

**BASKETBALL BASIC TECHNICAL TRAINING EFFECT ON
STUDENTS' PERFORMANCE LEVEL: THE CASE OF KELLE
PREPARATORY SCHOOL AT KELLE WOLLEGA ZONE**

BY

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This is to certify that the thesis prepared by Leta Tadese, entitled: *Basketball Basic Technical training effect on Students' Performance Level: the case of Kellem preparatory school at Kellem Wollega zone* and submitted in partial fulfillment of the requirements for the Degree of Masters of Education (in Teaching Physical Education) complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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ABSTRACT

Basketball Basic Technical Training effect on Students' Performance Level: the case of Kellem Preparatory school at Kellem Wollega Zone

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The main objective of this study was to investigate the effect of basketball technique training on the students' performance level; the study comprises 30 students of 11th grade in kellem preparatory school. The students were selected purposively from the class. Additionally, PE teachers were selected as coaches. The Quasi-experimental study is used to carry out this research. In this attempt, data were collected through and observational checklist. The result of the study clearly showed that kellem preparatory school students practice two days per week and 40 minute per session for continuous eight weeks. Ultimately, Basketball technique performance level of post-test, after eight weeks was conducted using the pre-test performance level of the students. The study was to investigate whether there was statistically significant difference between the performance levels before they went into the training. The age ranges of participants were "between" 17-19. In this quasi-experimental research, the T-test was used to compute and analyze pre-test and post-test results of the selected students and the results revealed that the selected group outperformed significantly ($p < 0.05$). The major constraints associated with kellem secondary school found to have low interest of students' to participate in basketball game due to its unpopularity in this area, lack of facilities and equipment, lack of playground in the villages and in the schools. Finally, based on the major findings some valuable suggestions were forwarded to some valuable places beginning from school principal to higher Federation.

Keywords: Basketball, training, technique, performance, pre-test and post-test.

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LIST OF ACRONYMS

ABL- American Basketball League

BAA- Basketball Association of America

FIBA- Federation of International Basketball Association

IOC- International Olympic Committee

NBA- National Basketball Association

NBL – National Basketball League

NYSL- North York Soccer League

SPSS- Statistical Package for Social Science

USA- United States of America

YMCA- Young Men’s Christian Association

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Basketball is one of team sport or ball game that is played by two (2) teams of five (5) players each. The aim of each team is to score in the opponents' basket and to prevent the other team from scoring. Basketball game requires adaptation from players in the field and offence is the part of the game that allows the players to discover what is happening then response according to this correctly. Contemporary basketball requires players to have high levels of accuracy in varying conditions during the game (jovanovic-golubovic, 2003). The game is controlled by officials, table officials and a commissioner, if present. The basket that is attacked by a team is the opponents' basket and the basket that is defended by a team is the team's own basket. The team that has scored the greater number of points at the end of playing time shall be the winner (FIBA 2010). Basketball can contribute to the development of personal and social values that are very important in the educational process of the child and youngsters. These include commitment, perseverance, and personal responsibilities within the group, team work, respecting the rules, respecting others, and learning to compete (Maurizia, 2001, as cited in <http://en.wikipedia.org>).

The main objective of each basketball player during a game is to score points. In an attempt to do so, an athlete might perform a jump shot, set shot, lay-up, or a free throw. An analysis of the ground reaction forces generated by basketball players during a shot provides information concerning the phases of take-off and landing (McClay et al., 1994b), which permits the studies to focus on not only the jumping performance, which is of key importance to the shot, but also on the other techniques of basketball including dribbling and passing. Basketball game is one of the sport activities that has a positive effect on learner in physical, mental and social sides as a result of that it acquires a wide attention locally and globally, it concerns with the variety of concepts and basic as a fundamental requirements to learn. Shooting accuracy is of according to the distance from the basket and depends to some extent, on the player's body height and playing position. When shooting at the basket from a distance, a jump shot with a two-leg take off

is usually used, generating about 41% of all points in a match (Baloncesto, 1997, in Tang and Shung, 2005).

In a movement skill learning, the time that is dedicated to teaching to the learner is a part of practice time. Thus, the training should be efficient and effective (Magil, 1993). Observing a skill gives much information being required for learning the skill entirely (Bandura, 1986). Regarding basketball technique practice the physical education period is used for the students to practice the technique and the time used efficiently. Therefore, activity practice can cause enhancement in performance (Bennech et al, 2013).

Basketball is a fast moving, high scoring indoor game that requires of the individual player extreme qualities of skill, precision, control and agility, as well as the physical prerequisites vital for athletic excellence (Len Hoy & Cyril A. Carter, 1980).

Nowadays the world witness a lot of rapid and continuous changes and transfer in all fields and the most important is in the educational field. In order to follow this sort of change the educational standard must transfer from the state of memorization and indoctrination to participating with the learners in the learning process and using methods and styles of training which focus on acquiring knowledge and skills to contribute effectively in the learning process.

Students practice motor skills, create, and perform movement sequences within the game of Basketball. They develop and practice strategies and tactics to enhance their own and others' performance in gaining and maintaining possession of the ball and scoring goals. Students also analyze how their participation in games and attitudes towards fair play in games and sports are influenced by media images of physical activities. The selected students were tested their actual performance (pre-test) and their result were recorded and again after 8 weeks of training the students were tested (post-test) then the impact of the training of two days per week were analyzed. Quasi-experimental design was implemented for this study, However, This research aimed to investigate the effect of basketball basic training on students' performance level.

1.2. Statement of the Problem

The engagement in basketball technique practice in sport is an issue of national concern especially of students. In any sport activity, there will be motor skill development only through practice. It is the same also for basketball. For any basketball skill development, there will be practice of techniques. Through practice in high school, there is a change in motor skill development of students.

Engagement in sport especially in basketball has been associated with positive steps that can lead to better life and there were changes in performance level of students through practice. Students who take part in sport experience have a higher level of self-esteem, self-confidence and developed skill. Sport helps to build confidence, a positive body image, and lower levels of depression (Digest, 1997).

Students who participate in basketball technique practice develop their skill and become physically healthy in terms of strength and weight management. Early involvement in practicing or training in sport can also minimize the likelihood of the development of a number of health related conditions (Digest 1997). A healthy body nurtures a healthy mind and school-based physical education and sports programs are ideal to facilitate the training program for basketball technique practice.

1.3. Research question

In this research, an attempt was made to answer the following research question:

1. Is there any impact of basketball technique practice on students' skill or performance level?
2. Is there any difference between pre-performance and post-performance of students' performance level?
3. What is the significance of basketball practice on students' skill and performance level?
4. How basketball technique practices develop students' skill?

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of the study is to find out the effect of basketball basic techniques training on students' performance level. In this research an attempt was made to answer this question:

- Is there any effect of basketball technique practice on students' skill? and
- Is there any change induced after technique practice?

1.4.2. Specific Objectives

The specific objectives of the study are:

- To investigate the effect of basketball technique practice on students' skill and their performance level.
- To observe changes induced by practicing and training basic basketball techniques on students' performance.
- To find out basketball technique skill difference between pre-test and post-test performance.
- To find out the effect of basic technique training on the students' skill.

1.5. Hypothesis

Accordingly, the following hypothesis was formulated.

1.5.1. H0 (Null hypothesis)

There would not be a significance difference between the pre-test and post-test effects of basketball technique training on students' performance level.

1.6. Significance of the Study

The main aim of this study is to analyze the effect of basketball technique training on students' skill or performance level among Kellem Secondary school Grade 11th students during physical education practical class.

The outcome of this research would help students to practice basketball for skill development and improvement of performance. Besides this study will intend to signify the following importance:

- It helps to motivate students to engage in basketball practice.
- It helps to identify the change that will happen on the skill and performance of the students through training.
- To investigate the significance of basketball technique training on students' skill and performance level.
- To analyze the result that students has improve their skill.
- To find out the students result after eight week technique training.
- It will help for others as a research work for depth studies on the case undertaken.

1.7. Delimitation of the Study

The scope of the study was delimited to a single secondary school in Dambi Dollo city namely in Kellem preparatory school. It is delimited to the effect of basketball basic technique training on students' skill and performance. From total number of schools found in this woreda only the place where the researchers work has a preparatory school; due to this, the researcher selects to do his research on this school. Depending on the nature of the study, sample size was delimited to one classes of the school (experimental class). The grade level that was selected by the researcher was only grade 11th students. The practice session was delimited to only PE class (i.e. two periods per week, with 40 minute in a period) one period normal class and one additional period, which were added by the researcher.

1.8. Limitation of the Study

The most serious limitations were lack of reference materials, and other resources, including related researches in our context, lack of material and equipment such as balls, lack of comfortable playground. Moreover, there was no enough time allotted for physical education class. Additionally on this experimental research, the researcher faces complexity in recording the students' performance through observation. To one side from this, Constraints of time and money contributed to the inadequacy of the research.

However, the researcher tried all his best to maintain the excellence of this research by putting utmost effort.

1.9. Operational Definition of Terms

- ❖ **Basketball**- game that is played between two teams with five players each.
- ❖ **Skill**-Is an athlete's ability to choose and perform the right techniques at the right time, successfully, regularly, and with a minimum of effort (Graham, 1995).
- ❖ **Offence**- Is an action of attacking or engaging an opposing team with the objective of scoring points or goals (Dauer & Pangrazi, 1979).
- ❖ **Performance**-is the cumulative effect of genetics, practice, psychological and situational factors that can be observed in training and competition.
www.merriam-webster.com/dictionary/preference.
- ❖ **Pre-test**-A preliminary test administered to determine performance of students' before training.
<https://en.wikipedia.org/wiki/Student>
- ❖ **Post test**-An achievement test administered after training.
- ❖ <https://en.wikipedia.org/wiki/Student>
- ❖ **Training**- Pedagogical process of upgrading or improving performance.
- ❖ www.merriam-webster.com/dictionary/preference.

1.10. Organization of the study

This study was organized in such a way that the first chapter presents and discusses the introduction (background), statement of the problem, objective, limitation, delimitation, significance of the study and definition of terms. The second chapter attempted to forward various literature works of scholars that has relation to the topic under discussion. The concern of chapter three is on presenting the methodology of the study. Chapter 4 reports the presentation, analysis, and discussion of the study and finally chapter five presents the summary, conclusion, and recommendation of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to discuss the literature related to basketball techniques, and the discussion of some selected techniques of basketball game and factors that affect improvement of performance.

2.1. History of Basketball

In early December 1891, Canadian American Dr. James Naismith, a physical education professor and instructor at the International Young Men's Christian Association Training School (YMCA) (today, Springfield College) in Springfield, Massachusetts, USA, was trying to keep his gym class active on a rainy day. He sought a vigorous indoor game to keep his students occupied and at proper levels of fitness during the long New England winters. He developed the original 13 rules and thus the game of basketball emerged (Griffiths & Sian, 2010). After rejecting other ideas as either too rough or poorly suited to walled-in gymnasiums, he wrote the basic rules and nailed a peach basket onto a 10-foot (3.05 m) elevated track. In contrast with modern basketball nets, this peach basket retained its bottom, and balls had to be retrieved manually after each "basket" or point scored; this proved inefficient, however, so the bottom of the basket was removed, allowing the balls to be poked out with a long dowel each time.

Basketball was originally played with a soccer ball. The first balls made specifically for basketball were brown, and it was in the late 1950s that Tony Hinkle searching for a ball that would be more visible to players and spectators alike, introduced the orange ball that is now in common use. Dribbling was not part of the original game except for the "bounce pass" to teammates. Passing the ball was the primary means of ball movement. Dribbling was eventually introduced but limited by the asymmetric shape of early balls. Dribbling only became a major part of the game around the 1950s, as manufacturing improved the ball shape.

The peach baskets were used until 1906 when they were finally replaced by metal hoops with backboards. A further change was soon made, so the ball merely passed through. Whenever a person got the ball in the basket, his team would gain a point. Whichever

team got the most points won the game. The baskets were originally nailed to the mezzanine balcony of the playing court, but this proved impractical when spectators on the balcony began to interfere with shots. The backboard was introduced to prevent this interference; it had the additional effect of allowing rebound shots. Naismith's handwritten diaries, discovered by his granddaughter in early 2006, indicate that he was nervous about the new game he had invented, which incorporated rules from a children's game called "Duck on a Rock", as many had failed before it. Naismith called the new game "Basket Ball". The first official game was played in the YMCA gymnasium in Albany, New York on January 20, 1892 with nine players. The game ended at 1–0; the shot was made from 25 feet (7.6 m), on a court just half the size of a present-day Street ball or National Basketball Association (NBA) court. By 1897–1898, teams of five became standard.

Basketball game is one of the sport activities that has a positive effect on learner in physical, mental and social sides as a result of that it acquires a wide attention locally and globally, it acquires a wide attention locally and globally, it concerns with the variety of concepts and basic skills as a fundamental requirement to learn (Bandura, 1986). Moreover, shooting is an important skill required in basketball. The shooting skill, like other skills of basketball, requires a more powerful concentration. Athletes involved in court and field team sports face a broad range of challenges that involve physical fitness, precision motor skills, team tactics, and individual and group motivation.

In early December 1891, Canadian American Dr. James Naismith, a physical education professor and instructor at the International Young Men's Christian Association Training School (YMCA) (today, Springfield College) in Springfield, Massachusetts, USA), was trying to keep his gym class active on a rainy day (Len H. & Cyril A, 1980).

The International basketball Federation, more commonly known as FIBA, FIBA world, or FIBA international name *federation Internationale de Basket-ball*, is an association of organizations that governs international competition in basketball. Originally known as the *Federation Internationale de Basketball Amateur* (hence FIBA), in 1989 it dropped the word amateur from its official name but retained the acronym, the “BA” now represents the first two letters of basketball.

2.2. What is Basketball?

Basketball (commonly nicknamed "B-ball" or "hoops") is a team sport in which two teams of five players try to score points by throwing or "shooting" a ball through the top of a basketball hoop while following a set of rules. Basketball is one of the world's most popular and widely viewed sports. Basketball is a multifaceted and complex team game that combines cyclic and acyclic movement structures. The movement structures consist of movements with the ball and without it (FIBA, 2003) According to (Al Ameen J Med, 2009) Basketball is one of the most popular team sport extensively played and viewed all over the world. Through time, basketball has developed to involve common techniques of shooting, passing, dribbling, including player's positioning as well as offensive and defensive structures. Typically, the tallest members of a team will play "centre", "small forward", or "power forward" positions, while shorter players or those who possess the best ball handling skills and speed play "point guard" or "shooting guard". While competitive basketball is carefully regulated, numerous variations of basketball have developed for casual play. While competitive basketball is primarily an indoor sport, played on a basketball court, less regulated variations have become exceedingly popular as an outdoor sport among both inner city and rural groups. What does a basketball player needs? Apparently, it is the ability to switch rapidly between forward, backward, lateral and vertical movement. In view of this, we can say a basketball player needs good fitness, flexibility, power, strength, agility, endurance, and vertical jumping ability to achieve sporting targets.

2.3. FIBA History

The International Basketball Federation (French: Fédération Internationale de Basketball), more commonly known by the French acronym FIBA, is an association of national organizations which governs international competition in basketball. The association was founded in Geneva in 1932, two years after the sport was officially recognized by the IOC. Its original name was Fédération Internationale de Basketball Amateur. Eight nations were founding members: Argentina, Czechoslovakia, Greece, Italy, Latvia, Portugal, Romania, and Switzerland. During the 1936 Summer Olympics held in Berlin, the Federation named James Naismith (1861-1939), the founder of

basketball, as its Honorary President. FIBA has organized a FIBA World Championship for men since 1950 and a World Championship for Women since 1953. Both events are now held every four years, alternating with the Olympics. In 1989, FIBA opened the door to Olympic participation by professionals such as players from the NBA in the United States. At this point, the Fédération Internationale de Basketball Amateur became the Fédération Internationale de Basketball, but retained FIBA as an abbreviation. The Federation headquarters moved to Munich in 1956, then returned to Geneva in 2002 (Federation of International Basketball Association Assist Magazine Vol. 02, 2003).

2.4. Changes in the game

In 1906, Rims with open nets become. In 1908, Player ejected after five fouls. In 1915, Dribbler is allowed to shoot. In 1923, nominated free throw shooter eliminated. In 1944, Three-second lane rule introduced. In 1950 Nat Clifton, Earl Llyod and Charles Cooper become first Black players to play in the NBA. In 1954, NBA adopts 24-second shot clock. In 1966, unlimited dribbling allowed in women's game. 1971 Five-on-five full court game becomes standard for women. In 1979, NBA adds three-point shot. In 1986, College adopts three-point shot. In 1988, NBA adds third referee 2001 Reduce time to advance the ball past mid court from 10 seconds to 8 seconds. In 2001, National Basketball Development League (D League) created. In 2002, The Hornets moved from Charlotte, North Carolina to New Orleans. In 2004, The Bobcats formed in Charlotte, North Carolina. In 2006, NBA introduces new game ball representing the first change to game ball in 35 years. In 2007, in response to player complaints the old style game ball was re implemented (Shashi & Tom, 1998).

2.5. Basketball in Africa

Since June 11, 1961, FIBA Africa has been promoting basketball and implementing capability-building programs throughout Africa. FIBA Africa's capability programs include training for coaches, referees, and administrative people. Currently, there are 53 national federations affiliated to FIBA Africa. Among these federations, Egypt, Morocco, Ethiopia, Sudan, Togo, Northern Rhodesia, Sierra Leone, Ghana, Guinea, Libya, Mali and Upper Volta served as the founding member (<http://www.sportsknowhow.com>).

It is believed that, basketball was introduced in Africa by missionaries, possibly Americans. It was an interesting game for Africans that the game was popular in a short period. In 1936, an Egyptian team took part in the Olympic Games in Berlin. In 1949 the first international basketball competition in Africa was held in Egypt (Cairo) and an Egyptian team was champion until recently, however, basketball was largely played in Ethiopia, Tunisia, Egypt, Morocco, and Algeria. The African Association of basketball Federation was organized at a meeting in Cairo that took place from June 11-14, 1961. During this historical meeting, representatives were presented from the National Basketball Federation of Ethiopia, Ghana, Guinea, Libya, and Egypt (<http://www.fiba.com>).

2.6. Basketball in Ethiopia

Basketball was first introduced in Ethiopia in the year 1946-47 (1939 E.C). It was first played in the Teferi Mekonnen (Entoto Comprehensive) and Hailesilasse (Kokebe Tsebah) secondary schools. It was introduced by physical education teachers who came from Canada. Beginning from 1950-51, basketball became popular in most primary and secondary school of Addis Ababa. To this effect, Addis Ababa Inter-school Association included basketball in the inter-school competition that was held every year during that time. Later on physical education instructors of Addis Ababa University College and other colleges, coupled with members of Juventus club organized the competition programs of basketball in Addis Ababa. These programs were conducted in ancient cinema hall that was found in the present day Science Faculty of Addis Ababa University. This greatly contributed for an increased popularity of the game as well as number of participant teams. As a result, the Aratkilllo Y.M.C.A (now Aratkilllo sport training center) organized a team and registered as an additional team member. While the competition programs were expanded, the above motioned cinema hall was destroyed for some other purpose. Hence, the competition place was transferred to Etege Hotel compound where the present day National Lottery building exists. The basketball court that was made in this hotel was made of red ash and it had light even to serve at night. The Addis Ababa Basketball Federation was established in the year 1950-51(1943 E.C). Beginning from this year, the federation has been organizing the annual basketball

competition in Addis Ababa. Following the then AratKillo Y.M.C.A. and Olympics club (which was found at Bole road), prepared a basketball court for each of them. Because of this, the competition place was transferred from Etege Hotel to these two places. In addition, all the competition programs were conducted in these two courts interchangeably. The Ethiopian Basketball Federation was established in the year 1953-54(1946 E.C), since having five Federations is compulsory for a country to be a member of International Olympic committee (IOC) as participant member of the modern Olympic games. Consequently, Ethiopia became a member of International Olympic committee and participated in the modern Olympic games for the first time at Melbourne Olympiad in the year 1956 (1948 E.C). Being established as a Federation, the Ethiopian Basketball Federation becomes a member of the Federation of International Basketball Association (FIBA). To this effect, Ethiopian participated in the first African Basketball competition in the year 1962 (1954 E.C). This was the first time for Ethiopia to participate in International Basketball Competition. Being a participant in the first African basketball competition Ethiopia became one of the founding members of African Basketball confederation.

The Ethiopian basketball team who participated in the first African basketball competition brought unsatisfactory result. Following this, it is believed that the attitude of Ethiopians towards basketball declines. In the year 1975-76(1968 E.C.) the Ethiopian sports commission was newly reorganized. Along with this, the Ethiopian basketball federation has been exerting persistent effort to make basketball more popular and favorite game for Ethiopians (Physical Education Grade 11 textbook, 2001)

2.7. The Benefits of Youth Sport Participation

With so many youth participating in sports, either in school or agency sponsored programs, it is important to examine the possible benefits of this involvement. The benefits and detriments of youth sport participation have been a topic of debate within the research and policy literature; however, numerous benefits have been identified. For instance, Seefeldt, Ewing, and Walk (1992) have identified the following possible benefits associated with competition:

- Learning physical skills: Young athletes learn both fundamental motor skills (e.g., running, jumping, and hopping) and sport-specific skills (e.g., how to put a golf ball or shoot a jump shot in basketball) that allow them to stay active.
- Appreciation of fitness: Two of the motives for participation identified by children are “to get exercise” and “stay in shape” (Ewing & Seefeldt; 1989); participating in sports offers this benefit.
- Sense of belonging: Another strong motive of participation is social interaction. Sports can provide peer interaction through both teammates and healthy competition (Weiss & Stuntz, 2004).
- Acquiring sport skills for leisure: Learning the fundamental motor skills through sport (e.g., proprioception, coordination) can aid in skill development, but can also be transferred to other sports and leisure activities. Promoting increased participation and involvement. In a review of current trends and literature in youth sport, Malina and Cumming (2003) outlined other possible benefits of participation:
 - Growth and maturation effects
 - Regular physical activity leading to increased fitness
 - Self-concept or self-worth effects
 - Social competence
 - Moral development

2.8. Basic Techniques of Basketball Game

Basketball techniques included in this research briefly. Those techniques include:

- Passing
- Dribbling and
- Shooting

2.8.1. Basketball passing fundamentals

Passing is the key technique to moving the ball effectively into position to take high percentage shots. We will address passing skills first. Players pass the ball to maintain possession and create scoring opportunities. Passes should usually be short and crisp, because long or slow passes are likely to be stolen. However, players should avoid

throwing too hard or using passes that are difficult to control. A player should pass the ball above the waist and within easy reach of the receiver. If possible, passes should be thrown to the receiver's side that is farthest from his/her defender (Brook B. Crawford, 2001).

Basketball is a team game. By definition, that means all players are involved with the process of playing the game and should function as one. One of the primary skills created to accomplish this is passing. Yet, passing remains one of the most under-taught, under-emphasized, and under drilled skill in the game! When a player with a ball in his possession passes to a teammate in an unguarded position and then automatically moves to an unguarded position himself, we have the theory of perfect offence at work (Forrest C. Allen, 1937).

Players assume the values that the coach places on each aspect of the game. When teaching passing; it is important that the coach teach not only the skill, but the mentality as well. Too many players think of passing as something to do when they do not have a shot as opposed to an unselfish act that is designed to include other players. When teaching younger players, be aware of their physical and mental limitations. Young players usually lack the strength necessary to make the plays that they believe can be successful (like the ones they see on television) and they are still developing their sense of space and time. In addition, their recognition skills can only be honed by experience. Passes that look open to them often are not because they do not have the experience to know how long it takes to get from point A to point B and bad passes are often a result of slow recognition. In either case, negative reinforcement of the attempted pass often results in a reluctance to make the next pass. The long-term effect could be a player who does not understand the value of passing and takes no joy in it. Hambrick (2003) demonstrated that basketball players with the greatest knowledge of the game before starting a competition made better decisions during it. In team sports, this knowledge is related to the internal logic of the game (Grehaigne, Godbout & Bouthier, 1999). Specific rules or principles arise from the application of this logic, such as maintaining the possession of the ball (Bayer, 1992). In order to keep control of the ball, it is necessary to facilitate the action of passing (Cárdenas & Alarcón 2009).

2.8.2. Types of Passes

There are essentially two types of passes:

- Air Pass - The pass travels between players without hitting the floor.
- Bounce Passes - The pass is thrown to the floor so that it bounces to the intended receiver

Each type of pass comes with its own variations.

1. Basic variations:

Those passes with basic variations are; Chest Pass, Bounce Pass, Overhead Pass, and Wrap around Pass.

2. Advanced variations:

Those passes with advanced variations are; Baseball Pass, Dribble Pass, Behind-the-Back Pass, and Pick and Roll Pass.

Teaching points during passing technique

When teaching passing, points of emphasis should:

A good pass is a pass a teammate can catch, when passing, step forward your receiver. When catching, step forward the pass, like shooting, the ball should have a backspin to it. This is accomplished by following through on every pass.

2.8.3. Basic Pass Techniques

2.8.3.1. Chest pass

Chest pass is named so because the pass originates from the chest. It is thrown by gripping the ball on the sides with the thumbs directly behind the ball. When the pass is thrown, the fingers are rotated behind the ball and the thumbs are turned down. The resulting follow through has the back of the hands facing one another with the thumbs straight down. The ball should have a nice backspin (Forrest C. Allen, 1937). Chest passes can be used quickly and accurately from most positions on the floor. The chest pass is so named because the ball is thrown with two hands from the passer's chest to the receiver's chest area. A player should begin in the ready position and step toward his target to initiate the pass. While all players need to see their targets, more advanced player should practice seeing their targets without looking at them by looking or faking

away before passing. A player should step in the direction of the target, extending her legs, back, and arms. Emphasize forcing the weak hand through the ball; the strong hand tends to dominate. Releasing off the first and second fingers of both hands gives the ball backspin and direction. A player should follow through with his fingers pointed at the target, palms facing down (Brook B. Crawford, 2001).

When throwing a chest pass, the players should strive to throw it to the receiver's chest level. Passes that go low to high or high to low are difficult to catch.

2.8.3.2 Bounce Pass

Sometimes it is easier for a passer to get the ball to a teammate by bouncing the ball once on the court before it reaches the receiver. For example, a defender may be guarding a player with both hands overhead, preventing a pass through the air to a teammate. In that case, a bounce pass may be the only route to get the ball to a teammate. Players should use bounce passes when they are closely guarded and may not have the space to extend their arms in a chest pass (Brook B. Crawford, 2001).

Bounce pass is thrown with the same motion however; it is aimed at the floor. It should be thrown far enough out that the ball bounces waist high to the receiver. Some say try to throw it 3/4 of the way to the receiver, and that may be a good reference point to start, but each player has to experiment how far to throw it so it bounces to the receiver properly. Putting a proper and consistent backspin on the pass will make the distance easier to judge (Forrest C. Allen, 1937).

2.8.4. Fundamentals of Dribbling Technique

Dribbling the Basketball

Dribbling is an integral part of basketball and vital to individual and team play. To maintain possession of the ball while moving, a player must dribble (tap or bounce the ball on the floor). At the start of the dribble, the ball must leave the hand before the player lifts his pivot foot from the floor. The player may not touch the ball simultaneously with both hands while dribbling or allow it to come to a rest in his hand (Brook B. Crawford, 2001).

Dribbling is the most misused fundamental skill in the game. A pass travels much faster than a dribble, so before he/she dribbles, a player should look to pass to an open teammate. If a player dribbles too much, his/her teammates will tend not to move, making the defenses job easier. Excessive dribbling can destroy teamwork and morale. Dribbling should have a purpose: to take the player somewhere.

The three most common errors in dribbling are slapping at the ball from the chest area and waiting for it to bounce back up; keeping the head down, with eyes riveted to each bounce; and using one hand exclusively to bounce the ball. The ability to dribble with the weak hand as well as the strong hand is a key to advancing a player's ability level. If a player only dribbles with his strong hand, he can be overplayed to that side and made to be virtually ineffective (Brook B. Crawford, 2001).

There are two ways to move the basketball. The preferred and quicker method is the pass. However, if the defense is tight and the passing lanes clogged, the dribble is used to set up the offense. Since the dribble can only begin and stop one time it is in a player's possession, he should make his dribble count. It has to have a purpose! The dribble is used to break through quickly to open places on the floor or to extricate oneself from congested areas (Forrest C. Allen, 1937).

The dribble, along with the pass and the shot is one of the offensive triple threats every player must have. Use the dribble to:

1. Move the ball on offense.
2. Blow past your man to the hoop.
3. Escape from a tough and sticky defense.
4. Shooting
5. Move around a screen and get off your shot behind it.
6. Get a better passing angle.
7. Freeze the ball in the closing minutes.

Do not pound the air out of the ball going nowhere. If you want to get from point "A" to point "B", do it with the least amount of dribbling that is possible. Once you put the ball

on the floor, it should be to help you get where you want to go. If the dribble cannot help you, pass to a teammate.

Isiah Thomas said, "The mistake that I see many young players make on the court is that they just dribble too much. Many of these players do not realize they are hogging the ball because they are too intent on their own dribbling. However, while they are playing with the ball, four other teammates are standing around waiting for something to happen. Before you know it, the defense begins to tighten. More often, than not, the dribbler gets trapped and turns the ball over to the defense, which often scores two easy points."

How to Dribble: Contrary to what many young players actually do, dribbling is not done while staring at the ball. You dribble with your fingertips and pads of the hands without looking at the ball. Keep your head up at all times. Keep your eyes focused on what is happening on the court.

A properly inflated basketball will always bounce straight up at least 75-percent of the height from which it was dropped. Therefore, you do not have to watch the ball as you dribble. "See" with your fingertips. Simply have your fingers there to feel and control the ball.

To dribble, push the ball down by spreading the fingers and flexing the wrist. You do not need to push it down hard. Light pressure is enough. Also, keep your legs flexed and your back straight, ready to make a quick move (Brook B. Crawford, 2001).

All players should learn to dribble equally well with both hands. This ambidextrous ability will open up your offensive game. It will help discourage the defense from trying to overplay you on your strong side.

There is one important rule to keep in mind whenever you decide to put the ball on the floor. Do not pick up your dribble, until you know what you are going to do with the ball!

2.8.5. Types of Dribbling Technique

There are about as many types of dribbles as there are players. The important ones will be discussed in this chapter. If you want to be a good player, practice enough on all that, you can use them whenever a situation arises.

2.8.5.1. The Low Dribble

The low dribble is to be used whenever you are closely guarded. This type of dribbling simply entails keeping the ball low to the floor and in your control. Extend your dribbling hand and arm down as much as possible to shorten the distance the ball has to travel. Keep the elbow of your dribbling hand close in at your side. Dribble the ball on the side of your body away from the defender. The palm of your dribbling hand is kept over the ball. Do not watch the ball as you dribble. Look over the court and prepare your options. Use your other forearm to shield the ball from the defender (Brook B. Crawford, 2001). While being tightly guarded, be careful not to blatantly push or shove the defender with your forearm.

2.8.5.2. The Speed Dribble

Once you are in the open court, you need to go as fast as you can with the ball while remaining in control of the ball and your body. Since you are not tightly guarded, keeping the ball from the defenders is not a priority here; however, maintaining top speed is a priority.

To run fast and dribble at the same time, push the ball out in front of you at waist height and run after it. Keep your head up so you can see the entire court and teammates, and whatever defenders are in front of you. The faster you run the farther out in front of you the ball has to be pushed. With this type of dribble, your hand is not directly over the ball as in the low dribble, but behind it (at nearly a 45-degree angle to the floor) so you can push the ball hard and in front of you with your arm completely extended (Brook B. Crawford, 2001).

The speed dribble requires a high dribble, but make sure that the bounce is below the hip level, else you may lose control of the ball as you sprint down court.

2.8.6. Fundamentals of Shooting Technique

The objective of the offense in Basketball is accuracy of each attempted shot. Most players recognize this; but only the better shooters learn how to practice correctly and work at improvement year round. Since most of this practice sessions are alone, every

player must be his own critic. This means he/she must understand the proper mechanics that affect the success, or failure, of every shot. Basketball shooting skills are equally dependent upon body stance, tactile sense, courage, and confidence, combined with both mental and physical poise (Forrest C. Allen, 1937).

2.9.6.1. Fundamental Techniques for Specific Shots

Before describing the techniques associated with the various shots a player might have in his offensive repertory, we again emphasize the importance of improvisation to the particular style of each player. Basketball has changed in recent decades, largely due to innovations of individual players whose experimenting with accepted techniques led to development and recognition of revolutionary new techniques. For example, dunks, behind-the-back passes, jump shots, shot blocking, and one-handed set shots were once considered showboating. Shooting is the principal method used to score points in basketball and for this reason; it is the most frequently used technical action (Hay 1994).

2.8.6.2. Basic Shots

Virtually every shot required can be adapted from a mastery of a six basic techniques:

Lay-up: Approaching from the right (technique reverses from the left), the shooter grasps the ball in both hands as his/her right foot hits the floor, keeping the body between the ball and defender. The highest percentage shot, and therefore the most desirable shot, is a lay-up. A lay-up is one-handed shot taken within three feet of the basket (Brook B. Crawford, 2001).

Come down hard on the left foot, and thrust sharply upward with the right knee, carrying the ball in both hands as high as possible with the right hand behind the ball, wrist cocked and facing the basket, and the left hand in front, wrist away from the basket.

This last step is a shorter step that enables the shooter to convert his forward motion into vertical jumping thrust. At the top of the high jump, with both arms above your head erect, eyes fixed on a spot high above and to the right of the basket, allow the left hand to fall away. Your right arm, wrist, and fingers extend to place the ball against the sighted point in a motion similar to that of trying to grasp the rim from a running start without the ball.

The backboard should be used for lay-ups approached from the side. After completing his follow-through, the shooter lands with hips down, knees bent, and body weight low, ready to rebound or go on defense. A lay-up is used in the following situations:

- A player receives a pass; close in, while cutting for the basket.
- A player dribbles past defenders and under the basket.

Two-handed set: This shot is hardly used by modern-day players; however, Bob McDermott, the best shooter I ever saw used it with great success. Therefore, it is described here because I feel it is the most accurate shot from long range.

During his era, five-foot-eleven guard Bobby McDermott owned basketball's best two-handed set shot. The dazzling McDermott, who was voted the "Greatest Player of All-Time" in 1946 by NBL coaches, players and sports editors, had the raw athletic ability to score from anywhere inside half court.

At a time when teams played deliberate, slowdown basketball, McDermott often scored more than 20 points in a game. Known as "Mr. Basketball Man," McDermott turned professional after just one year of high school, and starred in the ABL and NBL for 17 years. After leading the Brooklyn Visitations to the ABL title in 1935, McDermott played for the Original Celtics from 1936 to 1939 and 1940 to 1941, and quickly became the player fans wanted to watch perform. In five seasons with the Fort Wayne Zollner Pistons, McDermott landed two straight NBL titles (1944 and 1945) and three straight World Professional Tournament titles.

As player/coach of the Chicago Gears in 1947, "Mr. Inside and Mr. Outside" teamed with George Mikan to bring the Gears an NBL championship. McDermott, the only basketball player to lead three leagues (ABL, NYSL, NBL) in scoring and the only pro basketball player/coach to guide two teams to championships, was annually among the NBL's leading scorers.

McDermott was considered by many to be the dominant player in basketball from the mid-1930s to the late 1940s. He concluded his career in 1950, the year Collier's named him to the All-World Team, as cited in fundamentals of specific shots (bgparks.org).

One-handed set: This shot retains much of the balance, range, and accuracy of the two-handed set while realizing an increase in speed of getting off the shot. Because the technique is essentially the same as all other non-hooking, one-hand overhead shots, including the jump shot, it should be the basic shot for every player.

For the one-handed set shot, position the foot under the shooting hand slightly forward of the other. The level the ball is carried may be a matter of choice.

Some players prefer to shoot from the chest, while others prefer to come from shoulder; however, the higher the ball is carried in the set position, the closer the shooter can be to the defender and still get his shot away.

The starting point also affects the range, the higher the ball, the shorter the range. The shooting hand is positioned on the low-back side of the ball; fingers spread comfortably wide, with palm facing the basket and held clear of the ball by the fingertips and heel of the hand. The offhand is on the low-forward side, palm away from the basket. The function of the off-hand is to provide balance and control.

The off-hand falls away the instant before release and the driving force to the ball is transmitted solely by the shooting hand. Otherwise, shot execution is the same as a two-handed set. The shooter rises to his toes and thrusts with his legs. Simultaneously, he thrusts his shooting arm to full extension, his hand, and fingers flexing downward at the wrist in order to impart a gentle backspin as the ball is released (bgparks.org).

2.9. Youth Basketball Players Development Program

Youth basketball players develop in the same game as NBA players with only minor adjustments. The Playmakers Basketball Development League is an effort to break player development into different steps and encourage more small-sided competition for youth players. Small-sided games provide many advantages for youth players, especially more equitable competition and more touches on the ball. When players play in an atmosphere where the best player dominates the ball or the coach restricts certain players (tall players do not dribble), players develop slowly. Young players need the ball and opportunities to improve their game awareness and confidence as cited in (<http://thecrossovermovement.wordpress.com>).

2.11. Facilities and Equipment

According to David Levinson and Karen Christensen (2005), availability of sport facilities and equipments has a tremendous effect on the development and popularity of a given sport. If the facilities and equipments are available in sufficient manner, it is too easy to produce a number of outstanding athletes who can show highest performance at national of international level.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. Research Design and Procedure

3.1.1. Research Design

A quasi-experimental design was implemented which seeks to determine if a specific treatment influences an outcome. A quasi-experimental pre-post test design without a control group was employed, and the sample was the experimental group (Latorre Del Rincón & Arnal, 2003). The researcher assessed this by providing a specific treatment to one group pre-test and post-test. This design was used when it was not possible to control for all potentially confounding variables. and also they used to analyze the mean change in training at the end of two days per week for two month (16 periods) training to determine if the training programs had any effect on the participants' performance. Due to the real-world setting, pre-test and post-test were created using matched pairs while as many threats to validity as possible were controlled. The reason why the researcher takes the pre-test and post-test was, to see statistically significant difference or not been difference between the physical fitness performances following the technique practice.

The quantitative approach was used to describe this approach. This is because experimental approach is used to describe carefully the performance of the student in relation to basketball basic techniques that is primarily concerned with cause-and-effect relationships among variables. In addition, when problem is to examine the effect of basketball technique practice on students' skill and to observe the change induced on selected students through technique practice, experimental approach is used. Therefore, for this study quantitative approach was selected as an appropriate approach to examine the effect of basketball basic technique training on students' skill or performance level.

3.1.2 Research Procedure

Firstly, students' practice on the selected basketball techniques two days per week for two month. Since, the training was two days per week, this technique-training program was applied one day (40 min) per week of the normal class, and one day was additional class of practical classes that was done by the researcher. However, eight periods were

under the normal class and the other eight classes was additional class of the basketball technique-training program.

During the period of maintenance program, each session of maintenance was alternated according to the course planning designed by the researcher. Each session last 40 minutes and consisted of a five-minute warm up and five-minute cool-down exercise. All exercises were fully explained and demonstrated by the researcher, and students were asked to try them a few minutes before starting the first session of the intervention.

Although, the students arranged into three rows of 10(ten) students depending on the amount of the ball, then the training continuous. However, the testers take a rest until his number was rounded to the back for next test of variables. However, the selected subject was tested firstly by the researcher himself.

3.2. Sources of Data

Data were obtained from primary data sources. The primary sources of data were those obtained from observational checklist to acquire adequate information and insight in the area of the study; relevant literatures will consult for the availability of data.

The main sources of data were obtained from students of kellem preparatory school. In addition, the data obtained from pretest and posttest record on selected physical fitness to acquire adequate information and insight in the area of the study.

3.3. Study Area

This study was conducted in Kellem Wollega zone administration zone was at kellem Preparatory School. This school is found to the West of Addis Ababa which far away 632km. In this school, the researcher has five years' experience; within this year, the researcher faces problems with regard to the title. Therefore, the researcher wants to study on this issue to solve the problem.

3.4. The study Population, Samples and Sampling techniques

The populations of this study were grade 11th students of the school that was found in kellem preparatory school.

The sample sizes were one of the classes in all 11th grades. Thirty-(30) students were used for this study as an experimental group.

The sampling techniques for the study was purposive, particularly purposive sampling techniques was used because of its low cost and convince to the study title. The researcher used the sampling method to draw conclusion about population from samples. In order to do this the researcher uses the sample population that enabled to determine population characteristics by directly observing sample of the population. Thirty-(30) students were selected from one of the 11th grade of the school. The selected class was selected purposively depending on the appropriate time for the technique training. In addition to experimental students, the researcher selected one physical education teacher who was going to train the students according to the training program.

3.5. Data Collection Instruments

The necessary data for the study were collected through pre-test and post-test of skill through observation using checklist. The instruments were developed by the researcher based on literature review.

Instruments of data collection used in this research are observational checklist.

3.6. Procedures of Data Collection

Reviews of related literatures were made in advance to get information on what has been done in relation to the problem (effect). Documentary sources were consulted in order to have background information for the study. Then the data gathering instruments were prepared, that was checklist. Additionally, observation was also used in order to record pre and post skill of the students’.

3.7. Validity and Reliability

The reliability of the data was established through test and retest method. Quasi-Experimental class was tested twice by the same testers under similar conditions on each variable. Reliability during data collection, the researcher tries to obtain score through the assessment techniques using checklists. The stability or consistency of scores will be

checked by others through the test-retest methods and ring pre-test and post-test of students' skill.

Validity is the accuracy of the results. This means whether the results that were recorded from the basketball basic techniques test are true reflection of what was actually trying to measure. Validity in order to collect adequate data, the researcher was construct instruments to measure the necessary traits and checklists are relevant and transparent to the subjects. The validity of the study will be crosschecked by the evaluators who are going to evaluate the findings of the study through content validity.

3.8. Methods of Data Analysis

In quasi- experimental study, quantitative data analysis were used. In order to identify the effect of basketball technique training, the data was collected as numerical form of Statistical Package for Social Science (SPSS) and it was analyzed using through quantitative forms.

T-test was employed to check whether there exists any significant difference between the mean scores of the study with respect to their posttest results. The full preview of the T-test results is displayed, and discussed in chapter four. Furthermore, the analysis was supported by table's presentation.

$$t = \frac{\bar{D}}{\sqrt{\frac{D - \bar{D}^2}{n(n-1)}}}$$

Where:

- t = repeated measure sample t-test value
- $\bar{D} = \frac{\sum D}{n}$
- $D = (X - Y)$ is the difference between mean of post-test and pre-test result
- $n = \text{no of sample participants}$

3.9. Exercise training program

Table 1 Exercises prescribed during the technique-training program

Duration: 8 week	Warm Up Exercises: 5 minutes
Weekly: Two days per week	Technique practice: 30 minutes
Time: 40minutes	Cool Down Exercises: 5 minutes

Thirty-(30) students were divided into 3 groups of 10 students because of the ratio of ball to student is 1:10. There were six techniques that students were going to train in, so 30 minute is used from all 40 minute allocated for PE period, 10 minutes were taken for warming up 5 minutes and 5 minutes for cooling down at the end of the task.

3.10 Ethical Consideration

The research would be conducted by an individual with a post-graduate for the fulfillments of masters of physical education thesis in Addis Ababa University. The people were used for the sample would participate in the study and were confidential for the technique training in the school. The data gathered from study group through observational checklist were done in a right, ethical and responsible procedure. The study was free from any sort of political, religious, and personal biases.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF THE STUDY

The collected data on students' performance through the practice has been analyzed and presented in this chapter. The purpose of the study was to find out the effects of basketball technique training on the students' performance level. Such as dribbling, passing and shooting performance of selected students from kellem preparatory school.

4.1 Background characteristics of study group

The study group was included 19(63.3%) male students and 11(32.7%) female students; all of them are categorized between 17-19 ages.

4.2. The Analysis and interpretation result of passing technique.

4.2.1. Chest passes analysis and interpretation

Table 2 Sample students' pre-test and post-test performance Result of Basketball Techniques for Chest pass

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	1	2	1	0.0045	*t-value=11.18 *df=29 *p-value=0.0079
2	M	2	3	1	0.0045	
3	M	2	2	0	1.14	
4	M	2	3	1	0.0045	
5	F	1	2	1	0.0045	
6	M	2	4	2	0.87	
7	M	1	2	1	0.0045	
8	M	2	3	1	0.0045	
9	F	2	3	1	0.0045	
10	F	2	3	1	0.0045	
11	M	2	3	1	0.0045	
12	F	1	2	1	0.0045	
13	M	2	3	1	0.0045	
14	M	3	4	1	0.0045	
15	F	2	3	1	0.0045	
16	M	2	3	1	0.0045	
17	M	1	3	2	0.87	
18	F	2	3	1	0.0045	
19	F	2	2	0	1.14	
20	M	3	4	1	0.0045	
21	F	1	3	2	0.87	
22	F	2	3	1	0.0045	
23	M	2	3	1	0.0045	
24	F	1	2	1	0.0045	
25	F	2	3	1	0.0045	
26	M	2	2	0	1.14	
27	M	2	3	1	0.0045	
28	M	2	4	2	0.87	
29	M	1	3	2	0.87	
30	M	2	3	1	0.0045	
Total		Mean 1.8	Mean 2.87	$(\Sigma D) = 32$	$\Sigma(D - \bar{D})^2 = 7.87$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05
 Poor = ≤ 1.5 , Fair = 1.5 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5., Excellent = ≥ 4.5
 Number of participants (sample) is 30 students Male= 19, Female= 11

As shown above in the Table (3), pre-test and post-test performance results of individual students in basket ball training on chest pass technique were given. Before giving basketball technique training, students have showed lower performance with total mean value of 1.8 on chest pass technique relative to their performance observed after the training were given with total mean score 2.87. In conformity with this test result, the change in behavior observed before and after the program were statistically tested by t-test, the difference is significant. Thus, the t-test value computed to show probability of statistical significant differences between the means of pre and post performance test of students on chest pass technique at alpha (0.05) level was indicated as $t\text{-value} = 11.18$, $df = 29$ and $P\text{-value} = 0.0079$. Thus, P-value is less than alpha level (0.05). Hence, the t-test result indicates that there was statistically significant difference between the means of pre-test and post -test result of students. This indicates that giving appropriate training for the learners is highly important to improve or develop learners' performance in basketball techniques.

Chest pass is the main passing technique in which ball is passed to the chest of a player who receives it. After the training were given the researcher was continuously observed that, students were fairly improved their chest pass performance and developed the basic skill of chest pass in basketball play. During chest-pass test, the researcher was made the training according to the following procedure. First the passer or the student was hold a ball at his/her chest level with both hands, knees slightly bent, and feet shoulder-width apart. Secondly, the passer was then squared up to the target with both shoulders, established a pivot foot and then step with the opposite foot, and passed the ball to the partner, finishing with hands fully extended and thumbs pointing in and down. The passer then focused on stepping into the pass and on snapping the pass with both hands so that the basketball travels into the hands of the receiver at about chest level. During the training, the researcher also observed that, passing the basketball is moved between different players. Sampled students were increased their accuracy of passing basketball as they developed the power after the training were given. Outward snap of the thumbs is involved to add the velocity of the ball leaving little time for the defense to react.

4.2.2. Bounce passes Analysis and interpretation

Table 3 Sample students' pre-test and post-test performance Result of Bounce passes Technique

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	1	2	1	0.01	*t-vale=12.86 *df=29 *p-vale= 0.0068
2	M	2	3	1	0.01	
3	M	2	3	1	0.01	
4	M	2	3	1	0.01	
5	F	1	1	0	0.81	
6	M	1	2	1	0.01	
7	M	1	2	1	0.01	
8	M	2	3	1	0.01	
9	F	2	3	1	0.01	
10	F	2	3	1	0.01	
11	M	1	2	1	0.01	
12	F	1	2	1	0.01	
13	M	2	3	1	0.01	
14	M	2	4	2	1.21	
15	F	2	2	0	0.81	
16	M	2	3	1	0.01	
17	M	2	3	1	0.01	
18	F	2	2	0	0.81	
19	F	2	2	0	0.81	
20	M	2	3	1	0.01	
21	F	2	3	1	0.01	
22	F	2	3	1	0.01	
23	M	2	3	1	0.01	
24	F	1	2	1	0.01	
25	F	2	3	1	0.01	
26	M	2	3	1	0.01	
27	M	2	3	1	0.01	
28	M	2	3	1	0.01	
29	M	2	3	1	0.01	
30	M	2	3	1	0.01	
Total		Mean 1.76	Mean 2.67	$(\Sigma D) = 27$	$\Sigma(D - \bar{D})^2 = 4.7$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05

Poor = ≤ 1.5 , Fair = 1.6 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5, Excellent = ≥ 4.5

Number of participants (sample) is 30 students Male= 19, Female= 11

The bounce pass is a fundamental and very effective passing technique. This pass consists of one player passing the ball to a teammate by bouncing the ball off the floor. As shown above in the Table (4), pre-test and post-test performance result of individual students in basket ball technique training on bounce pass technique were given. The mean result of majority of students revealed that there is improvements in their performance after the training were given. That is most students have showed lower performance before giving any training and most students have showed a remarkable improvement in bounce pass with total mean score 1.76 and with mean score 2.67 respectively. In line with this, the statistical significance test was computed using t-test to see if there was significance difference in the two-performance test regarding the issue under consideration. In conformity with this, the computed t-test for equality of means with 29 df at calculated t-value of 12.86 the obtained p-value is 0.0068 which is less than 0.05. Accordingly, the change or the difference in behavior observed before and after the test were statistically significant. Hence, the null hypothesis is accepted and the alternative hypothesis was rejected. Therefore, the t-test result indicates that there was statistically significant difference between the means of pre-test and post-test. This indicates that giving appropriate training for the learners is highly important to improve or develop learners' performance in ball control.

During training, the researcher also observed that a player could only master the technique of bounce pass if he/she makes best judgment when he/she decides to make such a pass. Because a bounce pass may be kicked by rapidly shifting players and might be a difficult catch for the intended receiver. Furthermore, the learning aspect depends on the number of repetitions, whereas there are various combinations available in terms of the method to be used to master it.

4.3. Analysis and interpretation of dribbling technique

4.3.1. Analysis result and interpretation of Control dribble

Table 4 Sample students' pre-test and post-test performance Result of Control Dribble Technique

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	2	4	2	0.01	*t-vale=15.71 *df=29 *p-vale= 0.0023
2	M	1	3	2	0.01	
3	M	2	3	1	0.81	
4	M	1	2	1	0.81	
5	F	1	3	2	0.01	
6	M	2	5	2	0.01	
7	M	1	3	2	0.01	
8	M	1	4	3	1.21	
9	F	2	4	2	0.01	
10	F	2	3	1	0.81	
11	M	2	4	2	0.01	
12	F	1	3	2	0.01	
13	M	2	3	1	0.81	
14	M	3	5	2	0.01	
15	F	2	4	2	0.01	
16	M	2	3	1	0.81	
17	M	1	4	3	1.21	
18	F	2	3	1	0.81	
19	F	2	4	2	0.01	
20	M	2	3	1	0.81	
21	F	2	4	2	0.01	
22	F	2	3	1	0.81	
23	M	1	4	3	1.21	
24	F	1	4	3	1.21	
25	F	1	3	2	0.01	
26	M	1	3	2	0.01	
27	M	2	5	2	0.01	
28	M	2	4	2	0.01	
29	M	2	4	2	0.01	
30	M	2	5	3	1.21	
Total		Mean 1.67	Mean 3.64	$(\Sigma D) = 57$	$\Sigma(D - \bar{D})^2 = 12.7$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05

Poor = ≤ 1.5 , Fair = 1.6 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5., Excellent = ≥ 4.5

Number of participants (sample) is 30 students Male= 19, Female= 11

As it was illustrated in the Table (5), pre-test and posttest performance results of individual students in basketball technique training on control dribble technique were given. The mean result of each students showed that there is an improvement in their performance after the training were given. That is each students have showed lower performance before giving any training and all students have showed a remarkable improvement in playing basket ball using control dribble technique with total mean value of 1.67 during pre-test and with mean value 3.64 after the post-test. In line with this, the statistical significance test was computed using t-test to see if there was significance difference in the two-performance test regarding the issue under consideration. In conformity with this, the computed t-test for equality of means with 29 df at calculated t-value of 15.71 the obtained p-value is 0.0023 which is less than 0.05. Accordingly, the change or the difference in behavior observed before and after the test were statistically significant. Hence, the null hypothesis is accepted and the alternative hypothesis was rejected. Therefore, the t-test result indicates that there was statistically significant difference between the means of pre-test and post -test. This indicates that giving appropriate training for the learners is highly important to improve or develop learners' performance during training.

Therefore, a player may learn and develops art of action in giving the ball to a teammate that is an essential part of team play during passing. As the core of the game, passing allows a team to keep possession of the ball, set up attacks, change the direction of play, counter attack, and provide a decisive or final pass.

4.3.2. Analysis result and interpretation of Speed Dribble

Table 5 Sample students' pre-test and post-test performance Result of Speed dribble Technique

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	2	2	0	0.81	*t-vale=9.0 *df=29 *p-vale=0.014
2	M	1	2	1	0.01	
3	M	1	2	1	0.01	
4	M	1	2	1	0.01	
5	F	1	1	0	0.81	
6	M	2	3	1	0.01	
7	M	1	2	1	0.01	
8	M	1	2	1	0.01	
9	F	2	4	2	1.21	
10	F	2	4	2	1.21	
11	M	2	2	0	0.81	
12	F	1	1	0	0.81	
13	M	2	3	1	0.01	
14	M	2	3	1	0.01	
15	F	2	2	0	0.81	
16	M	1	2	1	0.01	
17	M	1	2	1	0.01	
18	F	2	3	1	0.01	
19	F	1	2	1	0.01	
20	M	2	3	1	0.01	
21	F	2	3	1	0.01	
22	F	2	3	1	0.01	
23	M	1	2	1	0.01	
24	F	1	2	1	0.01	
25	F	1	1	0	0.81	
26	M	1	2	1	0.01	
27	M	1	3	2	1.21	
28	M	2	3	1	0.01	
29	M	1	2	1	0.01	
30	M	2	3	1	0.01	
Total		Mean 1.47	Mean 2.34	$(\Sigma D) = 27$	$\Sigma(D - \bar{D})^2 = 8.7$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05

Poor = ≤ 1.5 , Fair = 1.6 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5, Excellent = ≥ 4.5

Number of participants (sample) is 30 students Male= 19, Female= 11

In table (6) sample student's pre-test and post-test performance result of basketball training on speed dribble technique were given. During pre-test performance of students in speed dribble were repeatedly tested and their mean result were taken. Similarly, during post-test i.e. after 16 days (8 week) training the same procedure was taken. As it was indicated in the table majority of students 80%, (24) showed performance improvement in basketball training. From total students only six students (20%) failed to show improvement after 16 days training. However, the total mean result of all students during pre-test was 1.47 and 2.34 at posttest, which revealed that there was fair performance improvement. In conformity to this, from the t-test result the p-value 0.014 was less than 0.05 confidence level. Therefore, the average posttest performance of 30 students was significantly different from that of pre test.

4.4. Analysis and interpretation of shooting technique

4.4.1. Analysis result and interpretation of set shot technique

Table 6 Sample student's pre-test and post-test performance Result of Set shot Technique

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	1	2	1	0.09	*t-value= 8.24 *df= 29 *p-value= 0.026
2	M	2	2	0	0.49	
3	M	2	3	1	0.09	
4	M	1	2	1	0.09	
5	F	1	2	1	0.09	
6	M	2	3	1	0.09	
7	M	2	2	0	0.49	
8	M	1	2	1	0.09	
9	F	2	2	0	0.49	
10	F	2	3	1	0.09	
11	M	2	2	0	0.49	
12	F	1	1	0	0.49	
13	M	2	3	1	0.09	
14	M	2	3	1	0.09	
15	F	2	2	0	0.49	
16	M	1	2	1	0.09	
17	M	1	2	1	0.09	
18	F	2	2	0	0.49	
19	F	1	2	1	0.09	
20	M	2	3	1	0.09	
21	F	2	2	0	0.49	
22	F	2	3	1	0.09	
23	M	1	2	1	0.09	
24	F	1	2	1	0.09	
25	F	1	1	0	0.49	
26	M	1	2	1	0.09	
27	M	1	2	1	0.09	
28	M	2	3	1	0.09	
29	M	1	2	1	0.09	
30	M	1	2	1	0.09	
Total		Mean 1.5	Mean 2.2	$(\Sigma D) = 21$	$\Sigma(D - \bar{D})^2 = 6.3$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05

Poor = ≤ 1.5 , Fair = 1.6 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5., Excellent = ≥ 4.5

Number of participants (sample) is 30 students Male= 19, Female= 11

As shown above in the Table (7), pre-test and posttest performance results of individual students in basketball training on set shot technique were given. Before giving performance training of basketball play, students have showed poor performance with total mean value of 1.5 using chest pass technique relative to their performance observed after the training were given with total mean score 2.2. In conformity with this test result, the change in behavior observed before and after the program were statistically tested by t-test, the difference is significant. Thus, the t-test value computed to show probability of statistical significant differences between the means of pre and post performance test of students onset shot technique at 0.05 confidence level was indicated as $t\text{-value} = 8.24$, $df = 29$ and $P\text{-value} = 0.026$. Hence, the t-test result indicates that posttest mean of students were varied significantly from pre test mean ($P\text{-value} < 0.05$). This indicates that giving appropriate training for the learners is highly important to improve or develop learners' performance in basketball training.

4.4.2. Analysis result and interpretation of Lay-up technique

Table 7 Sample students pre-test and post-test performance Result of Lay-up shot Technique

Students	Sex	Performance result (Mean)		Difference (D= X - Y)	$(D - \bar{D})^2$	Repeated measure t-test
		Pre-test (Y)	Post-test (X)			
1	M	1	1	0	0.49	*t-vale= 8.24 *df= 29 *p-vale= 0.026
2	M	1	2	1	0.09	
3	M	1	2	1	0.09	
4	M	1	2	1	0.09	
5	F	1	1	0	0.49	
6	M	1	2	1	0.09	
7	M	1	2	1	0.09	
8	M	1	2	1	0.09	
9	F	1	1	0	0.49	
10	F	1	2	1	0.09	
11	M	1	2	1	0.09	
12	F	1	1	0	0.49	
13	M	1	2	1	0.09	
14	M	2	3	1	0.09	
15	F	1	1	0	0.49	
16	M	1	2	1	0.09	
17	M	1	2	1	0.09	
18	F	2	2	0	0.49	
19	F	1	2	1	0.09	
20	M	1	2	1	0.09	
21	F	2	2	0	0.49	
22	F	1	2	1	0.09	
23	M	1	2	1	0.09	
24	F	1	2	1	0.09	
25	F	1	1	0	0.49	
26	M	1	2	1	0.09	
27	M	2	2	0	0.49	
28	M	1	2	1	0.09	
29	M	1	2	1	0.09	
30	M	1	2	1	0.09	
Total		Mean 1.13	Mean 1.84	$(\Sigma D) = 21$	$\Sigma(D - \bar{D})^2 = 6.3$	

D = difference between X & Y, $\bar{D} = \Sigma D$ divided by no of participants (n), significance (alpha level) = 0.05

Poor = ≤ 1.5 , Fair = 1.6 -- 2.5, Good = 2.5 -- 3.5, Very Good = 3.5-- 4.5, Excellent = ≥ 4.5

Number of participants (sample) is 30 students Male= 19, Female= 11

In table (8) pre-test and post-test performance result of basketball technique on lay-up shot technique were given for sampled students. During pre-test performance of students in lay-up, shot were repeatedly tested and their mean results were taken. Similarly, during post-test i.e. after 16 days training the same procedure were taken. As it was indicated in the table majority of students 73.33%, (22) showed performance improvement in basketball technique using lay-up shot technique. From total students only 6 students (26.67%) were showed difficulty to improve their performance after 16 days training. However, the total mean result of all students during pre-test was 1.13 and 1.84 at posttest, which revealed that there was fair performance improvement. In conformity to this, from the t-test result the p-value 0.026 was less than 0.05 confidence level. Therefore, the average posttest performance of 30 students was significantly different from that of pre test.

Table 8 Comparison of Performance Result of Students Using Chest pass, Bounce pass,

Control dribble, Speed dribble, Set shot and Layup shot Techniques

No	Basketball Technique	Pre-test mean	Post-test mean	Difference	Standard deviation
1	Chest pass	1.8	2.87	1.07	1.14
2	Bounce pass	1.76	2.67	0.91	1.25
3	Control dribble	1.67	3.64	1.97	0.98
4	Speed dribble	1.47	2.34	0.87	1.5
5	Set shot	1.5	2.2	0.7	2.04
6	Lay up shot	1.13	1.84	0.71	2.35

Table (9) illustrates the comparison of pre-test and post-test performance result of chest pass, bounce pass, control dribble, speed dribble, set shot and layup shot techniques of basket ball play for sampled students. Most students have showed relatively good performance improvement in control dribble from total mean value of 1.67 during pre test and total mean value of 3.64 during posttest relative to other basketball techniques. It deviates from the mean only by 0.98 and students showed relatively greater difference of

1.97 from their prior ability to play basketball. As a young player develops, his/her technical skills he/she will set the foundations for good development and it enables to experience all of the joy that basketball can bring. However, as it was indicated in the table (9) majority of students showed relatively poor performance in layup shot technique in both pre and post test with mean value of 1.13 and 1.84 respectively. The standard deviation of layup shot is also 2.35 that indicate greater deviation from the mean of the rest techniques. Thus, students have showed difficulty in layup shot during training. Additionally as shown in table (9) the mean difference were 0.7 lower mean difference value and 1.97 higher mean difference value. This indicates that there is an improvement of performance, as discussed by (Bennech et al, 2013) activity practice can cause enhancement in performance; but the level of performance improvement was not satisfactory depending on the result interpreted.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter deals with the summary, conclusions and recommendations.

5.1. Summary

This study was intended to assess the effect of basketball technique training on the performance level of the students'.

In order to test the effect of basketball technique training, the subjects were allowed to participate in this training. Thirty healthy students were selected; 19 (63.3%) were male students and 11(37.7%) were female students from kellem preparatory school during the year of 2008 E.C.

The selected subjects were under the quasi- experimental design of one group before training (pre test) and posttest after twelve weeks of training period. The training periods of this group were twelve weeks, two-(2) days per week with duration of 40 minutes in one session. The data were collected on some selected basketball techniques, namely chest pass; bounce pass, control dribble, speed dribble, set shot and lay-up shot.

Technical test variables were statistically analyzed by using T-test. 'T' ratio interaction values are found to be significant; the simple effect test is used. When the value of 'T' obtained ratio is greater than the table value of "T" is found there was, significant and if the "T" table value is greater than the "T" obtained, significant was not found. The Scheffe's test is applied as posttest to determine which of the paired mean had significant differences. In all the cases, the level of confidence was fixed at 0.05 to test the significance.

According to the data collected and analyzed in chapter 4 the degree of improvement of performance varied depending on individual ability and technique complexity, i.e. some students improved their performance poorly when some improved it fairly.

From the selected techniques, some were simple to handle and develop and some were complex:

□ in chest pass; students showed fair improvement of performance with respect to other techniques with total mean value of 1.8 during pre-test and total mean value of 2.87 during post-test.

□ in control dribble; students showed fair improvement of performance with respect to other techniques with total mean value of 1.67 during pre-test and total mean value of 3.64 during post-test with 1.97 mean difference.

□ in lay-up shot; students showed poor improvement of performance with total mean value of 1.13 during pre-test and total mean value of 1.84 during post-test with 0.71 mean difference.

□ when we compare the mean difference of chest pass and control dribble with lay-up shot there was better improvement in chest pass and control dribble because of its simplicity. Still the improvement was not satisfactory.

There are some reasons for this unsatisfactory outcome; those reasons were:

□ the distribution of physical education period and time allotted for this class.

□ lack of comfortable play ground in the schools and in villages.

□ lack of material and equipment, especially lack of balls.

□ Students did not introduce (familiarize) with basketball in lower grades.

5.2. Conclusions

Based on the data collected and discussion made, the following conclusions were drawn. The major challenges associated with improvement were lack of adequate facilities; Such as balls. However, lack of ball intends to have low level of improvement. Because, students cannot execute many repetitions in order to master the technique, absence of inter-school competition, low students knowledge on basketball, losing popularity in this area, and not being familiarize with basketball in lower grades, the number of session's student engage in physical education class per week was not convenient/enough.

Generally, in this study it was found that the effect of training on students' performance level for 8 weeks was not satisfactory; even if there was a change; due to the challenges listed above. In addition, the study proved that there is no adequate improvement with 2 sessions per week and 40 minute each session.

5.3. Recommendations

The researcher suggested the following recommendations in light of the summary and the conclusions made:

- Sport commission and education bureau should have to work in collaboration for the development of students' skill and should have to work on its popularity. Because, the main source of player was school.
- Courts should have to be constructed in the school and in villages.
- Schools and stakeholders should have to organize inter-school competition to give chance for students to develop their skill.
- Facilities and balls should have to be enough with respect to student's number.
- Students should have to learn/train the techniques in lower grades.
- Youth projects should have to be established in the schools.
- School principals and PE teachers should give attention and emphasize on sport.
- The ratio of ball to student should be managed well in order to improve performance level to the highest degree.

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APPENDIX A

Sample practice plan

Date _____

Practice length

Practice session	Drill/game	Teaching points/comments
Dynamic warm-up: 5 minutes	Follow the leader: 4 minutes - Teacher starts and then players take turns leading the group. - Teachers command players' race to different spots. Teacher says: 1 minute - Students listen and perform what "teacher says"	*jog, skip, hop, side sliders, high kicks, etc. *beer crawl, 2 foot jumps, backward skip, lateral slide, etc.
Technical skills: 30 minutes Dribbling: 10 min -control dribble -speed dribble	Left and right: 10 min - Students make a group of 10 students and use a ball turn by turn. - A single player uses one minute to execute the technique - Dribble down the court (standing position during control dribble & running position in speed dribble)	*remind players to keep eyes up
Passing: 10 min -chest pass -bounce pass	Give and go: 10 min - Students make pair - Each group make 2 lines about 10ft apart - Player passes and then runs to the end of the other line.	*demonstrate a proper pass *remind them to pass with 2 hands and snap at the finish *receiver needs to have "soft" hands and catch with 2 hands, 2 eyes, and 2 feet *players can only pass not dribble
Shooting: 10 min -set shot -lay-up shot	Form shooting - Students divided into 2 groups and groups use divided court/board. - Starts with no ball, just "imaginary" ball - Do several rounds with no ball - Add ball and have them shoot on wall	*remind about ready position *elbow under ball/over knees *follow through to cookie jar
Cool down: 5 min	Walking stretch/cool down 2 lines follow teacher - Slowly walk around court doing various stretches. High knee grab, quad stretch toe touch, etc *students cheer	*take this time to offer praise to players for progress and effort during practice.

APPENDIX B

Addis Ababa University

Faculty of Mathematics and Behavioral Studies

School of Graduate Studies

Rating checklist of basketball techniques training of the selected technique

This is an experimental checklist designed to obtain information on the basketball technique performance of selected students in 11th grade of kellem preparatory school. The performance of the student is to be recorded by the researcher. Thus, the information is taken as a crucial input for the efficacy of the study.

Basketball skills rubric

Basketball skills	Dribbling	Passing	Shooting
Excellent skill level 5 pts.	-Students eyes are scanning and not focused on the ball -Students dribbles the ball at the waist - Student pushes the ball down with their fingertips -Student can use both hands equally while dribbling -Students dribble is under control at full speed	-Student always receives the ball in a triple threat position (feet shoulder width apart, and slightly staggered, knees bent, shooting hand on top of the ball and other hand is to the side of the ball and elbows are bent at 90 degrees). - Hold the ball to your chest. - Extend your arms in a quick motion to pass the ball. - Throw the chest pass with some velocity. - Hold the ball at the waist. - Push off back foot, and take a step with your front foot. - Extend your arms in a quick and downward motion to pass the ball.	-Student dribbles all the way into the basket - Student is balanced when approaching the basket -Student jumps off their inside leg while shooting with their outside hand -Student uses the backboard while shooting -Student dribbles the ball all the way to the shooting spot -Student makes a complete stop and balances their body -Student bends knees and uses lower body during shot -Student's hands are on correct spot on the basketball -Student's vision is at the basket while shooting.
	- Student pushes the ball down with their fingertips	-Students Hold the ball to the chest level. - Push off with back foot and take	-Student bends knees and uses lower body during shot. Student's hands are

Very good skill level 4 pts.	-Student can use both hands equally while dribbling -Student loses some control of the ball when dribbling at full speed	a step with your front foot.	- on correct spot on the basketball -Student's vision is at the basket while shooting. - Student dribbles all the way into the basket -Student is not balance when they pick their dribble up (too many steps)
Good (Advanced) skill level 3 pts.	-Students eyes are scanning and not focused on the ball - Student dribbles the ball at waist level -Student pushes the ball down with their fingertips -Student can dribble properly with their dominate hand -Student loses some control of the ball when dribbling at full speed	-Hold the ball to your chest. -Push off with back foot and take a step with your front foot. -Extend your arms in a quick motion to pass the ball. -Lead your teammate when they are moving. -Throw the chest pass with some velocity. - Student consistently receives the ball in a triple threat position (feet shoulder width apart, and slightly staggered, knees bent, shooting hand on top of the ball and other hand is to the side of the ball and elbows are bent at 90 degrees). -Hold the ball at the waist. -Extend your arms in a quick and downward motion to pass the ball.	- Student dribbles all the way into the basket -Student is not balance when they pick their dribble up (too many steps) -Student jumps off their outside leg -Student jumps from an appropriate area on the floor -Student uses the backboard while shooting -Student dribbles the ball all the way to the shooting spot -Student makes a complete stop but body is not fully balanced -Student's hands are on correct spot on the basketball -Student does not bend knees or fully uses lower body (causes student to not shoot properly) -Student's vision is at the basket while shooting
Elementary (fair) skill level 2 pts.	-Students eyes are focused on the ball and student will sometimes look up to scan -Student dribbles the ball at varying levels -Student pushes the ball down with their fingertips -Student can dribble properly with their dominant hand but not equally with their non-dominate hand -Student cannot keep control when dribbling	- Students sometimes receives the ball in a triple threat position (feet shoulder width apart, and slightly staggered, knees bent, shooting hand on top of the ball and other hand is to the side of the ball and elbows are bent at 90 degrees). - Student sometimes holds the ball to the chest. - Student sometimes pushes off with back foot and takes a step with your front foot. - Student does not extend your arms in a quick motion to pass	-Student takes extra steps with the ball or ends their dribble premature -Student stops momentum before shooting the ball -Student jumps off both legs -Student jumps from far away from the basket -Shot does not use the backboard or is not accurate -Student picks up dribble

	at full speed	the ball. Student does not throw the chest pass with some velocity. Hold the ball at the waist. Student sometimes pushes their off back foot, and takes a step with your front foot. Sometimes extends their arms in a quick and downward motion to pass the ball.	before the shooting -Student does not make a complete stop and rushes shot -Student does not bend knees or fully use lower body -Vision in not focused on target/basket -Student shoots with both hands on the side of the ball
Basic (poor) skill level 1 pts.	-Students eyes are focused on the ball at all times -Student dribbles the ball at varying levels -Student slaps the ball down with their dribbling hand -Student cannot dribble properly with their dominant hand or their non-dominant hand -Student cannot keep control of the ball when dribbling at full speed	Students rarely receives the ball in a triple threat position (feet shoulder width apart, and slightly staggered, knees bent, shooting hand on top of the ball and other hand is to the side of the ball and elbows are bent at 90 degrees). Student rarely holds the ball to the chest. Student rarely pushes off with back foot and takes a step with your front foot. Student rarely extends arms in a quick motion to pass the ball. Student rarely throws the chest pass with some velocity. Student rarely receives the ball in a triple threat position (feet shoulder width apart, and slightly staggered, knees bent, shooting hand on top of the ball and other hand is to the side of the ball and elbows are bent at 90 degrees). Student rarely holds the ball at the waist. Student does not push off back foot, and take a step with your front foot. Student does not extend their arms in a quick and downward motion to pass the ball.	-Student runs with the ball instead of dribbling to the basket -Student stops momentum completely before shooting -Student does not jump or jumps off both legs -Shot is not accurate or around the basket -Student picks up dribble before the shooting spot -Student does not stop body and shoots while moving -Student has little/no balance and the shot is inaccurate -Student shoots with both hands on the side of the ball

APPENDIX C

Addis Ababa University

Faculty of Mathematics and Behavioral Studies

School of Graduate Studies

Observation checklist for recording performance level of selected students

1. Dribbling

Dribbling is one of the most fundamental skills that must be learned. Not only is it important to learn how to dribble well, but it is also important to know when, and when not, to dribble. To become a good dribbler and ball handler, you must practice dribbling as often as you can, using both hands at different time.

Skill progression Dribbling

No.	The students can	YES	NO
1.	Attempt to dribble a basketball in any manner		
2.	Dribble the ball in any manner at least three bounces in a row		
3.	Dribble a ball with one hand more than three bounces in a row while standing in place		
4.	Dribble the ball with the opposite hand more than three bounces in a row while standing in place		
5.	Dribble the ball with one hand, then the other hand, three bounces in a row each, without stopping, while standing still		
6.	Dribble the ball with one hand while walking forward ten steps		

Modified From: Special Olympics Basketball Coaching Guide- October 2007

2. Passing

Skill Progression-Passing

No.	The students can	YES	NO
1	Attempt to pass a basketball		
2	Pass the ball in any manner and in any direction		
3	Pass the ball in any manner to an intended target		
4	Make a two-handed chest pass in any direction		
5	Make a two-handed chest pass to an intended target		
6	Make a bounce pass to an intended target		

Modified From: Special Olympics Basketball Coaching Guide- October 2007

3. Shooting

Shooting is the most important skill in basketball. To win, you have to score points. All the other skills are tools a team uses to get the ball and its players into position to score. If your athletes can develop confident, accurate shooting skills, they will be hard to stop on the court!

Skill progression Shooting

No.	The students can	YES	NO
1	Attempt to shoot a basketball in any manner		
2	Hit the backboard with a one-hand set shot		
3	Make a basket with a one-hand set shot		
4	Hit the backboard on a lay-up attempt		
5	Make a basket on a lay-up attempt		

Modified From: Special Olympics Basketball Coaching Guide- October 2007

APPENDIX D

Pre-test and post-test of students passing performance

1. Chest pass technique rating scale of selected students

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	fair	Poor		Excellent	v. good	good	Fair	Poor
1	19	1					✓	2				✓	
2	19	2				✓		3			✓		
3	19	2				✓		2				✓	
4	18	2				✓		3			✓		
5	18	1					✓	2				✓	
6	19	2				✓		2				✓	
7	19	1					✓	2				✓	
8	18	2				✓		3			✓		
9	19	2				✓		2				✓	
10	19	2				✓		3			✓		
11	18	2				✓		2				✓	
12	19	1					✓	2				✓	
13	18	2				✓		3			✓		
14	18	3			✓			4		✓			
15	18	2				✓		3			✓		
16	18	2				✓		3			✓		
17	17	1					✓	2				✓	
18	18	2				✓		2				✓	
19	17	2				✓		2				✓	

20	19	3			✓			4		✓			
21	17	1					✓	1					✓
22	19	2				✓		3			✓		
23	19	2				✓		2				✓	
24	17	1					✓	2				✓	
25	18	2				✓		3			✓		
26	19	2				✓		2				✓	
27	19	2				✓		3			✓		
28	18	2				✓		2				✓	
29	18	1					✓	3			✓		
30	19	2				✓		3			✓		

2. Bounce pass technique rating scale of the students

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	Fair	Poor		Excellent	v. good	good	Fair	Poor
1	19	1					✓	2				✓	
2	19	2				✓		3			✓		
3	19	2				✓		3			✓		
4	18	2				✓		3			✓		
5	18	1					✓	1					✓
6	19	1					✓	2				✓	
7	19	1					✓	2				✓	

8	18	2				✓		3			✓		
9	19	2				✓		3			✓		
10	19	2				✓		3			✓		
11	18	1					✓	2				✓	
12	19	1					✓	2				✓	
13	18	2				✓		3			✓		
14	18	2				✓		4		✓			
15	18	2				✓		2				✓	
16	18	2				✓		3			✓		
17	17	2				✓		3			✓		
18	18	2				✓		2				✓	
19	17	2				✓		2				✓	
20	19	2				✓		3			✓		
21	17	2				✓		3			✓		
22	19	2				✓		3			✓		
23	19	2				✓		3			✓		
24	17	1					✓	2				✓	
25	18	2				✓		3			✓		
26	19	2				✓		3			✓		
27	19	2				✓		3			✓		
28	18	2				✓		3			✓		
29	18	2				✓		3			✓		
30	19	2				✓		3			✓		

APPENDIX E

Pre-test and post-test of students dribbling performance

1. Rating scale of selected students control dribble performance

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	Fair	Poor		Excellent	v. good	good	Fair	Poor
1	19	2				✓		4		✓			
2	19	1					✓	3			✓		
3	19	2				✓		3			✓		
4	18	1					✓	2				✓	
5	18	1					✓	3			✓		
6	19	2				✓		5	✓				
7	19	1					✓	3			✓		
8	18	1					✓	4		✓			
9	19	2				✓		4		✓			
10	19	2				✓		3			✓		
11	18	2				✓		4		✓			
12	19	1					✓	3			✓		
13	18	2				✓		3			✓		
14	18	3			✓			5	✓				
15	18	2				✓		4		✓			
16	18	2				✓		3			✓		
17	17	1					✓	4		✓			
18	18	2				✓		3			✓		
19	17	2				✓		4		✓			
20	19	2				✓		3			✓		

21	17	2				✓		4		✓			
22	19	2				✓		3			✓		
23	19	1					✓	4		✓			
24	17	1					✓	4		✓			
25	18	1					✓	3			✓		
26	19	1					✓	3			✓		
27	19	2				✓		5	✓				
28	18	2				✓		4		✓			
29	18	2				✓		4		✓			
30	19	2				✓		5	✓				

2. Rating scale of selected students on speed dribble

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	Fair	Poor		Excellent	v. good	good	Fair	Poor
1	19	2				✓		2				✓	
2	19	1					✓	2				✓	
3	19	1					✓	2				✓	
4	18	1					✓	2				✓	
5	18	1					✓	1					✓
6	19	2				✓		3			✓		
7	19	1					✓	2				✓	

8	18	1					✓	2				✓	
9	19	2				✓		4		✓			
10	19	2				✓		4		✓			
11	18	2				✓		2				✓	
12	19	1					✓	1					✓
13	18	2				✓		3			✓		
14	18	2				✓		3			✓		
15	18	2				✓		2				✓	
16	18	1					✓	2				✓	
17	17	1					✓	2				✓	
18	18	2				✓		3			✓		
19	17	1					✓	2				✓	
20	19	2				✓		3			✓		
21	17	2				✓		3			✓		
22	19	2				✓		3			✓		
23	19	1					✓	2				✓	
24	17	1					✓	2				✓	
25	18	1					✓	1					✓
26	19	1					✓	2				✓	
27	19	1					✓	3			✓		
28	18	2				✓		3			✓		
29	18	1					✓	2				✓	
30	19	2				✓		3			✓		

APPENDIX F

Pre and post-performance of selected students on shooting technique

1. Rating of selected students' performance on set shot

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	Fair	Poor		Excellent	v. good	Good	Fair	Poor
1	19	1					✓	2				✓	
2	19	2				✓		2				✓	
3	19	2				✓		3			✓		
4	18	1					✓	2				✓	
5	18	1					✓	2				✓	
6	19	2				✓		3			✓		
7	19	2				✓		2				✓	
8	18	1					✓	2				✓	
9	19	2				✓		2				✓	
10	19	2				✓		3			✓		
11	18	2				✓		2				✓	
12	19	1					✓	1					✓
13	18	2				✓		3			✓		
14	18	2				✓		3			✓		
15	18	2				✓		2				✓	
16	18	1					✓	2				✓	
17	17	1					✓	2				✓	
18	18	2				✓		2				✓	
19	17	1					✓	2				✓	

20	19	2				✓		3			✓		
21	17	2				✓		2				✓	
22	19	2				✓		3			✓		
23	19	1					✓	2				✓	
24	17	1					✓	2				✓	
25	18	1					✓	1					✓
26	19	1					✓	2				✓	
27	19	1					✓	2				✓	
28	18	2				✓		3			✓		
29	18	1					✓	2				✓	
30	19	1					✓	2				✓	

2. Rating of selected students' performance on lay-up shot

No	Age	Pre- test						Post –Test					
		Result	Rating scale					Result	Rating scale				
			Excellent	v. good	Good	Fair	Poor		Excellent	v. good	good	Fa ir	Poo r
1	19	1					✓	1					✓
2	19	1					✓	2				✓	
3	19	1					✓	2				✓	
4	18	1					✓	2				✓	
5	18	1					✓	1					✓
6	19	1					✓	2				✓	
7	19	1					✓	2				✓	
8	18	1					✓	2				✓	
9	19	1					✓	1					✓
10	19	1					✓	2				✓	

11	18	1					✓	2				✓	
12	19	1					✓	1					✓
13	18	1					✓	2				✓	
14	18	2				✓		3			✓		
15	18	1					✓	1					✓
16	18	1					✓	2				✓	
17	17	1					✓	2				✓	
18	18	2				✓		2				✓	
19	17	1					✓	2				✓	
20	19	1					✓	2				✓	
21	17	2				✓		2				✓	
22	19	1					✓	2				✓	
23	19	1					✓	2				✓	
24	17	1					✓	2				✓	
25	18	1					✓	1					✓
26	19	1					✓	2				✓	
27	19	2				✓		2				✓	
28	18	1					✓	2				✓	
29	18	1					✓	2				✓	
30	19	1					✓	2				✓	