, where they are falling short (FGD participant, Savelugu-Nanton).

When I came [to the school] we had one [student with special needs]...He is okay, normal, but if you are teaching... he will tell you he understands everything but the moment you give work, he will not do anything....He will write but you will not [decipher] what he is writing....The handwriting is legible but he will join everything such that you can't even separate it....so we don't know. He is even supposed to complete this year but we have to repeat him again.... We are still trying... we don't know if it's the brain.... He is very neat. He does everything he is instructed to do perfectly but if it comes to teaching and learning... No!... (IDI participant, South Dayi).

In fact, at times ...although they [students] are matured, in class six, you will be teaching and somebody will be playing with a pen. So I consulted the headmaster and he said, you are a teacher so you should have a critical look at that person. So I did that and I saw that psychologically the guy is not sound. So I took time, and I gave the person time when I'm

teaching so always I would be mentioning his name so that it will draw his attention to what I am teaching (FGD participant, Kassena-Nankana).

The experiences that were shared by NQTs point to the fact that they are conscious of differences among their students in the classroom and are willing to assist such children. It would thus be useful if attention is paid to this topical issue during in-service training programmes.

The data further suggest that nearly half of NQTs had participated in other forms of professional training aimed at enhancing teaching across the various grades in the past 12 months preceding the survey (Figure 29). The differences observed among the regions is significant at the .01 level. On the whole NQTs found the trainings useful or very useful (Figure 30). However there are differences across the regions in the rating of the usefulness of the training, which is significant at the .05 level.

Figure 29: Percentage of NQTs who participated in other trainings to enhance teaching

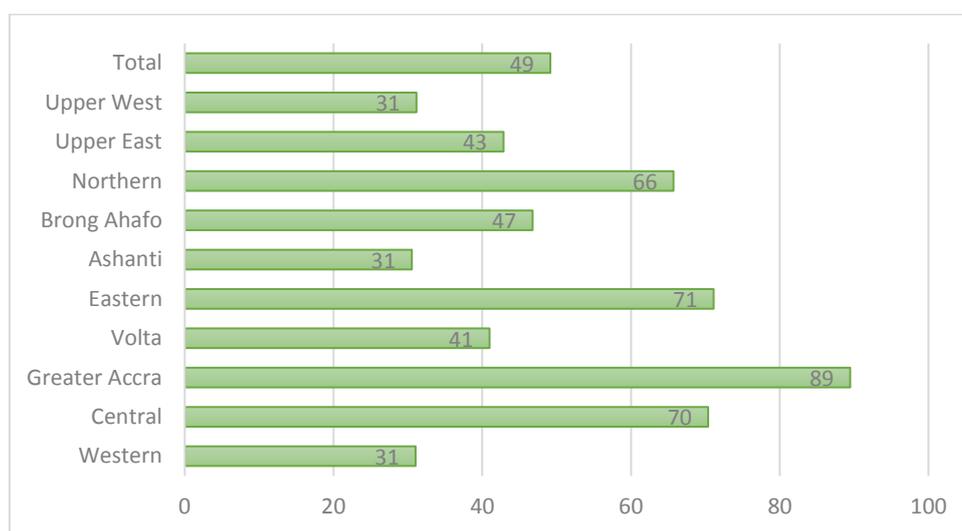
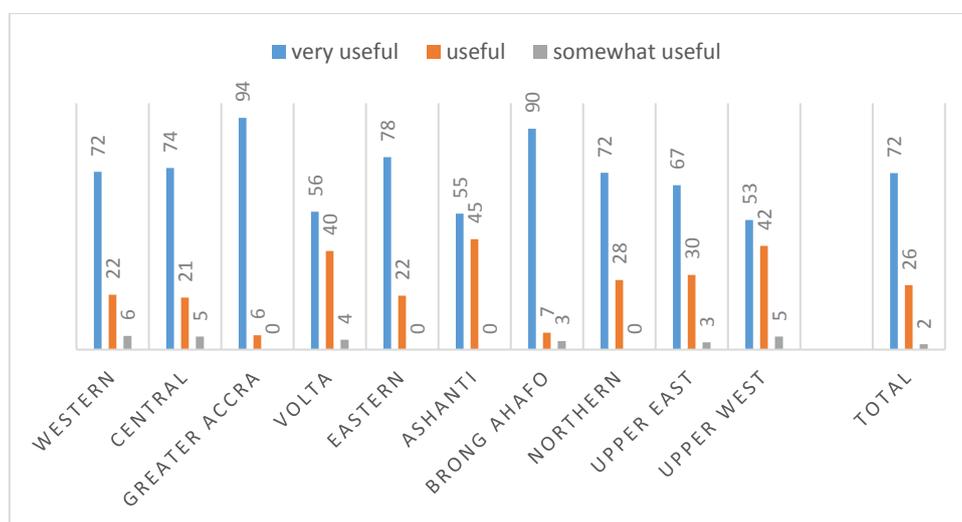


Figure 30: NQTs' percentage rating of usefulness of other trainings aimed at enhancing teaching



Professional development of NQTs and teachers in general was a primary concern to both NQTs and key informants alike. Participants acknowledged that in-service training was critical to the career development of NQTs. However, not all NQTs had participated in an in-service training since they were posted in September 2016.

In-service training needs to be organised by our districts, based on our area of specialization. We have not been receiving enough of in-service training from our district. For ICT and mathematics, I think I have gone for one training ever since I was posted here. I think this is also a problem because in-service training should be organised from time to time for us to be abreast with certain changes ... *(FGD participant, Asikuma-Odoben-Brakwa)*.

Another participant in the same FGD at Asikuma-Odoben-Brakwa lamented that:

When it comes to in-service training, we at the rural areas don't benefit. This is because for almost two years I haven't attended any in-service training *(FGD participant, Asikuma-Odoben-Brakwa)*.

In South Dayi however, the NQTs had received different kinds of in-service training ranging from once to thrice per NQT over the period they had been at post.

We attended a USAID learning programme. It's about a new programme being introduced into the system to help the children to be able to read fluently in the Ghanaian language and in English. It started last year [2017] but they are doing it every term ending.... It was done at the district level but it was organized in different locations for us...That programme is for KG *(FGD Participant, South Dayi)*.

There was one of the [in-service] programmes but I have forgotten the name; it's like each school around presents a representative...and when they come back they have to organize us the teachers... then they teach the things that they've gone to learn over there. Maybe the instructor will appoint one of the teachers among us, give him the lesson, plan the lesson with him, and then he will go and deliver then we will sit down and listen and after that we ask questions like a normal teaching process *(FGD Participant, South Dayi)*.

In Kassena-Nankana, Savelugu-Nanton, and Ahafo Ano South districts, NQTs indicated having received an average of one in-service training programme. Some had not experienced any at all.

3.3.3 Teachers' professional development priorities for next year

Another important indicator of interest was to measure the professional development interests of NQTs for the next academic year. The four main areas of interest to NQTs are maintaining student discipline and classroom management (28 percent); methods of teaching (22 percent); the use of technology in instruction (18 percent) and being abreast with the contents of the subjects they primarily teach (10 percent) (Table 1).

Table 1: Teachers' professional priority in the next year

Teachers' priority in the next year	Female %	Male %	Total %
Student discipline and classroom management	26.0	30.4	28.3
Teaching students with special needs	10.4	4.1	7.1
Methods of teaching	25.0	19.5	22.1
Student assessment	6.2	8.3	7.3
Communicating with parents	9.4	4.7	7.0
The content of the subjects(s) I primarily teach	8.4	11.8	10.2
Use of technology in instruction	14.6	20.7	17.8
Other	0.0	0.6	0.3
Total	100	100	100

During the FGDs and IDIs, NQTs vented a lot of frustration about student discipline. The various disciplinary methods adopted by NQTs on the pupils include sending the child out of the classroom, using facial gestures, assigning them to weed, collecting and bringing pebbles to school, writing "I am sorry" several times on sheets of paper, threatening them with the cane, and actually caning students. The latter method however was mentioned with some level of uneasiness due to different directives that had come from the GES about the use of the cane, as well as experiences that had deterred some of them from using the cane at all.

During the South Dayi FGD, one participant shared the following:

Here [NQT mentions name of town], you can't discipline a child ...The parent will come to the school and beat you up ...Yeah ... I gave them homework so ...I asked them to bring their work. One just got up 'madam [in local language] we've not done it and we can't do it'. So in fact I got angry and I gave (*participant laughs*) him four canes Yes! The next day when I came to school, the head master called me that a parent was in the school, that he's coming to beat me up.... It was not easy at all. So as at now I have stopped giving them homework because I don't want any trouble further. If you give them homework they will not do it! And if the child misbehaves and you try correcting the child you are in trouble!mmm... (*FGD participant, South Dayi*).

The challenges that NQTs face with respect to disciplining children reflects some key reasons why perhaps student discipline and classroom management emerged in the quantitative data as one of the core areas that NQTs are interested in getting more training.

3.3.4 Happiness as teacher and teacher licensing

The teacher happiness question was intended to gauge the level of satisfaction the NQTs were deriving from their work, irrespective of any challenges they might be facing. The results suggest that about two-thirds of NQTs are happy being professional teachers, with another 28 percent indicating they were moderately happy.

Teacher licensing is a topical subject that has received considerable attention in Ghana in recent months. The study therefore sought the opinions of NQTs on the subject. Asked whether they embrace the concept of teacher licensing, less than half of the NQTs responded in the affirmative (Figure 31). More female than male NQTs embrace the concept of teacher licensing. The difference is significant at the .05 level.

For NQTs who embrace the idea of teacher licensing, more than half were of the view that licensing would make the teaching profession a disciplined one; provide legitimacy to trained teachers; enhance teachers’ competencies and capabilities as well as standardise the practice of teaching in Ghana. On the other hand, nearly half of NQTs not embracing teacher licensing held the view that teacher licensing is not the solution to the educational problems in Ghana. Others expressed the view that the process could be discriminatory in addition to the general lack of interest in writing a licensing examinations (See Table 2).

Figure 31: Percentage of NQTs who embrace the concept of teacher licensing

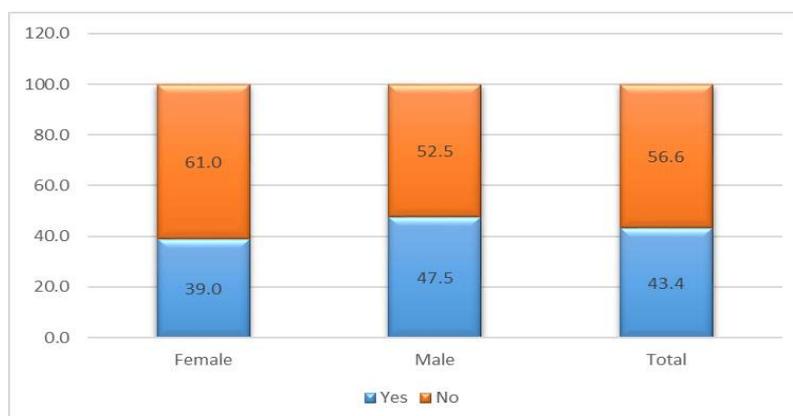


Table 2: Reasons for supporting teacher licensing or otherwise

Reasons for supporting teacher licensing	N	% cases
It gives legitimacy to trained teachers	154	54.8
It standardises the processes for attaining professional recognition	135	48.0
It enhances teachers’ competencies and capabilities	149	53.0
It makes the teaching profession a more disciplined one	157	55.9
Other	12	4.3
Reasons for not supporting teacher licensing		
The implementation will be cumbersome	97	26.3
The process can be discriminatory	152	41.2
It is not the single solution	182	49.3
Tired of writing exams	101	27.4
Other	83	22.5

Note: Percentages are calculated based on the N cases and the number of valid responses in the data.

During the FGDs and IDIs with the NQTs, the discussion around teacher licensing generated interesting debates. While some participants were in favour, the majority did not understand its relevance. For those who embraced the idea, some of their explanations of the concept indicated that they did not have sufficient information about it. One concern that kept coming up was why they needed to “write examinations” again to receive licenses when they had professional certificates to prove their training. Some comments on teacher licensing by the NQTs are as follows:

For me I don't know the reason for this. I would have preferred them to bring text books and supply the various schools than this teacher licensing. I don't know what it is about. You go to the training college for three years and you are now going for licensing (*FGD participant, Kassena-Nankana*).

I am sure when the teacher is not qualified the person cannot come out to teach. I will suggest that instead of the licensing they should rather provide in-service training for teachers ... so that they will equip them with more knowledge (*FGD participant, South Dayi*).

I heard that the license will increase salaries but I don't know how true that is (*FGD participant, Kassena-Nankana*).

I don't know the main reason for that [teacher licensing]...I think it is something to measure the output of a teacher... I don't think it is going to add up to anything (*IDI participant, Kassena-Nankana*).

Ahh well, I don't have any idea about it so ... I don't think it will help. Initially, you have written exam, and people are sacked if they fail any subject. And if you're posted and you're having a referral, you don't take your money. Doing this, and at the same time bringing the licensing exam? And I heard that if you write and fail, you will not be called a professional teacher, which is really bad! Then what is the essence of the certificate you worked for. If they want to do something, they should include it to the college exam. The nurses' [licensing] is like that, it is part of their exam (*FGD participant, Savelugu-Nanton*).

NQTs and most of the key informants indicated that they had not received any formal communication regarding teacher licensing. It is clear that the education on teacher licensing needs to be intensified if it is to be embraced and successfully carried out.

3.4 Newly qualified teacher lesson observation

3.4.1 Levels and subjects observed

More observations were done at the JHS level (42 percent) followed by lower primary (32 percent) and upper primary (27 percent). At the JHS level observations of English-language lessons constituted 40 percent followed by the other subjects (36 percent), and mathematics and science (12 percent each). Mathematics lessons dominated at the upper and lower primary levels; 44 percent and 32 percent, respectively. English language was, however, the second main subject which was observed at both the upper and lower primary levels; 38 percent and 26 percent, respectively.

3.4.2 Newly qualified teacher competencies

The lesson observers¹⁰ looked out for the performance of certain actions, use of certain strategies and the general conduct of the teacher in the classroom. Teachers were assessed in 16 competency areas (see Table 3). They were scored excellent, satisfactory or poor in the various actions / strategies they displayed in each competency area.¹¹ Teachers were rated “strong” in possessing a particular competency if they exhibited an excellent demonstration of two actions or strategies, or had at least three satisfactory demonstration of actions / strategies within a particular competency area. Otherwise, the teacher was rated "weakly competent."

Teachers generally exhibited competencies in many of the areas assessed. A majority of the teachers could use different strategies to give clear explanations to the students, give constructive feedback on students’ answers and apply all teaching methods to both male and female students equally. A majority of NQTs were also good at opening lessons (but the proportion fell by 27 percentage points when it came to the closure of lessons). Other competency areas in which a majority of NQTs excelled are: ability to ask range of questions during lessons, the use of different teaching materials, and promoting and managing whole class discussion.

Table 3: Scores for NQT competencies

Teacher competencies	Weak		Strong	
	N	%	N	%
Use of strategies to open lesson	10	16.7	50	83.3
Use of strategies to give clear explanations	5	8.3	55	91.7
Use of different teaching materials	17	28.3	43	71.7
Use of different interactive methods	28	46.7	32	53.3
Ask range of questions during lessons	12	20.0	48	80.0
Promotes and manage whole class discussion	17	28.3	43	71.7
Use strategies to organise and execute group/pair work	46	76.7	14	23.3
Uses strategies to assess students’ understanding	27	45.0	33	55.0
Use constructive feedback on student’s answers	8	13.3	52	86.7
Use of techniques to address mixed abilities	44	73.3	16	26.7
Applies all teaching methods equally to males and females	9	15.0	51	85.0
Use strategies to challenge traditional gender roles and norms	51	85.0	9	15.0
Use strategies to effectively manage class	19	31.7	41	68.3
Clearly pays attention to seating arrangement in the classroom	23	38.3	37	61.7
Use of strategies to close the lesson	27	45.0	33	55.0
Use of a high quality lesson/activity plan	21	35.0	39	65.0

¹⁰ Six trained and experienced basic school teachers who were still practising were recruited to conduct the lesson observations.

¹¹ See Observation Tool in Appendix C for the various actions and strategies and Appendix D Table D3 for the distribution of scores based on the various actions and strategies.

However, in three competency areas, namely, using strategies to challenge traditional gender roles and norms, using strategies to organise and execute group / pair work and using techniques to address mixed abilities, the NQTs were generally weak. Less than a third of the teachers had strong competencies in adopting strategies to address mixed abilities, organising and executing group / pair work, or using strategies to challenge traditional gender roles.

A three-point scale was developed for the number of competencies each teacher possessed: 1) weak- if the teacher was competent in less than five competency areas; 2) satisfactory- if the teacher was competent in five to nine competency areas; and 3) strong- if the teacher was competent in ten or more competency areas. Overall, six of every 10 teachers observed were rated strong while 13 percent were rated weak.

Seventy-one percent of female teachers exhibited competencies in at least 10 of the 16 areas assessed compared with 44 percent of their male counterparts (see Table 4). These differences are statistically significant at the .05 level (p-value of 0.011 from a Fisher's exact test)¹².

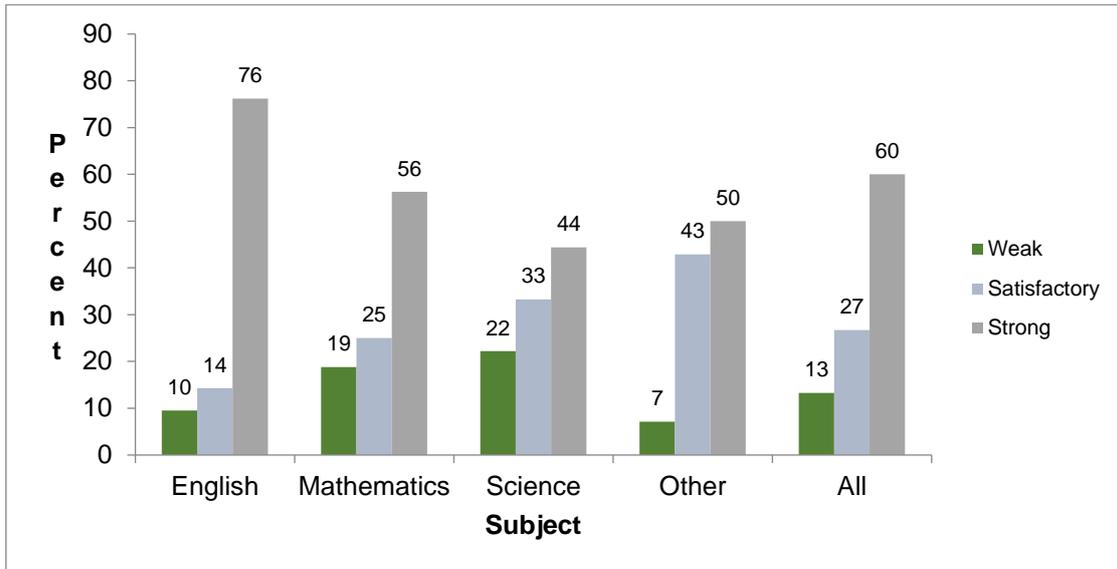
Table 4: Overall competence of NQTs by sex

Overall competency	Female		Male		All	
	N	%	N	%	N	%
Weak	1	2.9	7	28.0	8	13.3
Satisfactory	9	25.7	7	28.0	16	26.7
Strong	25	71.4	11	44.0	36	60.0
Total	35	100	25	100	60	100

Most English-language teachers had strong competencies followed by mathematics teachers and other subjects' teachers. A slightly higher proportion of science teachers obtained an overall weak score compared with mathematics and English-language teachers (Figure 32).

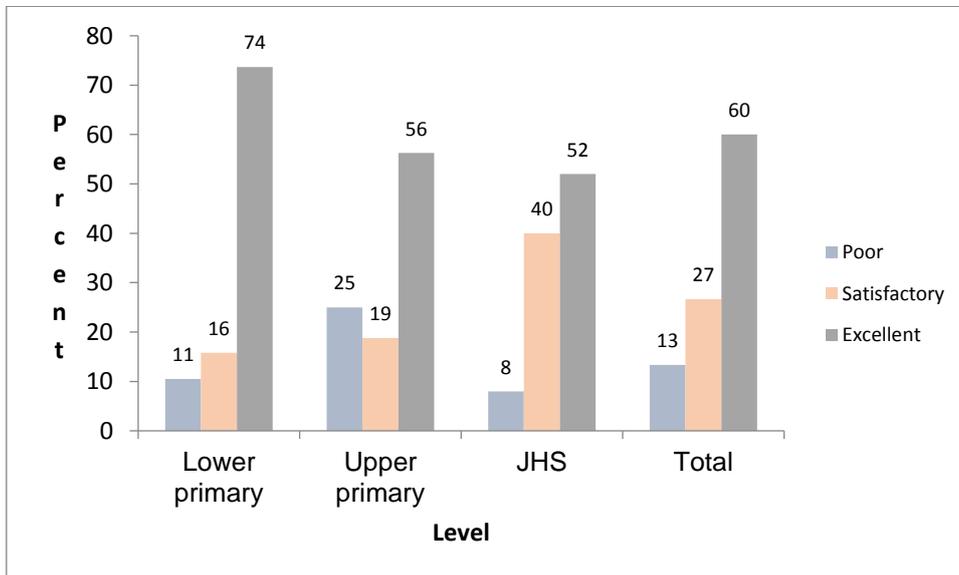
¹² Fisher's exact test is used in place of Pearson's Chi-squared test for significance between sample groups when any of the cells have a value less than 5.

Figure 32: Percentage rating of overall competence of NQTs by subject



Sixty percent of all NQTs observed demonstrated excellent competence (Figure 33). A higher proportion of lower primary teachers demonstrated excellence compared with upper primary and JHS teachers.

Figure 33: Percentage rating of overall competence of NQTs by level/grade



4 Conclusion and Recommendations

4.1 Conclusion

The study aimed at understanding the teaching experiences of NQTs posted in the 2016/2017 academic year by assessing their preparedness from their ITT and their teaching experiences in the first year. Based on the findings NQTs generally ranked their ITT as high. Whereas this is a good finding, we perceive the rating as overrated. NQTs are products of the CoEs in Ghana and their assessment has implications for their own professional qualifications as teachers. As a result, there is the likelihood that the high rating of their ITT is so that they would be regarded as highly qualified teachers. It is apparent that while CoEs are doing their best to train highly qualified teachers for Ghana's basic schools. However, identified lapses – such as lack of training in methodology for specific topics; lack of hands-on practical sessions in some subjects; and similar curriculum as used in SHS – tend to undermine their efforts. Additionally, the constraints within the larger education sector limit the NQTs' ability to perform effectively in their first year of teaching. While regional differences in the first-year experiences of NQTs were not consistent, until the challenges are pragmatically addressed, NQTs will continue to suffer the same fate year after year, with rippling effects on the entire education system.

4.2 Recommendations

In the light of the findings, the following recommendations are made:

- CoEs need to address the training gaps related to equipping NQTs to apply theory to practice in their teaching.
- Measures should be put in place to ensure that all NQTs receive timely induction training and mentorship. One way of doing this is to empower head teachers at the basic level to conduct the orientation. This can be part of their annual appraisal.
- The GES and MoE should ensure that NQTs receive the needed TLMs, textbooks and other resources to help them perform their responsibilities effectively. In addition, efforts must be made to provide appropriate methodology for the identified subjects and topics.
- Ongoing professional development programmes should be continued, paying attention to the needs of NQTs, particularly students' discipline and classroom management; methods of teaching; and handling children with special needs.
- The NTC, GES, and MoE need to roll out a comprehensive education programme on teacher licensing in Ghana at all levels – schools, districts, regions and national – to ensure that all relevant stakeholders are engaged about the matter and understand the modalities associated with it.

References

- Boakye, C., & Ampiah, J.G. (2017). Challenges and solutions: The experiences of newly qualified science teachers. *Sage Open*, 7(2), 1-10.
- Grosch, K. and Rau, H. (2017). Gender differences in honesty: The role of social value orientation, Discussion Papers, Center for European, Governance and Economic Development Research, No. 308, Center for European, Governance and Economic Development Research, cege, Georg-August-Universität Göttingen, Göttingen.
- He, Y., & Cooper, J. (2011). Struggles and strategies in teaching: Voices of five novice secondary teachers. *Teacher Education Quarterly*, 38(2), 97-116.
- Liston, D., Whitcomb, J., & Borko, H. (2006). Too little or too much: Teacher preparation and the first years of teaching. *Journal of Teacher Education*, 57, 351-358.
- Mckenzie, M. L. (2005). *Stories of buoyancy and despondency: Five beginning teacher's experiences in their first year in the teaching profession* (Unpublished doctoral dissertation). Australian Catholic University.
- Senom, F., Zakaria, A. R., & Shah, S. S. A. (2013). Novice teachers' challenges and survival: Where do Malaysian ESL teachers stand? *American Journal of Educational Research*, 1, 119-125.
- Sunde, E., & Ulvik, M. (2014). School leaders' views on mentoring and newly qualified teachers' needs. *Education Inquiry*, 5, 285-299.
- Wang, J., Odell, S. J., & Schwille, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of literature. *Journal of Teacher Education*, 59 (2), 132-152.
- Watson, S. B. (2006). Novice science teachers: Expectations and experiences. *Journal of Science Teacher Education*, 17, 279-290.

Appendix A: Survey Questionnaire

RTL-NTC/GES Study on Newly Qualified Teachers' Teaching Experience

IDENTIFICATION

Region
 District
 Respondent ID

SECTION A: GENERAL INFORMATION

1	Sex	1. Male 2. Female
2	Age	<input type="text"/> <input type="text"/> <input type="text"/>
3	Highest educational qualification obtained	1. Diploma in Education 2. HND 3. Bachelor's Degree 4. Postgraduate Degree 5. Certificate in Education 6. Professional (specify)
4	Name of College of Education you attended	
5	In which year did you complete	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
6	What did you do before training as a teacher?	1. In school / education 2. Paid employee 3. Paid work for self 4. Unemployed, looking for job 5. Doing unpaid work 6. Apprenticeship 7. Others (specify)
7	Name of school you are currently teaching in.	
8	In which grades are ALL the pupils you currently teach at this school?	1. Kindergarten 1 2. Kindergarten 2 3. Primary 1 4. Primary 2 5. Primary 3 6. Primary 4 7. Primary 5 8. Primary 6 9. JHS 1 10. JHS 2 11. JHS 3
9	Which subject (s) do you currently teach?	1. English Language 2. Mathematics 3. R.M.E 4. ICT 5. Social studies

		6. Ghanaian Language 7. Citizenship 8. Integrated science 9. French 10. Music 11. BDT 12. Creative Arts 13. Other (specify)
--	--	--

SECTION B: INITIAL TEACHER TRAINING

This section of the survey relates to your teacher training. For all questions which ask about your training, please consider your taught sessions, other support received from your training provider(s) or colleges and support, training and experiences in school settings (including teaching practice) during your teacher training years.

	Please rate the following using the scale provided	1. Very good 2. Good 3. Satisfactory / Adequate 4. Poor
i. Overall quality of training		
1.a	Overall quality of your training	
1.b	The overall quality of assessment and feedback you received during your training	
1.c	The overall quality of guidance you received during your training to achieve the standards for a qualified teacher status	
1.d	The overall quality of support you received during your training to achieve the standards for a qualified teacher status	
ii. Promote good progress and outcomes by pupils		
<i>How good was your teacher training (not your induction) in:</i>		
2.a	preparing you to be aware of pupils' prior knowledge?	
2.b	preparing you to be aware of pupils' capabilities?	
2.c	preparing you to guide pupils to reflect on the progress they have made?	
2.d	preparing you to integrate the theoretical elements of your programme with your practical experiences?	
iii. Demonstrate good subject and curriculum knowledge		
<i>How good was your teacher training (not your induction)</i>		

	Please rate the following using the scale provided	1. Very good 2. Good 3. Satisfactory / Adequate 4. Poor
<i>in:</i>		
3.a	preparing you to understand the national curriculum?	
3.b	preparing you to teach your specialist subject?	
3.c	preparing you to teach reading, including comprehension?	
3.d	preparing you to teach primary mathematics?	
3.e	preparing you to teach JHS mathematics?	
3.f	preparing you to teach primary science?	
3.g	preparing you to teach JHS science?	
iv. Plan and teach well-structured lessons		
<i>How will you rank your teacher training (not your induction) in:</i>		
4.a	preparing you to plan your teaching to be pupil centred?	
4.b	preparing you to use a range of teaching methods that promote pupils' learning?	
v. Adapt teaching to respond to the strengths and needs of all pupils		
<i>How good was your teacher training (not your induction) in:</i>		
5.a	preparing you to teach across the range of abilities?	
5.b	preparing you to teach pupils from all ethnic backgrounds?	
5.c	preparing you to teach pupils with special education needs in your classes, using appropriate support?	
5.d	preparing you to teach pupils with English as an additional language?	
vi. Make accurate and productive use of assessment		
<i>How good was your training (not your induction) in:</i>		
6.a	preparing you to assess pupils' progress?	
6.b	preparing you to record and report pupils' outcomes?	
6.c	preparing you to provide feedback to pupils to support their progress?	
vii. Manage behaviour effectively to ensure a good and safe learning environment		
<i>How good was your training (not your induction) in:</i>		
7.a	preparing you to establish and maintain a good standard of behaviour in the classroom?	

	Please rate the following using the scale provided	1. Very good 2. Good 3. Satisfactory / Adequate 4. Poor
7.b	preparing you for your teachers' statutory responsibility for the safeguarding of pupils?	
viii. Fulfil wider professional responsibilities		
<i>How good was your training (not your induction) in:</i>		
8.a	preparing you to deploy support staff effectively?	
8.b	preparing you to communicate with parents?	
8.c	preparing you to identify and address your own continuing professional development needs?	
8.d	preparing you to access educational research to support your teaching?	
8.e	preparing you to understand and apply the findings from educational research?	
9.a	preparing you to apply confidently for teaching positions (e.g. support with job applications and interviews)?	
9.b	Any further comments about your training:	

SECTION C: TEACHING EXPERIENCE IN THE FIRST/INDUCTION YEAR (Post-COE TRAINING)

This section relates to your induction as a newly qualified teacher. This covers the period of time working in this school as a teacher since you were posted, i.e. 2016/17 academic year.

10.a	When did you start your induction? (Please give your answer in the format MM/YYYY or write N/A (not applicable) if you did not have an induction and then skip to Section D)	_ _ / _ _ _ _
10.b	To what extent do you feel that your induction experience so far has been helpful in improving the quality of your training?	1. Very helpful 2. Somewhat helpful 3. Not helpful at all
10.c	What do you feel about the length of your induction period?	1. Too short 2. About right 3. Too long
10.d1	Is your school providing you with planning, preparation and assessment (PPA) time?	1. Yes 2. No 3. Not applicable
10.d2	How many hours of PPA time are you provided with in a week?	

10.d3	Please rate the adequacy of your PPA time	1. More than adequate 2. Adequate 3. Inadequate >>10.d5
10.d4	If more than adequate, how much less time would you recommend to be taken away in a week?	
10.d5	If less than adequate, how much more time would you recommend to be added in a week?	
10.e	Is your school providing you with a professional development programme?	1. Yes 2. No 3. Not applicable
10.f	Is your school providing you with the support of an induction mentor?	1. Yes 2. No 3. Not applicable
10.g	Is your school providing you with observations by your mentor?	1. Yes 2. No 3. Not applicable
10.j	Is your school providing you with reviews from your mentor?	1. Yes 2. No 3. Not applicable
<i>Has your induction to date supported you to:</i>		
10.h	teach pupils with special education needs in your classes?	1. Yes 2. No 3. Not applicable
10.i	establish and maintain a good standard of behaviour in the classroom?	1. Yes 2. No 3. Not applicable
10.k	Has your induction helped you to address issues of gender equity?	1. Yes 2. No
11.a	Any further comments about your induction:	

SECTION D: POST COE TRAINING PROFESSIONAL DEVELOPMENT, FUTURE PLANS AND EXPECTATIONS

12.a	Select three from the list provided that are your top priority for your own professional development. 1. Student discipline and classroom management 2. Teaching students with special needs (eg. Disabilities, special educations, etc.) 3. Methods of teaching	1 st __ __ 2 nd __ __ 3 rd __ __
------	---	--

	<p>4. Student assessment</p> <p>5. Communicating with parents</p> <p>6. The content of the subjects(s) I primarily teach</p> <p>7. Use of technology in instruction</p> <p>8. Other (please specify)</p>	
12.b	In the past 12 months, have you participated in any professional development activities specific to or concentrating on the content of the subject(s) you teach?	<p>1. Yes</p> <p>2. No</p>
12.c	Overall, how useful were these activities to you?	<p>1. Very helpful</p> <p>2. useful</p> <p>3. Somewhat useful</p> <p>4. Not useful</p>
12.d	In the past 12 months, have you participated in any professional development activities that focused on student discipline and management in the classroom?	<p>1. Yes</p> <p>2. No</p>
12.e	Overall, how useful were these activities to you?	<p>1. Very helpful</p> <p>2. useful</p> <p>3. Somewhat useful</p> <p>4. Not useful</p>
12.f	In the past 12 months, have you participated in any professional development activities on how to teach students with disabilities	<p>1. Yes</p> <p>2. No</p>
12.g	Overall, how useful were these activities to you?	<p>1. Very helpful</p> <p>2. useful</p> <p>3. Somewhat useful</p> <p>4. Not useful</p>
12.h	In the past 12 months, have you participated in any professional development activities or training programme aimed at enhancing your teaching?	<p>1. Yes</p> <p>2. No</p>
12.i	Mention any other type of training	
12.j	Overall, how useful were these activities to you?	<p>1. Very helpful</p> <p>2. useful</p> <p>3. Somewhat useful</p> <p>4. Not useful</p>
12.k	What is your main priority for the next year in relation to your professional development?	<p>1. Student discipline and classroom management</p> <p>2. Teaching students with special needs (e.g. Disabilities, special educations, etc.)</p> <p>3. Methods of teaching</p> <p>4. Student assessment</p> <p>5. Communicating with</p>

		<p>parents</p> <p>6. The content of the subjects(s) I primarily teach</p> <p>7. Use of technology in instruction</p> <p>8. Other (specify)</p>
12.l	Where do you see yourself in the next 5 to 10 years?	<p>1. Continue with teaching at the basic level</p> <p>2. Continue with teaching but at the second cycle level</p> <p>3. In another profession</p> <p>4. Left the country</p> <p>5. Administrative role in education</p> <p>6. Other (specify)</p>
12.n	Do you have plans of furthering your education (1 st degree and Masters)?	<p>1. Yes</p> <p>2. No</p>
12.p	To what level?	<p>1. First Degree only</p> <p>2. Masters</p> <p>3. Ph.D (Doctorate)</p> <p>4. Professional (specify)</p> <p>..</p>
13	Are you happy as a teacher?	<p>1. Yes</p> <p>2. No</p>
14	Have you always desired to be a teacher?	<p>1. Yes</p> <p>2. No</p>
15	If you had to leave teaching today, what profession will you likely consider?	<p>1. Self-employment</p> <p>2. Banking/Insurance</p> <p>3. Oil and Gas/Extractive industry</p> <p>4. Farming</p> <p>5. Other (specify)</p>
16	Are you happy with the teaching/training you received at the CoE as a teacher?	<p>1. Very happy</p> <p>2. Happy</p> <p>3. Somewhat happy</p> <p>4. Not happy</p>
17	Are you happy with the way you are treated as a teacher in your district?	<p>1. Very happy</p> <p>2. Happy</p> <p>3. Somewhat happy</p> <p>4. Not happy</p>
18	Are you happy with the way information flows to you?	<p>1. Very happy</p> <p>2. Happy</p> <p>3. Somewhat happy</p> <p>4. Not happy</p>
19	Do you embrace Teacher Licensing?	<p>1. Yes</p> <p>2. No</p>
20.a	If Yes, why?	<p>1. It gives legitimacy to</p>

		<p>trained teachers</p> <p>2. It standardizes the processes for attaining professional recognition</p> <p>3. It enhances teachers' competencies and capabilities professional recognition</p> <p>4. It makes the teaching profession a more disciplined one</p> <p>5. Other (specify)</p>
20.b	If no, why?	<p>1. The implementation will be cumbersome</p> <p>2. The process can be discriminatory</p> <p>3. It is not the single solution to Ghana's educational challenges</p> <p>4. Tired of writing exams</p> <p>5. Other (specify)</p>

Appendix B: In-depth Interview and Focus Group Discussion Guides

NTC/GES Study on Newly Qualified Teachers' Teaching Experience

In-depth Interview / Focus Group Discussion Guide (For NQTs)

Introduction

The purpose of this study is to investigate the preparedness of Newly Qualified Teachers (NQTs) with DBEs to teach in public basic schools across the country. We would like to find out: how the DBE programme is helping NQTs to professionally address the various challenges in the basic education classroom; the challenges NQTs face; and what changes can be made. It is anticipated that the findings of this study will provide empirical evidence to guide policy and curriculum reforms to improve teacher training and adequately set NQTs up for a successful career in education.

Questions

1. Kindly tell me about yourself as an NQT: For example:
 - Year of completing teacher training and acquiring your Diploma
 - When you were posted to your first station.
 - How long you have served at your current station.
(If this does not tally with the expected number of months since posting, ask why.)

2. Kindly share your **Initial Teacher Training** experience with me.
 - Was it what you expected it to be prior to admission?
 - What subject area(s) did you specialize in? AND Why?
 - What did you enjoy most during your training?
 - What were some of the challenges you faced?
 - What suggestions do you have about the training you received at your college of education?

3. **Induction:** What kind of preparation were you given as you transitioned from being a trainee teacher into a Newly Qualified Teacher?
 - Did you have any induction training?
 - How did your induction training prepare you?
 - What suggestions do you have regarding your induction training?
 - What supports did you receive from your college?

4. As an NQT, kindly share what **your experiences** have been in the following areas:

<i>a. Lesson planning</i>	<ul style="list-style-type: none"> - What were you taught to do? - Has it been practically applicable? - What modifications/
<i>b. Subject area preparation</i>	
<i>c. Ensuring gender equity</i>	
<i>d. Motivating students</i>	

<i>e. Encouraging parental involvement in their children's learning</i>	adjustments/ innovations have you had to make? - What challenges have you faced in this regard?
<i>f. In-service training</i>	
<i>g. Managing your time as a teacher/ in class</i>	
<i>h. Support provided by school, including mentors</i>	
<i>i. Student assessment</i>	
<i>j. Coping with disciplinary problems</i>	
<i>k. How and where to seek guidance</i>	
<i>l. Identifying and meeting the needs of children with special needs, including those with emotional or physical disabilities.</i>	
<i>m. Managing other kinds of stressors on the job.</i>	

5. Perceptions about subject areas/ Topics

- Which subject area or topics do you consider as your strength? (e.g. English, mathematics, etc.)
- Can you tell me why?
- Which ones do you consider yourself to be weak in? (e.g., English, mathematics, etc.)
- Can you tell me why?
- Based on what you have told me, does it matter the grade levels? (For example, are you more confident about teaching lower primary Science subjects than you are with Upper Primary or JHS?)

6. What **supports** (e.g. Motivation, including such things as provision of accommodation, etc.) do you receive from your district assembly as an NQT?

7. General experiences of first year of teaching

- Altogether, how would you say your first year of teaching has been like?
- Generally, what are the challenges that you face?
- How have you handled these challenges?

8. Teacher licensing

- Do you embrace the idea of teacher licensing? WHY OR WHY NOT?
 - What are your expectation(s) of teacher licensing?
 - What do you perceive to be the benefits of teacher licensing?
 - What do you perceive to be the challenges of teacher licensing?
9. What are your **future plans and expectations** as a professional teacher?
- Do you intend to stay with GES? WHY OR WHY NOT?
10. What advice would you give to NQTs that would start the next academic year?
11. Is there anything else you would want to share about your experience as an NQT?

Thank you very much for your time.

Appendix B: In-depth Interview and Focus Group Discussion Guides (continued)

NTC/GES Study on Newly Qualified Teachers' Teaching Experience

Key Informants' Interview Guide (For DDEs, Head Teachers & Mentors)

Introduction

The purpose of this study is to investigate the preparedness of Newly Qualified Teachers (NQTs) with DBEs to teach in public basic schools across the country. We would like to find out: how the DBE programme is helping NQTs to professionally address the various challenges in the basic education classroom; the challenges NQTs face; and what changes can be made. It is anticipated that the findings of this study will provide empirical evidence to guide policy and curriculum reforms to improve teacher training and adequately set NQTs up for a successful career in education.

Questions

1. Kindly tell me about yourself.
 - How many years have you worked in education?
 - What rank do you hold currently?

2. Kindly describe how **Initial Teacher Training** is carried out in the country.
 - What do teacher trainees learn during their time in school?
 - What are the expected outcomes for undergoing Initial Teacher Training?
 - Are teacher trainees trained to teach all subjects at the basic school level? Why?
 - Do all teacher trainees specialize in specific subject areas? AND Why?
 - What do you perceive to be some of the challenges teacher trainees face?
 - What suggestions or recommendations can you offer to improve teacher training in Ghana?

3. **Induction:** How are Newly Qualified Teachers inducted into the teaching profession?
 - Is there any induction training?
 - o If Yes, Kindly describe what is entailed in the induction training.
 - o How does the induction training prepare the NQT?
 - o Are there any supports from the Colleges of Education with respect to induction training?
 - Can you offer any suggestions regarding how to improve induction training for NQTs?

4. What are your **observations about / or experiences with NQTs** concerning the following?:

<i>n. Lesson planning</i>	
<i>o. Subject area preparation</i>	

<i>p. Ensuring gender equity</i>	<ul style="list-style-type: none"> - What are they taught to do? - How do you see them practically applying what they were taught? - Do some NQTs bring modifications/ adjustments/ innovations to the job? Kindly give examples of such observations or experiences. - Any peculiar challenges that NQTs face in this regard?
<i>q. Motivating students</i>	
<i>r. Encouraging parental involvement in their children's learning</i>	
<i>s. In-service training</i>	
<i>t. Managing their time as a teacher/ in class</i>	
<i>u. Support provided by school, including mentors</i>	
<i>v. Student assessment</i>	
<i>w. Coping with disciplinary problems</i>	
<i>x. How and where to seek guidance</i>	
<i>y. Identifying and meeting the needs of children with special needs, including those with emotional or physical disabilities.</i>	
<i>z. Managing other kinds of stressors on the job.</i>	

5. Perceptions about subject areas/ Topics

- Which subject area(s) or topic(s) do you see most NQTs having strength in when it comes to teaching it/them? (e.g. English, mathematics, etc.)
- Why do you think this is so?
- Which subject area(s) or topic(s) do you see most NQTs having a weakness in when it comes to teaching it/them? (e.g., English, mathematics, etc.)
- Why do you think this is so?
- Based on what you have told me, have you observed or experienced variations in subject strengths or weaknesses when it comes to the grade levels that NQTs teach? (For example, are NQTs more confident about teaching lower primary Science subjects than they are with Upper Primary or JHS?)

6. What **supports** (eg. Motivation, including such things as provision of accommodation, etc.) do NQTs receive from the district assembly?

7. General experiences of NQTs' first year of teaching

- Altogether, how would you say the first year of the NQTs teaching has been like?
- Generally, what are the challenges that they face?
- Have you been in a position to help some NQTs resolve or handle some of these challenges? Kindly share how you went about it.

8. Teacher licensing

- Do you embrace the idea of teacher licensing? WHY OR WHY NOT?
 - What are your expectation(s) of teacher licensing?
 - What do you perceive to be the benefits of teacher licensing?
 - What do you perceive to be the challenges of teacher licensing?
9. From your experience and encounters with NQTs, what do you sense about their **future plans and expectations** as professional teachers?
- For example, do you think they will stay within the teaching field?
 - Are they inclined toward staying with GES? WHY OR WHY NOT?
10. What advice would you give to NQTs that would start the next academic year?
11. Is there anything else you would want to share about NQTs?

Thank you very much for your time.

Appendix C: Teacher Lesson Observation Tool

NTC/GES Study on Newly Qualified Teachers' Teaching Experience

NEWLY QUALIFIED TEACHER LESSON OBSERVATION TOOL¹³

Before the lesson:

1. Please observe the newly qualified teacher while s/he teaches a math/science/English lesson (If none of these is being taught on the day of the observation, observe the teaching of another subject).
2. Upon entering the classroom, introduce yourself to the teacher who you will be observing. Be friendly and feel free to use the introduction speech below:

Hello, my name is _____. I work for RTL, a research firm in Accra, which is conducting a study on Newly Qualified Teachers' Teaching Experiences for T-TEL/NTC/GES. The objective of the study is to understand the preparedness of newly qualified teachers (NQTs) with Diploma in Basic Education (DBEs) to teach in public basic schools in Ghana. As part of the study, we are required to observe teaching by NQTs. Would you mind if I observe your lesson? This is not an appraisal or inspection and your participation will be completely anonymous. Your name will not be recorded in any way. You have the right to withdraw your participation at any time during the observation and interview; however, I hope you will participate, since your input is very important to improving teacher education in Ghana. Do you have any questions regarding the observation?

NOTE: T-TEL stands for Transforming Teacher Education and Learning
NTC stands for National Teaching Council
GES stands for Ghana Education Service

3. Ask the teacher to allow you to sit at a strategic position in the classroom (but not at the front of the classroom).

During the lesson:

4. If helpful, take notes with regard to the teacher's actions, the flow of class activities, positive/negative occurrences, etc. These notes can be used to inform and validate your assessment.
5. Tick the appropriate boxes on the observation tool while you observe the class.

At the end of the lesson:

6. Thank the teacher for allowing you to observe the lesson

¹³ Acknowledgement: This instrument was adapted from a previous study by T-TEL, Ghana.

SECTION A: INTRODUCTION

No.	Question	Response
A1	Date of Observation/Interview	_ _ / _ _ / _ _ DD / MM / YR
A2	Name of Observer	
A3	Name of school	
A4	Region (Use codes)	
A5	District (Use codes)	
A6	Subject being observed	English 1 Math 2 Science 3 Other, specify 4
A7	Level of the class being observed	Lower primary 1 Upper Primary 2 JHS 3
A8	Observation Start Time _ _ : _ _	Observation End Time _ _ : _ _

SECTION B: TEACHER COMPETENCIES

TEACHER OBSERVATION TOOL

- Tick the '**0. Not Observed**' box if the teacher did not attempt the listed action/strategy.
- Tick '**1. Poor Demonstration**' if the action/strategy was observed but not appropriate or executed adequately.
- Tick '**2. Satisfactory Demonstration**' if the action/strategy was appropriate and executed well.
- Tick '**3. Excellent Demonstration**' if you observed best practice for appropriateness and execution (the end result being student participation and higher order thinking).
- "Tick the '**0. Not Observed**' box if the teacher did not attempt the listed action/strategy".

Teacher competencies:	Example actions or strategies to watch for:	0	1	2	3
1. The teacher uses strategies to open the lesson.	a) Asks pupils/students what they remember from last class				
	b) Gives a summary of what pupils/students have learned in the previous lesson				
	c) Ask students questions to see what they know about the topic				
	d) Gives a clear introduction to the topic of the lesson				
	e) Shares learning objectives with pupils/students				
	f) Other:				
2. The teacher uses strategies to provide clear explanations for new concepts, knowledge or skills.	a) Gives an explanation				
	b) Gives examples				
	c) Gives a definition(s)				
	d) Gives a demonstration				
	e) Gives clear instructions				
	f) Follows the process 'I do', 'We do', 'You do'				
	g) Other:				
3. The teacher uses different teaching and learning materials to facilitate learning.	a) Manages white board / chalk board effectively				
	b) Real-life objects / Hand-made objects				
	c) Pictures / Posters				
	d) Newspapers / Magazine articles				
	e) Textbooks				
	f) Reference / Supplementary books				
	g) Teacher has pupils/students bring resources to the lesson				

	h) Radio or other electronic audio/visual device, including tablet, phone, etc.				
	i) Other:				
4. The teacher uses different interactive methods/ activities to facilitate learning.	a) Question and answer (where students also ask questions of teacher)				
	b) Whole class dialogue (e.g. discussion, debate, brainstorming)				
	c) Small group work (e.g. discussion, debate, brainstorming)				
	d) Class assignment				
	e) Student presentation of their work, answer or discussions				
	f) Role-play				
	g) Games				
	h) Story telling				
	i) Lecturette				
	j) Songs, poems or rhymes				
	k) Other:				
5. The teacher asks pupils/ students a range of questions during the lesson.	a) Asks questions that require remembering (What do you remember about...? How do you define....? What is....?)				
	b) Asks questions that require analysing and evaluating (How can you classify...? Why do you think...? Can you compare with? What are the advantages/disadvantages of ...? What is the most important...? Is there a better solution than...? Can you suggest an alternative? Can you predict the outcome if...?)				
	c) Handles student responses well (Is kind/patient with students who may be shy or afraid to speak out, sufficient wait time, doesn't immediately correct wrong answers)				
	d) Asks follow-up questions to build on student responses (How did you come to this answer? Why do you think this? Does everybody agree or disagree? Is there an alternative answer?)				
	e) Uses strategies to increase participation during questioning (e.g. calls on students randomly, doesn't require students to raise their hands, gives praise for effort)				

	f) Asks question before calling student student's name to answer.				
	g) Other:				
6. The teacher promotes and manages whole class discussion.	a) Uses brainstorming (asks for pupils'/students' views/ideas on a topic)				
	b) Writes pupils'/students' views/ideas down				
	c) Organises/summarises students' views/ideas				
	d) Builds on what is said				
	e) Encourages pupils/students to build on what is said				
	f) Amount of time students talk = amount of time the teacher talks/lectures				
	g) Other:				
7. The teacher uses strategies to organise and execute group or pair work. (Be sympathetic to large class sizes when marking).	a) Has students re-arrange seating to promote student to student work				
	b) Demonstrates strategies for group formation (e.g. assigns groups/pairs randomly, through interest/ability/friendship)				
	c) Demonstrates strategies for group management (e.g. assigning roles, randomly selecting somebody to report back to class)				
	d) Has pupils/students discuss a topic with each other in groups or pairs				
	e) Uses Think-Pair-Share (students think individually, discuss with a partner and then shares views/ideas with the class)				
	f) Has groups/pairs complete the same activity/task				
	g) Has groups/pairs complete <i>different</i> activities/tasks				
	h) Walks around the class to monitor and provide support to groups/pairs				
	i) Other:				
8. The teacher uses strategies to assess pupil/student understanding.	a) Uses questions to see whether pupils/students understand				
	b) Uses peer-assessment (students discuss/mark each other's work)				
	c) Uses pupil/student self-assessment				
	d) Uses pupil/student presentations to see whether they understand				
	e) Assess through individual work assignment/homework				
	f) Has students vote on different answers to see if they understand				

	<p>g) Uses traffic lights (red-yellow-green cards for groups to indicate how they are dealing with a task)</p>				
	<p>h) Other:</p>				
<p>9. The teacher gives constructive feedback on student's answers, work or effort.</p>	<p>a) Gives verbal feedback on whether students are correct/incorrect</p>				
	<p>b) Corrects wrong answers kindly</p>				
	<p>c) Gives verbal feedback on how students can improve (You would benefit from looking at This area needs improvement... You could do this to strengthen...)</p>				
	<p>d) Gives feedback on what students have done in previous classes</p>				
	<p>e) Gives praise for correct answers/good effort</p>				
	<p>f) Other:</p>				
<p>10. The teacher uses techniques to address mixed abilities.</p>	<p>a) Uses peer teaching</p>				
	<p>b) Gives individual coaching/support</p>				
	<p>c) Has students give each other support in mixed ability groups</p>				
	<p>d) Gives more/different activities to keep excellent students challenged</p>				
	<p>e) Other:</p>				
<p>11. The teacher applies all teaching methods equally to boys and girls.</p>	<p>a) Gives equal chance to girls and boys to ask/answer questions</p>				
	<p>b) Assigns leadership roles equally to girls and boys in lesson activities</p>				
	<p>c) Makes sure girls and boys participate equally in activities</p>				
	<p>d) Is patient with girls and boys who may be shy or afraid to speak out</p>				
	<p>e) Checks if both girls and boys equally understand the lesson</p>				
	<p>f) Provides constructive feedback to both girls and boys in class</p>				
	<p>g) Other:</p>				
<p>12. The teacher uses strategies to challenge traditional gender roles and norms.</p>	<p>a) Uses teaching materials that do not show traditional gender roles (e.g., women cooking/cleaning and men working)</p>				
	<p>b) Points out and discusses traditional gender roles that appear in books/materials (eg., discusses how gender roles are problematic)</p>				
	<p>c) Actively uses examples (in exercises or activities) that <i>challenge or reverse</i> traditional gender roles (e.g., show men cooking)</p>				

	d) Makes girls and boys feel confident to challenge traditional gender roles in general (eg., boys should cook, girls should be doctors)				
	e) Other:				
13. The teacher uses strategies to effectively manage a class (particularly a large class).	a) Uses strategies to get the class ready for learning that do not require shouting, threats or violence				
	b) Makes the lesson interesting to draw the attention of almost all pupils/students in class				
	c) Is able to divide and share resources amongst all the pupils/students				
	d) Establishes clear rules and expectations for pupil/student conduct				
	e) Other:				
14. The teacher has clearly paid attention to the seating arrangements in the classroom.	a) Children who need more support (physical/learning disabilities) are sitting at the front				
	b) Girls and boys are equally mixed throughout the classroom				
	c) Quiet and more vocal students are equally mixed throughout the classroom (quiet pupils are <i>not</i> all sitting at the back)				
	d) Other:				
15. The teacher uses strategies to close the lesson.	a) Reviews core concepts/skills from the lesson				
	b) Asks if pupils/students have any more questions				
	c) Asks final questions to gauge if students understand what was taught				
	d) Other:				
16. The teacher has a clear, high-quality lesson plan or activity plan for parts of the lesson.	a) Lesson objectives were completed during the observed lesson				
	b) Lesson plan demonstrates the use of appropriate teaching and learning materials				
	c) Lesson plan demonstrated the use of interactive methods				
	d) Time was allocated appropriately for each part of the lesson				
	e) Has example questions or exercises for the class				
	f) Lesson plan demonstrated a logical development for the lesson				
	g) Other:				

ENUMERATOR NOTES-Please record anything that might help put meaning to the Teacher Lesson Observation.

Appendix D: Selected Districts, Sample Sizes and other statistics

Table D1: Selected Districts and Sample Sizes

Region	Survey districts	No. of NQTs posted in 2016/17	Sample size for survey	Teacher Observation Districts ¹	No. of obs	IDIs/FGDs Districts	No. of IDIs/FGDs
Ashanti	Ahafo Ano South	134	30	Ahafo Ano South	6	Ahafo Ano South	5
	Ejura Sekyedumase	43	30				
	Atwima Nwabiagya	81	30				
Eastern	Upper Manya Krobo	82	30				
	Fanteakwa	50	30	Fanteakwa	6		
	West Akim	58	30				
Upper East	Kassena-Nankana East Municipal	69	25	Kassena-Nankana East Municipal	6	Kassena-Nankana East Municipal	5
	Bawku West	57	25				
	Bongo	163	25				
Northern	Kumbungu	76	23				
	Savelugu-Nanton	127	23	Savelugu-Nanton	6	Savelugu-Nanton	5
	West Mamprusi	63	23				
Volta	Nkwanta South	71	30				
	South Dayi	67	30	South Dayi	6	South Dayi	5
Brong Ahafo	Kintampo South	37	30	Kintampo South	6		
	Kintampo North	78	30				
Upper West	Nadowli	54	29	Nadowli	6		
	Wa West	46	29				
Western	Bibiani/Anhwiaso/Bekwai	50	29				
	Shama	48	29	Shama	6		
Central	Abura-Asebu-Kwamankese	47	26	Abura-Asebu-Kwamankese	6		
	Asikuma-Odoben-Brakwa	72	26			Asikuma-Odoben-Brakwa	5
Greater Accra	Ada West	27	10				
	Ga West Municipal	57	10	Ga West Municipal	6		
Planned sample size			632		60		25
Achieved sample size			647		60		22
Response rate (%)			102.4		100.0		88.0

Table D2: Colleges of Education attended by sampled NQTs

Name of College of Education	Female		Male		Total	
	N	%	N	%	N	%
Abetifi Presbyterian College of Education	3	1.0	0	0.0	3	0.5
Accra College of Education	3	1.0	6	1.8	9	1.4
Ada College of Education	4	1.3	13	3.8	17	2.6
Agogo Presbyterian College of Education	6	1.9	0	0.0	6	0.9
Akatsi College of Education	3	1.0	5	1.5	8	1.2
Akrokerri College of Education	6	1.9	12	3.5	18	2.8
Atebubu College of Education	6	1.9	6	1.8	12	1.9
Bagabaga College of Education	10	3.2	16	4.7	26	4.0
Berekum College of Education	3	1.0	8	2.4	11	1.7
Bimbila E.P. College of Education	4	1.3	3	0.9	7	1.1
Dambai College of Education	7	2.3	5	1.5	12	1.9
Enchi College of Education	1	0.3	2	0.6	3	0.5
Evangelical Presbyterian College of Education	5	1.6	7	2.1	12	1.9
Fosu College of Education	5	1.6	6	1.8	11	1.7
Gbewaa College of Education	9	2.9	14	4.1	23	3.6
Holy Child College of Education	10	3.2	1	0.3	11	1.7
Jasikan College of Education	4	1.3	1	0.3	5	0.8
Kibi Presbyterian College of Education	5	1.6	13	3.8	18	2.8
Komenda College of Education	11	3.6	23	6.8	34	5.3
Mampong Technical College of Education	0	0.0	12	3.5	12	1.9
Mount Mary College of Education	13	4.2	14	4.1	27	4.2
Nusrat Jahan Ahmadiyya College of Education	6	1.9	21	6.2	27	4.2
Ofinso College of Education	1	0.3	9	2.7	10	1.5
Ola College of Education	18	5.8	0	0.0	18	2.8
Peki College of Education	2	0.6	5	1.5	7	1.1
Presbyterian College of Education (Akropong)	6	1.9	19	5.6	25	3.9
Presbyterian Women's College of Education	10	3.2	0	0.0	10	1.5
SDA College of Education	15	4.9	14	4.1	29	4.5
St John Bosco College	7	2.3	23	6.8	30	4.6
St. Francis? College of Education	9	2.9	17	5.0	26	4.0
St. Joseph College of Education	3	1.0	8	2.4	11	1.7
St. Louis College of Education	19	6.2	0	0.0	19	2.9
St. Monica's College of Education	25	8.1	1	0.3	26	4.0
St. Theresa's College of Education	8	2.6	0	0.0	8	1.2
Tamale College of Education	14	4.5	15	4.4	29	4.5
Tumu College of Education	5	1.6	7	2.1	12	1.9
Wesley College of Education	14	4.5	4	1.2	18	2.8
Wiawso College of Education	12	3.9	9	2.7	21	3.2
Private CoE	16	5.2	20	5.9	36	5.6
Total	308	100.0	339	100.0	647	100.0

Table D3: Distribution of Teacher Competencies

Teacher competencies (actions / strategies)	Not observed		Poor		Satisfactory		Excellent	
	N	%	N	%	N	%	N	%
<i>Use of strategies to open lesson</i>								
Asks pupils/students what they remember from last class	12	20.0	7	11.7	18	30.0	23	38.3
Gives a summary of what pupils/students have learned in the previous lesson	11	18.3	7	11.7	24	40.0	18	30.0
Ask students questions to see what they know about the topic	4	6.7	9	15.0	23	38.3	24	40.0
Gives a clear introduction to the topic of the lesson	1	1.7	4	6.7	30	50.0	25	41.7
Shares learning objectives with pupils/students	6	10.0	11	18.3	23	38.3	20	33.3
<i>Use of strategies to give clear explanations</i>								
Gives an explanation	2	3.3	3	5.0	29	48.3	26	43.3
Gives examples	1	1.7	5	8.3	24	40.0	30	50.0
Gives a definition(s)	4	6.7	5	8.3	20	33.3	31	51.7
Gives a demonstration	3	5.0	6	10.0	21	35.0	30	50.0
Gives clear instructions	4	6.7	8	13.3	28	46.7	20	33.3
Follows the process 'I do', 'We do', 'You do'	10	16.7	13	21.7	18	30.0	19	31.7
<i>Use of different teaching materials</i>								
Manages white board / chalk board effectively	1	1.7	-	-	20	33.3	39	65.0
Real-life objects / Hand-made objects	29	48.3	7	11.7	12	20.0	12	20.0
Pictures / Posters	33	55.0	6	10.0	12	20.0	9	15.0
Newspapers / Magazine articles	48	80.0	6	10.0	4	6.7	2	3.3
Textbooks	23	38.3	5	8.3	13	21.7	19	31.7
Reference / Supplementary books	29	48.3	6	10.0	15	25.0	10	16.7
Teacher has pupils/students bring resources to the lesson	42	70.0	8	13.3	4	6.7	6	10.0
Radio or other electronic audio/visual device, including tablet, phone, etc.	52	86.7	4	6.7	2	3.3	2	3.3
<i>Use of different interactive methods</i>								
Question and answer (where students also ask questions of teacher)	10	16.7	14	23.3	24	40.0	12	20.0
Whole class dialogue (e.g. discussion, debate, brainstorming)	24	40.0	7	11.7	18	30.0	11	18.3
Small group work (e.g. discussion, debate, brainstorming)	41	68.3	10	16.7	6	10.0	3	5.0

Class assignment	20	33.3	4	6.7	24	40.0	12	20.0
Student presentation of their work, answer or discussions	18	30.0	13	21.7	23	38.3	6	10.0
Role-play	48	80.0	8	13.3	2	3.3	2	3.3
Games	52	86.7	3	5.0	3	5.0	2	3.3
Story telling	45	75.0	5	8.3	6	10.0	4	6.7
Lecturette	33	55.0	10	16.7	12	20.0	5	8.3
Songs, poems or rhymes	41	68.3	3	5.0	5	8.3	11	18.3
Ask range of questions during lessons								
Asks questions that require remembering	12	20.0	9	15.0	29	48.3	10	16.7
Asks questions that require analysing and evaluating	11	18.3	7	11.7	30	50.0	12	20.0
Handles student responses well	3	5.0	6	10.0	26	43.3	25	41.7
Asks follow-up questions to build on student responses	9	15.0	10	16.7	25	41.7	16	26.7
Uses strategies to increase participation during questioning	2	3.3	9	15.0	28	46.7	21	35.0
Asks question before calling student student's name to answer.	-	-	2	3.3	20	33.3	38	63.3
Promotes and manage whole group discussion								
Uses brainstorming (asks for pupils?/students? views/ideas on a topic)	18	30.0	13	21.7	16	26.7	13	21.7
Writes pupils'/students' views/ideas down	19	31.7	14	23.3	13	21.7	14	23.3
Organises/summarises students? views/ideas	8	13.3	14	23.3	26	43.3	12	20.0
Builds on what is said	6	10.0	15	25.0	27	45.0	12	20.0
Encourages pupils/students to build on what is said	6	10.0	14	23.3	23	38.3	17	28.3
Amount of time students talk = amount of time the teacher talks/lectures	6	10.0	15	25.0	28	46.7	11	18.3
Strategies to organise and execute group/pair work								
Has students re-arrange seating to promote student to student work	24	40.0	6	10.0	18	30.0	12	20.0
Demonstrates strategies for group formation (e.g. assigns groups/pairs randomly, through interest / ability / friendship)	42	70.0	9	15.0	6	10.0	3	5.0
Demonstrates strategies for group management	42	70.0	10	16.7	6	10.0	2	3.3
Has pupils/students discuss a topic with each other in groups or pairs	42	70.0	10	16.7	5	8.3	3	5.0
Uses Think-Pair-Share (students think individually, discuss with a partner a	40	66.7	9	15.0	11	18.3	60	100.0
Has groups/pairs complete the same activity/task	40	66.7	10	16.7	9	15.0	1	1.7

Has groups/pairs complete different activities/tasks	45	75.0	10	16.7	5	8.3	60	100.0
Walks around the class to monitor and provide support to groups/pairs	13	21.7	15	25.0	17	28.3	15	25.0
Uses strategies to assess students' understanding								
Uses questions to see whether pupils/students understand	8	13.3	26	43.3	26	43.3	60	100.0
Uses peer-assessment (students discuss/mark each other's work)	44	73.3	8	13.3	6	10.0	2	3.3
Uses pupil/student self-assessment	39	65.0	7	11.7	9	15.0	5	8.3
Uses pupil/student presentations to see whether they understand	30	50.0	8	13.3	10	16.7	12	20.0
Assess through individual work assignment/homework	14	23.3	7	11.7	25	41.7	14	23.3
Has students vote on different answers to see if they understand	40	66.7	8	13.3	9	15.0	3	5.0
Uses traffic lights (red-yellow-green cards for groups to indicate how they	46	76.7	11	18.3	1	1.7	2	3.3
Use constructive feedback on student's answers								
Gives verbal feedback on whether students are correct/incorrect	1	1.7	8	13.3	19	31.7	32	53.3
Corrects wrong answers kindly	1	1.7	2	3.3	21	35.0	36	60.0
Gives verbal feedback on how students can improve	12	20.0	7	11.7	23	38.3	18	30.0
Gives feedback on what students have done in previous classes	18	30.0	13	21.7	14	23.3	15	25.0
Gives praise for correct answers/good effort	4	6.7	3	5.0	19	31.7	34	56.7
Use of techniques to address mixed abilities								
Uses peer teaching	42	70.0	7	11.7	7	11.7	4	6.7
Gives individual coaching/support	22	36.7	7	11.7	24	40.0	7	11.7
Has students give each other support in mixed ability groups	38	63.3	3	5.0	9	15.0	10	16.7
Gives more/different activities to keep excellent students challenged	23	38.3	13	21.7	14	23.3	10	16.7
Applies all teaching methods equally to males and females								
Gives equal chance to girls and boys to ask/answer questions	10	16.7	7	11.7	16	26.7	27	45.0
Assigns leadership roles equally to girls and boys in lesson activities	22	36.7	6	10.0	13	21.7	19	31.7
Makes sure girls and boys participate equally in activities	4	6.7	6	10.0	19	31.7	31	51.7
Is patient with girls and boys who may be shy or afraid to speak out	2	3.3	2	3.3	20	33.3	36	60.0
Checks if both girls and boys equally understand the lesson	4	6.7	3	5.0	21	35.0	32	53.3
Provides constructive feedback to both girls and boys in class	2	3.3	7	11.7	22	36.7	29	48.3

<i>Use strategies to challenge traditional gender roles and norms</i>								
Uses teaching materials that do not show traditional gender roles	37	61.7	8	13.3	6	10.0	9	15.0
Points out and discusses traditional gender roles that appear in books/mate	45	75.0	9	15.0	2	3.3	4	6.7
Actively uses examples (in exercises or activities) that challenge or reverse traditional gender roles (e.g. show men cooking)	40	66.7	7	11.7	7	11.7	6	10.0
Makes girls and boys feel confident to challenge traditional gender roles in society	42	70.0	3	5.0	8	13.3	7	11.7
<i>Use strategies to effectively manage class</i>								
Uses strategies to get the class ready for learning that do not require shouting, threat or violence	4	6.7	7	11.7	26	43.3	23	38.3
Makes the lesson interesting to draw the attention of almost all pupils/students	2	3.3	9	15.0	25	41.7	24	40.0
Is able to divide and share resources amongst all the pupils/students	24	40.0	11	18.3	12	20.0	13	21.7
Establishes clear rules and expectations for pupil/student conduct	5	8.3	13	21.7	27	45.0	15	25.0
<i>Clearly pays attention to seating arrangement in the classroom</i>								
Children who need more support (physical/learning disabilities) are sitting	26	43.3	6	10.0	17	28.3	11	18.3
Girls and boys are equally mixed throughout the classroom	3	5.0	8	13.3	20	33.3	29	48.3
Quiet and more vocal students are equally mixed throughout the classroom	3	5.0	6	10.0	26	43.3	25	41.7
<i>Use of strategies to close the lesson</i>								
Reviews core concepts/skills from the lesson	7	11.7	16	26.7	25	41.7	12	20.0
Asks if pupils/students have any more questions	5	8.3	7	11.7	29	48.3	19	31.7
Asks final questions to gauge if students understand what was taught	9	15.0	9	15.0	25	41.7	17	28.3
<i>Use of a high quality lesson/activity plan</i>								
Lesson objectives were completed during the observed lesson	4	6.7	10	16.7	24	40.0	22	36.7
Lesson plan demonstrates the use of appropriate teaching and learning mater	5	8.3	12	20.0	28	46.7	15	25.0
Lesson plan demonstrated the use of interactive methods	2	3.3	8	13.3	35	58.3	15	25.0
Time was allocated appropriately for each part of the lesson	5	8.3	12	20.0	27	45.0	16	26.7
Has example questions or exercises for the class	3	5.0	5	8.3	24	40.0	28	46.7
Lesson plan demonstrated a logical development for the lesson	2	3.3	6	10.0	31	51.7	21	35.0