Achieving Quality Teacher Education in Nigeria: Learning from Global Trends/Best Practices

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Abstract

To achieve quality teacher education in Nigeria, the metaphor of a quality teacher must be redefined to the metaphor of a midwife of thought. By this metaphor, quality teachers are those who help students birth logical and accurate thinking skills. This metaphor gives four characteristics of a quality teacher: viewing the learning environment as the thinking environment, viewing learning as a joyful and interesting process, viewing incorrect answers as learning opportunities, and asking many open-ended questions. Five recommendations for teacher education programs in Nigeria are given to enable student teachers to adopt the midwife metaphor of a quality teacher and gain more practical experience in teaching. First, teacher educators must model quality teaching by using teaching practices that embody the teaching metaphor of a midwife of thought. Second, small class sizes are needed. Third, examinations should be largely replaced with performance assessments to more effectively assess students' teaching skills. Fourth, the final research project should be replaced with a project that requires student teachers to practice teaching skills that they will use on a regular basis. Finally, student teachers should spend more time in intensely supervised practicum and teaching practice exercises throughout their teacher education.

Introduction

This paper is grounded on two rather indisputable facts. First, teachers have a profound impact on student achievement (e.g., Chetty, Friedman, & Rockoff, 2013; Filmer, Molina, & Stacy, 2015; Hattie, 2003). Second, effective teaching requires considerable professional skills (e.g., Darling-Hammond, 2006) that can be developed through teacher education programs (Wright, 2017). However, debates and controversies arise at the point of defining quality teaching (Sayed & Ahmed, 2015). Oxford University Press (2018) defines quality as "The standard of something as measured against other things of a similar kind." The standard by which quality teaching is measured is the topic of considerable debate globally (e.g., Cochran-Smith et al., 2012) and locally (e.g., Adeosun, Oni, Oladipo, Onuoha, & Yakassai, 2009; Okoli, Ogbondah, & Ekpefa-Abdullahi, 2015).

This paper will first argue that a paradigm shift is needed in Nigeria by redefining a quality teacher as one who is a midwife of thinking skills. Based on this thesis, the paper will recommend four characteristics of a quality teacher. Second, this paper will make five recommendations for teacher education programs so they can achieve quality teacher education.

Redefining a Quality Teacher

The need to redefine a quality teacher can be effectively illustrated by a traditional story about Ipaja the tortoise.

> *One day, Ijapa the tortoise decided to become the wisest creature in the whole universe. He did not want any other creature challenging his superior wisdom, so he decided to take a journey around the entire world and collect all of the wisdom in the world. As he traveled around the world, he collected all of the wisdom that he found into a calabash so he could protect it and keep it for himself.*
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> *When Ijapa the tortoise was satisfied that he had collected all of the wisdom from every corner of the world, he decided to hide the calabash so nobody could steal any wisdom from him. He thought and he thought about where he could hide the calabash of wisdom so nobody would have access from it, and finally decided to hide the calabash at the top of a very tall palm tree. To get to the top of the palm tree, Ijapa tied the calabash to a rope and hung it around his neck, carefully placing the*

calabash of wisdom on his chest. Then he began to climb the tall palm tree. But the calabash of wisdom was between Ijapa and the tree trunk, making it difficult to climb. He would climb a few feet up the tree, and then slide right back down. Ijapa tried climbing the tree again and again and again, and every time he would slide back because the calabash of wisdom would interfere with his efforts.

Meanwhile, a snail that was slowly, slowy passing by stopped to watch the tortoise. After watching Ijapa slide down the tree yet again, the snail suggested, "Why don't you move the calabash to your back instead of hanging it in front?" Ijapa the tortoise tried this, and easily climbed to the top of the tree.

When he paused at the top of the tall palm tree, Ijapa realized how futile his effort was. He had collected all of the wisdom in the world, and yet the snail had proven wiser than him. Ijapa threw the calabash onto the ground where it smashed into hundreds of pieces. All of the wisdom escaped from the calabash and dispersed back throughout the world. From that day, there was a saying that "The tortoise is wise but the snail is wiser."

This traditional story illustrates two key themes related to achieving quality teacher education in Nigeria. The first theme, which will be addressed later in the paper under recommendations for teacher education programs, is that Ipaja the tortoise had wisdom, but his wisdom was confined to a calabash. Snail, on the other hand, had wisdom that was practical and able to solve problems. This story compels us to consider whether wisdom is truly wisdom if it is only contained within a calabash – or in a teacher's brain. Or, rather, perhaps wisdom is truly wisdom when it is put into practice.

The second theme of this traditional story illustrates the underlying thesis of this paper. Ipaja the tortoise repeatedly tried to climb the palm tree and yet failed. He continued to fail, not because of a lack of effort or a lack of skill in climbing a tree, but because of one small problem: he had a wrong mindset about how to climb the tree. Once that mindset was corrected by snail and he moved the calabash from his chest to his back, then tortoise easily accomplished his goal.

The main thesis of this paper is that the problem of poor quality teaching in Nigeria is not due to a lack of effort or a lack of skill, but due to an outdated mindset about what defines a quality teacher and, as a result, the practice of teaching. Teachers' beliefs about teaching and learning impact the type and quality of instruction that they provide for students (van Hover & Yeager, 2004). Current beliefs about quality teaching in Nigeria are misguided, which results in poor quality instruction. Once beliefs about quality teaching change, then quality teaching and teacher education can be achieved in Nigeria.

A teacher's beliefs about teaching and learning can be represented by a metaphor, which is a figure of speech in which one thing is regarded as symbolic as something else (Oxford University Press, 2018). Metaphors influence beliefs and attitudes that guide behavior. A teacher's metaphor for teaching can influence how, what, and why teachers teach (Emerson & Mansvelt, 2015). Therefore, analysis of the metaphors that are used to describe quality teaching can be a useful tool for redefining a quality teacher.

Current beliefs about teacher quality take a traditional view illustrated by the metaphor of pouring water into an empty bucket. The traditional view is that a quality teacher is a source of knowledge, and as such, the role of the teacher is to share that knowledge with her students. In other words, the teacher has a bucket full of knowledge, and the teacher's role is to pour that knowledge into the empty buckets, or brains, of the students. This view of a quality teacher is effective if knowledge is scarce. In previous generations, knowledge was hidden in rare and inaccessible repositories such as a library. Therefore, students had to go to school to access to this knowledge from their teachers.

However, times have changed. Knowledge is not now limited to the privileged few who have access to libraries or an education. Instead, knowledge is widely accessible on the internet (Murphy & Carmody, 2015). Any individual who needs knowledge about any topic can simply type their question into the Google search engine, and she will receive thousands of answers within seconds. Quality teachers are no longer knowledge experts who have access to privileged information that must be poured into students because students can get this information from the internet.

As the proverb says, *if the rhythm of the drum beat changes, the dance step must adapt.* As teachers, we must adapt to the changing times. We must change our mindsets about a quality teacher and the role of the teacher. Quality teachers are no longer buckets full of knowledge because the ocean of knowledge is now abundantly available as a result of the information revolution. Students do not need to receive facts, definitions, dates, and formulas from teachers. Instead, students need to learn how to think. As a result, a quality teacher needs to be redefined from the source of knowledge to an individual who teaches students how to think (Adeosun, 2014).

There are many metaphors that can be used to illustrate the redefined quality teacher: a facilitator of thinking, a designer of learning experiences, a strategist for student thought. The metaphor that will be used in this paper is that a quality teacher is like a midwife who helps students deliver the ability to think. A midwife is a trained, skilled professional who has a deep understanding of the birthing process and, as such, is able to provide guidance, assistance, support, and care during the delivery of a baby (Grand Valley Midwives, 2014). During labor, the midwife creates a conducive environment for the safe delivery of the baby. She also monitors the delivery process, and has the skill and training to know what to do if complications arise during the birthing process. As the mother is going through labor, the midwife provides the support and assistance that the mother needs to successfully deliver the baby. The midwife also offers encouragement to the mother, who is going through the pain and hard work of birthing a baby.

A teacher who is training students to think logically and accurately is like a midwife who is helping to birth a baby. When a baby is being birthed, it is not the midwife who does the labor of birthing, it is the mother. Likewise, in education, it is not the teacher who should be doing the labor of thinking, it is the students. Therefore, during class, the students should be working harder than the teacher because the students need to practice the hard work of thinking. A proverb says *you learn how to cut down trees by cutting them down.* The more the teacher explains and gives notes for students to copy, the less those students are thinking. Therefore, instead of teachers doing the labor, teachers should be creating a conducive learning environment so that students practice thinking, just as midwives create a conducive environment for the mother to deliver. More on creating a conducive learning environment will be discussed in the next section on characteristics of a quality teacher.

Just as the midwife has expert knowledge of the birthing process, so too the quality teacher should have expert knowledge of learning and the thinking process. This allows the teacher to monitor the learning process just as the midwife monitors delivery. A teacher then has the skill to correct students and provide instruction when needed. As the midwife provides support and assistance to the mother in labor, the teacher too provides the support and assistance that students need to learn and think well.

The type of support and assistance that teachers provide as students are learning to think is similar to the support and assistance that parents give to infants when they learn to walk. First, parents hold an infant's hands to provide balance as the infant practices her steps. Then the parent will stand just a few feet away from infant as she takes one or two unsteady steps by herself, and the parent is prepared to catch the infant when she stumbles. Finally,

after an infant has developed her strength and balance with parental support, then the parent stands back and watches with pride as the infant walks by herself.

It is important to consider not just what parents do when they teach an infant to walk, but also what parents do not do. A parent does not lecture the infant on the physiology of walking. The infant does not memorize the muscles that are used in walking. Parents do not provide lists of advantages and disadvantages of walking. To teach a child to walk, parents do not give knowledge and facts about walking. Instead, parents provide the conditions and support that an infant needs to walk.

There are also two ways that children could be taught to cook. Children could be taught knowledge and facts about cooking. In this method of teaching, children would get out their notebooks and copy lists of ingredients in different dishes that are written on the blackboard in the lecture hall. They might have to memorize the origin of each ingredient in a dish, and the chemical reactions that take place to produce a particular dish. Children might be lectured on the cultural significance of each dish, and the times at which each dish is best served. But this is not how children learn to cook. Instead, children enter the kitchen and first observe their mother as she cooks the dish. Then, children are given small tasks to help in the preparation of a dish, such as washing and cutting the vegetables. Once children have mastered this, then they are allowed to start adding ingredients to the pot as the mother monitors and gives instructions and correction where necessary. Finally, children are able to cook a dish independently.

In both learning both walking and cooking, children are not taught facts, but are given opportunities to practice their skills while being monitored and guided. This process needs to be adopted for teaching students learn how to think. When children are taught to cook by being guiding in the practice of cooking, they naturally learn the other important facts associated with cooking: they learn the ingredients in the dish not by memorizing the list of ingredients, but by practically adding the ingredients to the pot. Children learn the cultural significance of dishes and the best time to serve dishes as they are actually serving them to family and friends.

In a classroom where a quality teacher is one who is a midwife of thought, students are given opportunities to practice thinking skills just as children are given opportunities to practice walking and cooking. As students are given practice in thinking, they will also learn the knowledge and information that is necessary for them to be successful in life. Instead of pouring facts and information into the notebooks and brains of students, quality teachers need to create learning experiences that give students practice in thinking.

For example, when teaching the nature of verbs to pupils, the traditional teacher will give the definition of a verb and then list examples of verbs for pupils to copy. Then the teacher might ask pupils to identify verbs, but the pupils will simply name the verbs that the teacher has already given. This follows the metaphor of teachers pouring knowledge from their bucket into the pupils' empty buckets. The teacher is doing the labor of delivering a baby and is not allowing the pupils to do the hard work of thinking.

Instead, a quality teacher should provide a learning experience that allows pupils to do the hard work of thinking about verbs, and then provide support and assistance as pupils are thinking and learning for themselves. To do this, the teacher could begin by giving examples of verbs for children to actually perform, such as jump, wave, and bow. As the pupils are doing the actions of the verbs, they are coming to a better understanding of the concept of a verb. Then the teacher could present the definition of a verb and ask pupils to give examples of verbs. However, to get the pupils to actually think instead of just repeat, the teacher should not allow the pupil to give examples that she has already presented. If a pupil gives an incorrect answer, then the teacher lovingly corrects her by either explaining why her answer is not a verb or asking guiding questions so the child can see for herself why her answer is

not the verb. Then the teacher can give a series of nouns and verbs and ask children to say whether the word is a verb or not. For example, the teacher could ask, "Is *zebra* a verb?" To ensure that the pupils are thinking, the teacher should ask children to justify their answer by explaining why. "Why do you say that a *zebra* is not a verb?" A right answer does not necessarily prove that a child has been thinking. However, a pupil's explanation that a zebra is an animal and not an action shows that the pupil has really been thinking about verbs.

This vignette of teaching verbs illustrates the four characteristics of a quality teacher when using the midwife metaphor. These characteristics include viewing the learning environment as the thinking environment, viewing learning as a joyful and interesting process, viewing incorrect answers as learning opportunities, and asking many open-ended questions. These four characteristics will be described in more detail in the next section.

Characteristics of a Quality Teacher

The first characteristic of a quality teacher is that he views the learning environment as the thinking environment. Oftentimes people tend to think of the learning environment as including the school's physical facilities such as classroom space, lighting, and ventilation; sturdy benches; and perhaps colorful posters on the wall. While these physical facilities are important, they are not the essence of the learning environment. There is an important distinction between the physical facilities and the learning environment. The physical environment consists of material objects such as the classroom structure, benches, and classroom decor. The learning environment consists of the conditions that are necessary for students' learning, and these tend to be non-material. For example, a conducive learning environment requires a classroom atmosphere where students feel comfortable asking questions. A conducive learning environment also consists of a teacher who has high expectations for student learning and thinking, is available to support students as they are learning, and provides challenging learning experiences that require students to think deeply. There are a few material objects that are necessary for a conducive learning environment, but these are primarily books or technology that provides the information that students need to think about. Because the phrase *learning environment* is so often misunderstood, perhaps it is better to reframe this concept as the thinking environment. The teacher is the primarily individual responsible for the thinking environment. Therefore, the quality of the thinking environment depends on the quality of the teacher.

A second characteristic of a quality teacher is that she views learning as a joyful and interesting process. This was illustrated in the vignette above when the teacher instructed the pupils to demonstrate different verbs such as jumping and waving, which would foster joy and interest with the children. Many view learning as a tedious process that must be endured. Teachers who believe this will prepare dull and dry lessons, and students must struggle and suffer as they complete their studies. However, there can be great joy in learning (Copple & Bredekamp, 2009). This is most obvious in young children, whose joy in discovery and learning is clearly written in their smiles and laughter when they learn something new. Even seasoned academics feel deep satisfaction when they learn something new or complete a research project. The quality teacher incorporates this joy, enthusiasm, and interest in learning into their thinking environments. This point is noted with the caveat that there is a balance that must be achieved in education. While learning is joyful and engaging, learning is also hard work, and there are times when the learner must grit his or her teeth and do the hard work that is necessary for future learning and growth. However, there is too much suffering and too little joy in most Nigerian classrooms. This point, too, is similar to the birthing process, which includes both the hard work and pain of labor, as well as the deep joy and satisfaction in the new life that has come into the world.

The third characteristic of a quality teacher is that he views incorrect answers and mistakes as an opportunity for learning. Oftentimes, a mistake can be a more powerful learning opportunity than getting the answer correct the first time. Piaget was intrigued by the mistakes that children made because he believed that their errors helped explain their thinking (Green & Piel, 2010). Learning oftentimes results from making mistakes, being corrected, and then learning from the mistake. Mistakes are opportunities for students to learn and improve their thinking. Therefore, a quality teacher allows mistakes and incorrect answers, but then provides gentle feedback and correction so that students can learn from their mistakes.

The final characteristic of a quality teacher is that she asks many open-ended questions. In a classroom where students think – and not just memorize facts – students should be doing more talking than the teacher. This is similar to how the mother does the hard work in delivery, not the midwife. The teacher accomplishes this by spending less time explaining and more time asking open-ended questions. Open-ended questions are those in which students have to truly think about the answer and not just repeat information that the teacher just stated. Effective questions can be one of the most effective and powerful teaching strategies (Woolfolk, Winne, & Perry, 2016). In a classroom where students are learning to think, they will give wrong answers sometimes. However, as noted above, wrong answers provide an opportunity for the teacher to correct students' misconceptions. Likewise, students might not give complete and thorough answers, but this then gives the teacher an opportunity to provide a more complete explanation.

Recommendations for Teacher Education Programs

Considerable changes are needed in teacher education programs in order to achieve quality teacher education in Nigeria based on the redefined metaphor of a quality teacher. These changes should aim to accomplish two objectives. The first objective is to enable student teachers to reframe their metaphor of a quality teacher to that of a midwife of thought. Additionally, it was noted above that the quality teacher gives his students opportunities to practice their skills while being monitored and guided. This principle must also be adopted in teacher education. Therefore, the second objective for the changes in teacher education programs is to enable student teachers to not just gain head knowledge of effective teaching strategies, but to have practical opportunities to put their skills into practice (Darling-Hammond, 2006). In the traditional story about Ipaja the tortoise, the practical wisdom of the snail was more effective than the tortoise's wisdom confined in a calabash. Likewise, the more practical teacher education programs are, the better quality teachers they will produce. Education must be better integrated with teaching practice in order to achieve quality teacher education.

The first recommendation for teacher education is that teacher educators must model quality teaching by using teaching practices that embody the metaphor of a teacher as a midwife of thought. Teacher educators need to change their teaching practices in teacher education programs before student teachers can change their teaching practices in primary and secondary schools. Teachers teach as they were taught (Goodwin et al., 2014). If teacher educators only give facts, knowledge, and lists to student teachers, thereby embodying the bucket metaphor of quality teaching, then student teachers will do the exact same thing when they become teachers. Instead, teacher educators need to change their pedagogy to be much more practical. Student teachers should be required to think deeply about how students learn, to think and reason about the curriculum that they will be teaching, and to critically examine different pedagogies that can most effectively teach that curriculum. Only giving notes to student teachers in class reflects the bucket metaphor of quality teaching. Instead, student teachers should analyse case studies of learning, analyse the quality of lessons planned by

teachers, evaluate videos of lessons and offer suggestions for improvement, observe pupils, and interview teachers and parents (Darling-Hammond, 2006). These types of practical activities are much more effective in preparing quality teachers. Furthermore, teacher educators need to ask more open-ended questions in classes. These discussions are effective for helping student teachers to truly understand, as well as apply what they are learning to their future teaching career. For example, when student teachers need to be aware of advantages and disadvantages of different teaching practices, the students should use their reasoning skills to identify the advantages and disadvantages. Students may give incorrect answers, but these are teachable moments that the teacher educator can use to help correct students' understanding. Then teacher educators can fill in gaps in student teachers' understanding by providing explanations where student teachers' explanations were incomplete.

Learning activities that require student teachers to think and reason about teaching and put their skills into practice require intensive preparation and attention by teacher educators. Therefore, the second recommendation is that teacher education programs must maintain small class sizes. In teacher educator programs with large class sizes, oftentimes the only reasonable option for teaching is lecture, which is counter-productive to the objective of redefining student teachers' metaphor to a midwife of thought. A midwife cannot deliver babies for 80 different mothers at the same time. Quality teacher education requires small class sizes so that teacher educators can plan learning activities that foster thinking and provide the experience that student teachers need in teaching practices.

If teacher education programs are restructured to facilitate thought and give student teachers more practical experiences in teaching, then the role of examinations in teacher education programs should also be reconsidered. Examinations effectively measure students' knowledge, which is the goal for learning in the bucket metaphor of a quality teacher. However, if a quality teacher is redefined as a midwife who delivers thought, then examinations are not typically the best method of assessing thought. Instead, performance assessments should be used more frequently than examinations in teacher education programs. For example, I teach a class entitled *Drama in Early Childhood Education*. Based on the two different metaphors of teaching, there are two different goals for my class. According to the bucket metaphor for a quality teacher, the goal of this course would be to transfer knowledge of the theory of how drama could be effective in early childhood education. According to the midwife metaphor for a quality teacher, the goal would be to enable students to develop the skills and experience of planning and implementing learning opportunities that incorporate dramatic activities. An examination would assess student teachers' knowledge of the theory based on the bucket metaphor, but it is quite challenging to create examination questions that assess whether they can plan and implement effective learning opportunities that incorporate dramatic activities. A performance assessment where each student plans dramatic play activities is a much more effective way to assess students' thinking and teaching skills than an examination. In summary, the third recommendation for teacher education programs is that examinations should be largely replaced with performance assessments.

In line with the objective that student teachers should have more practical opportunities to put their skills into practice, the teaching practice experience should also be redesigned. Student teachers should not just be learning to pass exams, which currently is the main emphasis in teacher education programs in Nigeria; but should be learning to make them quality teachers in practice. This requires more opportunities for student teachers to enter a primary or secondary school classroom throughout their teacher education program, from the first term to the last term. In every class, ranging from educational psychology to teaching methods courses, student teachers should have opportunities to see and experience

how what they are learning in the classroom relates to teaching practice. This can be accomplished in many different ways. First, student teachers should have practicums where they conduct observations that are focused on identifying principles that they are learning about in their courses. Second, student teachers should participate in more microteaching exercises. Third, student teachers can have shorter practicums more frequently throughout their education in addition to the teaching practice exercise. For the teaching practice exercise, Darling-Hammond (2006) recommends at least 30 weeks of intensely supervised teaching practice exercises. She notes that the phrase *intensely supervised* was purposefully chosen. Simply participating in teaching practice exercise is not effective in producing quality teachers. Instead, student teachers should be supervised regularly, perhaps on a weekly basis, and given in-depth feedback that will allow them to improve their teaching practices. In summary, the fourth recommendation for teacher education programs is that student teachers should spend more time in practicum and teaching practice exercises in the classroom, and should be intensely supervised during these experiences.

Finally, the concept of the final project should also be reconsidered in teacher education programs. The final project in many teacher education programs is a research project. However, teachers practically never conduct research, unless they decide to pursue a further degree. Why are student teachers – and the supervisors of these students – suffering to do something that they will never do again? Are the skills that are needed to conduct a research project the most important skills that student teachers need to develop? There are other more important skills that student teachers need to develop to be quality teachers, such as planning learning activities. Therefore, the project should be reconceptualized to give student teachers practice on tasks that teachers do on a regular basis. While there are different forms of a final project that would be more beneficial to preparing quality teachers, I suggest that the research project should be replaced with projects where students translate curriculum into engaging, relevant, and effective learning activities. Perhaps more advanced students could even develop new curriculum, creating objectives and learning activities for topics that are not commonly taught in schools but are relevant for effectively living in Nigerian society, such as peace education or prevention of malaria. In summary, the fifth recommendation for teacher education programs is that the final research project should be replaced with a project that requires student teachers to practice skills that they will use on a regular basis as they are teaching.

Conclusion

In conclusion, the quality teacher should be redefined to the metaphor of a midwife of thought. Using this metaphor, quality teachers are those who help their students birth logical and accurate thinking skills. Thinking skills are more necessary in today's society because knowledge is readily available, whereas thinking skills take time, practice, and guidance to develop. To enable students to birth thinking skills, quality teachers view the learning environment as a thinking environment, view learning as a joyful and interesting process, view mistakes as learning opportunities, and ask many open-ended questions.

Teacher education in Nigeria needs to be restructured to enable student teachers to reframe their metaphor of a quality teacher to that of a midwife of thought as well as have more practical opportunities to practice their teaching skills. To this end, teacher educators need to model the midwife metaphor of a quality teacher. Class sizes in teacher education programs also must be kept small so teacher educators can plan learning activities that enable student teachers to have practical opportunities to practice teaching skills. The role of examinations and the type of final project must also be reconsidered based on the midwife of thought metaphor. Finally, student teachers need opportunities to participate in focused

observations, microteaching, practicums, and intensely supervised teaching practice throughout their entire experience in a teacher education program.

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