

Apprenticeship Learning and Adolescents' Acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda: Implications for Situated Learning

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Abstract

This study aimed at investigating situated learning and adolescents' acquisition of social and cognitive skills in Bamenda in the North West Region of Cameroon. In this regard the researchers sought to provide answers to two important research questions namely: 1) How does modeling influence the acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda?; 2) How does coaching influence the acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda? The study anchored on three theories which are: Lave and Wenger's (1991) situated Learning theory, Brown, Allan Collins and Paul Duguid's (1989) Situated learning cognition and Vygotsky's (1978) sociocultural perspective of learning. A concurrent nested mixed method design with the help of questionnaire and interviews was used for data collection from some 20 adolescent apprentices learning their trade at tailoring workshops in Bamenda. Findings of the study

revealed that modeling influences adolescents' acquisition of social and cognitive skills. It was also revealed that coaching had a significant influence on the acquisition of social and cognitive skills among adolescent apprentices. A number of recommendations were made to masters/expert tailors, apprentices and the government. As far as master/expert tailors are concerned, they should understand that learning within such an informal context does not always require direct instruction but that it is usually accidental. In this regard, the onus is on them to ensure that they demonstrate clearly the tasks they would eventually expect the novice apprentices to perform so that they can keenly pay attention, observe and eventually perform to the best of their abilities.

Keywords: apprenticeship learning, social and cognitive skills, situated learning

1. Introduction

The late 1970s and 1980s saw a paradigm shift whereby interest gradually moved from the once heralded cognitive revolution to a much more pragmatic and social aspect of thinking and learning (Brooks, 1991; Suchman, 1987). Attention also shifted towards the inequalities in educational setting experienced by groups from cultural and linguistic minorities. Talking of inequalities in educational setting, it is important to note that this study was conducted in Bamenda, in the North West Region of Cameroon. Cameroon is a Bilingual Country with two exclusive linguistic groups and two systems of education, one system for the French speaking Cameroonians and another system for the English speaking Cameroonians which is evident in Bamenda where this study was conducted. Situated learning started gaining much interest when experts like Dreyfus, Vygotsky and Lave expanded their research on the said phenomenon. Situated approach to learning is based on the premise that the context, the culture and the immediate situation in which learning takes place are primordial (Brown, 1989). Situated learning is an alternative to the conventional approaches to learning (behaviourist and cognitivist) as it offers the learner (in this case the apprentice) the latitude to be able to observe more experienced others perform a task, is often coached and receives some scaffolding on how to do it. Moreover, the apprentice is encouraged to imitate the performance and to engage in reflection so that he is able to, on his own reproduce that performance. Situated cognition believes that learning is a process that gives flexibility to the apprentice (learner) to co-create knowledge with the tutor (master) or more experienced learners as they interact in what Lave and Wenger (1991) calls community of practice. In this context the role of the expert and the novice can be highlighted as the expert is considered to be the more knowledgeable teacher who is there to guide the novice and scaffold learning as the novice keenly observes the necessary steps needed to perform a task. McDermott and Hood (1982, p. 234) draws our attention to the fact that cognitive and behavioural components of learning often engage in experimental procedures that constraint the involvement of the learner in the learning process and that it is better to engage the learner (apprentice) in an approach (situated learning) that gives the learner the flexibility to make use of a wide range of procedures to simplify, alter, and negotiate tasks.

Tailoring workshops within the Bamenda municipality give young apprentices the opportunity to acquire tailoring skills to be able to practice on their own. The young

apprentice, while learning his/her trade, is exposed to a context whereby he/she is supposed to mutually interact with other novice learners, interact with the masters or more experienced others and be able to learn. Unfortunately, most of these young apprentices, lack the necessary social skills needed to fully participate. They cannot interact with others, cannot ask for help or give help to others, are unable to cooperate with others when confronted with challenging tasks. Moreover, their social cognition is limited. They find it difficult to understand how others are feeling or what they are thinking. They do not reflect, think or reason while solving difficult problems at work. These limitations in social and cognitive aspects, could be due to the fact that as novice learners who are quite naïve, they have not been taught skills on how to observe experts perform, how to imitate these experts and they have not been properly coached by the more knowledgeable others to understand the best possible approaches or ways to interact with others and learn. As such when confronted with learning tasks, they find it difficult to imitate and reproduce the said tasks. The master/trainer does not make the environment conducive for learning and must constantly ask the apprentice to watch/observe what others are doing, try to reproduce it at a later time. Unfortunately, this is more often than not a myth than a reality.

This problem is very relevant within our context today because a lot of learning in our society is informal and does not necessarily happen in school. Many parents in Bamenda in particular and Cameroon in general are so obsessed with the idea of sending their children to formal educational setup. They want their children to graduate from primary, secondary, high schools and if possible university so that at the end of the day they can gain some white collar jobs and be contributing members to the society. They want their children to speak English like like a native will speak it and solve mathematical problems. The question to pose is are these realistic skills for daily living in a context like Cameroon where problem solving skills to navigate one's way in society is a sine qua non? Unfortunately the dreams of many such parents never come to fruition given that majority of their children who are sent to do formal education struggle to grapple with the demands of formal education. Many of them struggle not only with language problems, but they equally find it difficult to master difficult concepts in school which are farfetched from their daily realities. Many of them end up dropping from school and seek solace in learning a trade in an informal sector like tailoring where they often begin as apprentices. The reality is that our environment believes more in learning by observation whereby parents are able to start socializing their children from a very young age to observe every activity they do and eventually put to practice what they have observed. This is in pure contrast with the formal educational setup which requires learners to master difficult cognitive concepts and grammar that are of very little practical value to them. When a mother sits in the kitchen to do cooking, she ensures that the children (especially the female children) are observing every step of the way what they are doing. Eventually, in the absence of the mother or when the mother has gone to the farm, there is assurance that she will come home and meet food, given that the children are able to now put into practice what they have learned by cooking for their mother to come home and eat. This analogy, puts into context the kind of skills that young apprentices in tailoring workshops acquire and how these skills are acquired. These young apprentices who find themselves in tailoring workshops are more comfortable learning in an informal context by observing others perform tasks and eventually

try out their skills by performing the observed tasks themselves. This is unlike in formal education that puts more strain on their cognitive functioning.

1.1 Importance of the Problem

This problem is of importance because our parents, as well as caregivers, are gradually forgetting how best children learn within the African context. It is often said that charity begins at home. In the context of learning, cognitive theorists have often emphasized that learning should begin from known to unknown. Bruner (1960) clearly articulates this in his spiral curriculum whereby he emphasizes that any subject can be taught in some intellectually honest form to any child at any stage of development. In the views of Bruner, children can learn any complex material if properly structured. Looking at Bruner's views on the iconic, enactive and symbolic aspects of learning, it is quite glaring that emphasis has always been on how these concepts are applicable within the formal learning environment. Very little is known on how the enactive, iconic and symbolic stages of cognitive representation happens within an informal learning context like tailoring workshops. A lot of focus has been on how children in formal educational setting move from one cognitive stage to the other. That is from the enactive, to the iconic and finally symbolic. Within a context whereby children often learn by doing like ours and whereby they often learn by observation, it will be interesting to focus more specifically on the enactive aspect of knowledge representation to see how young apprentices, within a situated learning context can learn, basically by manipulating objects (objects in this case has to do with cutting the materials for sewing into required dimensions and actually manipulating the machine to sew the dress to the required taste of the customer).

Lave and Wenger's (1991) situated learning approach fits well within a context whereby children are socialized to learn by doing and to observe how their parents do things and later put it into practice. Many children who drop out of formal education in Bamenda can still learn some social and cognitive skills within an informal context. Many young people think that by dropping out of school all is lost and they have no place in the society. This is far from the truth if we understand that most of these school dropouts end up learning a trade like tailoring in an informal setting. It is of interest, therefore, to investigate how these youths who drop out of school can continue acquiring social and cognitive skills by learning their trade in an informal context that gives them the latitude to utilize not only their strengths (observing others) in learning but also to learn within the confines of their comfort zones (interacting with others who share similar experiences with them). It is often said that if teachers teach the way children learn then learning will be effective. In effect, the point is being made that the best way children learn in our African context is how they have been socialized. In other words, children learn best by observing others and eventually putting to practice what they have observed. Lave and Wenger (1991) calls this legitimate peripheral participation. A study that anchors on how adolescent novice apprentices learn by observation projects another way of learning in our society and calls attention to the fact that informal learning can also be glorified in the same way we glorify formal learning so that the school dropouts can still see themselves as contributing members of the society.

1.2 Literature Review

Apprenticeship is a practice that gives the learner the opportunity to acquire theoretical knowledge about any given occupation with on the job practical experience. Macleod and Hughes (2006) maintain that it is pertinent for apprenticeship training to focus on, and build a solid foundation of occupational capacity and to give impetus to competence necessary to project oneself throughout working life. The Modern Apprenticeship Advisory Committee (2001) has put together some elements that must be taken into cognizance for us to better conceptualize and understand the meaning of apprenticeship. According to them, there must be an agreement between the employer and the person undergoing training. Secondly, apprenticeship requires a blend of learning on and off the job. Finally, The Modern Apprenticeship Advisory Committee (2001) believes that the public must recognize that the trained apprentice has acquired the necessary learning/competence, if not proficiency in the said occupation or profession. Looking at the sociological perspective, Lave & Wenger (1991); Greeno (1997) are of the opinion that generalizing knowledge to a novel and new context, especially one in which learning did not take place is relatively farfetched. That is, a theory of instruction which posits that the culture, context and authentic activities are what gives relevance to learning. In other words, the learner (apprentice in this situation) is inseparable from the environment in which learning takes place. These authentic activities are what makes the formal learning context different from the informal learning context because within the context of cognitive apprenticeship, the novice learns by placing his/her hands on concrete tools and information in the learning environment. The learner must be given the opportunity to deal with concrete activities rather than abstract ones within this environment. Moreover, it is a given that the environment in which learning occurs is the same environment in which it will be applied. Both the environment (the people around it like the master, other advanced apprentices, experienced and novice learners) all interact in a mutual process to co-construct knowledge. Collins, Brown, & Newman (1987), in adding their voice to the aforementioned views, observe that within the process of cognitive apprenticeship, the novice learner must be given the opportunity to observe, enact and practice the relevant complex skills necessary to move from the periphery to the center. In advancing this view, Bandura's (1997) Social Learning theory must be invoked here because the learner in this context is expected to be attentive, retain the information in memory, be eventually given the platform to perform or practice that activity when the right motivation is in place.

Ryan and Unwin (2001) are in tandem with The Modern Apprenticeship Advisory Committee in terms of on the job training, employer role, recognized vocational qualification. In the views of Ryan and Unwin (2001) apprenticeship is a well-organized program aimed at preparing one for a vocation, often sponsored by an employer and gives the trainee the flexibility to juggle between part time education and on-the-job training. Ryan and Unwin (2001) add that such a program must have as end product a recognized vocational qualification that must have taken about two years to complete. By arguing that cost of training has to be shared by the employer and the state, Fuller and Unwin (2003) were able to add another dimension to the concept of apprenticeship. According to them, it is the employer's responsibility to take charge of the wages of the apprentice while the state ensures

that the training components are in order.

The theoretical underpinning of this study hinges on Lave and Wenger's (1991) situated Learning theory which posits that learning should focus on the product, the activity and the culture. In their view, learning takes place within a community of practice, whereby the apprentice or novice learner, interacts on equal level with the expert or tutor and through observation, scaffolding, coaching, reflection, etc, the novice is able learn by gradually beginning at the periphery before moving to the center. Lave and Wenger (1991) posit that within the community of practice, the novice learner, is able to acquire expert knowledge when they are given the opportunity to practice within the learning context. These authors were able to project the role of legitimate peripheral participation within this community of practice. This legitimate peripheral participation highlights the unintentionality of the learning environment. Unintentionality because most of the learning in tailoring workshops and in other informal setting is accidental. Research suggests that towards the close of the twentieth century, apprenticeship as a concept in nonformal teaching and learning context was gaining grounds as teachers sought to investigate its features that were capable of bringing success. In this regard, there was little doubt that the proponents of situated learning like Lave & Wenger (1991) made the case for learning to take cognizance of the physical and social context in which it occurs. Herrington, Herrington, Sparrow, & Oliver (1998) posit that there are nine essential elements within the environment necessary for situated learning to take place. These elements are: an authentic or genuine context, complex authentic activities, multiple perspectives, expert performance, coaching and scaffolding, opportunities for collaboration, reflection and articulation, and authentic assessment. The present study, however, investigates particularly the elements of modeling and coaching within the context of Bamenda, in Cameroon to see if the findings arrived at in studies in most Western contexts will be replicated.

Another theory, closely related to situated learning theory that has provided the theoretical starting point for this study is the situated cognition of Brown, Allan Collins and Paul Duguid (1989). This theory emphasizes the social nature/context of learning and makes the case that it is difficult to separate learning from the learning environment. Looking at the African context, and in particular the context of Bamenda where this study was conducted, learning through social interaction (especially observation) is a way of life which begins during the early stages of socialization when parents expect their children to always observe what they are doing, master the process and eventually puts it into practice. The African setup is a communal one which gives room for learning by interacting with others and observing them. This theory, just like the situated learning theory of Lave and Wenger maintains that learning is a function of the activity, the context, and culture. In this regard, it is glaring that for the novice apprentice to acquire expert knowledge and be able to cut and sew dresses on his/her own in tailoring workshops, he/she must constantly interact socially with others who have acquired expert knowledge within the community of practice. Such social interaction, has the potential to bring about unintentional learning.

Vygotsky's sociocultural perspective of learning shares similar ideas with the situated learning perspective as his focus on social interaction where more knowledgeable other

(expert in this context) is able to mediate and scaffold knowledge within a social milieu so that the novice (apprentice) learner is able to go beyond his/her zone of proximal development. Vygotsky (1978) had long emphasized that for the learner to develop higher mental functions, it is necessary to participate in society's activities. In this case priority must be given to the social context of learning. This is exactly the context in which the apprentices in tailoring workshops find themselves as they must interact with other people in the context like their masters, collaborators, other apprentices to learn as they engage in social speech with these significant others while at the same time, are able to observe and imitate their performance in solving problems. Lave (1988) emphasized the need for active social actors, located in time and space. Learners must not be passive but actively engaged in the activity they are doing with others by observing, imitating, acting reflexively and recursively, and eventually participating in the activity (Lave, 1988). As far as Lave is concerned learning has to be approached from the perspective of apprenticeship as exemplified by a study she did with Librarian tailors who were able to expertly learn their craft with little or no direct instruction. In Lave's view, learning in most tailoring workshops (like the one she researched on in Liberia) was more incidental in the course of participation in the activity at different phases of production rather than a single phase. This study of Lave is similar to the present study in that they are both looking at situated learning in tailoring workshops. However, the Librarian context has specificities in culture that are different from that of Cameroon. Moreover, the present study focuses on adolescent apprentices who, in most cases have dropped out of school and see tailoring as a trade that does not weigh heavily their mental skills (or better still does not place huge demand on cognitive abilities) as does purely academic tasks. Finally, while Lave's study looked at situated learning in these tailoring workshops from a more incidental point of view, the present study, however, seeks to investigate how social and cognitive skills can be directly imparted by the master or more experienced apprentices through modeling and coaching.

Given that learning involves changes in an environment constructed through mutual interaction, learning cannot be said to locate within the individual in the same way that a child does not learn to ride a bike but engages in mutual interaction with the bike. In essence the child rides with the bike. Riding is not in the child. Emphasis is on the interaction between child and bike. As Lave and Wenger put it, "We have thus situated learning in the trajectories of participation in which it takes on meaning" (1991, p. 121). In essence, such situated learning whereby the learner is involved in a mutual interaction with more knowledgeable others in a community of others is a social activity (Lave & Wenger, 1991). By emphasizing that within the context of learning one has to change his/her social role as learning unfolds, Lave, draws our attention to the concept of legitimate peripheral participation whereby the apprentice comes to the learning context with little or no knowledge, begins at the periphery and gradually moves to the center (community of practice). In this case, the apprentice is only able to attain the zone of proximal development when he must have moved to the center from the periphery, is actively engaged in co-constructing knowledge in social interaction with others as a full-fledged contributing member in an activity rather than engaging in isolated activities. In Lave and Wenger's (1991) view, knowledge is not owned by a single individual. Rather knowledge is in the community

of practice whereby both the master (expert) and apprentice (novice) are part of this community and must mutually interact for learning to take place. This brings to mind Tchombe's (2019) Mediated Mutual Reciprocity Theory which opines that both the learner and the teacher are in a give and take relationship and that in most cases the learner sets the pace. To emphasize the equal role that both the learner (apprentice) and master (tutor) have in the process, Lave (1991), draws our attention to the concepts of "newcomers" and "old-timers" within the community of practice rather than novice vs expert. In this context, it is evident that in most tailoring workshops, the social environment/context is imperative in how roles and identities get mutually constructed. It is informal and the master may not play the role a teacher in a formal classroom does but creates an enabling environment for learning to take place through social interaction, and ensuring that the tailoring workshop reflects a true, if not genuine community of practice. This is important in the present study given that most of the apprentices are adolescents who have dropped out of school because of the formal nature of learning that places too much demand on their mental capacities. By emphasizing a social model of learning in tailoring workshops, this study has brought in a more acceptable dimension of learning for these apprentices who, in most cases have to associate play, humour and a more conducive social climate to learning. Such a context makes learning a fun and enjoyable activity, which contrasts sharply with the more formal context of learning with stringent rules and regulations to be employed, often making learning cumbersome and boring.

Looking at some empirical studies on situated learning, focus has mostly been on how it affects students' knowledge acquisition. Zheng (2010), for example, undertook a study where he was able to compare learning within a traditional context and a situated learning context. The study was able to establish that situated learning has a significant effect on learners' performance. The present study, however, leans more towards a situated learning approach by looking at learners who may have been frustrated by the traditional setup in the formal context of learning, dropping out and finding solace in a more informal learning situation, giving them the latitude to utilize their strengths (learning by observation and interaction with peers and more knowledgeable others). In a similar study, Bell et al. (2013) were more interested in looking at how situated learning theory can improve preservice science teachers' use of technology in a training program. Their study established that situated learning theory provided a good base for preservice teachers to be able to incorporate technology in their teaching. Last but not the least, Catalano's (2015) study sought to identify the effectiveness of situated learning in the transfer of learning from the context in which learning occurs (classroom context) to a completely neutral environmental context. Results of this study shows that situated learning gave learners the latitude to transfer learning to a new and practical real-world context. Looking at the present study, it is very possible that the skills acquired by the apprentices in tailoring workshops, especially social skills can equally be transferred from the learning context (tailoring workshops) to new and unrelated context given that they are social beings who will meet opportunities to interact with people in diverse social contexts. These apprentices will also face challenges elsewhere in life and they will have to use the social and cognitive skills learned in the tailoring workshops to navigate such challenges.

1.3 Research Questions

This study sought to investigate the role of apprenticeship learning in the acquisition of social and cognitive skills within a situated learning context. Specifically, the study sought to provide answers to two research questions making use of a mix method approach. The research questions formulated for this study are: 1) How does modeling influence the acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda?; 2) How does coaching influence the acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda? The concurrent nested mixed method design was considered necessary to facilitate investigation of this problem. In this regard, both quantitative and qualitative phases of data collection were employed. Looking at the quantitative phase, structured questionnaires were designed by the researcher to solicit objective information from the respondents. Qualitatively, interviews were conducted with respondents to get their in-depth and subjective views of apprenticeship learning in tailoring workshops.

2. Method

This section focuses on the procedures employed in the investigation. Specifically, focus will be on the research design, population of the study, sample of the study, sampling technique, instruments used to collect data and ethical considerations. To begin, the researcher will be addressing the design used in this study in the next subsection.

2.1 Research Design

The design that was considered most appropriate for this study was a concurrent nested mixed method design that employed both qualitative and quantitative approaches in seeking answers to the two research questions. However, emphasis was placed on the qualitative data given that the interviews allowed the respondents to freely express themselves. The interviews also give the researcher the opportunity to collect additional data from non-verbal expressions of the respondents. Quantitatively, the researcher employed a close ended (structured) questionnaire in getting respondents' objective views on how they acquire social and cognitive skills in tailoring workshops in Bamenda. Qualitatively, the researcher conducted semi-structured interviews to get the subjective views of the respondents on their situated learning experiences in tailoring workshops, how they learn and how they acquire social and cognitive skills. This design was considered appropriate because in cases where the researcher could not get all necessary information via a structured questionnaire, the interviews provided the respondents the latitude to go in-depth with their responses and further gave the researcher the opportunity to probe and get more information. However, one main problem with this design is that the respondents often feel shy being interviewed. Moreover, the respondents have the tendency to be bias in their responses and to give socially desirable responses. Overall, the strong point of this mix method design lies in the fact that the strengths of one outweigh the weaknesses of the other.

2.2 Participants (Subjects)

In this study the researcher worked with 20 adolescent male and female apprentices between the ages of 14 and 18. These were adolescents who had all dropped from school (primary

school) and who considered formal schooling too demanding for them in terms of the mental aspects. These apprentices were all in their first year in the tailoring workshops. Given that they had been to primary school they could speak English (though not fluently). However, they were more comfortable communicating in pidgin English, which is a language often used by the common man in the streets of Bamenda. So adolescents below 14 and above 18 years were excluded from the study. In addition, adolescents who had spent more than a year in the tailoring workshops were excluded given that the researcher intended to work with novice apprentices who were still learning their trade. Only apprentices who had dropped out of school were included in the study given that the researcher also sought to look at the gap, or better still the difference between the formal and informal setup. In this regard, apprentices who had never been to formal school were excluded from the study.

2.3 Sampling Procedures

The 20 apprentices were purposively selected from 10 tailoring workshops in the Bamenda Main market. Purposive sampling was employed in this study because the researcher only wanted to identify and work with school drop outs (those who have had phobia for formal education because of its cognitive demands and who may otherwise embrace a more informal, social and flexible approach to learning). Moreover, the researcher only wanted to work with adolescents within the ages of 14 to 18, who are in their first year of learning their trade. This criterion was considered important because the first year often presents them with challenges (both cognitive and social) that they have to solve. At this stage, friendships are still developing and some of them have to learn skills of interaction from others within the group. In short, it is a stage for them to begin learning both social and cognitive skills.

2.3.1 Sample Size

As stated earlier a sample of 20 adolescents was used in this study. In order to justify the sample size for this study, the authors subscribed to the views of Julie et al (2018), who postulated that sampling in qualitative research tend to be small so that it can support the depth of the case-oriented analysis which is fundamental to the mode of inquiry. This view is important given that, although this study made use of a mix method approach, it leans more towards the qualitative interviews. They also went further by stating that, qualitative samples are designed to be purposive. There is greater efficiency in a purposive sampling compared to random sampling in qualitative research given that the sample is chosen with a certain criterion in mine. In this study the phenomenon under study warranted the researcher to choose school dropouts within the ages of 14 and 18 who are in the first year of learning their trade as tailors. Brannen and Collard (1982), on their part hold that for a researcher to decide on the number of qualitative interviews that will be enough for the study, the research has to take into account the aim of the study, type of research question and the methodology adopted in the study. They further add that so far as the study is not a comparative study or comparing cases, one case study could be just enough in a qualitative research. Mason (2010), adds his view on the issue of sample size by saying that he found a number of interview-based qualitative Thesis in Britain with a sample size ranging from 1 to 95 after going through a number of PhD thesis that were based on qualitative interviews. In the

present study, given that the researcher targeted 10 tailoring workshops, over three quarters of the adolescents aged 14 to 18 were selected from these 10 workshops.

2.3.2 Measures and Covariates

Two instruments were used to collect data for this study. These were a structured questionnaire and a semi structured interview guide. The structured questionnaire was constructed on a four point Likert scale with the respondents expected to choose from the options strongly agree (scored on 4), agree (scored on 3), disagree (scored on 2) and strongly disagree (scored on 1). The questionnaire was divided into three parts. Part A solicited respondents' demographic information like age, sex, level of education and duration as an apprentice. Part B had 6 items to measure the construct of Modeling while part C had 5 items which were indices to measure the construct of Coaching. The interview guide was semi-structured in nature and had 6 questions soliciting respondents' in-depth information on modeling and coaching. The guide gave the researcher the opportunity to probe further. To assess the validity of the items, the researcher handed the constructed items to other professors and experts in the department of Educational Psychology of the University of Bamenda to scrutinize and make sure that the items were relevant in measuring the constructs under investigation. These experts eliminated items that were considered not relevant in measuring the constructs. They also made sure that ambiguous words were eliminated and the language was kept as simple as possible. In conducting the interview, there were instances when the researcher resorted to speaking pidgin English with the respondents given that this is the language they understood best. Translation was done into English by the researcher who is from within the community and communicates fluently in both pidgin English and English language.

2.3.3 Ethical Considerations

Working with human subjects, especially minors often expose them to risks or potential harm. In this regard, certain ethical considerations were put in place to minimize, if not eliminate such potential harm. To begin, the researcher got the informed consent of the participants. The researcher had to get the consent of those who were minors from their parents, guardians and masters. Moreover, the researcher assured them of their privacy and confidentiality as the information gathered was not divulged to a third party but was used strictly for research purpose. Finally, the researcher ensured that the participants were not exposed to physical or psychological harm.

3. Results

In terms of data analysis, descriptively, the data were presented on tables in the form of frequencies and percentages. The apprentices were also interviewed to get a more in depth and qualitative perspective as far as the constructs of modeling and coaching are concerned. Analysis of the interview data took a thematic approach. The following tables illustrate analysis of the quantitative data from the questionnaire followed by analysis of the interviews.

3.1 Quantitative Data

Table 1. Effects of Modeling on the Acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda

SN	ITEMS	FQ / %	SA/A	SD/D	TOTALS
1	There is collaboration between the master and apprentices	Frequency	20	0	20
		%	100%	0%	100%
2	My master listens to me when I have difficulties performing a task	Frequency	17	3	20
		%	85%	15%	100%
3	My master often questions me to make sure I understand how to go about given tasks	Frequency	20	0	20
		%	100%	0%	100%
4	During work we do cooperate to perform given tasks	Frequency	18	2	20
		%	90%	10%	100%
5	I often get help from my master and colleagues when I face difficulties	Frequency	16	4	20
		%	80%	20%	
6	I have a good relationship with my colleagues and master at work	Frequency	17	3	20
		%	85%	15%	100%
	TOTAL AVERAGE	Frequency	18	2	20
		%	90%	10%	100%

Table 1 above captures responses based on the first research question. From the responses captured, all the 20 respondents (100%) agreed and strongly agreed that there is collaboration between the master and apprentices, 85% of the respondents strongly agreed and agreed to the fact that their master listens when they have difficulties performing a task with 15% strongly disagreeing and disagreeing. Based on the statement “my master often questions me to make sure I understand how to go about given tasks”, all of the 20 respondents strongly agreed and agreed to this view. Moreover, a majority (90%) of the respondents strongly agreed and agreed that during work they do cooperate to perform given tasks with 10% disagreeing and strongly disagreeing. Furthermore, 80% of the respondents strongly agreed and agreed that they often get help from their master and colleagues when faced with difficulties with 20% strongly disagreeing and disagreeing. Finally, 85% strongly agreed and agreed that they have a good relationship with their colleagues and master at work, whereas 15% of the respondents disagreed and strongly disagreed to that view. Overall it is evident that 90% of the respondents strongly agreed and agreed with the view that modeling influences their acquisition of social and cognitive skills positively.

Table 2. Effects of Coaching on the Acquisition of Social and Cognitive Skills in Tailoring Workshops in Bamenda

SN	ITEMS	FQ / %	SA/A	SD/D	TOTALS
1	My master helps demonstrate aspects of tailoring for your effective understanding	Frequency	14	6	20
		%	70%	30%	100%
2	I often observe my master as she performs tailoring tasks	Frequency	16	4	20
		%	80%	20%	100%
3	After observing for some time, I try to practice what I have observed	Frequency	17	3	20
		%	85%	15%	100%
4	I think and I reason before performing a task.	Frequency	20	0	20
		%	100%	0%	100%
5	When I observe my master perform a task, I am able to solve problems on my own	Frequency	13	7	20
		%	65%	35%	100%
	TOTAL AVERAGE	Frequency	16	4	20
		%	80%	20%	100%

Table 2 above captures responses based on the second research question. From the responses captured, 70% of the respondents agreed and strongly agreed that their master helps demonstrate aspects of tailoring for their effective understanding with 30% strongly disagreeing and disagreeing with this view. A similar trend was noticed with the second item where 80% of the respondents strongly agreed and agreed with the view that they often observe their master performs tailoring tasks while only 20% strongly disagreed and disagreed. Based on the statement “After observing for some time, I try to practice what I have observed”, 85% of the respondents strongly agreed and agreed with this view while only 15% strongly disagreed and disagreed. In terms of the fourth item, all the respondents (100%) strongly agreed and agreed that they think and reason before performing a task. Finally, a similar trend was noticed with the last item where 65% of the respondents strongly agreed and agreed that when they observe their master perform a task, they are able to solve problems on their own. Overall it is evident that 80% of the respondents strongly agreed and agreed with the view that coaching influences their acquisition of social and cognitive skills positively.

3.2 Qualitative Data

Analysis of the interviews was able to come up with a number of themes. These themes are: performing after observing, teaching by demonstration, learning by observation, thinking through the process, collaboration, assistance and assignments from master. As far as the theme of performance after observation is concerned, majority of the respondents (over 80%) were of the view that while in their tailoring workshops, they spent over ninety percent of the time observing what their master and other senior apprentices are doing. Thereafter, they are given the opportunity to perform a not so complex task based on what they have observed like cutting a material or taking measurements. One of the apprentices in her own words said

“I do not sit. I stand, watch my master use a measuring tape to take measurement of a customer’s dress, cuts it into the required dimension sews it and iron it.” Another apprentice remarked that “I also watch and see what the experienced tailors are doing. I follow them wherever they go in the workshop, I laugh with them, play with them, we often buy food and eat together. But when they are working on the machine to sew a dress, I watch them for a number of weeks. Afterwards, the master may start asking me to do little things like ironing the dresses, cutting the dresses, especially the simple ones.” Looking at the theme of teaching by demonstration, majority of the apprentices interviewed agreed that their masters and other senior apprentices, do their best to demonstrate by acting or performing, the task and thereafter, they equally ask the apprentice to do same. This requires them to be very attentive to the actions of the master.

As far as the theme of thinking through the process is concerned, majority of the apprentices at tailoring workshops indicated that they think through the problem-solving process before they try solving the problem. They indicated that in trying to solve a problem or to stitch a dress properly you must think through the design and the measurements before you start the process. They also have to think about the dimension, where to begin the cutting, as well as the appropriate fit. One apprentice remarked that “I am always afraid to cut the dress otherwise I will make a mistake. But my master encourages me to do it myself. He gives me less complicated dresses to cut. Sometimes he asks me to sit on the machine, place the thread in the needle and sew something. I always start by sewing with materials that have been rejected so that when I make errors it will not be costly.” Concerning the theme of collaboration, majority of the respondents said yes to the fact that they work in close collaboration with the other apprentices as well as more experienced tailors to carry out tasks and solve problems in tailoring workshops in Bamenda. In their views, they experience a cordial relationship in their workshops whereby they are able to cooperate with one another, ask questions in a respectful manner and get clarifications from the more capable apprentices. In the words of one apprentice she said “we even eat together, we play together and do a lot of things together. Sometimes when I face difficulties I am not afraid to ask one of the more experienced tailors to direct me on what to do. I am more comfortable asking questions from those who are of the same age as me.” They were clear on the point that when they face issues at a particular task, they turn to their fellow apprentices for help in solving the problem before they go to their master. As concerns the theme of assignments and assistance from the master, majority of the respondents agreed that their master always give them assistance when they are carrying out task at the workshop. Moreover, the master gives them assignments for them to do at the workshop or at home to see how far they can apply what they have learned. The respondents equally indicated that their master gives some minor tasks to them and helps them when they are faced with difficulties. This brings to mine Bruner’s theory of Discovery learning where he emphasized the need for learners to go beyond the given.

4. Discussion

It is important to recall that two research questions guided this study and the data collected quantitatively and qualitatively were intended to provide answers to the two research

questions. These research questions are: 1) How does modeling influence the acquisition of social and cognitive skills in tailoring workshops in Bamenda?; 2) How does coaching influence the acquisition of social and cognitive skills in tailoring workshops in Bamenda? It was found that both modeling and coaching influence the acquisition of social and cognitive skills in tailoring workshop in Bamenda. The present results align with Zheng (2010) who after comparing learning within a traditional context and a situated learning context established that situated learning has a significant effect on learners' performance. Also, in synergy with this result is Bell et al. (2013) who in their study on how situated learning theory can improve preservice science teachers' use of technology in a training program, found that situated learning theory provided a good base for preservice teachers to be able to incorporate technology in their teaching. The result arrived at in this study is also in tandem with Catalano (2015) who, after trying to identify the effectiveness of situated learning in the transfer of learning from the context in which learning occurs (classroom context) to a completely neutral environmental context came up with the finding that situated learning gave learners the latitude to transfer learning to a new and practical real-world context. The apprentices interviewed did acknowledge that they are able to interact with other colleagues (social skills) and that they are able to make friends and play with them outside of the tailoring workshops.

Results of this study also agree with Lave (1988) who in a study of Librarian tailors was able to conclude that these tailors were able to expertly learn their craft with little or no direct instruction. In Lave's view, learning in most tailoring workshops was more incidental as learners actively engage in observing, imitating, acting reflexively and recursively and eventually participating in the activity. Contrarily, in the present study, the apprentices expressed the view that learning to them was more intentional than incidental given that they are all expected to watch their masters and other experienced tailors, see what they are doing and eventually are asked to perform on their own. The results obtained here also concur with Lave and Wenger (1991) who maintain that knowledge is not owned by a single individual but rather knowledge is in the community of practice whereby both the master (expert) and apprentice (novice) are part of this community and must mutually interact for learning to take place. This, in essence means that the master is not playing the role of a teacher within a formal learning context, but is rather engaged in a mutual process with the apprentice (notice) in what Tchombe (2019) calls a give and take process for knowledge to be co-constructed. In this study, the give and take process is clearly evident given that the apprentice is not a passive observer but is given the opportunity to ask questions and gets clarifications as needed.

The respondents interviewed in this study acknowledged that there is intense collaboration between themselves and their master as well as with the more experienced apprentices. They are able to learn from the masters and more experienced apprentice by observing how they perform tasks and eventually try out on their own. The respondents equally agreed that they do not shy to ask questions to their master or more experienced tailors when faced with difficulties in performing given tasks. Looking at the construct of coaching, the respondents interviewed did express the view that their master and more experienced tailors are able to

demonstrate what they are expected to do by first of all doing it themselves and letting the apprentices observe their actions. They also expressed the view that they do not just jump into action but have to reflect, think on what to do, how to do it before doing it.

Given that the characteristics of these 20 selected apprentices are similar to those of other apprentices in tailoring workshops in Bamenda, the findings gathered from this study can be generalized to other apprentices of a similar age group in Bamenda. However, to generalize the results beyond Bamenda may be problematic given that out of Bamenda, the linguistic and other demographic characteristics and contextual realities may be different. This notwithstanding, the findings can be an eye opener to other apprentices learning their trade not only as tailors but as mechanics, carpenters etc in terms of making use of modeling and coaching in learning within a situated learning context.

It is also pertinent to highlight some of the limitations of this study so that the results can be appreciated within the context under which the study was conducted. First and foremost, the interviews were conducted in pidgin English and translated by the researcher into English. There is a possibility that certain words and facial expressions of the participants may have been interpreted otherwise. Secondly, in a qualitative research like this one, it is difficult to avoid the issue of bias. There is a strong possibility that given their age groups, adolescents are always searching for an identity and they will want to project an identity that is acceptable and likeable especially by adults. This may have prompted the respondents to provide more socially desirable responses that may not have suited the purpose of the research. Given the age of these respondents it is possible that some of the responses they gave may be out of excitement rather than actual real life experience. That notwithstanding, the results have to be understood within the context of the age group under investigation

Looking at the education system of Cameroon, most learners who face difficulties navigating their way through primary school by passing the First School Leaving Certificate often drop out of school and the only other option available to them is to learn a trade either as mechanics, carpenters, builders or tailors. Learning any of these trade takes place in informal settings which places little demands on the cognitive level of the learners unlike the formal schooling which warrants the learners to master some mathematical and other linguistic concepts. The informal nature of learning in these tailoring workshops makes it flexible for learning to take place as there is not just one teacher but anyone, even colleagues with expertise can play the role of teachers. It is worthy to take note of the fact that these tailoring workshops are situated in the Bamenda main market which is often very busy, noisy and filled with lots of customers. Such a location gives the apprentices the opportunity to meet and interact with people on a daily basis which further shapes and improves on their social skills. In an African setting whereby learning is a community thing, the location of these tailoring workshops in the busy market of Bamenda (unlike formal education which should be located in calm and quiet environment) provides further opportunities for these apprentices to learn within what Lave and Wenger (1991) calls a community of practices whereby learning begins from the periphery to the center. In the context of this study, it is assumed that, for most of these apprentices, their learning began at home in the family (the periphery) and gradually revolves to the center (the tailoring workshops in town) where you find a diversity

of people to learn not only cognitive skills but social skills. It suffices to say that by meeting people on your way to work in the busy markets of Bamenda provides a good test for the apprentices to demonstrate their social skills by greeting those they meet in an appropriate manner.

Overall, the results of this research have theoretical and practical implications. Apprentices in our society are often overlooked and thought of as people who have no future and who cannot learn. Given that most of them are school dropouts, it is often assumed that these categories of persons cannot learn. This study has been able to establish that by making use of an informal and situated learning context, these categories of persons can acquire not only social skills but cognitive skills as well, if the right attitudes, learning opportunities are put in place for them to learn via modeling and coaching. This study has proven that all is not lost for school dropouts and that there is light at the end of the tunnel if the necessary informal and enabling environment is put in place for them to learn social and cognitive skills. Theoretically, by articulating the views of Lave and Wenger (1991), Vygotsky, Jerome Bruner and Tchombe (2019), this study has brought to the limelight the idea that we can use our strengths to learn by making use of the context and the culture in which learning takes place. Secondly, social interaction is key to learning especially in informal contexts where we find apprentices like in mechanical workshops, carpentry workshops, tailoring workshops etc. Tchombe (2019) in her Mediated Mutual Reciprocity Theory has been able to establish that observation, community resources, and cultural amplifiers are imperative when it comes to learning in informal contexts. It has been proven in this study that by making use of local languages (pidgin in this case) the apprentices are able to learn from one another in a more flexible manner as they interact with one another. The results of this study have further practical implications as it has the potential to inform policy that could start recognizing, acknowledging and empowering the potential of most of these workshops that train apprentices. Policy makers and teachers can understand that it is important to incorporate more informal aspects into learning because it is within the learners' comfort zones and it gives them the flexibility to learn in the way they are comfortable.

5. Conclusion

This study has been able to establish that modeling and coaching lead to the acquisition of social and cognitive skills in tailoring workshops in Bamenda. The apprentices interviewed were able to mention cognitive skills like thinking through the process before performing a task which is vital to higher order learning. Moreover, social skills like collaboration, interaction performing after observing are acquired thanks to their ability to imitate what their master and other expert tailors are doing. Coaching gives the opportunity for the master to scaffold learning not in a direct way like a classroom teacher would do in a formal context but for the novice apprentice to start observing from the periphery before eventually moving to the center, by demonstrating his ability to pay attention to what the master is doing, store such a performance in memory, eventually reproduces it and gets motivated either intrinsically or extrinsically.

6. Recommendations

This study was able to make recommendations to apprentices in tailoring workshops, masters of tailoring workshops/experts, the government and the community of Bamenda. As far as apprentices are concerned, this study recommends that they should remember that coaching and modeling are only possible when they pay keen attention and are not easily distracted by external and irrelevant stimuli. They should always pay attention to what the master and other expert tailors are doing so that they can gradually move from the periphery (novice) to the center (expert). As far as the master/expert tailors are concerned, they should understand that learning within such an informal context does not always require direct instruction but that it is usually accidental. In this regard, the onus is on them to ensure that they demonstrate clearly the task they would eventually expect the novice apprentices to perform so that they can keenly pay attention, observe and eventually perform to the best of their abilities. As far as the government is concerned, it would be important for the government to give more youths the opportunities to learn their trade after dropping out of formal schooling by creating more vocational centers and if possible, engaging more experts to be involved in tailoring workshops to give the apprentices the best training possible to acquire the necessary social and cognitive skills.

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Appendix A

QUESTIONNAIRE

Dear Respondent,

I am conducting a study **on Apprenticeship learning and adolescents' acquisition of social and cognitive skills in tailoring workshops in Bamenda: Implications for Situated Learning**. This questionnaire is highly for research purpose. Therefore, any information you provide will be used strictly for that purposes. I will appreciate it if you provide honest and objective responses as requested. The information provided will be treated with utmost confidentiality.

Thanks for your kind collaboration

INSTRUCTION: Please answer by ticking (√) in the box or writing in the spaces provided.

PART A: DEMOGRAPHIC ASPECTS:

1. Sex Male female
- Age: 10-13 14 – 18 19– 22
2. Marital status: Married Unmarried
3. What is your education level? Tick the relevant answer (√)

FLS	<input type="checkbox"/>
OL/AL	<input type="checkbox"/>
B.sc/HND/BBA	<input type="checkbox"/>
Dropped out of primary school	<input type="checkbox"/>
Other qualifications	<input type="checkbox"/>

4. How long have you worked in the workshop as an apprentice? Tick the relevant answer (√)?

Below 1 year	<input type="checkbox"/>
1 - 5years	<input type="checkbox"/>
Above 5 years	<input type="checkbox"/>

Instructions: Please indicate the extent to which you are committed to the following constructs where strongly agree (SA), agree (A), disagree (D) strongly disagree (SD).

PART B: COACHING

SN	ITEMS	SA	A	D	SD
1	My master helps demonstrate aspects of tailoring for your effective understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I often observe my master as she performs tailoring tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3	After observing for some time, I try to practice what I have observed				
4	I think and I reason before performing a task.				
5	When I observe my master perform a task, I am able to solve problems on my own				

PART C: MODELING

SN	ITEMS	SA	A	D	SD
1	There is collaboration between the master and apprentices				
2	My master listens to me when I have difficulties performing a task				
3	My master often questions me to make sure I understand how to go about given tasks				
4	During work we do cooperate to perform given tasks				
5	I often get help from my master and colleagues when I face difficulties				
6	I have a good relationship with my colleagues and master at work				

Thank you for taking responding to this questionnaire

Appendix B
Interview Guide for Apprentices

1. Do you sometimes observe your master perform task and later you try to do it on your own?

Explain please

.....

2. Do you learn by observing your master? Explain please

.....

3. Does your master help demonstrate aspects of tailoring for your effective understanding?

Explain please

.....
.....

4. After observing your master perform a task, are you able to solve problems on your own?

Explain please

.....
.....

5. Do you think through the process of solving a problem at work? Explain please

.....
.....

6. Do you work in collaboration with other apprentices in solving problems at work? Explain

how this is done

.....
.....

Appendix C

Apprentices in tailoring workshop learning their trade



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