

Akershus University College
Master's Degree in Vocational Pedagogy
May 2010

**HOW CAN I IMPROVE MY PRACTICE AS A FACILITATOR IN
TECHNICAL AND VOCATIONAL EDUCATION?**

*Focusing on Facilitating Participants' Participation and
Learning Groups?*

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Acknowledgement

I would like to express my gratitude to a number of people for the parts they have played in bringing this work to completion. Special thanks to the Upper Nile University staff for their joint effort in giving me the opportunity of becoming among the master students at Akershus University College in particular the late Vice Chancellor professor Akuie, professor Fasial and Dr. Mekalilie Benjamin.

Special thank to Mr. Abdel Rahman Ahmed the director and Deputy directors Mr. Bona Amum and Mr. John Paul Akic of the MVTC for all the support they had provided. And to the MVTCs' instructors whose takes part and participant in this research.

Special thanks, to the NUCOOP project coordinator Prof. Johan Houge-Thiis, and to my Mentor Prof Trond M. Smistad for the efforts he has made in facilitating, helping and encouraging in my efforts to improve my English capacity and to accomplish this dissertation. Further appreciation goes to Mrs. Fatin Osman an exchange staff from Upper Nile University to Akershus University College for her support and advice. Special thanks to my friends and colleagues at master program Paul T. Nganda A.

Special thanks to Prof. Jack Whitehead from University of Bath and Prof. Bruce McKinzey from Systemic Development Institute for their contribution to this study through the dialogue we had together during the meetings and the workshops in Feb and March 2010 at Hiak.

Thank you

Dedication

This dissertation is dedicated to my wife Atoj Deng, for her love and support, and to our first-born Joy Daniel and to my parents and all human beings.

Disclaimer

The opinions expressed in this work are entirely those of the author and do not represent in any way the official viewpoints of Malakal Vocational Training Centre administration.

Authors Declaration

The material included in this dissertation has not been submitted in whole or in part for any other academic award.

Daniel Ruben Ateng kwang
May 2010

Abstract

This dissertation documents a self-study of my own practice as a facilitator in technical vocational education which is committed to practice improvement. I have adapted action research living theory methodology whereby I asked myself the question: How can I improve my practice? It is through adoption of this methodology I have been able to reflect over my practice and how I live in accordance with my values.

The aim of this dissertation is to present an account of my inquiry, in which I explore what it means to live my values in practice. Through descriptions and explanations of my practice, this dissertation unveils a process of action and reflection, punctuated by moments when I deny or fail to live my values fully in practice, prompting the iterative question how can I improve my practice; the reflective process enabling me better to understand my practice and test out that understanding with others in the public domain.

It is through the research method and tools e.g. audio and video recordings, minutes and log writing, photographing, I became able to document the sequences of my actions during the meetings and group discussion with the instructors at the Malakal Vocational Training Centre (MVTC).

List of Abbreviations

HIAK	Akershus University Collage - Norway
MVTC	Malakal Vocational Training Center
TVE	Technical and Vocational Education
UNS	Upper Nile State
UNU	Upper Nile University
VTC	Vocational Training Center
NUCOOP	Norwegian Universities Cooperation

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Chapter one

Personal and Research Background

1.1 Personal background

I am a research student under the Norwegian Quota Scheme program pursuing a Master's Degree in Vocational Pedagogy at Akershus University College (HiAk) and a graduate of mechanical engineering from Sudan University for Science and Technology (Sudan). I have been an instructor in Vocational Training Centers for the last eight years. My practice was from September 2000 to June 2005 in the North of Sudan at St. Joseph's Vocational Training Centre Khartoum and from October 2005 to June 2008 in Southern Sudan at Malakal Vocational Training Centre.

During the last eight years I was engaged in teaching practical and theoretical subjects in various vocational crafts. The instruction approach which I used was a kind of teacher centered. I used to determine what I regarded to be important for the students, and thus reducing their opportunity to take responsibility for their learning.

Generally, I used to select the subject matter based upon the curriculum requirements of the school. I had scheduled a plan indicating the teaching syllabus throughout the academic year. The plan did not take into consideration the diversity in experiences, knowledge, background and environment of the students.

When I reflect upon my former practice, I realize that the learners were not involved in planning which was important for their learning. I have the feeling that the students were there because they wanted to avoid being disciplined or dismissed from school.

It made me as a teacher to focus on the subject matter instead of concentrating on both students and the subject matter.

1.2 Problem Statement

I think that the teaching practice has to be in accordance with the needs, knowledge and background of the students to enable them to obtain an increased learning outcome. People learn

through experiences during their day to day activities and through teaching when they are being taught at school. Learning in this case is a lifelong process.

In Sudan for example, the government institutions like Ministry of Education, Ministry of Youth and Sport and Ministry of Labour play a part in determining what students should learn at school. In most cases they articulate the education policy and the curricula. This gives the teacher no other option than to teach as instructed by the government. This fact has an influence on teachers' and students' mind set. It probably also influences the way they regard teaching and learning. The students' parents on the other hand have limited influence on their children's learning process.

Teaching in such situations probably becomes a set of rules and plans rather than facilitating a learning process in which the students are enabled and expected to take responsibility for their learning.

In Sudan, there are a lot of students dropping out from the schools and universities. Some people may probably blame the students of not being able to meet the school requirements. Some may say that what is taught in school is irrelevant to the students and real life. Personally I think the above reasons may be part of the problem of students dropping out. As a teacher, I think the problem is more than just that. I think my practice as a teacher can influence the learning process of the students. Therefore, I think that it is necessary to examine my own teaching practice and to try to improve some areas of it. This may increase the learning outcome of my students and reduce the number of students dropping out.

The influence of these different systemic parameters (government institutions, school administrations, education policies etc) is significant both for my practice as well as for the learners learning outcome. However, the education system in its totality is not the focus of mine in this action research project.

I want to keep focusing on the improvement of my own capacity as a facilitator. This causes my problem statement to be:

How can I improve my practice as a facilitator of technical vocational education?

For the past eight years of my experience with teaching and learning, I used to communicate the subject matter to my students by explaining and illustrating everything to them. During the course of my experience I found that the participation of the students in class is very poor. Students didn't participate freely. In order to encourage them to participate I used to ask them some questions during the lesson. I realized that this approach was motivating the students to participate and therefore it made me to realize the importance of improving my capability in facilitating participation.

As a teacher I also wanted to improve my ability to facilitate the learning of the students in learning groups. I think doing so will enable the students to exchange their learning experiences and to encourage each other.

1.2.1 Research questions

My problem statement is: How can I improve my practice as a facilitator in technical vocational education? It is further narrowed down into two research questions which I will address in this enquiry. Those are:

1. How can I improve my capability to facilitate participation?
2. How can I improve my capability to facilitate learning groups?

1.3 The concepts of participation and learning group

In this part I will try to define and account for the meaning of participation and learning group when used in this enquiry.

1.3.2. Participation

By participation I mean that the students involve themselves in the learning activities in the workshop or classroom during the lesson. People in different contexts may possibly understand the word participation differently. Some people may understand it as a collective involvement whereby people join their hands together to perform a certain task of duty. Others may understand it as an individual commitment towards a group of people.

There is a difference between involving the students and the students' participation. The first one I as a teacher ask my students to take active part in doing something whether they like it or not. While the latter means that the students are willingly taking part to participate in the learning process.

In my context, I wish to improve my practice by enabling the students to participate that means that the students become participants.

1.3.1. Learning group

By learning group I mean a number of 3 to 6 people who meet together on a regular basis to share and discuss a subject matter of their interest. People may possibly understand learning group differently depending on their context and experience. Some may understand it as a group of people no matter how many people who are in this group. Like for example people who share common interest. However, in this context I mean by a learning group a number of 3 to 6 students in one specific class/ hall/workshop etc who share and discuss their understanding of a specific subject matter and are guided by a facilitator who facilitate their learning process.

1.3 Objectives, Scope, and Significant of the dissertation

1.3.1 Objectives

The intention of the study is to ask, research and answer my questions: How can I improve my capability to facilitate participation? And How can I improve my capability to facilitate learning groups?. The study was carried out jointly with the instructors at Malakal Vocational Training Centre (MVTC) South Sudan in an effort to facilitate and contribute in knowledge creation, in the learning groups and to improve my teaching practice while developing a shared understanding of a student centered approach. The objectives of the study are to improve my teaching practice and to establish a sustainable learning group.

This study will take a direction towards experiential learning. Based upon my own experience I agree with Griffin Collin in his statement when saying that experiential learning empowers individuals to gain control over their learning and hence their lives, and to take responsibility for themselves (Collin Griffin, 1992, p 32).

I and the some instructors at the MVTC decided to work together to facilitate learning, while developing a shared understanding of student centered approach, in an attempt to improve our teaching practice, and therefore, the instructors will be divided into learning groups to undertake responsibility for their own learning (Knowles, 1980).

1.3.2 The Scope of the Research

The study is about asking, researching and answering the question how can I improve my practice as a facilitator in Technical and Vocational Education at the Malakal Vocational Training Centre Upper Nile State Malakal South Sudan.

1.3.3 The MVTC Instructors' role in this study

I have invited the interested instructors at Malakal VTC, to be directly involved in the research, as those whose learning I am trying to influence, though the focus is I not them; I am investigating my practice in relation with them, not theirs in relation with me, as such they are equal and will be treated equally. (Jean McNiff & Jack Whitehead, 2009, p 61). Therefore the role of the instructors in this study is that they are participants who want to improve their teaching practice by obtaining a better understanding of the concept of student centered approach. In turn, I am trying to improve my practice through them.

1.3.4 Significance of the dissertation

The results of this study are expected to be important:

1. For the researcher in building his capacity in doing an action research, as well as, progress in his study to pursue a Master's Degree in Vocational Pedagogy at Akershus University College.
2. To contribute with new knowledge in the area of action research enquiry, emphasizing the question. How can I improve my practice?
3. To the instructors at Malakal Vocational Training centre in their efforts to improve their teaching through a student centered approach.

4. For the instructors at the Malakal Vocational Training centre in qualifying them to become part time students in the NUCOOP-TVET Bachelor's Degree program in Technical Vocational Education for Teachers.
5. For the Malakal Vocational Training Centre in its attempts to build the capacity of its staff.
6. For the NUCOOP – TVET project in its efforts to participate in building the capacity of the Technical and Vocational instructors in Sudan.

1.3.5. Financial Support:

This research is made possible with a financial support from the NUCOOP TVET project.

1.5 Report Structure

This report consists of five chapters, in chapter one Background, I wrote a personal background and instructors' background. I have also mentioned the research questions in addition to the purposes, objectives and scope of this dissertation.

In chapter two, I will make a literature review where I am going to discuss and make an argument about the main concepts used in this research, which are; facilitation and facilitator, participation and learning groups based upon my understanding of learning and knowledge.

In chapter three, I will write about the research methodology and the methods used to collect and analysis data.

In chapter four, I will present, research findings and one example of how the data were analyzed while the rest of the analysis can be found in appendix 1 and 2. In chapter five, I will discuss the findings based on the research questions. In chapter six, I will make my reflections and conclusion.

Chapter Two

Literatures Review

In this chapter I will make a literature review based on the problem statement how can I improve my practice as a facilitator in technical vocational education, and based on the two research questions; how can I improve my capability of facilitating participants' participation and how can I improve my capability of facilitating learning groups. I will discuss some concepts that I consider relevant to the research problem statement and research questions.

2.1 Facilitation and the Facilitator:

Patricia Prendiville, (2008, p 13) and Gerry Gaffney (2000) refer to facilitation as a developmental educational method that encourages people to share ideas, resources, opinions and to think critically in order to identify needs and find effective ways of satisfying those needs. I agree with their definition because facilitation enables people to be in an environment that enable them to discuss and share ideas. However, I don't agree with them when they limit the facilitation process to idea sharing. I have experienced that facilitation also can enable and empower the participants to carry out a task or perform an action.

Gerry Gaffney (2000), Stated that it is important that all participants are aware of, and agree with, the purpose of the session. The purpose should be visible at all times so that participants can be reminded of it if necessary. I agree with him because without a clear agenda and purpose it may be difficult for the facilitation as a process to be done.

Patricia Prendiville (2008) stated that facilitation encourages greater participation and responsibility for decisions. Through facilitation, group members come to value and develop their own expertise and skills. I agree with Patricia Prendiville because facilitation can encourage the participants' participation and could enable them to make decisions

Facilitation can be face-to-face or on line, in face-to-face settings the facilitator has to ensure that every participant is given a chance to speak/participate. On line facilitation the facilitator can encourage the participants to participate, by drawing their attention to the discussion and by

posting questions to each and every individual to get her/his opinion this. This in situation where the facilitator use Messenger, skype..etc. Another useful on line facilitation is through Blogs, wiki and e-mail. In this kind of facilitation the facilitator post comment, questions to the participants. The participants in turn can respond to those comment as well as they can comment of their own work too. This kind of facilitation according to my experiences is much effective. It enable the participants to reflect and analysis their work as well as it minimize the possible miss interpretation that could occur when using synchronous communication. Because the participants express their thought and idea in written form. I think face-to-face facilitation is more effective because all the participants are meeting each other and it may possibly give them the chance not only to talk and listen but understand each other better when they are socializing together.

Zane Berge (1995) has proposed a widely used classification of facilitating activities under four categories: pedagogical, social, managerial, and technical. According to Berge, the pedagogical role concerns the teacher's contribution of specialized knowledge and insights to the discussion, using questions and probes to encourage student responses, and to focus discussion on critical concepts. I agree with him because I think using questions and probes may raise the students' curiosity and possibly keep them attentive during the discussion.

Robert Bacal (2003) and Patricia Prendiville, (2008) defines a facilitator as an individual whose job is to help to manage a process of information exchange. The facilitator's role is to help with how the discussion is proceeding while an expert's role is to offer advice, particularly about the content of a discussion.

I agree with him because the facilitator helps people to decide what they want to accomplish, and encourages and helps them to complete an agreed task or activity. The facilitator ensures that the needs of individuals within the group are recognized, acknowledged and taken care of.

Schwarz (2002), Pierce Cheesebrow and Braun (2000) and Marcelle E. DuPraw and Marya Axner (1997) agreed that the facilitator role is to be a substantively neutral person who is not a group member and work for the entire group.

I think a facilitator having natural role is important in situation whereby the participants wanted to make a decision that concern the future and well being in the organization. But on the other

hand the involvement of the facilitator it is useful and important to maximize the learning outcome in the facilitation process.

Michael Wilkinson (2001, p 247), Sam Kaner, Lenn Lind, Catherine Toldi & Duane Berger (2007, p xiv), found that the power in the role of the facilitator is when he is advocating for facilitation process that is fair, and inclusive, to balance participation and improve productivity.

I agree of the above authors because the facilitator should advocate for process that could enable the participants to take decision and solve their own problems. He could advocate for such process like, brainstorming, mapping..etc. the facilitator should balance these process to achieve the possible outcome. The risk of advocating for such process may possible make the participants to be dependent on the facilitator instead of discovering their own process.

Patricia Prendiville, (2008) mentioned that in some settings, the facilitator plays an objective role, asking questions, encouraging responses and enabling group members to discuss, to respond and to reach a conclusion. In other situations, s/he may be stimulating group members to create solutions to problems they have identified by offering suggestions or creating simulations which the group can practice.

I agree with her because a facilitator who is posing questions can encourage participants to develop new ways of thinking and analyzing the situation they are in. I think also that as facilitator I may not know all the answers. I understand my role as to help the group to think critically about their own needs and interests, and to make decisions themselves.

I think that paying attention while facilitating the group discussions is important because it enables me as a facilitator to guide the group discussion in a proper way. I think also there should be a balance between offering ideas to guide the group and listening and questioning. I have to encourage each member of the group to contribute during the process. I believe that every member in a group has valuable knowledge and contributions to share.

Participants can be unwilling to share their knowledge perhaps because they lack the confidence or they may not regard what they know is important. The facilitator's role is to build trust and respect between the members of the group and to encourage dialogue and learning, from which

the whole group will benefit. She/he can advocate a process that would enable the participants to discover their abilities to participate and work for solutions of problems.

Patricia Prendiville (2008), Sophie C, Rachel B. & Isabel Carter (2004) and Marcelle E. DuPraw and Marya Axner (1997) acknowledged that a good facilitator should be humble, generous, patient, understanding, accepting, inclusive, an encourager, an enable, affirming of everyone's knowledge, sensitive to the needs of others, willing to learn from mistakes, dynamic, a motivator, a good listener, good at summarizing others' ideas, confident and a good communicator. I agree with them because these qualities and attributes may possibly help and enable the facilitator to perform her/his role smoothly. But it may not be possible for the facilitator at the same time to cultivate all of these qualities and attributes.

2.4. Participation

Participation is the involvement of the participants, students, or community members in the activities of the group. The main aim of a facilitator is to encourage individual members of a group to participate in a discussion or activity (Sophie C, Rachel B. & Isabel Carter, 2004, p 27).

Gerry Gaffney (2000) stated that some participants may not like to participate because they may be afraid that others may miss interpret what they are saying. I agree with him, and I think to ensure participants' participation as a facilitator I should observe the participants during the discussion and be aware of any participant keeping their head down, doodling, or showing similar lack of engagement.

The individuals in the group may participate actively when they feel comfortable and secure to express their ideas. The facilitator has to encourage all participants to respect each other's ideas and listen to what others are saying.

2.4 Learning Group:

Johnson, Johnson and Holubec (1998, pp 1 - 5) and A. Woolfolk (2001, p 340) refer to the learning group as a small group of students working together to maximize their own and each other's learning.

As stated by Patricia Prendiville (2008) the group members work together towards a defined end/goal and, at the same time, focus on how they are working together to ensure the development and support of each other within the group and throughout the process.

According to my experience, I think mixed groups may provide an opportunity of enriching the group experiences and will possibly help in building a collaborative relationship across the different department/workshop at the MVTC. (Johnson Johnson & Smith, 1991)

Johnson Johnson and Smith (1991) stated that the larger groups decrease each member's opportunity to participate actively. The less skilful the group members are, the smaller the group should be. The shorter amount of time available, the smaller the group should be

According to Rau and Heyl (1990) smaller groups of three contain less diversity and may lack the divergent thinking styles and varied expertise that help to animate collective decision making. Conversely, in larger groups it is difficult to ensure that all members participate.

Fiechtner and Davis (1992) and Smith (1986) argued that forming of the learning group is the school or college responsibility. The teacher or a facilitator can assign students to groups to maximize their heterogeneity: a mix of males and females, verbal and quiet students, the cynical and the optimistic.

Some teachers/facilitators let students choose with whom they want to work, although this runs the risk that groups may socialize too much and that students may self-segregate (Cooper, 1990).

Self-selected groups seem to work best in small classes, for classes of majors who already know one another, or in small residential colleges (Walvoord, 1986).

The proposed methods of the learning group's formation have its pros and cons. When the facilitator take the risk to form the group the members of the group may accept and get to know each other well and perform better than the self-selected. The limitations of doing so lays on not enabling the students to make their own decision and such limit democracy and freedom of

choice. On the other hand enabling the students to choose in which group they want to belong to, promotes democracy and free will. However, the students may choose their friends or people they know better. This may limit the performance of the group because they may engage themselves discussing their matters not related to the group goals. To minimize this risk, the facilitator has to follow up closely the group members to evaluate their performance. His role in this context is more to be like a leader and supervisor. Secondly, the group can be rearranged by mixing it with other learning group.

2.5 Learning:

The Free Dictionary¹ defines learning as knowledge gained by study; instruction or scholarship knowledge. This definition has probably limited the acquisition of learning to education, which means learning occurs only in the classroom and is passed from the teacher to the students which enforce the banking system of education (Frerie, 1972).

The free online Encyclopedia² defines learning as: Process of acquiring modifications in existing knowledge, skills, habits, or tendencies through experience, practice, or exercise.

David A. Kolb (1984) defines learning as a process whereby knowledge is created through the transformation of experience in his definition he emphasized on several critical aspects of the learning process viewed from the experiential learning perspective. Firstly, he emphasized on the process of adaptation and learning as opposed to content or outcome. Secondly knowledge is a transformation process, being continuously created and recreated, not an independent entity to be acquired or transmitted. Thirdly, learning transforms experience in both its objective and subjective forms. Finally, to understand learning we must understand the nature of knowledge and vice versa.

Experiential learning³ take place through reflection on doing, there are four important elements in experiential learning. For the learner to learn through experiences he must actively be involved in the experience, then reflect on what he did, then analysis the process and take decision to solve the problem.

¹ <http://www.thefreedictionary.com/learning>

² <http://en.wikipedia.org/wiki/Learning>

³ http://en.wikipedia.org/wiki/Experiential_learning

Kolb (1984) indicated in his experiential learning circle that there are four important elements experience, reflection, conceptualizing, new action to further experience.

Besides learning at school or university, involvement in workplace tasks promotes new learning and strengthens what has been learnt through further practice. “This account of workplace’s contribution to learning is consistent with contemporary learning theories, which help substantiate the case for workplaces to be seen as legitimate and effective learning environments” (Billet, 2001, p 14).

Workplace as a learning environment has some limitations which need to be considered when engaging in such kind of activities.

“The trouble with learning on-the-job ... you’re only as good as the situation you come up...and the people you are working with and their ability to communicate this limitation are summarized into three main points:

- a) Workplace situation; if the workplace has got limit equipment and tools that cannot no allow the people to perform most complex task or problems
- b) The nature of the problem the worker are facing can be beyond their capacity and this can limit their learning.
- c) The kind of people you are working with if they may have some communication difficulties that will limit their ability to communicate effectively” (Billett S. 1994.qouted in Billett. Stephen 2001, p 83)

After exploring the definition of learning from different perspectives. I think as an individual I learn through practice and experience, I can better my understanding of the world and construct meaning from the things around me in the world. Through my own experience, I can improve my practice and modify my existing knowledge, and skills.

2.6 Knowledge:

Knowledge is defined by the Oxford English Dictionary⁴ as

- (i) *expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject;*
- (ii) *what is known in a particular field or in total; facts and information; or*
- (iii) *awareness or familiarity gained by experience of a fact or situation.*

I think this definition has highlighted three important aspects of acquisition of knowledge; i.e., firstly; knowledge is acquired through life experiences or education or both. Secondly scientific knowledge which can be acquired in particular field. E.g. field of Vocational Education, medicine, ..etc. Thirdly being aware or familiar to a situation, this can also be gained through experience. However, for the knowledge to be legitimate it has to be made publicly and shared with others.

John Dewey goes further by linking the knowledge and action, when he said “Ideas are worthless except as they pass into actions, which rearrange and reconstruct in some way, be it little or large, the world in which we live” (Dewey, 1916, pp 260-270). To unfold our knowledge, we have to put it in actions thus there is an interactive relationship between human beings and the world by human action, experiment and experience. E.g. I can make a claim that I know how to ride a bicycle. To uncover this knowledge I should put this knowledge into action. There is a difference between **knowing how** to ride a bike and **knowing what** a bike is.

Jean Piaget (1970) described how a child acquired new knowledge; firstly, when a child faces a new situation, he tries to fit this external reality with his internal cognitive structures, or schemas. And he called this as Assimilation. Secondly, when face another situation, he tried to fit his internal mental structures with his external reality and called this accommodation. Piaget emphasized the functional quality of assimilation, where children and adults tend to apply any mental structure that is available to assimilate a new event, and actively seek to use this newly acquired mental structure.

⁴ <http://www.thefreedictionary.com/knowledge>

As an individual I think knowledge is acquired through practice, experience from real life situations and through scholars.

2.7. The relationship of ontology and epistemology to learning and knowledge:

Whitehead and McNiff (2006) stated that ontology refers to a theory of being, which influences how we perceive ourselves in relation to our environment, including other people. Ontology is not the same as cosmology, which refers more to one's worldview. It depends on how we assume our being; in or outside the world. If you see yourself as separate from other people, you may assume an outsider approach to research. This is the spectator form in the social sciences. Your task would be to observe other people and offer descriptions and explanations for what they are doing. If however you see yourself as part of other people's lives, and they of yours, you may adopt an insider, participative approach, which would involve you offering descriptions and explanations for how you and they were involved in mutual relationships of influence.

Whitehead and McNiff (2006) stated that epistemology refers to a theory of knowledge, which involves two parts:

- a theory of knowledge (what is known);
- a theory of knowledge acquisition (how it comes to be known).

They further stated that your epistemological stance is inevitably influenced by your ontological stance. If you believe that the world and its inhabitants are 'out there', separate from you, you may regard knowledge in the same way. You may even reify knowledge (turn it into a thing), which you could study and analyze. If however you believed that you were part of the world and not a fly on the wall, you would probably see knowledge as something you create, in company with other people who are also creating their own knowledge. Because you would see yourself as interacting with others, you could see your own process of interaction as a process of testing and critiquing what you already know and transforming it into something better. (Whitehead and McNiff, 2006, pp 22 – 24)

My ontological and epistemological assumption is that I am a part of the others and they are part of me and I assume I am influencing my and their learning too.

Chapter Three

Methodology and Methods

3.1. Methodology:

In my first report I used qualitative methodology to study the vocational practice at the vocational training center and the local Industries at Upper Nile State – South Sudan. (Ateng, D. R. September, 2009) I studied what students, and teachers were doing at the VTC, how the learning took place and what were the teaching methods used. At the local workplaces, I studied how learning took place, what were the vocational skills practiced outside the VTC, and what were the vocational products. The qualitative methodology and methods I used helped me to find answers to those questions. I presented what I had observed, experienced, seen etc. I found myself in a position of spectator observing what is happening around in the world. However this was in contradiction to my ontological and epistemological assumption because I assume that I am a part of the others and they are part of me and I assume I am influencing my and their learning too. But it was necessary to play the spectator role because the purpose of the study was to describe what is happening in the Vocational Training Center (VTC) and the workplaces.

As an alternative I could have used quantitative methodology to study the number of the students, workers, costumers, products etc. I could have combined the two research methodologies to test the validity of the findings. When the two research methodologies combined together is call triangulation. Triangulation could also be a combination of qualitative methods like interview and observation which is a combination of methods. Triangulation is used to test the validity of the finding obtained from quantitative methodology against qualitative methodology and vas versa. Triangulation can be used also to look into the same data from different points of view (Mikkelsen, 2005).

In this enquiry I am studying my own practice and I asked myself the questions; how can I improve my capability of facilitating participants' participation and how can I improve my capability of facilitating learning groups. This implies testing my actions against its consequences, and then I do reflection, planning, and action and so on. I choose the living theory

methodology, because it enabled me as a researcher/practitioner to investigate my own practice, observe, describe and explain what I am doing in company with other participants, and produce my explanations for what I am doing and why I am doing it (Whitehead & McNiff, 2006).

Greenwood D. and Levin M (1998) stated that, action research is a democratic research process through the inclusion of local stakeholders as core researchers. They further said that “they believe that action research (AR) can produce better research results than the arising from the professional expert social research models and they see AR as central of enactment of commitment to democratic social transformation through social research” (Greenwood D.& Levin M, 1998, p3)

My choice of action research methodology is because that I found as stated by Greenwood D. and Levin M. that AR methodology is different from other social research methodologies because Action research methodology contributes actively and directly to the process of democratic social change and the simultaneous creation of valid social knowledge.

The epistemological foundation of action research is based on practice, the researcher investigate a situation or action then create knowledge and explanation based of what he has experienced. The other forms of social research draw explanation based of theories and textbook. This distinguishing feature of action research made it scientifically accepted and capable to make social change. (Greenwood D. & Levin M, 1998, pp 67-69)

My choice of a living theory methodology is based on my willingness; firstly to live in accordance to my values, love for freedom, democracy and respect of others opinions. Secondly, to make my knowledge public. Thirdly to contribute to knowledge creation as a Master’s student pursuing a Master’s Degree in technical vocational pedagogy at Akershus University Collage. Fourthly, in the process to improve my practice as a facilitator in Technical Vocational Education.

The action research living theory approach methodology is probably different from other research methodologies because it addresses the question I whereby I became living

contradiction when my values are denied in my practice I use the living theory research methodology as means to overcome this contradiction (Whitehead, 1989).

The difference between living theory methodology and other research methodologies is that living theory methodology addresses the question “I”. It shows individual influences to his learning and others learning. The other from of research intended to study and interpret the things, ephemeron, people to make meaning, knowledge and theories out of it.

In action research approach the researchers may tend be spectators to maintain outsider perspective, to observe what other people are doing, and describe and explain people’s actions. Or they can be an insider taking the role of the participants in the research process and such observing their actions and describe and explain their action (Jack Whitehead & Jean McNiff, 2006).

3.2. Methods

Working as an action researcher means that I “accept no a priori limits on the kinds of social research techniques” which I can use. “Formal quantitative, qualitative, and mixed methods all are appropriate to differing situations.” (Greenwood & Levin, 1998, p.7)

Research method refers to any techniques and tools used to collect data or information about a situation, phenomena, people etc. Some of these methods are, observations, structured and unstructured interviews, text analysis, minutes, notes, logs, dairy, audio and video recordings etc. (McNiff & Whitehead, 2005).

3.2.1. Meeting minutes and Logs:

During my research I wrote minutes and logs from the meetings for later reflections to check out what I did during the discussion and how I can improve my actions/what I do, my methods of facilitation in the following meetings.

Writing minutes during the meeting helped me to keep track of my actions. One limitation of this method is that I used to stop the discussions and asked the participants to repeat or slow down their talks to be able to write what were said. Interrupting the participants perhaps made them to forget what they were about to say. Secondly what I am writing from the meeting is my own understanding and interpretation of what is said. Doing so is probably changing the data from the original source. On the other hand writing log after the meeting enabled me to reflect and to

describe what took place and how I can improve in the next meeting. However, the limitations of log writing is that during the meeting a lot of things might happen which I can't remember when writing the logs. To minimize the possible risks of using the logs and minutes from the meeting I compared what is written in the minutes with the logs.

I organized my log by using Microsoft word I created a table consisting of three columns, on the first column I wrote what I did, in the second column I wrote what I learnt from my actions and in the third column I wrote smart to do. Organizing the long in this way enabled me to reflect on daily basis on my actions and work for improvement. As in the below example:

Date	Done	Lesson Learnt	Smart to do
23/10/09	I suggested to the instructors that we can start with student centered approach as the subject of our discussion during the meeting.	I learnt that when the instructors they accept whatever I suggested to them. This is probably hindering their freedom of decision making.	What I could have done is to use probes and questions that would enable them to think and decide.

3.2.2. Audio and Video Recording:

I found that I cannot depend only on minutes and log writings, because of their limitations that I mentioned above. I decided to introduce new methods that are audio and video recordings.

I asked for the participants' permission and they accepted to make audio recordings from the meetings. This helped me to focus and pay attention to the discussion during the meeting and transcript it latter. The limitations of audio recordings are; firstly, there are important events that cannot be captured by the sound recorder such like the body language, secondly due to the noise during the meeting the sound may not be very clear. Thirdly during the transcription I found myself sometimes missing words, or miss interpreting the voices. To minimize the possible risks of audio recorder I decided to use video recorder in some of the meetings.

I think that, the use of audio and video recorder has influenced the participants' participation. Some of the participants when they knew that their voice will be taped, they reduced their participation and became careful in using terms. I felt that they are not talking and expressing themselves freely.

3.2.4 Photographing

I used photographing as research method to collect data. I combined pictures with notes to get better understanding from the data. The strength of this method it enables me to understand what had happen during the meeting when analyzing those photos. The weakness of this method is that, photos may not present the reality, secondly can be miss interpreted.

3.2.5. Reading literature as a research method

As preparation for this study I read literature about the research methods, the strength of the literature is that it enabled me to choose the appropriate methods for this research. My readings have influenced my assumptions regarding facilitation, participation and learning group. It helped me to take notice, reflect, summarizing, compare and so on. For example Kolb (1984) experiential learning reflective circle (experience, reflection, conceptualizing and experience again) helped me to constantly trace my actions. The weakness of some of the literature I read is that some of it was written before newer methods were available for use in research in general, especially the use of information and communication technology (ICT) the ICT is becoming widely use now a days because it reduce the facilitation cost and time saver.

3.2.6. Use of Internet as a research method:

I used the internet Google searching as a research tool, to gather information from different sources. This method helped me to find the necessary information needed to do the study. The research participants have used it also in their effort to understand what student centered approach might be. The use of the e-mail has helped me to communicate and receive comments, feedback from mentors and colleagues. The internet is a very good source for the researchers to search for information and such this implies that the researcher should be critical to all the source of the information.

3.3 Validity:

The idea of validity means that something is relevant, and can be accepted. When people say, ‘That’s a valid point,’ they probably mean that the point is, meaningful and acceptable.

In this enquiry I am studying my own practice and I asked myself the question how can I improve what I am doing. This implies testing my actions against the consequences of these actions, then reflections, planning, and act so on. I claim that the change happens in my practice as improvement. This claim of improvement is valid due to the change happen. However, I am

not trying to demonstrate a cause and effect relationship between me and other people's actions. I am not saying, 'I brought about improvement' or 'I made that happen'. I am saying, 'I can show that certain changes took place as I changed my practice, particularly in myself, and different relationships evolved.' I am trying to show a development of influence, an unfolding of new understandings and actions from people working together with in new ways, and their influence on one another, that is, how they learn with and from one another (Jean McNiff, 2002).

Showing the validity of the claim to knowledge implies two validity checks. The first relates to my capacity to test the validity of knowledge claim against my criteria and standard of judgment and it is known as personal validity. The second related to how correctly I disclose it so that other people can test it in relation to objective criteria and standards of judgment, and it is known as social validity (Jean McNiff & Jack Whitehead, 2009, 24 -25).

McNiff (2002) argues that in action research, practitioners, not 'the experts' set their own criteria as they take responsibility for their own work. In action research, she states that the values that inform practice become the criteria for judgment. The consequences of setting personal criteria of judgment are that my practice may not always in be accordance to my values.

During the six meetings of this study process, three kinds of evaluation were carried out during and after the meetings. Firstly, an evaluation of the methods used in the group meetings and how may action can be improved secondly personal assessment to examine what I am doing and how I can improve it, thirdly evaluation of the learning outcome of the participants' learning process and how it can be improved. I tried to validate this study through receiving feedback from the instructors by asking them to give their opinions on how each meeting was facilitated. (Flick 2007, p 66)

The strengths of this approach is that, asking for feedback from the participants helps in refining my understanding and improving what I have documented. The participants' feedback helps me to understand what they think I need to improve. The limitations of this approach are; the participants may possibly uncritically agree on whatever I did or said and this can minimize my possibility of making change in my practice. Secondly I may perceive the participants feedback wrongly. For instance, a participant may say that this is good. But what does good mean to him,

how good is it? To minimize the possible risk of interpreting feedback, mirroring and paraphrasing could possibly be means to validate their feedback.

3.4. Ethical Issues

Whitehead and McNiff (2006) give advice about ethical frameworks and state that there are three basic categories, the first being access whereby if you are involved with other participants then their oral and written permissions need to be negotiated, and if participants are young or vulnerable, then such permissions are needed from the parents or cares. The second category is about safeguarding rights whereby confidentiality is assured and that participants have the right to withdraw at any time and ask for data to be destroyed. Thirdly, it is about maintaining good faith whereby ethics' statements should be drawn up and letters of permission written.

My ethical principles as a researcher are respect of people's freedom and not miss using or handling the information given to me by them.

I conducted this study within the ethical framework. I have invited the interested instructors at Malakal VTC, to be directly involved in the research, as the people whose learning I am trying to influence. Though the focus is I not them; I am investigating my practice in relation with them, not theirs in relation with me, as such they are equal and will be treated equally. (Jean McNiff & Jack Whitehead, 2009, 61).

The participants willingly attended the meetings and participated fully. Though their presence could perhaps be interpreted and understood in several ways. I remember the director/principal of the Malakal VTC requested them to participate. Some of the instructors may have participated because they were asked to by their boss in his power position. Maybe the language used by the director shows power and authority. Secondly the instructors' participation could be interpreted as that they really wanted to take part and willingly came to the meetings.

I took photos, recorded audio and videos after I got their permission. To be within the ethical framework before each meeting for group discussion I used to post an invitation note on the announcement board in each department for the willing instructors to join.

The invitation notes look like the following

Subject: invitation for group discussion meeting on Friday 22/01/2010

Dear all,

As we have agreed to have a group discussion on Friday 22nd – January 2010. I would like to remind you that the meeting will be at 8:45 to 10:30 in the NUCOOP – TVET hall.

For the group discussion to be fruitful and inspiring it is advice able that

- *Each group prepares their part in advance.*
- *Each individual brings his/her individual report and experience on Student centered approach.*

Thanks

Daniel Ruben Ateng

Learning group facilitator

The participants could possibly understand this invitation as reminder to them to get prepared for the meeting and discussion. The strengths of this approach is that the participants upon reading the notice they have the freedom to decide whether to joint or not. Secondly it enables them to be prepared in advance for the group discussion. The limitations of the approach is that some participants may not see the invitation either because they have not come close to the announcement board during that day or perhaps somebody remove, torn the invitation unknowingly or not interested to participate.

3.5 Data analysis:

Relevant data to the research questions *how can I improve my capability of facilitating participation?* and *how can I improve my capability of facilitating learning groups?* will be used in the analyses and the discussion. I will select key pieces to use the relevant data based on the research questions and my claim to improvement happen in my own practice. (Jean McNiff & Jack Whitehead, 2009, p 62).

Comparative analysis is to compare case against other case or group or respondents against other respondents. I will adapt this analysis method to compare my action to the consequences of this action. The best way to do comparative analysis to the pros and cons of my action is through tables. (Flick 2007, pp 52 - 80).

I adapted this method in analyzing the findings to enable me to understand the influence of my actions to my learning and other's learning too. This is not cause and effect relationship between me and other people's actions. By doing so I am trying to show that certain changes took place

as learned and thus changed my practice. I am trying to show a development of influence, an unfolding of new understandings and actions from people working together in new ways, and their influence on one another, that is, how we learn with and from one another (Jean McNiff, 2002).

The qualitative research tables are used also to make comparisons. Creating such tables involves retrieving text that has been coded and putting it, or more often summaries of it, into cells of tables (Flick 2007, p 78).

In the data analysis I tried to use line-by-line analysis decoding, whereby I went through the text and analyzed each phrase. But I found it not effective, because it did not enable me to analyze and understand what I was looking for.

3.6. Data discussion

The findings will be discussed in relation to the supporting literature from the perspective of

- 1- the research question; how can I improve my capability of facilitating participation
- 2- the research question; how can I improving my capability of facilitating learning group

Chapter Four

Research findings

4.1 My previous experience

During the last eight years, I have been engaged in teaching practical and theoretical subjects in various vocational crafts. I used to determine what I regarded to be important for my students, and thus reducing their opportunity to take the responsibility for their learning.

Generally, I used to select the subject matter based upon the requirements of the curriculum of the school. I used to schedule a plan indicating the teaching syllabus throughout the academic year. When planning I did not take the diversity in experiences, knowledge, background and environment of the students into consideration.

In this teaching process, I used to communicate the subject matter by writing, explaining and illustrating the subject content. My concern was to cover my plan for the subject within the allocated time. This practice made my focus to be more on the subject under discussion than on the needs of the students themselves as learners.

After each lesson, I made an assessment, with an intention to find out whether the students have understood the lesson and testing their ability to memorize and repeat the subject that was taught, this assessment was generally done at the end of each topic by posing question relate to the subject under discussion. In most cases the results were not satisfactory.

When I reflect upon my former practice, I realize that the learners were not involved in planning which was important for their learning. I have the feeling that the students only were there because they wanted to avoid being disciplined or dismissed from school.

The experience above disclosed the actual situation how it was. It made me to realize that the way in which I was practicing the teaching perhaps didn't constitute the capacity of the

students to learn and to be responsible for their own learning. In addition, it made me as a teacher to focus on the subject matter instead of concentrating on the students.

From my former experience as a teacher, I think of many possible improvements in my practice. Here I will focus on working to improve my practice based upon the research questions.

1. How can I improve my capability to facilitate participation?
2. How can I improve my capability to facilitate learning groups?

4.2 The history before the meetings

Before I entered the Malakal Vocational Training Center (MVTC) related to this fieldwork I communicated by email and telephone with the Director of the MVTC. I informed him of my interest to conduct a study at the MVTC for the period between October and December 2009. He replied to me by phone saying that they accepted my request and that they were ready to receive me.

During our communication I told him that I were interested to conduct an action research project at the MVTC whereby I would be working in improving my teaching practice and that I would like to work together with the willing instructors.

In an action research perspective, AR involves trained social researchers who serve as facilitators ... of members of local communities or organizations. Because these people together establish the AR agenda, generate the knowledge necessary to improve the situation, and put the results to work (Greenwood & Levin, 1998, p 6).

He replied that I was welcomed from October 2009 and he was going to arrange for me to meet with the instructors.

On Wednesday 14th October 2009, I met Mr. Abdelrachman Ahmed the Director of MVTC to thank him for his support to my previous research. Then I studied the vocational practice at the MVTC and the local market and workplace from October to December 2008. I informed him about my need to build my capacity in facilitating participation and learning groups at the

MVTC. I wanted to invite the willing instructors who were interested in improving their practice too.

The director of MVTC said, “As a director of the centre I will work closely with you and the instructors in building the teaching capacity”. He further said “I will ask the instructors to participate fully in this process for the development of the centre and achieving good outcomes from the study”.

I said to him that one of the subjects I may possibly deal with is student centered approach if the instructors at the MVTC interested in the same subject. I suggested to him that I could carry out initial interviews in which I would ask the instructors three questions. *What* is student centered learning, *how* do you know that student centered learning is what you facilitate in classroom / workshop and *how* are you enabling student centered learning in your classroom / workshop.

Monday 19th October 2009 I visited the instructors in their departments and gave them the interview questions. These questions were to be answered by the instructors; they could choose to work on them in groups or individually. I also invited them to a general meeting on Thursday 22nd October 2009 where I was going to explain the purpose of my study and to invite them to participate.

The three questions that I gave them created different reactions among the instructors and some became curious to know more about student centered approach. While some reacted by saying “this is impossible, we cannot imagine the students developing their own learning style, besides these how do you expect the student to give his knowledge about technical matters, yes they may have their own experience, however this may not relate to what they are studying”.

Instructors expressed that these three questions should be answered to us, somebody must teach us and tell us what we should do, do not expect us to answer these questions.

The intention was not that the instructors necessarily should find the answers for the above questions before our general meeting on Thursday, but the idea was to allow them to start

thinking, and working on these questions, and in this way allow them to start developing their ideas and experience on the subject matter.

4.2 Meetings with the participants at the MVTC

From the period between 22nd of October 2009 to 20th of January 2010, I conducted six general meetings with the research participants. In which we met and discussed student centered approach in an effort of building my capacity in facilitating participation and learning groups. In this section, I will write a chronological story of what has happened during these meetings.

On 22 October 2009, I met with twenty-three instructors and the Director of the MVTC to invite the interested instructors to take part in the research and to identify the topic for our discussion. Before the actual discussion began, I as the facilitator had built a rapport with the instructors who attended the meeting so that they could understand that I was not there to tell them what they should do. This was a crucial step so that what follows did not skid into the traditional teaching practice of participants passively listening and normally accepting what the facilitator has to say. I tried to enable this process by asking the instructors to introduce themselves and give a brief introduction about their background and their work at the MVTC. This process was unusual to them because they knew me as their colleague as well as they knew each other well. However, I found it useful to break the tension and put them in the mood of the meeting.

I as the facilitator invited the instructors to identify subjects that they needed to learn during the study process. The participants were asked to suggest a subject and then give their opinion to show their interest for the actual subject as described below.

Nasr Eldeen Abdullah instructor from the machine shop workshop mentioned that lesson plan was a challenge to him. Seven instructors show their interest for the same matter.

Taban Gabriel, instructor from glassblowing workshop mentioned that his challenge was how to make the teaching attractive to the students. Five instructors showed their interest for this.

Arrik Atekdite a glassblower and Stephen James from building workshop mentioned that they wanted to understand and learn about student centered approach. A total of 12 participants;

Badwy Ahmed, David O. Dak, Augustion Othow, Ahmed Ali, Saeed Dafallah, Anger Nyok, Daniel Nyang, Paulino Albino, James Onoity, and Sidg Osman show their interest for this.

The term student centered approach was new to the instructors they got it from the interview I gave them at the beginning of this process. Such they became curious to know more about it.

Ahmed Ali, from the carpentry, Saeed from the Auto-electric and Omta from the machine shop, and Siddig from Auto mechanics was concerned about the language challenge, and voted for attention to improvement of their English language.

I realized in this process that one participant had voted for more than one subject. After the subjects of interest were identified I asked them to prioritize what was most important to them at that moment. To do this I asked them to group themselves in three groups. Each group was asked to choose three matters and to discuss and agree upon one of them. During the discussion it appeared that all these subjects were too important for them to manage to choose one.

I suggested to them that we could begin with student centered approach and deal with the others as we progressed (improving lesson planning, improving teaching to become attractive to students for better learning outcome, and English language).

The instructors accepted my suggestion to start with the topic of student centered approach. I asked them if they wanted to work individually or in groups. They said that they wanted to work in groups.

I then asked them if they need the learning groups to be a mixture of participants across the departments or each department can be in one learning group. All the participants were in support of the mixed group across the departments and they setup two conditions for forming the groups. The first condition was that there should be at least one participant in each group who knows English. Secondly, each group should have a mixture of instructors across the department.

To form the groups I asked five participants to stand up and then asked the other participants to choose which group they wanted to join. As a result, 22 instructors distributed themselves into five groups, numbered from 1 to 5; each group consisted of 5, 4, 4, 4, and 5 members.

Some learning groups had leaders that could organize their own meetings, write the minutes and keep the order in the group, and some group did not have a leader. They organized their meetings by asking one of them to chair and write the minutes during the meeting.

I asked the groups how many times they wanted the general meeting to be conducted per a month. Some said every week and others said every two weeks. We discussed these two options and concluded that having a general meeting every week might not be practical. The groups needed time to conduct their own meetings and perform their daily work in the departments. We all agreed to have a general meeting each fifteen days (twice a month). The general meeting would be for all the groups to present their own experience. On the other hand, each group would organize their private meetings to share and document their experiences. We ended the first meeting by agreeing that we should meet on the 6th November for the 2nd general meeting.

From the 23rd October to 5th November 2009 I followed up the groups and found that they were participating in their own learning groups developing their own definitions of student centered approach and its characteristics. Getting these definitions from their experience and the Internet before it went off some time afterward. Then each learning group would present their understanding in the general meeting.

They have been conducting these meetings following different ways. The participants in different groups agreed that each member in the group should develop his own definition and understanding of student centered and its characteristic. When each and everyone had done the same, they could meet and develop a shared document that they would present in the general meetings for all the participants.

Two weeks later, on the Friday 6th /November 2009, we conducted the second general meeting. In this meeting three participants from three learning groups i.e. group 3, 4 and 5 respectively presented the group definition of student centered. Each presentation followed by a discussion whereby participants posing questions regarding the topic while the group representatives'

answers and explained. The two other groups 1 and 2 were not ready to present their work because they have not met to discuss and prepare for the general meeting. I met with them after the general meeting and found that the lack of time and proper coordination between the group members were the reasons of them not meeting.

David O. head of group one said “I am not learning any new thing because I feel as I am teaching not learning in this sense, these instructors (*referring to his group members*) should be sent for English course before they join this program”. He added, “I feel frustrated, because this people they are only listening, I am the one doing the teaching and looking for the information and present it to them. I have my own ambition, as they have their own ambition too”

Group 3 presented by Taban, defines student-centered approach as ‘As a way of thinking about teaching and learning that emphasize on students to be responsible and accessing learning. The aim of using this approach is to encourage student’s participation. Students cannot be taught, but can be encouraged and helped to develop their learning skills. The role of the teacher is to work together with the student. The students should be in a group whereby they discuss and the teacher encourages, and monitors the process.’

After Taban presented group 3’s definition and understanding of student centered approach. I asked the participants if they wanted to participate by posting questions or adding comments to group 3’s presentation.

Badowi: commented that the students must pay attention to the teacher, have self confidence and must participate fully by asking questions during the lesson. The teacher on other hand must control the classroom and encourage the students to participate.

Taban: said that this approach focused on the student and the facilitator, and we should be aware of the difference between the facilitator and the teacher. When the students are rearranged in groups they will be able to know each other better and will be able to discuss without fearing each other and have good relation with their teacher.

Group 4 presented by Daniel Nyang, defined student centered approach, as ‘knowledge constructed by the student and the instructor is a facilitator’.

This was one-person effort because Daniel after the presentation said, “the people in my group are not cooperating and not committed and serious to attend the group meetings. We are only two, and the rest of us do not know English.”

After Daniel Nyang presented group 4 definition and understanding of student centered approach. I asked the participants if they wanted to participate by posting questions or adding comments to group 4’s presentation. There were no comments or questions posted.

Group 5 presented by Ariik, defined student centered approach as ‘A system that the students are entitled to learn by themselves not depending on the facilitators. This system created the spirit of creativity and put the ideas and plans to work. This system is the transformation of learning of the knowledge of the individuals. There should be aims and objectives, for example, there should be an outcome of any activity. Student centered approach reflects and emphasize on the learner, instructors should be an observer, to make sure that everybody is participating. He should know that he should relate to the group. He should welcome the ideas of everyone and making the correction when needed’.

After Ariik presented group 5’s definition and understanding of student centered approach. I asked participants if they wanted to participate by posting questions or adding comments to group 5’s presentation.

I asked Ariik what you mean all the ideas must be welcome?

Ariik answered, “I mean that the teacher should try to understand why his students give the idea in this way in state of rejecting them. The teacher should analyze the answers later after the discussion, so in other word the student has to understand that he was wrong”.

Badowi commented “we shouldn’t disappoint the students, let them say what every the want to say, this will encourage them to participate”

Taban: “The answered is in place, the facilitator has the right to explain everything according to the goals”

Ariik: “There should be definite goals. Those two they never talk about the learning area, the classroom should be comfortable for learning”.

After the discussions, I asked the participants to give their evaluation of this meeting.

The participants made this remarks from the meeting. It was good; we shared information and were able to participate in the discussion. The language was very difficult for some of us. We are suggesting that those who do not know English can present their ideas in Arabic. We should have a limit and respect time for the discussion, Taban have taken a lot of time while the rest got very little time.

At the end of the evaluation, we agreed to improve what they have mentioned next meeting. We agreed also to conduct the next general meeting on the 20th of November 2009 where the groups are going to present the characteristics of student-centered approach.

The period from 17 – 19 November 2009, I followed up the groups by meeting with each of the five groups. I discussed with them their progress and the challenges they were facing to find out how I could help them to continue with their meetings and discussions.

I found that the groups had common challenges that were no respect of time set by the group for meetings and discussion. English language as communication language among the group member was challenging. The approach used in this process was very complicated and so difficult because the group members found it difficult to search and document their experience. There were no references available.

I asked them how they wanted to deal with these challenges. They said for time respect as a group they should discuss it seriously and improve on it. For the English language they were going to help each other but it would be good also if they could find dictionaries and be given

English course. For the references, they needed library in the VTC. Some were suggesting that they needed lectures instead of them searching for the information and later on present it to the group in the general meeting.

In the third general meeting, on Friday 20 November 09, three participants from three learning groups i.e. group 3, 4 and 5 respectively presented the group's view of the characteristics of student centered approach.

Group 3 presented by Taban, identified three characteristics of student centered approach, and they were; 1/ Students work together in teams 2/ the teams should be rearranged every time and 3/ No order or command, the student should be allowed to work freely.

Group 4 presented by Badwi identified five characteristics of student centered approach, and they were; 1/ Students must love his work, 2/ Student should show good behavior and respect his follow students, and the teacher, 3/ Should have a confidence in himself and his ability to do things, 4/ Should be active and 5/ Should take care of his homework.

Then Taban and Badwi presented group 3's and 4's definitions and understanding of student centered characteristics. I asked the participants if they wanted to participate by posting questions or adding comments to the two groups' presentations.

Daniel Nyang asked, you mention the characteristic but is this applicable in the classroom or in the workshop?

Badwi answered, "I mean both in the workshop and classroom"

I as the facilitator asked, what do you mean by student should be confident in himself if he is doing something wrong does it mean to let him continue?

Badwi answered, "I mean by confidence the student shouldn't doubt about his ability"

Group 5 presented by Ariik, stated nine features of student centered approach that were; 1/ Student centered learning has a characteristic of learning together. 2/ the teacher role is to allow the students to study by themselves, 3/ they should be doing classroom that given by the teacher, 4/ should be able to do some work, the present of the teacher is to encourage them. Students

should be flexible. 5/ Each student must complete one task then proceeded with the next 6/ They should be knowing where to go, setting goals and objective about be achieved 7/ Networking and team working 8/ There should be cooperation between the students and their facilitators and 9/ there should be emotion feeling that each is equal.

After Ariik presented group 5's definition and understanding of student centered approach characteristics. I asked participants if they wanted to participate by posting questions or adding comments to group 5's presentation.

I as the facilitator asked the group. What do you mean by working together?

Ariik answered, "When we bring ideas and answers together that mean we are working together. It is not dependent on one person or individually, each is responsible"

After the discussions, I asked the participants to give their evaluation of this meeting.

The participants made this remarks from this meeting. It was good; we share much information and are able to participate in the discussion. The language is very difficult for some of us. We are suggesting that those who do not know English can present their ideas in Arabic.

After the evaluation of the 3rd meeting we found that there is improvements happen in the presentation, but the language challenge remind. The instructors said they wanted to practice student centered approach in their workshops and classrooms. We agreed to meet on the 11 of December whereby the instructors would present their individual experiences of their practices.

In the fourth meeting, on Friday 11 December 2009, some of the research participants who documented their practice shared their experiences by presenting it to the meeting participants. Seven participants documented their experiences but due to the meeting time three only presented their experiences on this general meeting.

Ariik Atakite is an instructor at the Glassblowing department. He is also a teacher of English language at one of the evening schools in Malakal. He tried student centered approach in his English classroom, he said that he divided the students into two groups (A & B) each consists of 4 students. He purposed a topic for them to debate on under the title the doctor is better than a

farmer as asked. Group A chose to collect information about the doctor while group B chooses to collect information about the farmer afterward the two group debates on who is better the doctor or the farmer.

He said that the approach helped the students to participate actively in the lesson. Because previously he was explaining everything, it was very heavy work for him. However, now he and the students are participating in all the learning process. He further stated that the books he is using had an exercise at the end of each lesson that required the students to work in groups while doing this exercise.

Stephen James an instructor at the Building department said that in the past, he used to give the students a drawing and explain it to them, and then they could implement it. This approach did not allow the students to be active they are always dependent on the teacher, so during the group discussion as instructors, and in learning group meetings he understood that it is necessary to allow the students participate fully in the subject under discussion, or even they can be allowed to choose the subject by themselves.

He further said “I allowed the students chose their own topic and work in a group or individually as they liked”. He further added, “When using this approach the students become freer, and they are working in a team sprit they work without any difficulties, and what they learn the learnt it to the best and when they face problem and difficulties. I can help them. I have noticed that the students have limited knowledge, and therefore, they cannot go beyond their capacity. For the next time, I will not let students work individually they should work in groups”

Obile Pakwany an instructor at the General Electricity department said, “In the past, I used to give the students practical and divide them in-group of two. In this approach, I decided to allow the students to work at a lone and this probably gives them the freedom of working and asking each other”.

He added that “when the student is working alone he is not benefitting much like when his working in a group. I realized that when the students were working on the subject that they have chosen, they have leant it faster and without any difficulties. And when they face difficulties they

can help and assist each other” he also said “The students had limits in their knowledge, and they cannot exceed that limit, here is where I can intervene to offer them the assistance they need”

Evaluation of the day:

Facilitator asked the participants, how do you evaluate this session? Some participants said, “this approach is new for us we need to practice more on it. We need references, books and internet. English language is a big problem. The meeting time is not convenient especially for the supporting staff”.

In the fifth meeting: on Friday 8 January 2010, I gave a presentation about the fifth discipline by Peter Senge (2000). The objective of this presentation was to give the participants an idea about the five disciplines i.e. personal mastery, mental models, shared vision, team learning and systems thinking.

This presentation was followed by discussion from the participants, displaying what they have understood from the presentation. It was difficult for the most of the participants to participate in the discussion due to the complexity of the subject matter.

Evaluation of the day:

After the presentation, the instructors admitted that these five disciplines are difficult tasks to work on, but they said as time goes they can work in each discipline over the time. But the most important they should have their own personal vision and then work in their various learning groups on a common vision. The instructors suggested that they will write their own reflections on this presentation. And hopefully they will submit it.

In the six meeting: Friday 22th January 2010, three kinds of evaluation were carried out during the study process. firstly, was an evaluation for methodology applied in the groups meeting and how it can be improved, secondly personal assessment to examine what I am doing and how can I improve it, thirdly evaluation for the learning outcome of the participants’ learning process and how they can improve what they are doing. This was normally done after each general meeting.

An evaluation form was given to the research participants containing close-ended questions and open ended questions. Thirteen out of seventeen participants’ filled in the interviews and returned it back.

The close-ended questions were about, how the participants were involved in indentifying the subject matter, how the meetings were facilitated by the facilitator, how the chance of discussion were distributed among the participants, duration of the meetings and how the facilitation for the learning groups were done.

The participants were to answer these questions by choosing one option among the options provided after each question. These options were fair, Good, Very good and excellent.

Answers of the open-ended questions

S/No.	Questions	Fair	Good	V.Good	Excellent
1	Participants involvement in choosing the subject matter	0	4	6	3
2	Facilitation of learning and discussion	2	3	6	2
3	Equally distributing of chances for discussion among the participants	0	0	7	5
4	Duration of the meeting time	0	7	5	1
5	The facilitator	2	11		

Answers for the closed ended questions

Category	Strength Points in the Process	Weakness of the Process
Functionality of the learning groups	1/ The commitment among the group member for the meetings, 2/ Openness and honest between the members of the group, the groups are determine to reach and obtains their goals. 3/ Confidence and trust between the group members.	1/ English language is a challenge, low standard of English. 2/ Lack of references 3/ Participants are occupied with their daily activities at the different departments.

<p><i>Discussions in the Groups meeting</i></p>	<p>1/ The way the discuss is done is very good, the way the group members participate in the discussion, the way the meeting and discussion are facilitated, openness and celerity.</p> <p>2/ The way the topics are introduced for discussion. There is enough time given to apply what we are learning. People learnt to better understanding the SCL. The groups were committed to talk in English during the meeting.</p> <p>3/ The place of the meeting is comfortable ,</p>	<p>1/ Some do not want to talk or participate during the meeting</p> <p>2/ Some do not talk in English language</p> <p>3/ Some participants come late for the meetings</p>
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4.3. Example on how the data are analyze (for the rest of the analysis please see appendix 1 and 2)⁵

Cause and effects analysis

Events	My actions	Reasons of my actions	Consequences of my actions
1 st Meeting	I asked them to choose one of these topics to begin with	To enabled them to participate in decision-making.	The 23 instructors discussed among themselves in three groups but they were not able to decide.
1 st Meeting	I suggested to them that by asking isn't better to being with student centered approach and deal with the others as we progress (improving lesson planning, improving teaching to become attractive to students for better learning outcome, and English	To save time since they were not able to decide for themselves	They accepted my suggestion.
1 st Meeting	I asked for the opinion of the instructors: Do you like to work individually or in group?	To encouraged participation.	All The participated said "We want to work in groups"
// //	I asked for their opinions: Do you like the groups to be a mixture of the across the department or each department can be in one group?	To encourage participation in decision making	The majority Said "we want the groups to be a mixture across the departments"
// //	I asked them how many times a month we should meet in general meetings.	To encourage participation in decision making	They participated by saying that twice a month. It is preferable

⁵ Only relevant data to the research questions are used in the analyses and the discussion. I selected key pieces to use as evidence based on the research question and my claim to improvement happen to my own practice. (Jean McNiff & Jack Whitehead, 2009, 62).

Chapter Five

Data Discussion

Data discussion

The findings will be discussed in relation to the supporting literature from the perspective of

- 1- the research question; how can I improve my capability of facilitating participation
- 2- the research question; how can I improving my capability of facilitating learning group

5.1. Data discussion from the perspective of improving my capability of facilitating participation

Robert Bacal (2003) and Patricia Prendiville, (2008) defines a facilitator as an individual whose job is to help to manage a process of information exchange. The facilitator's role is to help with how the discussion is proceeding while an expert's role is to offer advice, particularly about the content of a discussion.

Schwarz (2002, p 8), Pierce Cheesebrow and Braun (2000) and Marcelle E. DuPraw and Marya Axner (1997) agreed that the facilitator role is a substantively neutral person who is not a group member and work for the entire group.

Michael Wilkinson (2001, p 247), Sam Kaner, Lenn Lind, Catherine Toldi & Duane Berger (2007, p xiv), found that the power in the role of the facilitator is when he is advocating for a fair, inclusive, and open process would balance participation and improve productivity.

In some settings, the facilitator plays an objective role, asking questions, encouraging responses and enabling group members to discuss, to respond and to reach a conclusion. In other situations, s/he may be stimulating group members to create solutions to problems they have identified by offering suggestions or creating simulations which the group can practice (Patricia Prendiville, 2008, p 13) and (Gerry Gaffney, 2000)

My position as an internal facilitator might have influenced my neutrality when facilitating the group discussion at the MVTC. They were expecting me to tell them what they had to do.

If I were to be an external facilitator my neutrality might have been less influenced by the participants. I might have needed time to get acquainted with the situation and the participants at the MVTC.

Patricia Prendiville (2008), Sophie C, Rachel B. & Isabel Carter (2004) and Marcelle E. DuPraw and Marya Axner (1997) they acknowledged that a good facilitator should be humble, generous, patient, understanding, accepting, inclusive, an encourager, an enabler, affirming of everyone's knowledge, sensitive to the needs of others, willing to learn from mistakes, dynamic, a motivator, a good listener, good at summarizing others' ideas, confident and a good communicator these qualities and attributes may possibly help and enable the facilitator to perform her/his role smoothly.

In my efforts to live in accordance to my values, love for freedom, democracy and respect other's opinions, as a facilitator I think the above qualities and attributes help and enable me perform her/his role smoothly if I work on cultivating them.

To improve my practice as facilitator, I worked on facilitating the discussions of the participants during the general meetings, by: posting questions, asking the opinions, suggesting to them some options, supported the formation of learning groups, and invited the participants to present and discuss their presentations.

In the following, I will display how I have used the above methods and what has improved in my practice and what is still needed to be improved.

I visited the instructors in their departments to invite them to participate in the research process. I told them about my interest to conduct an action research project where I will be working together with them to improve my practice. Those who are interested were invited to attend a general meeting on Thursday 22nd October 2009.

To facilitate the participants' discussion I posted three questions that they will work with as individuals or in groups to find answerers for. The three questions were what is student centered learning, how do you know that student centered learning is what you facilitate in classroom / workshop and how are you enabling student centered learning in your classroom / workshop.

To facilitate participation I gave the instructors two options on how they could work on the three questions that I posted to them. They could choose to work with these questions in groups or individually. I did so to enable them to realize the difference between working in a group and working as an individual.

The instructors reacted to the questions posting approach I used to facilitate participation in two different ways. The first respond was as some said that, "This is impossible these three questions should be answered to us; somebody must teach us and tell us what we should do." The second respond was from those who partially understood what student centered approach is, they said that, "We cannot imagine the students developing their own learning style".

*Form the instructors' reaction I realized that posting questions might not be the best possible way to encourage participation. I decided to change my facilitation approach in the **first general meeting** by inviting the participants to a meeting to find out what they wanted to learn.*

*On 22 October 2009, I met with twenty-three instructors and the director of the MVTC for them to identify the topic of our discussion. I did this by **building a rapport** with the instructors who attended the meeting so that they could understand that I was not there to tell them what they should do. I built the rapport **by asking** the instructors to introduce themselves and give a brief introduction about their background and their work at the MVTC.*

Although the instructors at the MVTC know each other inviting them to tell something about themselves and what they are doing enabled them to know each other better.

To facilitate participation I asked the participants to suggest a subject and then give their opinion to show their interest for the actual subject.

Gerry Gaffney (2000), Stated that it is important that all participants are aware of, and agree with, the purpose of the session. The purpose should be visible at all times so that participants can be reminded of it if necessary. A clear agenda helps focus participants on the work at hand, and helps the facilitator enforce timekeeping. This step was necessary so that the participants are aware of what they want to discuss. I improved my facilitation approach from posting questions to participants to invited for their opinions.

According to Berge, the pedagogical of the teacher's contribution of specialized knowledge and insights to the discussion, using questions and probes to encourage student responses, and to focus discussion on critical concepts. Using questions and probes can raise the students' curiosity and keep them attentive during the discussion (Berge, 1995).

As a result four instructors participated by giving their opinions and the rest expressed their opinions regarding the subject chosen.

Nasr Eldeen Abdullah instructor from the machine shop workshop mentioned that lesson plan was a challenge to him. Seven instructors show their interest for the same matter.

Taban Gabriel, instructor from glassblowing workshop mentioned that his challenge is how to make the teaching attractive to the students. Five instructors showed their interest for this.

Arrik Atekdite a glassblower and Stephen James from building workshop mentioned that they wanted to understand and learn about student centered approach. A total of 12 participants; Badwy Ahmed, David O. Dak, Augustion Othow, Ahmed Ali, Saeed Dafallah, Anger Nyok, Daniel Nyang, Paulino Albino, James Onoity, and Sidg Osman show their interest for this.

The term student centered approach was new to the instructors they got it from the interview I gave them at the beginning of this process. Such they became curious to know more about it.

Ahmed Ail, from the carpentry, Saeed from the Auto-electric and Omta from the machine shop, and Siddig from Auto mechanics was concerned about the language challenge, and voted for attention to improvement of their English language.

The above experiences show that a certain change happened in my practice. This is probably because I changed the facilitation approach **from posting questions to asking for the opinions of the participants** to encourage participants' participation.

Asking for the participants opinions generates many ideas and problems For example they said they wanted to about lesson plan, how to make the teaching attractive to the students, understand and learn about student centered approach and improvement of their English language which cannot be covered in a single study like this.

It was difficult for the instructors to agree on one subject that we can use to begin our study because each instructor wanted the subject of his interest to be discussed first.

I suggested for the instructors to agree on one subject matter and that we could begin with student centered approach and deal with the others as we progress (improving lesson planning, improving teaching to become attractive to students for better learning outcome, and English language).

They agreed upon what I suggested to them, the possible consequences of not suggesting to them is that they might have not reached to a common subject.

I facilitated the participants' participation they have participated in the process of forming the learning groups by giving their opinions/suggestions. I facilitated this **by forming the learning groups** where the participants could meet, share and document their opinions. And then prepare their presentation for the general meeting (Prendiville, 2008).

To form the groups **I asked** them if they wanted to work on the subject that they have identified in groups or individually. All the instructors responded that they wanted to work in groups.

I asked the participants if they needed the learning groups to be a mixture of participants across the departments or each department can be in one learning group.

All the participants were in support of the mixed groups across the departments. Two conditions were setup by the participants for forming the groups. The first condition was there should be at least one participant in each group who knows English. Secondly, each group should a mixture of instructors across the department.

I asked five participants to stand up and then asked the other participants to choose which group they wanted to joint. As a result, 22 instructors were distributed themselves into five groups, numbered from 1 to 5, each group consisted of 5, 4, 4, 4, and 5 members.

I allowed the participants to setup their rules and conductions that will govern the function of group.

Some learning groups had leaders that could organize their own meetings, write the minutes and keep the order in the group, on the other hand, some didn't have a leader but they preferred each meeting to be chaired by a different person.

I further asked them to setup their private meeting time and the time for our general meeting. This is to enable the instructors to discuss among themselves and then document what they have discussed.

I asked the groups how many times they wanted the general meeting like this one to be conducted per month. Some said every week and others said every two weeks. Then we all agreed to have a general meeting each fifteen days (twice a month) in which the participants from all learning groups will present their own experience for their private meetings. Each group will have their own arrangement for their own meetings.

The groups in their private meetings have agreed to discuss and document their own definitions of student centered approach and its characteristics. Then in each general meeting, they selected one person among the group who presented their document on behalf of the group.

I facilitated **the second** general meeting **by asking group representatives** to present their document. After the presentation, I invited the attendants to ask questions or add comments to what had been presented.

Group three presented by Taban, defined student centered approach as ‘As a way of thinking about teaching and learning, that emphasis on students to be responsible and accessing learning, this activity can show students behavior toward learning. The aims will be participation, students cannot be taught, but can be encouraged and help to develop their learning skills. The role of the teacher is to work together with the student. The students should be in a group whereby they discuss and the teacher encourages, and monitors the process.’

Discussion by the participants

Badowi: commented that the students must pay attention to the teacher, have self confidence and must participate fully by asking questions during the lesson. The teacher on the other hand must control the classroom and encourage the students to participate.

Taban: This approach focuses on the student and the facilitator, and we should be aware of the difference between the facilitator and the teacher. When the students are rearranged they will be able to know each other better and will be able to discuss without fearing each other and have good relation with their teacher.

*Daniel Nyang, presented **group four**. They defined student centered approach as ‘knowledge constructed by the student and the instructor is a facilitator’.*

Group five presented by Ariik, defined student centered approach as ‘A system that the students are entitled to learn by themselves not depending on the facilitators. This system created the spirit of creativity and put the ideas and plans in working. This system is the

transformation of learning of the knowledge of the individuals. There should be aims and objectives, for example, there should be an outcome of any activities. They learn student centre reflects and emphasis on the learner, instructors should be an observer, he should make sure that everybody should participate. He should know that he should relate to one group he should welcome the ideas of everyone and making the correction when needed'.

Discussion by the participants

I as the facilitator asked what you mean by all the ideas must be welcomed.

Ariik answered, “I mean the teacher should try to understand why his students give the idea in this way in state of rejecting them. The teacher should analyze the answers later after the discussion, so in other words the student has to understand that he was wrong”.

Badowi commented “we shouldn’t disappoint the students, let them say whatever they want to say, this will encourage them to participate fully”

Taban: “The answered is in place, the facilitator has the right to explain everything according to the goals”

Ariik: “There should be a define goals. Those two they never talk about the learning area, the classroom should be comfortable for learning”.

5.2. Data discussion from the perspective of improving my capability of facilitating learning group

Johnson, Johnson and Holubec (1998, pp 1-5) and A. Woolfolk (2001, p 340) refer to the learning groups as a small group of students working together to maximize their own and each other’s learning.

I refer to learning group, as a group of 3 to 6 instructors who agreed to meet, face to face, via internet, through telephone in fixed time to maximize their own and other’s learning on subject matter of their interest.

My experiences as a Master’s student at HiAk and being a member of a learning group make me to be aware of that my role in the group enabled me to be committed to participate during the

group meeting. I felt safe enough to share my opinions with the other members of the group, because sharing is welcomed and respected.

Being a member of a learning group has limitations too. Individual differences and preferences can influence the learning of the group.

I formed learning groups **by asking instructors' opinions** on how they wanted us to work on these subjects. The instructors said that they wanted to work in groups.

I asked the instructors' opinions by posting several questions on how the need the learning groups to be formed⁶:

1. Do you like to work individually or in groups?

Everybody was in support of working in a group, however they said each should choose the persons they want to work with, in condition that, each group should consist one person they regard as knowing a little bit of English.

2. How many instructors do you like to be in a learning group?

The instructors gave different answers, some said, **three people**, other said **four** and some other said **six**, however the majority was in support of four people in one group. Therefore based upon their choice five groups were formed each consisting of four instructors.

3. Do you want the group members to be instructors from one section / department or a mixture of instructors across the departments?

All the instructors said they wanted the learning group to be a mixture of instructors from different sections; this will enhance their experience and will allow them to know each other better.

4. How many times do you want to meet as a group?

The instructors in the various learning groups agreed to meet once or twice a week.

5. How many times do you want to meet as all the groups at the MVTC?

Some instructors said for the beginning they should meet at least twice a month, while others said they could meet once a month. Therefore, for the time being, the instructors agreed to meet every 15 days (this meeting will be for the all learning groups, general assembly)

⁶ The answers included here are combinations of the different groups responds to the same questions.

According to my experience, I think mixed groups will provide an opportunity of enriching the group experiences and will possibly help in building a collaborative relationship across the different department/workshop at the MVTC (Johnson, Johnson & Smith, 1991).

Fiechtner and Davis, (1992) and Smith, (1986) argue that forming of the learning group is the school or college responsibility. The teacher or a facilitator can assign students to groups to maximize their heterogeneity: a mix of males and females, verbal and quiet students, the cynical and the optimistic.

Mixing the instructors across departments/workshops in a group causes some limitations also; firstly, they may not be able to meet on time due to the different activities in their different departments/workshops. Secondly, a learning group with a big diversity may slow down the learning process. And it may enable the group to be able to think out of the box and find really new approaches – that is if the members really do appreciate diversity and are able to utilize it.

There are possible opinions that the instructors could used to form the groups. .i.e. the groups can be formed by allowing the heads of departments in one group and other instructors in different groups. The groups can be formed by allowing group of English language and of Arabic language. Doing so will possibly limit the group's diversity and may hinder the learning form each other.

I requested if five participants can stand up and then **asked the other participants** if they want to **choose** which group they wanted to join. As a result, 22 instructors divided themselves into five groups, numbered from 1 to 5⁷. The groups consisted of 5, 4, 4, 4, and 5 members.

I limited the number of the participants between 4 to 5 people in the group. I think this will add diversity for the group and they might possible learn from each other. Having more than five people in the group may limit the participation of each member in the discussion. Because in such group some member may tend to talk a lot and dominate the discussion. In general, groups

⁷ Later on group 1 and 2 were mixed into the other groups.

of four or five members work best. Larger groups decrease each member's opportunity to participate actively. The less skilful the group members are, the smaller the group should be. The shorter amount of time available, the smaller the group should be (Johnson Johnson & Smith, 1991).

According to Rau and Heyl (1990), smaller groups of three contain less diversity; and may lack the divergent thinking styles and varied expertise that help to animate collective decision making. Conversely, in larger groups it is difficult to ensure that all members participate.

I do agree with Rau and Heyl in their statements that smaller group contain less diversity. Being a member of a group containing three Master's Students at HiAk, I still found rich experiences and diversity.

The period from 17 – 19 November 2009, I facilitated learning groups **by following** up and **observing** their performance in meetings; I visited each of the five groups individually. I visited them and discussed their progress with them and the challenges they were facing to find out how I could help them to continue with their meetings and discussions.

I asked them how they wanted to deal with these challenges. **They said that** as a group they will discuss the respect for time seriously and work for improvement. **They said** they are going to help each other in English language but it will be good if the MVTC can provide them with dictionaries and give them English course. For the references, they need library in the VTC. Some instructors suggested that I should give lectures instead of them searching for the information and later on present it to the group in the general meeting.

In the process, I failed to facilitate individual learning within the groups. I realized this when I evaluated the functionality of the groups. I found that the group in general is progressing but some individuals within the group may have felt as not being taken care of. I noticed also during the general meeting that specific members are always presenting the groups and actively participating in the discussion.

Change is a continues process and I will therefore continue working on improving facilitation of learning groups by taking care of the individual learners in the group and continue developing new methods that will increase the learning outcome in the group.

Chapter Six

Reflections, lessons learnt and conclusion

6.0 Reflections over my practice

John Dewey linked the knowledge and action, when he said “Ideas are worthless except as they pass into actions (Dewey, 1916). When reflecting over the influences of my actions to my own learning and others learning I claim that certain changes took place as I changed my practice in facilitating participants’ participation.

In the past I used to choose the subject matter to the students, in my efforts to live with my personal values, respect for others opinions and democracy, I enabled participants’ participation by encouraging and inviting them to share their opinions, posting questions to ask for comments and appreciate their participation.

In the past I used to decide for the students almost everything concerning teaching and learning. In my efforts to live with my personal values, respect for others opinion and democracy I enabled participants’ participation by encouraging responses and enabling group members to discuss, to respond, to reach a conclusion and to make decision. For example to enable them to make their own decisions on how they want to organize their own learning. I posted questions and provided options and let them make their own choices. For example questions such as how many time a week or a month do you like us to me for the group discussion? Do you like to work in groups or individually? Adapting this approach of encouraging participant’s participation has influenced their learning. Most of the participants were participating in the discussions, contributing with their questions and comments. This might have never happened if I was not concerned with improving my practice.

When reflecting on the influences of my actions to my own learning and other’s learning I think that certain changes took place as I changed my practice in facilitation of learning groups. In the past I was not encouraging group work, I used to focus on individual students by giving them individual assignments. In my efforts to live with my personal values, respect for others opinion and democracy I facilitated the formation of learning groups by asking participants for their

opinions by inviting their ideas and posting questions. Such as do you like to work individually or in group? Do you like the groups to be a mixture across the departments or can each department be in one group? How they wanted the groups to be formed? My actions have influenced the groups. They became able to take their own decisions regarding their meeting time, discussions and work. Some of the participants managed to document their practices and share it publically with others.

When reflecting over my practice I come to realize that the end of this study is a beginning to a new circle of investigation, of reflection, of planning and action. I discover that there is more to be done in my practice. I will continue working in developing my practice as a facilitator determined to live my values in practice.

6.1 Reflection over adaption of the living theory methodology

I have tried to integrate my pervious experiences from doing qualitative research in this study especially in data analysis and discussion, but it has not given me the result I needed to test the influence of my action to my practice. I spent a lot of time analyzing the data but all my efforts did not produce the needed results, but with the assistance and critical questions from my mentor I came to realize and choose the living theory methodology. The living theory methodology is recognized as different from other research methodologies because it addresses the question “I” whereby “I” became a living contradiction when our values are denied in our practice. We use our research as means to overcome this contradiction (Whitehead, 1989). It is through adoption of this methodology that I have been able to reflect on my practice and live in accordance with my values. It is through this methodology I have been able to influence my own and other’s learning.

6.2. Reflection over the adapted methods:

I have engaged several methods for data collection which I found are significant important. The use of meeting minutes and logs has helped me to keep track of my actions and work for the improvement. Both methods have their own limitations, during my experience I found that it sometimes is not easy to keep in track and take notes of what the participants are saying or doing. Secondly, I found myself writing my own interpretation of what has been said by the

participants. To minimize these risks, I used to compare the meeting minutes with the logs and vice versa. Secondly, I used to mirror what the participants said to avoid writing my own interpretation. While trying to improve my practice in using these methods I discovered that it is useful to combine several methods instead of depending on one method.

Using audio recordings and photos enabled me to list and follow the sequences of actions during the meetings and group discussions. During my experience I found that there are limitations of using audio recordings; firstly, there are important events that cannot be captured by the sound recorder such like the body language, secondly due to the noise during the meeting the sound may not be very clear. Thirdly during the transcription I found myself sometimes missing words, or not interpreting tone, strength and other characteristics of the voices. To minimize the possible risks of audio recorder I decided to use video recorder in some of the meetings. I must admit that I made a mistake by not fully integrating the videos as a main tool for data collection throughout this enquiry process. In some places people may not like their voice to be taped or feel comfortable with video recording. Using such methods can be risky for both the researcher and the participants.

I used structured and unstructured interviews as methods for gathering data and found that unstructured interviews generated to me data that I considered then concrete compared to structured interviews. The first are easy to modify as the interview goes on while the later are difficult to modify once they are given to the participants. For example I asked the participants to give me their opinion regarding the approach used to select the subject matter by requesting them to choose one answer among four options as below:

The approach used to select the topics for discussion was:

1- Fair () 2- Good () 3- Very good () 4- Excellent ()

The participants may choose *fair* or *good* or any of the above. But how fair or good to him, what does fair, good mean to him. Different people may have different concepts about the above choices. The respondent may choose any of these options to please or disappoint the interviewee. If unstructured interview was used for this purpose it could have been more flexible to seek clarification to understand the respondents' opinions. Understanding these details enabled me to

continue examining the methods I am using and work on improving them. This has contributed to my effort in working to improve my practice.

Getting feedback as a method to validate the findings has some strengths and limitations. The strengths of this approach is that, asking for feedback from the participants helps in refining my understanding and improving what I have documented. The participants' feedback helped me to work on what they expressed that I need to improve. The limitations of this approach are; the participants may possibly agree on whatever I did or said and this can minimize the possibility of making change in my practice. Secondly I may perceive the participants feedback wrongly. For instance, a participant may say this is good. But what does good mean to him, how good is it. To minimize the possible risk of getting feedback, mirroring and paraphrasing could possibly be means to validate their feedback.

6.3. Lesson learnt:

Learning means something which the individual does when he studies. It is an active, personally conducted affair (Dewey, 1916) I consider my engagement in the study of learning because I actively worked in examining my own practice and work in improving it. I learnt in this process that learning by doing it has empowered me to realize my potential to make the change.

“Learning at school or university, involvement in workplace tasks promotes new learning and strengthens what has been learnt through further practice”. (Billet 2001, p 14) I found that involving in improving my practice at the workplace has helped me to practice in a real life situation and has contributed in my learning process.

My practice as a facilitator has been challenging and rewarding at the same time. I learnt how to investigate my practice and work to improve it. I have come to that for me the best way to live with my own theory is to continue investigating and asking the question how can I improve what I am doing.

I learnt to question any single action in my practice because I know that my actions are influencing my own and others learning.

I discovered that the students/participants have the ability to learn and take responsibility of their own learning. If teachers reflect on their own practices and work with improving it, this perhaps will enable the students to do the same. In this way the students/participants will become learners in their learning processes (Ferie, 1972).

I learnt to listen to students/participants to respect their ideas. However, I did not manage to take care of every individual participant in the learning group. I focused on the progress and the development of the group as whole and pursuant to this some participants left the group. I managed to improve my practice by not only to be concerned about the subject matter but rather to be concerned about the participants learning and their interaction with each other. (Dewey, 1929)

During this journey my English capacity has improved significantly, I acknowledge the assistance of my Mentor Prof Trond M. Smistad for the efforts he has made in facilitating, helping and encouraging in my efforts to improve my English capacity and to accomplish this dissertation.

6.4. Conclusion:

I understand that this is not a conclusion and the end of my journey in improving my practice, because the end is the being of a new circle of actions and reflections. However, I am here to conclude what I have been doing so far.

I can claim that certain changes took place as I changed my practice in facilitating the participants' participation and learning groups. I claim also that I live in accordance with my values despite the contradiction of my values and practice.

Involving the instructors at the MVTC in this study has possibly influenced their practice toward teaching and learning. It has perhaps enabled them to appreciate the importance of living in accordance with their own values.

This study could have been enriched, if I had carried out in depth analysis and involved or introduced other methods for data analysis. It could have been enriched also if I integrated fully the use of video recording method in data gathering and used more methods for validation like validation group. The use of video could have enabled me to trace my actions, body language and participants' participation during the discussion. This method could have helped me to do an in-depth reflection. A validation group could have enriched my study by receiving critical feedback that could have contributed in my efforts to improve my practice.

This study could have been enriched if I had involved the students in the inquiry process because their feedback and comments could have contributed in the change I am making in my own practice.

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Appendixes

Appendix1. Data analysis from the perspective of the research question *how can I improve my capability of facilitating participation.*

Only relevant data to the research question will be used in the analyses and the discussion. I will select key pieces to use as evidence based on the research question and my claim to improvement happen to my own practice. (Jean McNiff & Jack Whitehead, 2009, 62)..

Cause and effects analysis

Events	My actions	Reasons of my actions	Consequences of my actions
Meeting with the instructors in their department	1/ I Posted three questions to the instructors A). <i>What</i> is student centered learning? B). <i>How</i> do you know that student centered learning is what you facilitate in classroom / workshop? C). <i>How</i> are you enabling student centered learning in your classroom / workshop?	To invite them to participate with their opinions	The some instructors replied one after another Said: “These questions should be answered to us.” and “Do not expect us to answer these questions.”

Events	My actions	Reasons of my actions	Consequences of my actions
1 st Meeting	I Asked for the opinions of the instructors about what they wanted to learn.	To encourage participation. I changed my facilitation approach from posting questions to asking for opinions.	Seven instructors participated by giving their opinions on what they wanted to learn about. <ul style="list-style-type: none"> 1- Nasr Eldeen said he wanted to learn about lesson planning 2- Taban said he wanted to learn how to make the teaching attractive to the students 3- Arrik and Stephen said that they wanted to understand and learn about student centered approach. 4- student centered approach. 5- Ahmed, Saeed and Omto said that they wanted to improve their English language.
1 st Meeting	I asked them to choose one of these topics to begin with	To enabled them to participate in decision-making.	The 23 instructors discussed among themselves in three groups but they were not able to decide.
1 st Meeting	I suggested to them that by asking isn't better to being with student centered approach and deal with the others as we progress (improving lesson planning, improving teaching to become attractive to students for better learning outcome, and English	To save time since they were not able to decide for themselves	They accepted my suggestion.

Events	My actions	Reasons of my actions	Consequences of my actions
1 st Meeting	I asked for the opinion of the instructors: Do you like to work individually or in group?	To encouraged participation.	All The participated said “We want to work in groups”
// //	I asked for their opinions: Do you like the groups to be a mixture of the across the department or each department can be in one group?	To encourage participation in decision making	The majority Said “we want the groups to be a mixture across the departments”
// //	I asked them how many times a month we should meet in general meetings.	To encourage participation in decision making	They participated by saying that twice a month. It is preferable
2 nd meeting	I asked them how many of them who wanted to present their work.	To encourage participation	Three groups said they are ready while two other groups were not ready, i.e. group 3, 4 and 5 Group 3 presented by Taban, defined student-centered approach as "As teaching that emphasis on students to be responsible and accessing learning. The role of the teacher is to help students' learning process”

Events	My actions	Reasons of my actions	Consequences of my actions
2 nd meeting	After Taban's presentation, I invited the participants to participate by posting questions or comments.	Hear how they have understood the topic under discussion.	<p>Badowi: commented that the students must pay attention to the teacher, have self confidence and must participate fully by asking questions during the lesson. The teacher on other hand must control the classroom and encourage the students to participate.</p> <p>Taban: said that this approach focused on the student and the facilitator, and we should be aware of the difference between the facilitator and the teacher. When the students are rearranged in groups they will be able to know each other better and will be able to discuss without fearing each other and have good relations with their teacher.</p>

Events	My actions	Reasons of my actions	Consequences of my actions
2 nd meeting	After Daniel's presentation, I invited the participants to participate by posting questions or comments.	Hear now how they have understood the topic under discussion.	Group 4 presented by Daniel Nyang, defined student centered approach, as 'knowledge constructed by the student and the instructor is a facilitator'. No comments or questions posted to group 4.
// //	After Ariik's presentation, I invited the participants to participate by posting questions or comments.	Hear now how they have understood the topic under discussion.	. Group 5 presented by Ariik, defined student centered approach as 'A system that the students are entitled to learn by themselves Instructor should be an observer, to make sure that everybody is participating.he should welcome the ideas of everyone and making the correction when needed'.

Events	My actions	Reasons of my actions	Consequences of my actions
// //	I asked Ariik what he did mean by saying that all the ideas must be welcomed?	<p>To encourage participants post questions and comments.</p> <p>To evaluate the meeting, to find what I should work on to improve for the coming meeting.</p>	<p>Ariik answered, “We mean the teacher should try to understand why his students give the idea in this way in state of rejecting them. The teacher should analyze the answers later after the discussion, so in other word the student has to understand that he was wrong”.</p> <p>Badowi commented “we shouldn’t disappoint the students, let them say whatever they want to say, this will encourage them to participate”</p> <p>Taban: “The answer is in its place, the facilitator has the right to explain everything according to the goals”</p> <p>Ariik: “There should be defined goals. Those two they never talk about the learning area, the classroom should be comfortable for learning”. The participants made these remarks from the meeting. It was good; we shared information and were able to participate in the discussion. The language is very difficult for some of us.</p>

Events	My actions	Reasons of my actions	Consequences of my actions
3 rd meeting	I asked them Who would like to presented their work.	To facilitate participants' participation in sharing their experiences with other.	Three participants from three learning groups i.e. group 3, 4 and 5 respectively presented the group's characteristics of student centered approach. Group 3 presented by Taban, identified three characteristics of student centered approach, and they were; 1/ Students works together in teams 2/ the teams should be rearranged every time and 3/ No order or command, the student should be allowed to work freely.
// //	After Taban's presentation, I invited the participants to participate by posting questions or comments.	To encourage participation	Daniel Nyang asked: "You mentioned the characteristic, but is this applicable in the classroom or in the workshop?" Badwi answered: "I mean both in the workshop and classroom." Badwi answered, "I mean by confidence the student shouldn't doubt about his ability."

Events	My actions	Reasons of my actions	Consequences of my actions
3 rd meeting	After Badwi's presentation, I invited the participants to participate by posting questions or comments.	To invite the participants to think and reflect on what they are saying.	Group 4 presented by Badwi identified five characteristics of student centered approach, and they were; 1/ Students must love his work, 2/ Student should show good behavior and respect his follow students, and the teacher, 3/ Should have a confidence in himself and his ability to do things, 4/ Should be active and 5/ Should take care of his homework.
// //	I asked: "What do you mean by that a student should be confident in himself? If his doing something wrong, does it mean that you should let him continue?"	To invite the participants to think and reflect on what they are saying.	Badwi said that "I mean that the students should not fair they have to talk freely "

Events	My actions	Reasons of my actions	Consequences of my actions
3 rd meeting	<p>After Ariik's presentation, I invited the participants to participate by posting questions or comments.</p> <p>I asked the group: "What do you mean by working together?"</p>	To encourage participation	<p>Group 5 presented by Ariik, stated nine features of student centered approach that are;</p> <p>1/ Student centered learning has a characteristic of learning together. 2/ The teacher's role is to allow the students to study by themselves, 3/ They should be doing classroom that given by the teacher.</p> <p>Ariik answered, "When we bring ideas and answers together it means that we are working together. It is not dependent upon one person or individually, each is responsible"</p> <p>I think Ariik probably referring to rule instead of characteristics.</p>

Events	My actions	Reasons of my actions	Consequences of my actions
3 rd meeting	After the discussions, I asked the participants to give their evaluation of this meeting.	<p>Evaluation of the day:</p> <p>I asked the participants, how do you evaluate this session?</p>	<p>The participants made this remarks from this meeting. It was good. We shared ideas and were able to participate in the discussion. The language is very difficult for some of us. We are suggesting that those who do not know English can present their ideas in Arabic. After the evaluation of the 3rd meeting we found that there are improvements in the presentations, but the language challenge reminds. The instructors said they wanted to practice student centered approach in their workshops and classrooms.</p>
4 th Meeting	I asked the participants who wanted to present their experiences.	<p>To encourage them to share their experiences in public</p> <p>Most of the could not participate they said, “SCL is new for us we need time to practice on it secondly . language problem”</p>	<p>Ariik, Stephen and Obile presented their experiences. These experiences are written in page 42 to 43 in chapter four</p>

Appendix 2. Data analysis from the perspective of the research question *how can I improve my capability of facilitating learning groups.*

Only relevant data to the research questions will be use in the analyses and the discussion. I will select key pieces to use as evidence based on the research question and my claim that I made improvements in my own practice (Jean McNiff & Jack Whitehead, 2009, 62)..

Cause and effect analysis

Events	My actions	Reasons of my actions	Consequences of my actions
1 st Meeting	I asked instructors' opinion if they want to work in groups or individually	To encourage them to work in groups.	They participated by saying that they will work in groups.
// //	I asked for their opinions if they want the groups to be a mixture across the departments or each department can be in one group.	To encourage participation in decision making	They decided by saying that they wanted the group to be a mixture across the departments.
// //	I asked them how they wanted the groups to be formed.	To encourage participation in decision making	They said each group should a mixture of instructors across departments and have at last one person who knows English in each group and the

Events	My actions	Reasons of my actions	Consequences of my actions
// //	I asked 5 instructors to stand up and then I asked the other participants to choose which group they wanted to join.	To form five groups	22 instructors distributed themselves into five groups, numbered from 1 to 5, each group consisted of 5, 4, 4, 4, and 5 consecutively.
// //	I asked them how many times a month we should meet in general meeting.	To encourage participation in decision making	They participated by saying that we should meet in general meeting twice a month.
2 nd meeting	I asked group 1 and 2 why they did not prepare and present their work.	To know the reason and how I can facilitate their progress	The two other groups 1 and 2 were not ready to present their work because they had not met to discuss and prepare for the general meeting. I met with them after the general meeting and found that the lack of time and proper coordination between the group members were the reasons of them not meeting.

Events	My actions	Reasons of my actions	Consequences of my actions
// //	I visited David the leader of group 1 in his department and asked him why is your group not meeting?	Follow up	David O. head of group 1 said “I am not learning any new thing because I feel as I am teaching not learning in this sense, these instructors (<i>referring to his group members</i>). should be sent for English course before they join this program”. He added, “I feel frustrated, because this people they are only listening, I am the one doing the researching and looking for the information and present it to them. I have my own ambition, as they have their own ambitions too”
3 rd Meeting	The period from 17 – 19 November 2009, I follow up the groups by meeting with each of the five groups individually. I discussed with them their progress and the challenges they are facing to find out how I could help them to continue with	To encourage and advice the group	I found that all the groups had similarly common challenges that are: <i>lack of respect of time set by the group for meetings and discussions. English language as communication language among the group members is challenging.</i> The SCL approach difficult, because it difficult for the individual

Events	My actions	Reasons of my actions	Consequences of my actions
// //	their meetings and discussions.		in the groups to search and document their experience..
// //	I asked them how do you want to deal with these challenges?	To how I can facilitate to the so that they can solve their challenges.	The group said they should discuss seriously how to respect time as a group and improve it. For the English language they are going to help each other but it will be good also if they can find dictionaries and be given English course. For the references, they need library in the VTC. Some are suggesting that they need lectures instead of them searching for the information and later on present it to the group in the general meeting.

Events	My actions	Reasons of my actions	Consequences of my actions
6 th Meeting	<p>I asked the group members individually the following questions</p> <p>1- Can you mention three points you regarded as Strength in your groups?</p>	Evaluation of the groups progress	<p>1/ The commitment among the group member for the meetings,</p> <p>2/ Openness and honesty between the members of the group, the groups are determined to reach and obtain their goals.</p> <p>3/ Confidence and trust between the group members.</p>
// //	<p>2- Can you mention three points you regarded as weakness in your group?</p>		<p>1/ English language is a challenge, low standard of English.</p> <p>2/ Lack of references</p> <p>3/ Participants are occupied with their daily activities at the different departments.</p>

Events	My actions	Reasons of my actions	Consequences of my actions
// //	3- Can you mention three points you regarded as strengths in the group meetings?		1/ The way the discussion is done is very good, the way the group members participate in the discussion, the way the meeting and discussion are facilitated, openness and clarity. 2/ The way the topics are introduced for discussion. There is enough time given to apply what we are learning. People learnt to better understand the SCL. The groups were committed to talk in English during the meeting. 3/ The place of the meeting is comfortable.
// //	4- Can you mention three points you regarded as weakness in the group meetings?		1/ Some do not want to talk or participate during the meeting 2/ Some do not talk in English language 3/ Some participants come late for the meeting

Notice: The above data are collected from meeting logs, sound records, interviews and video.

Appendix.3. MVTC Research participants names, contact and general meetings attendance

S/N	Name	Section	Position	Contact	Group no.	1stMeeting	2ndMeeting	3rdMeeting	4thMeeting	5thMeeting	6thmeeting
1.	Abdel rhman Ahmed	Administration	Director	abdelrachman25@yahoo.com							
2.	Sidig Osman Omer	Auto mechanic	H. section	+249915484503	5	x	x	x	√	√	√
3.	Saeed Dafalla Mah.	Auto-electric	H. section	+249918226148	1	√	x	√	√	√	√
4.	Ahmed Ali Mustafa	Carpentry	H. section	+249122495644	3	√	√	√	√	√	√
5.	Fatih Musa Mamur	Carpentry	Instructor	+249915650138	4	√	√	√	x	√	√
6.	Heba Ibrhim Farg	Clerk	Clerk	+249915019294	3	√	X	x	√	x	x
7.	Elisabeth Deng	Clerk	Clerk	+249915445447	2	√	√	x	x	√	√
8.	Paulino Albino	F. mechanics	Instructor	+249917272639	5	√	√	√	√	√	x
9.	Mayker Akwoc	F. mechanics	Instructor	+249909634527	-	x	X	√	√	√	x
10	Peati Chol Adung	Fitting	Instructor	+249915325576	5	√	√	x	x	√	√
11	Ayiel Deng Aloker	G. Electricity	H. section	+249910624862	-	x	X	x	x	√	x
12	Obiel Pawang	G. Electricity	Instructor	+249916468360	4	√	√	x	√	√	x
13	Taban Gabriel Akoj	Glass Blowing	H. section	t.akoje@yahoo.com	3	√	√	√	√	√	x
14	Ariik Atakdiit	Glass Blowing	Instructor	ariqdudic@yahoo.com	3	√	√	√	√	x	x
15	James Oniyati	Machine shop	H. section	+249918190476	3	√	X	x	x	x	x
16	Nasr Eldeen Abdal.	Machine shop	Instructor	waddabol@yahoo.uk.co	3	√	√	√	√	√	√
17	Omot Oten Jweth	Machine shop	Instructor	+249909788859	3	√	x	x	x	√	√
18	Badwy Ahmed	Student affairs	Instructor	+249915055185	2	√	√	√	√	√	√
19	Angier Nok Chowg	Tailoring	H. Section	+249913397098	5	√	√	√	√	√	√
20	David Dak Okwachi	Welding	H. section	+249917304324	1	√	x	x	x	x	x
21	Aqustino Othow	Welding	Instructor	+249918202693	4	√	x	x	√	√	√
22	Daniel Nyank Ayiek	UNIDO		danielnyang@yahoo.com	4	√	√	x	√	x	x
23	Stephen James	Building		+249911826682	5	√	√	√	√	√	√

Appendix.4. photos



From the left Mr. Abdel rahman and Daniel Ruben during the first meeting



forming the learning groups



A following up meeting with group to assess their progress.



UNCOOP-TVET classroom it was comfortable for the meetings as said by the participants



Ariik presenting group work to the participants



papers used by groups to present their work

Appendix.4. invitations for the group meetings

Announcement for all learning groups

Date: 02/11/09

I would like to inform you that, we shall be having our group discussion meeting on Friday the 06th of Nov 2009 at 8:45 am in the NUCCOOP – TVET hall.

Thanks,
Learning groups facilitator
Daniel Ruben Ateng

Announcement for all learning groups

Date: 16/11/09

I would like to inform you that, we shall be having our group discussion meeting on Friday the 20th of Nov 2009 at 8:45 am in the NUCCOOP – TVET hall.

Thanks,
Learning groups facilitator
Daniel Ruben Ateng

Announcement for all learning groups

Date:07/01/2010

I would like to inform you that, we shall be having group discussion meeting on Friday the 11th of Dec 2009 at 8:45 am in the NUCCOOP – TVET hall. For the success of the meeting, it will be very important if you could prepare in advance, by reading and writing your experiences with the student centered approach.

Thanks,
Learning groups facilitator
Daniel Ruben Ateng

Announcement for all learning groups

Date:05/01/2010

I would like to inform you that, we shall be having our group discussion meeting on Friday the 8th of January 2010 at 8:45 am in the NUCCOOP – TVET hall. For the success of the meeting, it will be very important if you could prepare in advance, by reading and writing your experiences with the student centered approach.

Thanks,

Learning groups facilitator
Daniel Ruben Ateng

Date: 20th January 2010

Subject: invitation for group discussion meeting

Dear all,

As we have agreed to have a group discussion on Friday 22nd – January 2010. I would like to remind you that the meeting will be at 8:45 in the NUCOOP – TVET hall.

For the group discussion to be fruitful and inspiring it is advice that

- Each group prepare their work in advance
- Each individual bring his/her individual report and experience on Student centred approach.

Thanks
Daniel Ruben Ateng
Learning group facilitator

Appendix.5. Questioner for following up the learning groups activities

1. How many times have you met since the learning group were formed?
2. How do you organize your meetings?
3. Do you have a leader in the group?
4. What is the role of each of you in the group?
5. What have you discovered so far?
6. Do you feel that you are learning?
7. What are the challenges are you facing?
8. How do you want to solve these challenges?
9. What are the goals that you want to achieve?
10. What are your plans to achieve these goals?

Appendix.6. Evaluation form for all meetings

1. Name:
2. Section:
3. Age:
4. The approach used to select the topics for discussion was:
2- Fair 2- Good 3- very good 4- excellent
5. The facilitations of the group discussion was:
1- Fair 2- Good 3- Very good 4- Excellent
6. The meeting time was:
1- Not convenience 2- Convenience 3- Very good

4- Excellent

7. The duration of the meeting was:

1- Short 2- long 3- Too long 3- good

8. The chances from the participation were given:

1- Not equally 2- Equally

9. The facilitator of the learning group was:

1- Fair 2- Good 3- very good 4- excellent

10. Mention three things you don't like from all these meetings:

- 1- -----
- 2- -----
- 3- -----

11. Mention three things you like from all these meeting:

- 1- -----
- 2- -----
- 3- -----

12. Mention three things you regard as strong points in your own learning group:

- 1- -----
- 2- -----
- 3- -----

13. Mention three things you regard as a weakness in your own learning group:

- 1- -----
- 2- -----
- 3- -----

14. What are your suggestions for the way forward?

Thank you