

## Applicability of Apprenticeship Model on Language Development of 4-5 Year Olds in Masvingo, Zimbabwe

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### Abstract

*this research examined the applicability of apprenticeship model on language development of 4-5-year olds at Gangare cluster, Bikita in Zimbabwe with the aim of identifying principles of apprenticeship model like active participation, scaffolding, and imitation. This study is informed by the theories of Barbara Rogoff and Lev Vygotsky. Both theories share the principle of Social-Constructivism. Social-Cultural theory and apprenticeship model view education as socially constructed. Therefore, the study views societal members as very important for young learners' language development. Qualitative research paradigm was employed by the researcher during the research. The researcher used a descriptive design. The purposive sampling method was employed to get the sample of twenty (20) pupils and two caregivers who participated in the research. Findings were inferred from the employed observations and interviews. This study established that principles of the apprenticeship model, effectively contribute to children's language development. The results of this study revealed that limited resources, incorrect staffing, lack of staff development sessions and high enrolment affect children's language development. The research study proposed that school administrators should monitor school enrolment for the school not to be under or overstaffed and that schools should schedule and organize staff development sessions and workshops for teachers to develop the language of 4-5-year-olds.*

**Keywords:** *Apprentice, Expert, Novice, Scaffolding, Imitation, and Zone of Proximal Development.*

### BACKGROUND TO THE STUDY

Cognitive apprenticeship is one of the most important models that reflect how young learners can learn effectively. It was proposed by Barbra Rogoff. Rogoff (2003) says Cognitive apprenticeship is a way of teaching and learning that views the classroom learners as inexperienced who will be apprenticed to an experienced individual. According to Rogoff cited in Dacey and Travers (2004), children are active in their effort to learn from observing and participating with more skilled members of society.

Different schools of thought held by different theorists explain differently how people develop language. Chomsky, a nativist cited in Steinberg and Sciarini (2006) argues that humans are biologically programmed to gain knowledge. Chomsky emphasizes that all humans have a Language Acquisition Device (LAD). According to him, the LAD contains knowledge of grammatical rules common to all languages. This perspective is different from the interactionist theory's point of view. Theorists like Thorndike, Pavlov, and Skinner in their Connectionism and Classical Conditioning Theories share the view that language learning is influenced by the desire of children to communicate with others. Both connectionism and classical conditioning cited in Snowman and Beihler (2000) argue that children are born with a powerful brain that matures slowly and predisposes them to acquire new understanding, which they are motivated to share well with others. Interactionist theories are of the view that language development is directed by both biological and social behaviors. Barbara Rogoff's apprenticeship theory falls under the interactionist perspective.

Rogoff subscribes to Vygotsky's Social Cultural Theory cited in Crain (2003), that learners must become more skilled in gathering and using knowledge for themselves and that the best way for them to do this is to observe experts while engaged in the process. This implies that learners should observe intellectually advanced people for them to learn effectively. Rogoff cited in Anning, Cullen, and Fler (2008:32) says that "Children should actively learn under adult guidance or in collaboration with more capable peers." Vygotsky and Rogoff share the same view that children learn through imitation from peers, older children, or adults. A language is a social

tool for thinking. This is supported by Anning, Cullen, and Fleer (2008) who assert that, as cultures develop, people create psychological tools like speech to help them master their environment. The social learning theory of Bandura cited in Snowman and Beihler (2000) stipulates that children learn by imitating the significant others.

In apprenticeship learning, children learn to think, act, argue, and interact with people knowledgeable in the skills. Learners act as legitimate participants in the co-construction of knowledge. Apprenticeship learning is a way in which learners learn naturally. The teacher and more knowledgeable peers help others to master concepts through guided participation. According to Rogoff and Vygotsky cited in Roskos and Christie (2000:48), “guided participation involves expert and novice, challenging and supporting one another in the process of solving problems through interpersonal communication.” This shows that during guided participation, the novice receives help from the caregiver and expert peers. The process of assisting the novice is described by Vygotsky as scaffolding. Through scaffolding, learners shift from ignorance to mastery. There is a transfer of responsibility from the expert to the learner. According to the apprenticeship theory, after the learner manages to master the language, the caregiver should leave the learner to practice his or her development. This is called appropriation. It clearly shows that teaching and learning using apprenticeship model helps learners to develop their language effectively.

Over the past twenty-five years, research and instruction in Mathematics education have witnessed a gradual shift to a constructivist (Gauvain, 2001). There is a shift from teacher-centered instruction to learner-centered instruction. After research in America, Gauvain concluded that the collaborative guided participation way of teaching helps learners to understand mathematics concepts effectively. Gauvain (2001) went on to say that involving learners and their active participation helps in the retention of gained knowledge when solving problems. This clearly shows that principles of the apprenticeship model are applicable to the effective teaching of mathematics. They help learners in the understanding of mathematics concepts. Teachers should adopt the traveling theory of teaching. This is when the teacher and pupils work together. Subscribers of this theory usually treat the subject matter of teaching and learning as some kind of terrain with hills to be climbed for better viewpoints. There are challenges going up the hills together with the pupils. The caregivers help these young learners to understand challenging concepts in the way. ECD practitioners are seen as companions, experienced fellow travelers who scaffold learners.

Apprenticeship model is supported by researchers like Trevarthen and Greenfield cited in Bruce (2004: 10) who assert that,

“Adults are not seen as empiricist instructors giving out information and knowledge. Instead, they are seen as means, the mechanism by which children can develop their own strategies, initiatives, responses, and construct their own rules, which enables their development.”

This clearly shows that both researchers agreed that when teachers actively involve young learners in their learning, they develop holistically. A developmental study of children’s problem solving by Teasley cited in Roskos and Christie (2000) asserts that adults and peer collaboration fundamentally rest in the interdependency of cognition, which helps in the mastery of life skills at an early stage. This shows that interdependency, which is a key principle of the apprenticeship model, has been proved effective in early childhood development.

Research by Brill, Kim, and Calloway (2001) established that apprenticeship learning is very effective in the teaching of Art and Craft. In their research, they found out that teacher demonstration and pupils’ imitation are very important strategies when teaching craft concepts like weaving to infants. Demonstration and imitation enhance guided participation. The trio further concludes that craft apprenticeship enculturates learners into authentic practices through activity and social interaction. This shows that the employed principles of apprenticeship model promote learners’ involvement, guided participation, scaffolding, and practicing of the skills, which helps to enhance perfection. After the pupils perfect the required skill, the learners are left to do

the work with limited supervision. This shows that apprenticeship principles, when employed in the teaching of art and craft, prove to be effective. Learners may effectively master the skills if exposed to such a conducive learning environment.

In another ECD class B at different schools, the researcher found out that the caregivers were more active and directive while the students were more passive. This clearly shows that the teachers use the rote method, which does not facilitate effective learning. Pupils were viewed by the teachers as recipients and inactive. The teachers viewed themselves as the fountain of knowledge and as the only ones responsible for creating knowledge. This reduces the learners' language development since their learning is not collaborative. This type of teaching is described by Roskos and Christie (2002) as didactic, traditional, and instructive. This description clearly shows that learners are viewed as empty-headed. Also viewed as people who know nothing and do not have any experience and who need only to receive knowledge from the teacher. Pupils were only expected to do what their instructor (caregiver) commanded them to do. The caregiver does not promote a conducive environment for learners to learn freely. The traditional description shows that there is no continuum of activities from the caregiver to the learners because the teacher usually does not provide demonstrations. No aspect of modeling was found in these classes. For effective learning to take place, learners should creatively duplicate the instructional activities of their caregivers. Little differences should be there between the activities of the caregivers and those of learners.

In some classes, the researcher observed that strict rules for young learners were made for them to comply. These learners were strictly not allowed to make noise. This seriously disadvantages learners since they naturally learn through trial and error as they practice the language. They are still at the concept formation stage, and they need a lot of practice for them to be able to develop their language. Their vocabulary is still limited, and it is only through interaction that they positively and speedily develop.

After observations, the researcher decided to discuss with caregivers. The researcher found out that teachers were complaining about their high-class enrolment. Non-Governmental Organisations feeding schemes contributed heavily to this scenario. Teacher-pupil ratio of an average of 1:38 was unfavorable. They suggested that it was better for them to teach the class, not individuals. Teaching the class as a group reduces the interaction between the caregiver and the individual child. Instead, interaction promotes guided participation, which is effective when teaching these young ones. This clearly shows that when the caregiver is not employing individual teaching, he or she is using a one-size-fits-all method that does not pay attention to individuals. This method is inappropriate since the learners have different levels of challenges. This is supported by Vygotsky cited in Tassoni (2004:59) who says that, "Young learners have different Zones of Proximal Development and that they need different levels of help." This shows that caregivers should consider individual differences. It is against this background that this research was done.

Rogoff's apprenticeship model has principles that may promote language development when implemented effectively. These are guided participation, positive interaction, use of relevant aids, and scaffolding novice learners. The principles proved effective in the researchers conducted by previous researchers in different areas.

## **THEORETICAL FRAMEWORK**

This study is informed by the theories of Barbara Rogoff and Lev Vygotsky. Both theories share the principle of Social-Constructivism. Social-Cultural theory and apprenticeship model view education as socially constructed. Therefore, the study views societal members as very important for young learners' language development

### **Barbara Rogoff's Apprenticeship model**

Apprenticeship model was proposed by Barbara Rogoff. She believes that cognitive development is formed from society (Anning, Cullen, and Flear, 2008). According to her, cognitive development is socially constructed. Apprenticeship model is of the view that young children imitate what they observed from capable

peers and intellectually advanced adults for their learning to be effective. This shows that capable peers and intellectually advanced adults should act as good role models of language development.

For children to learn, they have to be taken through guided participation. Rogoff cited in Bruce (2004:65) says, “The influence of other people on children together with events, places, and cultural context in which children grow up are of primary importance to their development.” This shows that social relationships children engage in may either cultivate development or constraint and damage it. Caregivers should be good role models. As children work and learn side by side with their intellectually developed partners, it is imperative that they emulate and practice good behavior. In the apprenticeship process, Rogoff believes in learning through intent participation. This means that participation in apprenticeship model is not passive but active. Children are viewed as co-partners in the construction of knowledge. Rogoff cited in Anning, Cullen, and Fler (2008) says apprenticeship model involves collaborative horizontal structures with fluid responsibilities and not a vertical structure with fixed roles. The collaborative horizontal structure shows that both the novice and expert are viewed as equal. The learner or novice can air constructive ideas in the process of learning. The child will no longer need assistance when he or she has mastered the skills and acquire confidence in exhibiting the skill.

### **Vygotsky’s Social Cultural Theory**

Like Piaget, he believed that children construct their own language. Piaget considered the child to be a lone scientist. Vygotsky came up with a theory that allows for interplay between the two lines of development. Two lines of development are natural lines that predetermine potential that emerge from within and the social-historical line that influences the child from without (Snowman and Biehler, 2000). This shows that cognitive skills have their origin in social relations and are embedded in a socio-cultural backdrop. Vygotsky is a social constructivist.

The content of knowledge is influenced by the culture in which the child lives that is language, beliefs, values, and skills. Vygotsky cited in Lee and Smagorinsky (2009:61) says, “Cognitive development is socially situated cognition.” This means that thinking is located or situated in social and physical context, not within the individual mind. Learning should be as close as possible to the real world. According to Vygotsky, culture is the child’s curriculum. The socio-cultural theory of Vygotsky has four main principles namely ZPD, scaffolding, language, and play (Snowman and Biehler, 2000). ZPD is a zone which has two levels the lower level and the upper level (Vygotsky, 1978). Problems encountered beyond the lower level of ZPD can be solved independently by the child. For the child to reach a higher level of ZPD, he or she needs guidance and assistance. When skills and abilities are mastered, the ZPD shifts. The child’s ZPDs are identified during play. Caregivers identify children’s difficulties when they enjoy their cultural plays. Within the ZPD there is a range of tasks that are too difficult for the child to master alone. The child needs assistance from capable peers and intellectually advanced adults.

Vygotsky cited in Snowman and Biehler (2000) believed that children use language not only for social communication but also to plan, guide, and monitor their behavior in a self-regulatory fashion. Language is one of the social tools gained by the child through interaction in the society. Inner speech is the language used for self-regulation. The inner speech reminds, encourages, or guides a person. It directs the child’s thinking. It is an important tool for thinking during the early years. Children use this self-talk for a long time before the transition from when external speech take place. The transition period is between the ages of three to seven. Vygotsky emphasizes that when young children talk to themselves, they are using language to govern their behavior to guide themselves. However, Piaget cited in Robin (2003: 80) says, “Self-talks just a sign of immaturity.” According to Vygotsky, for better understanding, children must be taught in their mother language.

### **PURPOSE OF THE STUDY**

- a. To find out the applicability of the apprenticeship model on language development

- b. To find out whether teachers are employing the principles of apprenticeship model in developing children's language.
- c. To find out ways of improving the implementation of the principles of apprenticeship model in language development.

### **SUB-PROBLEM QUESTIONS**

- (i) To what extent do caregivers promote the active participation of children in language development?
- (ii) How does imitation assist children in language development?

### **RESEARCH METHODOLOGY**

Qualitative research paradigm was employed by the researchers. The researcher used a descriptive sample design. This is when selected units from the population of the study are described to infer their current situations. The advantage of using this design is that it saves time because a limited number of units in the whole population are studied. The use of limited units can lead to great accuracy because monitoring and supervision of data collection, analysis, and interpretation can be managed. However, the researcher's perception when relevant data collection methods like observation and interviews are used can hinder the validity and authenticity of the research. Research results from observations and interviews can be correlated to defend the authenticity of the research hence attempting to eliminate confounding variables.

### **FINDINGS FROM OBSERVATIONS AND INTERVIEWS**

- Caregivers encourage them to be involved in their learning.
  - Giving them tasks to do in the learning process.
  - Encouraging peer interaction through group work.
  - Children are allowed to communicate in their classes orally.
  - Children are asked to act out the meanings of the terms to see whether they understand the vocabulary.
- Caregivers work with children to help them realize their language mistakes.
- Caregivers use meaningful terms when communicating with the class.
- Caregivers use simple terms when communicating with the class
- Caregivers do not mix languages when communicating with the class.
- Caregivers do not use ambiguous terms.
- Commercially made teaching and learning aids are limited.
- Caregivers improvise using different materials.
- Caregivers teach without teaching and learning materials
- Caregivers employ storytelling.
- Question and answer method is used to develop children's language.
- Group work method is employed by caregivers to encourage active participation of pupils when teaching the language.
- Peer tutoring encourage active participation of pupils.
- Pupils name and describe what is on picture cards or picture books in small groups or s a class
- Caregivers assist pupils to read from their picture books correctly.
- Peer tutoring allows children a chance to correct .each other as they interact.
- Peer tutoring when pupils are paired to help each other since one might be an expert and the other a novice.
- Learners discuss as they play hence rehearsing their vocabulary
- Learners try out to say different terms hence improving the skill of pronunciation.
- There are no in-service training sessions for example workshops, seminars, and staff development meetings

## DISCUSSION

### **The extent to which caregivers promote the active participation of children in language development**

Active participation of learners can only be achieved when caregivers directly involve learners' in their learning. Pupils need to take part in their learning. They should not be passive for effective learning to take place. Rogoff cited in Anning, Cullen, and Flear (2008) emphasizes that active participation of learners enables them to develop their language effectively. This clearly shows that it is imperative to make learners active if their language is to be developed.

It was found in this study that peer interaction promotes the active participation of children and is very important for language development. Fifty percent (50%) of caregivers claim that peer interaction effectively helps learners to develop their language through help from the expert peer. The observation results show that after the learners were assisted by their peers, they increased in their level of mastery be it in pronunciation, story-telling or making complete sentences. This is in line with Malanguzi cited in Anning, Cullen, and Flear (2008) who say that peer tutoring creates a conducive environment for learning and that the learner strives to master like expert peers. This clearly shows that peer tutoring helps for language development of young children

Hundred percent (100%) of the caregivers assert that group activities, for example, role-play and games promote active participation. Group work is viewed as a method that creates a favorable atmosphere for learners to develop language. This also confirms findings of Bruce (2009: 64) that, "During group work, the learners can acquire some new knowledge on language development through free divergent thinking." This may be part of the reason why learners after group work tend to perform well than when they learn as individuals. It was observed that group work helps pupils to develop their language pronunciation and rectifying grammatical mistakes in the process of sharing their ideas. The students learning efficiency is greatly promoted through group learning.

Hundred percent (100%) of caregivers indicated that play is a pre-requisite to language development. Data from interviews also indicated that play is vital for language development. This confirmed the observation by Tassoni (2007:147) who asserts that "play allows children to learn communication skills in a natural way." This attempts to explain why during play children democratically listen, talk, read, and write in a comfortable way as compared to when they are asked to do so individually in a more formal way. The play is viewed as part of children's lives and is always incorporated in their learning. Meggitt and Walker (2007) say that society's attitude towards play had changed enormously since the 1800s when children were considered little adults and play a waste of time. Play scheduled by caregivers for their children is viewed as paramount to language development. Engestron cited in Anning, Cullen, and Flear (2008) also established that through play, children demonstrate improved verbal communication, high level of social and interaction skills, imaginative and divergent thinking skills. This clearly shows that play is very important in children's language development.

### **How does imitation assist children in language development?**

The study found out that imitation is very important for children to develop their language. One caregiver views effective imitation as the one from capable peers, not from intellectually advanced adults like caregivers. However, imitating both caregivers and learners is important. Imitation is a process where the inexperienced learner duplicates the behavior of the expert in an attempt to develop language.

It was identified in this study that imitation plays a very significant role in helping the pupil to master the skill of pronunciations. Pupils imitate from their caregiver and capable peers. Through imitation, pupils develop language from an early stage. Pupils were given enough time to imitate and to rehearse what they imitate correctly. This was done to reinforce the correct word pronunciation. This contradicts findings of Tassoni (2007) who found out that at this early age children have not yet acquired all the sounds of language and their

intonation. This means that the pronunciation which works hand and glove with phonic sounds cannot just be successful without the knowledge of sounds.

Hundred percent (100%) of caregivers assert that play gives a conducive platform for imitation to take place. One caregiver highlighted that children emulate their capable peers. They emulate good language hence their language develops. This is in line with Skinner cited in Snowman and Beihler (2000) who concludes that language development is learned through operant conditioning that is reinforcement and imitation. Skinner shared the same view with Rogoff and Vygotsky that imitation is the backbone of language development. This contradicts findings of maturationists like Lenneberg who found out that language is acquired through Language Acquisition Device (LAD). This is the natural biological part which facilitates language development. According to him, language is from within not from the societal influences.

### **What challenges do caregivers meet when employing the principles of apprenticeship?**

#### **Model?**

Both interview and observation results indicate that a hundred percent (100%) of caregivers are teaching with very limited resources and that it makes their work difficult. Teaching and learning materials need to be more than enough. This is in line with Tompkins and Hoskisson (1995:40) who say, 'there should be at least four times as many teaching and learning materials as learners in the classroom. Conversely, it was discovered that very limited resources characterize the teaching and learning environment. Fifty percent (50%) of the caregivers explain that limited resources affect language development negatively. This confirms findings made by Gawe, Jacobs, and Vakalisa (2000) that limited teaching and learning materials cripple children's language development. Fifty percent (50%) of caregivers indicated that teacher made teaching and learning aids are made to substitute scanty commercially made aids, Commercially made aids and teacher made aids serve the same instructional purpose. This is in line with Gawe, Jacobs, and Vakalisa (2000) who concludes that both types of aids are instrumental to children's language development. They further explain that commercially made aids are specifically focusing on the content planned by the teacher, Correlation of both commercially made aids and teacher made aids is important for effective language development to take place. One caregiver was silent about teacher made aids. Children in her class did not perform well. This might have been contributed by the limited commercially made and teacher made aids.

Both findings from observations and interviews indicated that class enrolment is a factor which can affect teacher's individual attention. Hundred percent (100%) of caregiver indicated that they have a high enrolment of 1:29 and 1:25. High enrolments force the caregiver to teach the whole class and not viewing pupils as individuals who need individual attention. This is in line with Decker and Decker (2001) who conclude that high pupil enrolment reduces caregivers' individual attention hence reduces chances for effective language development, This uncomfortable high enrolment can be a contributing factor to ineffective language development as shown on the observation table. A conducive enrolment is lower than that in both classes. This is in line with Statutory Instrument 106 2006 which stipulates that the conducive caregiver-pupil enrolment ratio is 1:20. This ratio enables the caregiver to attend to learners individually. Findings from this study also revealed that caregivers need staff development workshops. It was found that one caregiver does not have enough expertise to teach ECD. Organising workshops and seminars on how to teach language development help to equip the caregiver with relevant content and skills. This is in line with Decker and Decker (2001) who assert that staff development help to equip relevant content and skills to caregivers who implement them to the class for effective language development to take place. Trained caregivers in ECD also need staff development to make them relevant every time in relation to teaching methods hence promoting language development.

### **RECOMMENDATIONS**

Because of the findings made in this study, the following recommendations and suggestions were made.

- Administrators must monitor school enrolment for the school not to be under or overstaffed.
- School administrators should schedule and organize staff development sessions and workshops for teachers to develop the language of 4-5-year-olds.
- Caregivers should be very observant since that is the best way to get information from children.
- Caregivers should model good language for pupils to imitate actively.

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