AKERSHUS UNIVERSITY COLLEGE

MASTER'S DEGREE IN VOCATIONAL PEDAGOGY

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Developing My Practical Ability in Facilitating Learning While Instructors Of NPAYVTC In Learning Groups As a Facilitator

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DEVELOPING MY PRACTICAL ABILITY IN FACILITATING LEARNING WHILE WORKING WITH INSTRUCTORS OF NPAYVTC IN LEARNING GROUPS

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COVER PAGE ILLUSTRATIONS

The four photographs used on the cover page were taken during the learning group dialogues in different meetings, help in the meeting hall of NPAYVTC. I (the researcher) took the photographs in their natural setting, during the learning group meetings; and no participant(s) was organized before taking them. This was done to minimize the cases of losing moments' expressiveness, and manipulating the photographic presentations.

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ABSTRACT

I was granted a scholarship under the Norwegian Quota scheme program to pursue a Master's degree (MA) in Vocational pedagogy (2008-2010) at Akershus University College (HiAk); through the collaboration between HiAk, Kyambogo University (KyU) in Uganda, and Upper Nile University in Malakal. I have been exposed to the Student Centered Approach (SCA) to learning as a MA research student in vocational pedagogy, which created a desire to improve my practice; from delivering content to the learners, to facilitating knowledge creation. This motivated me to research into how to develop my practical ability in facilitating learning processes, while working with willing instructors of Norwegian People's Aid's vocational training center (NPAYVTC) in Yei. This was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in Student Centered Learning (SCL).

Preliminary phases in this study involved identifying the different vocational practices at the Vocational Training Centers (VTCs) and local industries in Yei, and how teaching and learning was facilitated (Nganda, 2009). After identifying the Teacher Centered Learning (TCL) as a significant approach to learning, a vocational teacher development workshop was organized by NUCOOP-TVET project for VTC instructors in Yei; with the theme 'how can I improve my practice?' (Nganda, Kenyi, & Ateng, 2009b). Subsequently, instructors of NPAYVTC with the headship of their principal, Otim; organized for a workshop about SCL (Ateng, 2008).

The thesis focuses on how participants' learning groups were formed, how the learning group meetings were planned (meeting time, duration, frequency and venue), implemented, and organized (having leader(s) and rules). One general learning group meeting was planned weekly; which split to two sections' learning groups of 2 and 3 participants respectively. Some groups also had rules, and leader(s) to chair the learning group meetings. The willing instructors of NPAYVTC were practitioners in my practice and participants in learning groups, whose learning I was trying to influence. They chose not to follow-up a series of SCL activities with their students in the classes.

In an attempt to develop a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL, the participants and I discussed our understanding of a learning group (definition and characteristics); and the influence of gender aspect to an effective learning group dialogue. We also discussed our understanding of SCL (definition, characteristics and indicators); where participants related SCL to learning groups. This may

be because their initial experience with SCL was through learning groups; as well as appreciating learning groups as useful methodology in SCL.

In order to evaluate our learning processes, participants and I also documented and shared our learning experiences from the process. The participants chose to document and share their experiences via their blogs, which was challenging due to lack of commitment to their learning processes; and influence of other factors in their environment for example TCL, and being busy with their daily activities. We also shared our experiences during the different learning group dialogues. Data was generated from that process, and presented using three themes that is; <u>X: learning groups' planning, organization and implementation,</u> <u>Y: learning groups and student-centered learning</u> and <u>Z: sharing experiences in the learning groups in relation to improvement of practice.</u>

In this thesis, I have defined, discussed, and reflected about different theories and concepts related to teaching and learning which are; the 'banking' concept of education (Freire, 1972), the relations model of didactics (Tobiassen, 2002), experiential learning (Bjerknes, 2002), social practice of learning (Hung, Ng, Koh, & Lim, 2009), systemic thinking theory (McKenzie, 2005) and the five disciplines of organizational learning (Senge, et al., 2000). I was introduced to these theories and concepts as a master's student of vocational pedagogy, and I have consequently used them in analyzing and discussing the findings from this study.

In addition, a participatory action research (PAR) methodology was used (Greenwood & Levin, 1998); which consequently led me to the action research living theory (Whitehead & McNiff, 2006), concerned with the question of 'how can I improve my practice?' Four research methods were used in this study that is; qualitative semi-structured and conversational interviews, learning group dialogues, participant observation and continuous analysis and reporting during this research with participants' awareness. These methods were supplemented with audio recordings, note-taking, log writing, and digital photography as research tools. These were used in a holistic way where, different activities were interrelated.

In conclusion, the participants and I identified some important ideas about how learning groups could be used in SCL which are; participants' commitment to their learning process, respect for each other's ideas, portray participatory leadership, groups to have 5-7 participants, meeting within participants' vicinity, continuous documentation of experiences using learning logs; having a facilitator, who plans with students, minds about individual differences and creates a good learning environment with a high level of motivation in the learning group.

ACKNOWLEDGEMENT

LIST OF ABBREVIATIONS

BCP- Building and concrete practice section
C/J- Carpentry and Joinery section
CoL- Communities of Learners

CoP- Communities of Practice

HiAk- Akershus University College

FK- Fredskorpset

KyU- Kyambogo University

MA- Master's Degree

NOK- Norwegian Kroner

NOMA- NORAD'S program for Masters' studies

NORAD- Norwegian Development Agency

NPA- Norwegian People's Aid

NPAYVTC- Norwegian People's Aid's vocational training center in Yei.

NUCOOP- Norwegian University Cooperation program for Sudan

PAR- Participatory Action Research

SCA- Student Centered Approach

SCL- Student Centered learning

SSM- Soft Systems Methodology

SSC- Sudan School certificate

TCA- Teacher Centered Approach

TCL- Teacher Centered Learning

TVET- Technical and Vocational Education and Training for teachers

UACE- Uganda Advanced Certificate of Education

UNESCO- United Nations Education, Science and Cultural Organization

UNU- Upper Nile University

USD- United States of America's dollar

VET- Vocational Education and Training

VTCs- Vocational training centers

VTRIC- Vocational Training Resource and Information Center

YVTC- Yei Vocational Training Center

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CHAPTER ONE

1.0: INTRODUCTION TO THE THEME, FOCUS AREA AND PROBLEM STATEMENT

This chapter presents the theme of the thesis, a brief introduction of my background and point of departure for this thesis, project background, the need to improve my practice as a trainer in Vocational Education and Training (VET), objectives (general and specific) of the study, scope of the study, problem statement influencing the study, research questions and how the report has been organized.

1.1: Theme of the Thesis

The theme of the study is developing a deeper understanding about learning and how to facilitate learning processes of my students, through experiential learning. It relates to becoming more concerned about the learners, their needs and interests through the student centered approach (SCA) to learning; rather than pouring facts into the heads of learners.

In this study, I have therefore sought to understand the importance of changing my perspective and that of the willing instructors of Norwegian People's Aid's vocational training center (NPAYVTC) in Yei; from our own teaching and interests, to facilitating knowledge creation basing on interests' students.

I have further experienced that learning groups based on continuous dialogue is an important methodology in facilitating student centered learning (SCL); and I became interested in understanding how this methodology can practically be implemented during facilitation of learning processes.

While combining my own interests, those of the willing instructors of NPAYVTC and those of NUCOOP-TVET (Norwegian University Cooperation project in Sudan for Technical Vocational Teacher Education); I have taken a study about how I develop my practical ability in facilitating learning processes for NPAYVTC instructors in learning groups, as a facilitator. The instructors were practitioners in my practice, whose learning I was trying to influence; with an aim of developing a shared understanding of the usefulness of learning groups, as a part of the methodology in student-centered learning (SCL).

The idea was that the instructors participating in this process also had an aim of developing their ability to implement SCL in their classes. They however chose not to follow-up a series of SCL activities with their students, but rather practiced 'peer teaching' in our groups.

1.2: Personal Background

I am a research student under the Norwegian Quota Scheme Program pursuing a Master's Degree (MA) in Vocational pedagogy at Akershus University College (HiAk). I am also a graduate teacher whose vocational knowledge and skills are linked to teaching subjects of Home Economics (Foods and Nutrition) of Kyambogo University (KyU) in Uganda.

My place in this University was secured as a result of the collaboration between HiAk in Norway, KyU in Uganda and Upper Nile University (UNU) in Malakal.

Similarly, I am also a part of the "International English speaking learning group" which is linked to development of a Bachelor's Degree program in Technical Vocational Teacher Education for teachers (TVET) at UNU in South Sudan.[1]

As a graduate teacher whose vocational knowledge and skills are linked to Home Economics (Foods and Nutrition), my point of departure for this research theme is related to my experience as a trainee for three years at KyU that is; 2003-2006 and a trainer of Foods and Nutrition in an upper Secondary school for the past four years in Uganda. It should be appreciated that my point of departure is influenced by my social construction approach to knowledge creation (epistemology) and belief in commitment, determination and compassion as important values, on addition to being very critical.

In my experience as a trainee at KyU, the lecturer usually drew his/her lecture plan in the absence of the students (the recipients). The plan was related to the allocated time of the course unit (subject matter) which had been earlier timetabled (work plan) with other lecturers and the Heads of department. The aims and objectives were also drawn from the curriculum and subject content for each department for the different course units. The lecturer hence determined the type of subject matter, the methods of teaching to use, the aims or objectives, the learning instructional materials, methods of evaluation for the lecture. This lecturer according to me determined when to teach what, how, for who and why. He/ she had to be responsible for my learning as a student, democratic values were not exhibited and learners' individual differences may not have been catered for, and hence learning may not have taken place. This partly depicts the teacher-centered mode of facilitating learning. The learning process is also dependent on the learner's level of Meta-learning awareness. Norton et al (2004) highlight that;

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[1] The "International English Speaking Learning Group" is a part of the Masters of Vocational Pedagogy class (2008-2010). We are three members in this group by choice since we were the only English speaking and full time students among many part time students for the same program. In this group, we work as "critical friends" in developing our reports. This group has three mentors, Trond Smistad, Johan Houge-Thiis, and Ellen Bjerknes.

A student who has a high level of meta-learning awareness is able to assess the effectiveness of her/his learning approach and regulate it according to the demands of the learning task. Conversely, a student who is low in meta-learning awareness will not be able to reflect on her/his learning approach or the nature of the learning task set. In consequence, s/he will be unable to adapt successfully when studying becomes more difficult and demanding[2].

Reflecting about the above, a student's learning approach depends on his/her conception of learning, his/her epistemological values, learning processes and his/her academic skills.

In my experience as a trainer/ teacher, I drew my lesson plans according to the time table (educational frame) of the school, with aims or objectives related to the subject content I wanted to deliver then, methods of teaching, assignment and questions, learning instructional materials (work functions) and evaluation techniques. The learners who are the beneficiaries in this learning process may have been left out of all these sequences, as their backgrounds (educational, social, and vocational), abilities, strength and weaknesses may perhaps have been neglected. This is typical of the teacher-centered approach to learning and the consequences of this have been that, most of my teaching may not have resulted into learning as intended; due to variation in learners' interests or individual differences. A case in point is in the last batch of students I taught at an upper secondary prior to enrolling as MA student of Vocational Pedagogy. These students were in the same age bracket (17-19) years and direct entrants from lower secondary, apart from one nun who was 32 years. She had last attended school fifteen years back and had studied history, economics, divinity and French language before; where she scored low marks and this limited her progress to the next level in her education. She then started working as an English and French teacher in a secondary school for twelve years. Later, she realized the need for some practical skills in cookery, which encouraged her to take a step of repeating the advanced level with a more scientific approach (Biology, Chemistry, Agriculture and Foods& Nutrition). This student attended all the lessons (theory and practical), but would score highly in the practical tests or examinations; and least in the theoretical assignments, tests and examinations. Consequently, as a traditional practice, she had to sit for Uganda Advanced Certificate of Education (UACE) examinations for Foods and Nutrition like it's for other subjects, but she still scored least compared to her colleagues in the class. This student was still not awarded a certificate and a question came to me as "did this student achieve her aim/objectives of being in school?" It was a bad experience for her I

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[2] http://en.wikipedia.org/wiki/Meta_learning

suppose and my reflection is that this student was a special one who needed special attention, which I may have neglected (did not pay attention to individual differences). The subject matter may not have been relevant to her needs which affected her learning process. It may be evident that she needed more practical than the theory, which she did not have because of the influence of the Teacher-centered approach (TCA).

I would therefore like to see a gradual change from this tradition, when students plan for their learning process together with their lecturers, selecting subject matter most suitable for their needs, while considering their individual differences. With this in place, the student will take full responsibility for his/her learning, democratic values will be exhibited, and learning will be more sustainable (Tobiassen, 2002, pp. 42-47). According to me, the work of the trainer will be eased since he/she will be working with what the student finds relevant to him/her.

1.3: Project Background
1.3.1: The UNU -KyU- HiAk Collaboration

Upper Nile University (UNU) in Malakal is in cooperation with Akershus University College in Norway, and Kyambogo University in Uganda; to form a Bachelor program in TVET. The TVET will be offered at and by UNU in Malakal. To cater for the people far from Malakal, an initiative has been taken to decentralize the program at different Vocational Training Centers in Yei, Juba and Wau parts of South Sudan. This is planned to be offered as a part time program offered by UNU in collaboration with HiAk.

As reported by the Ministry of education of Sudan (1999), UNU is one of the three established universities in South Sudan. Its campus is in Malakal, Upper Nile state.

The Reuters (2006) reported that South Sudan is trying to build peace and working infrastructure after years of strife. On the other hand, Nexus, which is United Nations Education, Science and Cultural Organization (UNESCO)'s Institute for Lifelong Learning cites a report by the Southern Sudan Government that 92% of the inhabitants are illiterate (UNESCO, 2007, p. 6). Similarly, Vocational Training Resource and Information Center (VTRIC) report (2007) indicates that several TVET institutions in South Sudan closed during the last fifteen years due to continuing war. It has also come to my notice that UNU has been operating from the Sudanese Capital Khartoum due to conflict in the South of the country and with even the more recent episodes with militia, all moving to Malakal seemed to have stopped and by 21st, February 2010; its administrative offices and some faculties like medicine; were still operating from Khartoum, although the faculty of education operates in Malakal..

It is based upon the above background that the Norwegian Ministry of Foreign Affairs has allocated Norwegian Kroner (NOK) 65 million (about 13 million United States of America's Dollars (USD) towards development and capacity building of South Sudan through the Norwegian University Cooperation (NUCOOP) project for South Sudan. These funds have been then distributed amongst the seven projects including three at UNU in Malakal. The NUCOOP project thus answered the appeal made by the Sudanese Ambassador in Norway[3] at a Farewell dinner of a TVET workshop on development of a Master's program for KyU at Sømarka, to apply for a NUCOOP funded project for a Bachelor of Vocational Teacher Education at UNU.

Being a part of an exchange program aimed at strengthening the staff and students between KyU in the South and HiAk in the North towards capacity building in Vocational Pedagogy, involvement in the NUCOOP activities is one way of bringing about a synergy between NOMA, NUCOOP and FK-Norway programs.[4]

My participation in the NUCOOP activities as a member of the research team is also based upon the tripartite agreement between HiAk, UNU and KyU. As a result, KyU is educating Southern Sudan students on the MA program as part of capacity building for the degree program which is yet to be implemented in South Sudan. It was also deemed necessary for KyU to have representatives in the NUCOOP activities in order to widen an understanding of the complexities in TVET in South Sudan. This exposure will help me to view vocational issues at a broader perspective and also as an aspiring educator in vocational pedagogy, this will provide a foundation of sharing experiences with students from South Sudan.

My activities and findings in this report will help fulfilling Kyakulumbye's wish of a grounded situational analysis of Vocational Education and Training (VET) status in South Sudan as a whole and UNU in particular (Kyakulumbye, 2008, p. 8). The findings have also helped me learn how learning groups can be a means of facilitating SCL.

1.3.2: Masters' Thesis Background

The findings from my first field work in Yei about Vocational practices at the Vocational Training Centers (VTCs), NPAYVTC inclusive, local industries; and how teaching and

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[3] Dr. Eltom, who was the Sudanese Ambassador in 2007/2008 made this Appeal
[4] NUCOOP is Norwegian University cooperation aimed at strengthening of VET in South Sudan and directly linked to the Bachelor program at UNU in Malakal, NOMA is NORAD's Masters program in Vocational pedagogy at KyU with 21 students, fourteen (14) from Uganda and seven (7) from Sudan, FK is a Norwegian peace-corps program under the ministry of foreign affairs, with focus on development programs in the developing world centering on arrangement and facilitation of volunteers in exchange programs from the North and South or South and South, as well as forming development partners in line with the participating partners.

learning was facilitated, identified a teacher-centered approach as common in facilitating teaching and learning at the VTCs.

NPAYVTC is a Norwegian People's Aid's Vocational Training Center in Yei, Central Equatorial state. The center was established in 1995 with an aim of training the young men and women of a war-torn South Sudan in knowledge and skills of carpentry and joinery, building and concrete practice, tailoring, tie and dye. The center also trains the students in Adult Literacy of English language, mathematics and business. Similarly, it also has a three months' training course in computer applications of the general introduction to ms word, ms excel, ms access, ms power point and email & internet services.

Group- facilitated learning was not a significant approach much as some students advocated for it as a good way of facilitating their learning.

I recommended the student-centered approach based on experiential learning; where the instructors will build their capacity in facilitating SCL. Both the instructors and students are an active part the learning process. Learning groups were also identified as one of the means of attaining SCL, because they yield better retention of different knowledge and skills (Nganda, 2009, pp. 60-65).

Six workshops had been so far conducted in the initial stages of the Bachelor's Degree program in TVET, two in Juba, three in Yei and one in Wau. The participants in these workshops were instructors of different VTCs and I chose to follow up the activities of three workshops with NPAYVTC instructors in Yei; where I conducted my first field work (Nganda, 2009, p. 25). I participated in the first workshop and not in the second and third workshops; but rather read experiences from them as documented by the facilitators of those workshops.

The first workshop focusing on Technical Vocational Teacher Development, where I participated, was conducted from 16th -20th February 2009 at NPAYVTC in Central Equatorial state.

The workshop was the first of its kind in South Sudan as a part of a full one year program, offered as a part time program over two years in Technical Vocational pedagogy; and the program is offered by UNU in Malakal, in collaboration with HiAk in Norway. This will also promote decentralization of the TVET Bachelor for candidates far away from UNU.

Referring to a collaborative report written after the workshop (Nganda, et al., 2009b, pp. 6-10), learning group strategy was used as a didactical tool for facilitation; to enhance the participants' learning process during this workshop. Five learning groups of instructors from Vocational Training Centers in Yei, Southern Sudan were established with an overall question

of '**How can I improve my practice?'** resulting in change. The participants of the teacher Development workshop were quite clear that learning group dialogues made them really to learn.

This workshop also incorporated the use of blogs for documenting participants' improvement process. With the aim of achieving a collaborative learning, each participant was able to create his/her own blog; where students from Sudan, Uganda and Norway can all contribute to each other's learning through blogs comments. These created blogs were however not functioning for about eight months partly because of poor Internet by then. An initiative was therefore taken by NPA to have an improved VSAT for better internet and this is working properly now.

The second workshop in Yei was a follow-up of the activities of the first workshop and how the participants were continuing with the documentation process of their practice.

The third workshop about what Student- Centered Learning (SCL) is, at the NPAYVTC was initiated by instructors of the center with the headship of their principal, Otim Joseph.[5] The workshop intended to facilitate for developing an understanding of SCL (what SCL is, how it is implemented, and why it is important for the learner and facilitator) for the NPAYVTC's instructors; and be assisted in continuously developing their understanding of SCL. The facilitator encouraged the participants to reflect upon their teaching and to improve it using student- centered learning (Ateng, 2008).

This was done by continuously meeting and discussing on how they can change their teaching practice from teacher- centered approach (TCA) to Student- centered approach (SCA).

The eight participants (instructors) who attended the workshop discussed in two learning groups to share their knowledge and experiences. They also documented experiences as both groups and individual on their blogs, the subject matter of SCL and why it was important to them as facilitators; as well as presenting a short lesson each (peer teaching). The facilitator discussed with the participants on how they wanted to proceed.

In preparation for this field work, I had learned that instructors at NPAYVTC had been working in groups at their sections to develop their version of SCL and I became interested in working together with them to improve our practices as facilitators in a SCL environment.

To implement the action-oriented methodology, a meeting with Trond Smistad [6] Nina Pedersen[7]and NPAYVTC principal, Otim Joseph were organized and held. The meeting was

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[5] Mr. Otim Joseph is the principal of this center.
[6] Trond Smistad is the Program Developer of the NUCOOP project.

aimed at having final decision of what the needs of NPAYVTC are and the framework for how to support NPAYVTC in achieving their needs. This followed the final talks with the Governor of Central Equatorial State; where it was agreed that NPAYVTC would remain a part of NPA in the coming years.

The meeting of NUCOOP program developer, Trond; NPAYVTC principal, Otim and NPA program manager, Nina; involved discussions of the situation of NPAYVTC regarding them developing their version of SCL. The instructors at NPAYVTC had been noted to be in a process of documenting their own practices. They were also noted to be meeting regularly at each section[8] to share their experiences. To initiate the learning group dialogues with the participants and me in our first general meeting held on 26th October, 2009; I inquired if the participants had been having meetings at their section levels. In response to it, I learned that this had been their suggestion from the third workshop, but was not implemented. We therefore could not share our previous learning groups' experiences among ourselves.

1.4: The Need to Improve My Practice as A VET Trainer

As a master's student of vocational pedagogy at HiAk, I was introduced to the SCA to learning; where the learner takes full responsibility for his /her learning process.

My former experiences as a student at KyU for three years (2003-2006) and trainer at an upper secondary school (2005-2008) was my beginning point; which initiated a dialogue between my facilitators and me. This is one of the key characteristics of SCL which helps a learner to identify what he/she is most interested in improving in his/her practice (most relevant knowledge to a learner). Exposure to the SCA created a desire to improve my practice from being a deliverer of content to the learners, to being a facilitator in knowledge creation; where students are not treated like objects to be filled (Freire, 1972, pp. 44-46).

Similarly, my experience as a member of the "International English speaking learning group" has helped me to realize the usefulness of learning groups in facilitation of SCL. Working together in this learning group as 'critical friends' in developing our different reports, while taking care of each other's interests has led to development of a diversified way of thinking (looking at things in different perspectives) for each of us.

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[7] Nina Pedersen is a Danish working as NPA Program Manager in Juba. She is among others responsible for the YVTC in Yei.

[8] NPAYVTC has three basic sections; carpentry /joinery, bricklaying and concrete practice and tailoring, tie &dye.

I have hence realized that a learning group could yield better retention of different knowledge and skills (Nganda, 2009, pp. 60-65); while taking care of each one's needs to learning and individual differences.

Bishop (1985) criticized TVET in Africa as being poor, based on western values and non-competitive as opposed to western TVET; which is situational-based and competitive. Similarly, Grierson (1997, p. 11) indicated that; the crisis of vocational training has three interrelated aspects: the crisis of cost, the crisis of relevance, and the crisis of equity. Reflecting about the aspect of relevance and my experience as both a student and trainer of VET in section 1.2 of this chapter, my impression is that the learners who are the beneficiaries in the learning process may have been left out of the sequences of educational planning; and their backgrounds (educational, social, and vocational), abilities, strengths and weaknesses may perhaps have been neglected (Freire, 1972).

With this reflection; working together with willing instructors at NPAYVTC in their learning groups as a facilitator, would help us develop a shared understanding related to the usefulness of learning groups, as a part of the methodology in student-centered learning (SCL) facilitation. This will help me to develop my practical ability in facilitating learning processes, hence improvement of practice to a more SCA.

Having got an opportunity to study in a college where the MA of vocational pedagogy has been running for thirty (30) years; has enlightened me about the need to improve my practice as a trainer to a more SCA. Improvement being a process, I have tried to assess how I have been instructing and facilitating the learning process, and have found out that there are many aspects I need to improve, including the shift from teacher-centeredness to learner-centeredness, from pouring facts into the heads of learners to guidance in knowledge creation. Bruning et al (1995) observed that; '*To educate, you must help the student learn how to develop strategies for learning*' (Bruning, Schraw, Norby, & Ronning, 1995, p. 1). Bruning as a constructionist further explains that the aim of teaching is not so much to transmit information, but rather to encourage *knowledge formation* and development of meta-cognitive processes for judging, organizing, and acquiring new information (1995, p. 216).

I have therefore identified that an update in educational work through research work would help me to take care of some of the aspects I had shelved as a trainer in a vocational field, and trainee in vocational pedagogy through experiential learning, hence improving my practice.

1.5: The Objectives, Purpose and Scope of the Study

1.5.1: The General Objective and Purpose of the Study

In this study, I intended to work together with the willing instructors at NPAYVTC, who were participants in learning groups; and whose learning I was trying to influence, to develop a shared understanding of how these groups can be an arena of facilitating SCL. I trust that working with these instructors in learning groups will develop my practical ability in facilitating learning processes, through experiential learning; and enhance a shift from the TCL to SCL. This will improve my practice. The instructors as practitioners in my practice will experience the role of students, and they chose not to follow-up a series of SCL activities with their students; but rather practiced 'peer teaching' in our groups (*refer to section 3.5 of chapter three*). I hope that this also improved their practice in relation to facilitating SCL in learning groups; but it would have been better if they had followed up a series of activities with their students (*refer to chapter four and five*).

The findings in this study are significant to;

- me as a researcher who wants to improve my practice in carrying out participatory action research (PAR)
- NPAYVTC staff and myself in our struggle towards becoming facilitators of learning processes
- NUCOOP-TVET project in their efforts of building capacity of TVET instructors in South Sudan.

1.5.2: Specific Objectives of the Thesis

1. To work directly with NPAYVTC principal, Otim and willing instructors of NPAYVTC in their learning groups; to develop my practical ability in facilitating learning processes for a group of teachers.

2. To develop a shared understanding of how self-propelled learning groups can be a sustainable methodology of facilitating SCL.

3. To continue with the decentralized bachelor of TVET program for UNU in Malakal.

4. To improve my knowledge and skills of carrying out qualitative action research, in partial fulfillment of the requirement for attaining a MA in vocational pedagogy, as a research student at HiAk.

1.5.3: Scope of the Study

The participants in this research were the willing instructors in these different vocational trades at NPAYVTC with a challenge of improving their practice as facilitators in SCL environment. The willingness of the participants was very important for me because it

promotes sustainability of the process; where an individual finds the process worthwhile being a part of.

1.6: Problem Statement Posing

In my preliminary research activities in Yei about Vocational practices at the Vocational Training Centers (VTCs), local industries, and how teaching and learning was facilitated; I identified a <u>teacher centered approach</u> (TCA) as common in facilitating teaching and learning at the VTCs. Group- facilitated learning was also not a significant approach, much as some students advocated for it as a good means of facilitating their learning. Learning groups were also identified as one of the means of attaining student-centered learning because they yield better retention of different knowledge and skills (Nganda, 2009, pp. 60-65).

The problem statement is therefore; *how can I develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator?*

This was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in student-centered learning (SCL).

Referring to section 1.1, the instructors were practitioners in my practice, whose learning I was trying to influence; and <u>they chose not to follow-up a series of SCL activities with their students</u>, but rather practiced 'peer teaching' in our groups.

In action research, the professional action researcher and members of an organization or community who seek to improve their practice, define the problems to be examined, cogenerate relevant knowledge about them, learn and execute social research techniques, take actions and interpret the results of the actions based on what they have learned (Greenwood & Levin, 1998, pp. 4-6). In a planning meeting with the principal of NPAYVTC, Otim; he suggested three ideas for improvement which are: *re-direction with opening of blogs, getting more information about SCL and documentation of practice on computer and in groups (see section 4.1.1).* Basing on Otim's suggestions, we discussed our <u>understanding of a learning group and SCL</u>; and there after discussed our learning experiences (*see sections 4.2 and 4.3*). The participants opted to work on the different challenges in learning groups, which we formed basing on their section levels.

Basing on the aim of developing a shared understanding of how learning groups can be a sustainable methodology of facilitating SCL, the problem statement and the challenges identified by Otim; research questions were generated (*see section 1.7*).

1.7: Research Questions

Flick highlighted that Research questions do not come from nowhere. In many cases, their origin lies in the researchers' personal biographies and their social contexts. The decision about a specific mostly depends on the researchers' practical interests and their involvement in certain social and historical contexts (Flick, 2006, p. 106).

The questions employed in this study are created from the problem statement formulation of the participants in this study and I. These questions are also in line with the general objective of this study of working together with the willing instructors at NPAYVTC, who were participants in learning groups; and whose learning I was trying to influence; to develop a shared understanding of how these groups can be an arena of facilitating SCL.

They include:

1. How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?

2. How have these learning groups been organized (leadership, contract/ rules)?

3. What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?

4. What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experience related to this?

5. How have the instructors been documenting and sharing their experiences and practices as a team?

6. What have been the most important experiences discovered in the learning groups meetings?

1.8: Summary of Chapter One and Organisation of the Report

1.8.1: Summary of Chapter One

As a graduate teacher whose vocational knowledge and skills are linked to Home Economics (Foods and Nutrition), my point of departure for this research theme is related to my experience as a trainee for three years at Kyambogo University (KyU) that is; 2003-2006 and a trainer of Foods and Nutrition in an upper Secondary school for the past four years in Uganda. It should be appreciated that my point of departure is influenced by my social construction approach to knowledge creation (epistemology) and belief in commitment, determination and compassion as important values, on addition to being very critical. This has consequently influenced how I think as well as my practice; because what I value, and how I think has influenced my way of doing things.

Exposure to the SCA as MA research student in vocational pedagogy created a desire to improve my practice from being a deliverer of content to the learners, to being a facilitator in knowledge creation; where students are not treated like objects to be filled (Freire, 1972, pp. 44-46). I have worked with the question of 'how can I improve my practice?' as a trainer and research student; which necessitates me to reflect upon the challenges met as both student and researcher as opportunities for my improvement process.

The findings from my first field work in Yei (Nganda, 2009) identified a teacher-centered approach as common in facilitating teaching and learning at the VTCs. Group-facilitated learning was also not a significant approach much as some students advocated for it as a good way of facilitating their learning (pp. 60-65).

In an effort to develop a shared understanding of how self-propelled learning groups can be a sustainable methodology of facilitating SCL, as well as decentralizing the TVET Bachelor's Degree program; six workshops had been conducted in the initial stages of the program, two in Juba, three in Yei and one in Wau. The participants in these workshops were instructors of different VTCs in and I chose to follow up the activities of three workshops with NPAYVTC instructors in Yei; where I conducted my first field work (Nganda, 2009, p. 25). I participated in the first workshop and read experiences documented by the facilitators of workshops two and three.

Referring to a collaborative report written after the Technical Vocational Teacher Development workshop (Nganda, et al., 2009b, pp. 6-10), the participants of this workshop were quite clear that learning group dialogues made them really to learn.

After the third workshop about Student Centered Learning (SCL) at the NPAYVTC, initiated by instructors of the center with the headship of their principal, Otim; I learned that instructors at NPAYVTC had been working in groups at their sections to develop their version of SCL. I became interested in working together with them to improve our practices as facilitators in a student-centered learning environment.

The theme of the study is developing a deeper understanding about learning and how to facilitate learning processes of my students, through experiential learning. It relates to becoming more concerned about the learners, their needs and interests through the student centered approach (SCA) to learning; rather than from pouring facts into the heads of learners. This theme led me to the problem statement that guided the study, which is; *how can I develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator?*

In this study, I intended to work together with the willing instructors at NPAYVTC, who were participants in learning groups; and whose learning I was trying to influence; to develop a shared understanding of how these groups can be an arena of facilitating SCL, using a <u>Participatory Action Research methodology</u>. In a planning meeting with the principal of NPAYVTC, Otim; he suggested three ideas for improvement which are *re-direction with opening of blogs, getting more information about SCL and documentation of practice on computer and in groups (see section 4.1.1).* Basing on Otim's suggestions, we discussed <u>our understanding of a learning group and SCL</u>; and there after discussed our learning experiences (*see sections 4.2 and 4.3*).

The findings in this study are significant to me as a researcher and trainer, to NPAYVTC staff and to NUCOOP-TVET project.

1.8.2: Organisation of the Report

The main points in this report are built up in six chapters. Chapter one summarises my personal background as a trainer and trainee as well as the project/ research background, the need to improve my practice, the problem statement, objectives and purpose of this thesis and the research questions.

Chapter two presents the different concepts and theories related to teaching, learning and knowledge creation; whose use I have found very significant in an effort to improve my practice as a researcher and facilitator.

Chapter three spells out the research methodology (context of the research) including research planning, research design, choice of research techniques or methods and tools, data presentation & analysis, participants involved in the study, validity and reliability of the data.

Chapter four highlights the description, explanation and analyses of empirical findings; showing the situation as it unfolds as well as participants' and personal learning experiences.

Chapter five spells out the discussion of the empirical findings with generated evidence in relation to critical standards of judgement; barked up with relevant literature, as well as my empirical reflections about our learning experiences from the research (McNiff & Whitehead, 2009, pp. 12-13).

Chapter six summarises the findings, the conclusion, recommendations, and way forward.

CHAPTER TWO

2.0: THEORY OF PRACTICE

This chapter presents the different concepts and theories related to teaching, learning and knowledge creation whose use I have found very significant in an effort to improve my practice.

As a master's student of vocational pedagogy, I have been introduced to different scholars who defined, explained and developed teaching and learning concepts and theories, which I have also used in analyzing teaching and learning. I have chosen specific ones in my interest to understand and analyze their implications to anyone's learning process, and thereafter use some of them in analyzing and discussing some of my research findings. Their use in my report is dependent upon how I have understood, interpreted and reflected upon them as implemented in facilitation of learning.

I have organized these theories and concepts interdependently in an attempt to be able to reflect upon each of them as a separate entity as well as relating some of them according to my understanding; without being influenced by another. I have therefore appreciated the works of Paulo Freire, Lave and Wenger, Bruce McKenzie, Peter Senge, Liv Mjelde, Ellen Bjerknes, to mention but a few. The concepts affiliated to my theory are experiential learning, systemic thinking, social practice of learning, shared vision, mental models, participatory leadership as well as didactical relations model, dialogue, complexity etc; because they emphasize learning as a continuous process based on reflection. These have been presented in the different sub-sections below;

2.1: Introduction to Knowledge, Teaching and Learning

As a graduate teacher whose vocational knowledge and skills are linked to Home Economics (Foods and Nutrition), my point of departure for this research theme is related to my experience as a trainee for three years at Kyambogo University (KyU) that is; 2003-2006 and a teacher (trainer) of Foods and Nutrition in an upper Secondary school for the past four years in Uganda. It should be appreciated that my point of departure is influenced by my social construction approach to knowledge creation (epistemology) and belief in commitment, determination and compassion as important values, on addition to being very critical. This has consequently influenced how I think as well as my practice because what I value, and how I think, have influenced my way of doing things (practice) as a researcher as well as Master's Degree (MA) student of vocational pedagogy (McNiff & Whitehead, 2009, pp. 8-10).

Learning according to me is a complex holistic and multidimensional (cognitive, social and emotional) process emerging from education, experience and reflection about what

is most relevant knowledge for an individual. Education in this case involves knowledge development in basic skills, technical, academics; on addition to understanding the value of the knowledge and processing it with one's inspirations, ambitions as well as creativity.[9]

The learning processes involve practice, reflection and continuity; as one develops what is most relevant knowledge for him/her (Bjerknes, 2002). These learning processes can be facilitated both formally (at institutions) and informally (work places) through education, training, experiences and reflections. This implies that learning is not limited to institutions and may even be more sustainable if it takes place experientially, in informal situations. Knowledge is not something written in books (Bjerknes, 2002) or a gift bestowed by those who consider themselves knowledgeable upon those considered to be knowing nothing (Freire, 1972); but rather continuously developing in accordance to personal relevance. The type of knowledge being developed will depend on one's former experiences and the context or situation one is in. The teacher or practitioner needs to create a good environment for this knowledge creation process to proceed smoothly; while acting as both a 'knowledge broker' and boundary crosser (Hung, et al., 2009, p. 210).

Teaching and learning in Uganda is still understood as content delivery based on prescribed curriculum to prepare the students for examinations. This is evident even in the more recent Uganda Advanced Certificate Examinations (UACE) results released on the 25th February, 2010 when the secretary of the Uganda National Examinations Board affiliated students' poor performance to teachers' failure to complete the syllabi. Learning in this case is regarded as internalizing, memorizing and reproducing of facts, ideas and explanations; given in the form of written literature (notes) to learners. According to my experience as a student and teacher, examination-oriented learning has led to individualistic tendencies and competition, where each student works as an independent being in isolation which does not promote cooperation. This implies that the learner/student does not benefit from other people's learning experiences significant in group learning and this narrows the student's knowledge base.

When conducting practical lessons in laboratories and workshops, learning is usually noted as imitation of what the teacher demonstrates and models. As a student in a secondary school, I struggled so much with reproducing a copy of the teacher's product even when I would perhaps do the same differently. This implies that this way of learning does not promote creativity because knowledge is assumed to be static.

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[9] http://www.motivation-tools.com/youth/what_is_education.htm

2.2: Freire's 'Banking' Concept of Education

This concept took a careful analysis of the teacher-student relationship at any level, inside and outside school and reveal a fundamentally narrative character. The relationship reveals a narrating subject (teacher) and listening objects (students). The teacher's task is to 'fill' the students with the contents of contents of his narrations, contents attached from reality, disclosed from totality that engendered them and could give them significance.

The students' role is to record, memorize and repeat the narrations without perceiving what they really mean or realizing their true significance. The student memorizes the narrated content 'mechanically' and worse still, it turns students into 'containers' into receptacles to be filled by the teacher. The more completely the teacher 'fills' the receptacle, the better the teacher he is; and the more meekly the receptacles permit themselves to be filled, the better students they are. Education therefore becomes an act of depositing, in which the students are depositories and the teacher is the depositor (Freire, 1972, pp. 44-46).

In this concept, *knowledge* is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing.

This concept maintains and stimulates the attitudes and practices as;

- The teacher teaches and the students are taught

- The teacher know everything and the students know nothing

- The teacher thinks and the students are thought about

- The teacher talks and the students listen meekly

- The teacher disciplines and the students are disciplined

- The teacher chooses and enforces his choice, while the students comply

- The teacher acts and the students have an illusion of acting through the action of the teacher

- The teacher chooses the program content and the students who were not consulted adopt it

- The teacher confuses the knowledge authority with his professional authority which he sets in opposition to the freedom of the students

- The teacher is the subject in the learning process while the students are mere objects (Freire, 1972, p. 45).

In learning facilitation, this concept is also synonymous with the teacher-centered approach to learning or the 'jug-mug' method. The teacher assumes that the learner has no prior

knowledge of the topic; he/she organizes lectures or demonstrations in such a way that he/she teaches the same thing, at the same time to all students. The teacher treats the students like objects to be filled up; some students may understand and the bottles are filled up whereas others do not understand and the liquid spills over which usually happens if the subject matter does not link to the student's experiences.

According to my experience as a student and teacher, this approach reduces learners' creativity as well as knowledge creation because the more they work at storing the deposits entrusted to them, the less they develop their critical consciousness which would result from their intervention as transformers of the world (Freire, 1972, p. 47). This implies that I agree with Freire when he mentions that '*the capacity of the banking concept to minimize or annul the students' creative power and to stimulate their credulity serves the interest of the oppressors, who care neither to have the world revealed nor to see it transformed*." This is evident in Uganda's education system where; a teacher can use the same lesson notes, year and after without considering the changes in the world as well as the kind of students he/she is dealing with.

Similarly, those using the banking concept knowingly or unknowingly fail to perceive that deposits themselves contain contradictions about reality. Sooner or later, these contradictions may lead formerly passive students to turn against their domestication and attempt to demonstrate reality (Freire, 1972, pp. 48-49). This according to me implies that the students could listen to the teacher but due to disagreement with his/her suggestion; the student tends to rebel against their teacher. Similarly, when this approach dominates the teaching/learning process, some students tend to act like chameleons. They try to act in a way that is wanted by teacher when he/she is present; and they may try out their own views when the teacher is not present, or when the teaching has ended (Inglar, 2002, p. 24).

From my experience as a teacher trained using this concept, I recall many incidences of students refusing to attend lectures; with reasons that the lecturer did not 'know' what he was teaching the students. This makes me agree with Freire who also advises a humanist revolutionary educator not to wait for this possibility to materialize. The educator's efforts must coincide with those of the students to engage in critical thinking and quest for mutual humanization. This implies that the teacher and student have to plan together for what is most important knowledge especially for the students to meet his/her needs interests and opinions. This way of facilitating learning minimizes 'rot' learning and makes the learning more sustainable because the student is working with what he/she is interested in.

From the 'banking' notion of consciousness, the educator's role is to regulate the way the world 'enter' into the 'students'. His task is to organize a process which readily happens spontaneously; to 'fill' the students by making deposits of information which the teacher considers to constitute true knowledge.

According to me, this implies that the educator puts himself at a risk of knowing how much the student learns, and he accompanies this by assessment of the student's learning process using examinations. Relating this to my experience as a teacher at an upper secondary school, I noted that I usually taught many aspects in form of narrations but less was assessed as learned. This could have been because the content was not close to the learner's knowledge reality as well as assessment of the learning product, and not the process.

The 'banking' concept of education also undermines the role of communication to someone's learning process. Freire (1972, p. 50) appreciates that:

'Yet only through communication can human life hold meaning. Authentic thinking (thinking about reality) does not take place in ivory-tower isolation, but only through communication'

As a master's student of vocational pedagogy at HiAk, I have appreciated and learned the role of communication or structuring dialogues to a person's learning process. In a seminar about structuring and leading dialogue, I learned that students love to be 'seen& recognized' as they communicate their needs, interests and opinions (*refer to* http://nucoop-aidah.blogspot.com/).

I however disagree with Freire when he stresses communication being the only means of fostering authentic thinking, while interpreting communication as verbal. This is because introverts who may hardly speak verbally can have their thinking developed using learning visual aids (Tobiassen, 2002). This can also consequently develop their verbal communications skills.

Basing on some of my criticisms to this 'banking concept' of education, I would like to appreciate the role of the didactics relations model in education planning as well as 'experiential learning' concept as aspects which would improve the teaching and learning process.

2.3: The Relations Model of Didactics

The traditional understanding of teaching is the teacher's management of the teaching and learning situation; which involves pre-active decision making of planning, sourcing, designing, and preparing; followed by direct interaction between the teacher and the learners, and pro-active redirection involving evaluation and redesigning. The learners are not involved in the lesson planning, selection of most important knowledge for them, learning visual aids

as well as the evaluation process. The teacher also assumes that whatever is taught is also learned; which according to my experience is not the case. I therefore find the relation model of didactics used for planning and evaluating pedagogical work useful to me because it could be used to improve learning processes in both SCL and TCL (Tobiassen, 2002, pp. 42-47). The model emphasizes the relations between six phenomena which are;

- The *learning experiences* that is; knowledge, skills, attitudes and values: Include learner's physical (ability to see or hear, walk, etc), psychological (knowledge motivation and attitudes) and social (ability to work in a group, to mention but a few) conditions to learn. To me who wants to improve my practice, this is the most aspiring resource for change.

- *Resources*: Include how large the classroom is, time at one's disposal, textbooks, learning materials, teaching equipment and curriculum. The teacher's qualifications in form of knowledge, skills, pedagogical experiences and enthusiasm. Some of these elements facilitate learning while others constrain it. In the figure 1, these have been split into work functions (learning aids, textbooks, self study, and group discussions, etc) and educational frames (timetabling). My experience has been that the teacher selects the visual aid, and not with the learners. The challenge is that the students may need different visual aid; it will be very complex for the teacher to meet each student's needs if he/she has not learned about their abilities and strength, what they are interested in and how they want to attain it.

- *Objectives*: Include descriptions of the intentions of the learning activity. These may either be short-term (after a lesson, a task) and long-term (after a specified training period) or goals for knowledge, skills, attitudes or values. In a situation where the teacher wants the students to be responsible for their learning, they should be involved in setting objectives for their learning.

- *Learning processes*: Being the main part of the plan, it includes the pupil's actions, the teacher's actions, the teaching or learning methods and classroom atmosphere as processes leading to learn. According to me, these processes should be collaborative where the teacher and student work in a dialogue.

- *Subject matter*: It may be what is written in a book or said by a lecturer; contents of a film or experiences from an excursion; what students experience when they perform role plays, critical comments from observations. In vocational education, it includes textual& experiential matters of touching equipment, well-functioning motor, taste of

a food dish; etc. My experience is that the teacher determines the subject matter for the students without questioning its relevance to each individual student. Working with the students in identifying their interests/ subject matter is important for me who wants to improve my practice as a facilitator.

- *Evaluation*: This means to control or measure learning and teaching. In the traditional way of learning facilitation, only the subject matter is evaluated by the teacher. The model emphasizes the relationship between the six phenomena and this implies that all should be evaluated with a holistic approach that is; the learning experiences, the content, objectives and the learning processes. The evaluation should be done by both the student and the teacher using logs, pupils' final results, individual& group talks to enhance an improved learning process.
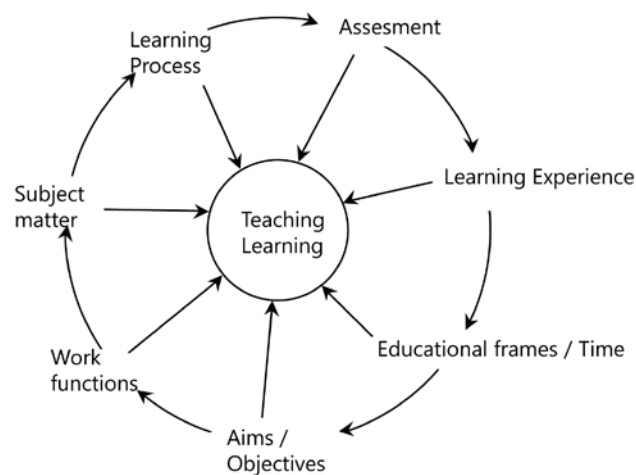
Figure 1: *The relations model of didactics. The educational resources in this diagram have been split into 'educational frames' and 'work functions' for my better understanding.*

2.4: Experiential Learning

Bjerknes (2002) defines experiential learning as unveiling meaning, both in professional and contextual matters as well as relating to one's own existence. This approach to learning acts as an alternative for *'learning about'*; which is a view of knowledge that focuses on the content to be learned, learning material as something written in books, and this knowledge does not necessarily need personal relevance. The concept of 'experiential learning' necessitates one to make meaning from direct experience. Knowledge in this case is developed from the process of action and reflection. The action in this case means 'description of the actual happenings' and reflection means 'to look back and be aware of what one thinks about what happened' that is; what does it mean, what are my interpretations and thinking, and what is my analysis of what happened? A person also learns by doing and

discovering; and by reflecting and integrating what has brought about it (Bjerknes, 2002, pp. 8-11). This approach to learning embraces all three dimensions of learning, that is; the cognitive, the emotional and social dimension, hence linking to a more holistic approach as Dewey's experience concept (1963) does. Dewey focuses on the principles of continuity and interaction in an integrated form, while labeling educationally worthwhile experiences. The interaction between the individual's active influence on the environment and the social and substantial influence of the environment constitutes the experience. This according to me implies that the kind of educational experiences gained is dependent on the type of people and environment one lives in or interacts with; because individuals do not act alone but most often act together with others or at least in a social context. The kind of knowledge developed will also depend upon these different experiences.

The point of departure is that knowledge exists in practice and not theory (Bjerknes, 2002, p. 8). This according to me implies that experiential learning does not view knowledge as static (unchangeable) but rather continuously developing. This is because experiential learning reflects the perspective of learning as a person's knowledge development; rather than knowledge acquirement.

A crucial point in experiential learning is the element of discovery. One of the aims of experiential learning is to gain new insights based on an integration of practical experiences, reflection and analyses and the theoretical studies. To discover is to experience new things, to gain new experiences, and to experience life in new ways. Learning through discovery challenges the learner's personal involvement and experience. It also includes feelings like frustrations, grief, joy and satisfaction (Bjerknes, 2002, p. 11).

Aristotle also once said that;

> *"For things we have to learn before we can do them, we learn by doing them." Experiential learning focuses on the learning process of individuals. One makes discoveries and experiments with knowledge first hand; instead of hearing or reading about others' experiences"*[10]

According to me, learning by doing empowers individuals to take responsibility of their learning process, and with that authority; learning takes place more deeply and what is learnt is retained longer than when one learns by being taught and told (Knowles, 1980)

This way of facilitating learning requires that one is responsible, committed, self organized, motivated and has an open mind to change.

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[10] http://www.infed.org/biblio/b-explrn.htm

Being aware of the danger of oversimplifying, Bjerknes regards experiential learning as an alternative to the traditional method of lecturing; which I also agree with. Those two models can represent significant differences as to how they perceive the learning person, how we learn, as well as the basic underpinning ideas (Bjerknes, 2002, pp. 11-12). Their differences are summarized in the table below;

Lecturing/ teacher-centered approach	Experiential learning/ Student- centered approach
The student/ learning person is a more or less active recipient of knowledge.	The student is an active and self-reliant subject, constructing her own knowledge and competence.
The teacher is regarded as the active part and expert, and the subject in the learning situation.	Both the teacher and the learner are subjects in the learning situation.
Learning is mainly a mental or cognitive process.	Learning is a complex process including mental, social and emotional elements.
Words and texts are the main source of knowledge. The teacher delivers the knowledge	Former concrete experience is a basis for learning process, and is a point of departure for learning.
Learning is seen as transfer of knowledge, skills and attitudes.	The learner is able to construct her own knowledge and competence on the basis of experiences.
Focus is on the teacher as the most important person in the learning process	Focus is on the learner and the learning process as well as the learning result.
The learning product is regarded as the most important	Both the learning process and the learning outcome are regarded as important
Instructional technology and ends-means thinking underpins the 'model.'	A process –oriented thinking underpins the model.

Figure 2: *Modes of learning*

Experiential learning appreciates the constructivist approaches of Jean Piaget and Lev Vygotsky, although their learning concepts are criticized as one-dimensional. A basis in constructivism is an understanding of the learner as able to construct his/her own knowledge and competence, which I also agree with.

2.4.1: Jean Piaget

Piaget presents a cognitive constructivist view and sees learning as an individual process; dependent on processes in the brain. Piaget's learning concept can be said to be too individualistic and narrowly cognitive, theoretical and abstract. This according to me means that his learning aspect promotes competitiveness and individualistic tendencies noted with the teacher-centered approach to learning (Bjerknes, 2002, pp. 13-14).

Piaget's concepts of adaption, assimilation and accommodation are however meaningful during structuring of learning experiences. Adaption is construction of new knowledge, which is also linked to mental structures of former knowledge and experiences. It implies that Piaget appreciates the role of one's former knowledge and experiences to his/her learning, which I also appreciate. According to him, adaption is a dynamic process between two complementary processes; assimilation and accommodation.

Assimilation is a process where new knowledge is quietly added to former experiences and knowledge. This implies that new knowledge is a sum of the old and new knowledge and experiences which fit well together. Assimilative processes are characteristic in traditional school learning where the student is more of a passive receiver of knowledge, which a limitation to learning.

Accommodation is a process where former knowledge has to be rearranged, in order to make integration or synthesis of new knowledge if possible. Accommodative learning implies a profound change of former structures and the establishment of new structures, and is experienced as a demanding process. Accommodative learning processes are related to learning by discovery and problem-based or project-oriented learning methods are utilized. Neither the methodology nor the answer or outcome is defined which confirms the discovery aspect of experiential learning.

It can be appreciated that accommodative and assimilative processes are dependent on each other; one cannot exist without the other.

2.4.2: Lev Vygotsky

Vygotsky (1979) views learning as based on a cultural, historical traditions and focuses on conversation and language as an important elements in learning (knowledge arise from active operations), and people learn from the social to the individual. As a social constructivist, he views and sees learning as an intellectual and social process, where knowledge, ideas, attitudes and values develop through social interaction. Vygotsky uses the concepts of word and meaning as basic tools for investigating the development of language and thought processes. A person does not learn a word's significance without the word being associated

with its meaning in society. Language as a crucial factor in learning acts as a tool for expressing ideas and asking questions and through it, concepts and thinking are established (Bjerknes, 2002, pp. 13-15).

Similarly, the process of living together educates. Through socialisation one's mental ability to perceive things enlarges, individual experiences are enlightened and the thinking is stimulated and enriched. Furthermore, a man living alone would have little or no chance to reflect upon his past experience to extract its net meaning (Dewey, 1997). This according to me implies that when students socially interact with one another, they share and reflect upon their experiences, which creates an insight to think deeply and reflect. Any person living in isolation is not exposed to other peoples' ideas and experiences and does not have much in his learning environment to compare and interact with, refer to, and reflect upon. Hanks in Lave and Wenger (1991, p. 15) also assert that learning takes place in a participation framework, not in an individual mind; though mediated by differences of perspectives of the co-participants.

Reflecting upon Vygotsky's concept, learning to me is a complex holistic process which is multidimensional as opposed to Vygotsky's intellectual learning concept dependent on social interactions. It leaves out the emotional dimension in learning which may be another factor affecting someone's learning process, and not necessarily the language aspect for example; family responsibilities, feeling unhealthy among others. This is because learning happens in two levels (inter-psychological – external conversation, talk with others and intra-psychological – internal conversations, talk inside yourself….) according to him.

2.4.3: Teacher's Role as a Counselor and Mentor

In experiential learning, the teacher or counselor acts as an important catalyst. A counselor is a person who helps someone with his/her learning; or development of knowledge, skills, attitudes and values. Lauvås and Handal (1990) in Inglar (2002, p. 38) refer to c*ounseling* as 'helping another person to make connections between values, theoretical knowledge and own experiences gained from everyday life, not in general; but in connection with each person's thinking and action in a specific situation.' With this definition as a point if departure, Inglar developed three other definitions basing on strategies of mentoring, gestalt's oriented counseling and reflective counseling.

I appreciate the reflective counselor, who gets the counseled person to reflect upon the connections they and others draw between values, theoretical knowledge and own experiences to everyday life; in connection with each person's thinking and action in a specific situation.

The reflective counselor is analytical and regards knowledge as something relativistic depending on the factors such as the learner's interests and abilities, the structures and traditions of society in which he/she lives and is being socialized into, the time she is living in and so on. The students usually work in groups and discuss their practice-theory in groups, as well as listening to a teacher's lecture (Inglar, 2002, p. 34). This counselor appreciates learning facilitated in groups which I also find very important to attaining experiential learning.

I also appreciate gestalt's counseling strategy, where the teacher works as a facilitator, catalyst or mirror; and the student is helped to learn by discovery. The gestalt counselor has great faith in the learner's ability to act and learn from his/her actions, which enables the learner to make choice from many alternatives; but he/she may be limited by failure to appreciate other people's ways of thinking. The teaching method is confluent pedagogy, where the teacher organizes learning activities in a way that enables students to learn through discovery and by experience (Inglar, p. 31).

According to Vygotsky, the counselor is regarded as a kind of supportive structure or scaffold in the learning process, stimulating the counseled to reach his or her 'zone of proximal development'. For an individual learner, the zone of proximal development is the distance between the performances the person is capable of obtaining on his/her own (one's own zone of proximal development) and the performance he/she can obtain in collaboration with a more knowledgeable or skilled person (teacher or practitioner). The counselor's task is to get in contact with the learner's abilities and their former experiences or mental structures; in order to establish an understanding of his/her zone of actual and proximal development, which I agree with.

The teacher is also seen as a mentor who aims at locating the learner's needs, making the learner aware of it, and helping him/her take his/her learning responsibility. The teacher and learner are subjects in the learning situation. Their relationship is characterized by equality and dialogue within an atmosphere of trust, support and challenge; with an aim of creating reflection (Inglar, 2002, p. 25). The teachers' and students' roles are symmetrical; being humans with experiences and competences, though with equal value. Following a professional aspect, the teacher's and learner's roles are asymmetrical. The teacher has a professional responsibility, the means and power to execute this responsibility. This includes among other things; the power to evaluate the student, and set grades on her work and development.

According to me, the aspects of equality and dialogue are rewarding to establishing a good teacher-student relationship; because both the teacher and the learner feel secure and trust one another. Relationships are based on communications, and the communications based on relationships; each being a function of the other. The teacher or counselor's ability to communicate is intimately linked with the problem of awareness of self and others. The counselor must therefore pay attention to herself and others as different persons, to listen with interest and empathy, and to make relevant responses. To be a good counselor/ teacher, it is relevant to be a good communicator. Brown (1996) in Lappen (2002, p. 74) shows that the communication process consists of many aspects in a model, where each aspect is a function of the other. The model indicates the linkage between *awareness of self, awareness of others, appreciation of differences, contact and communication* (pp. 74-75).
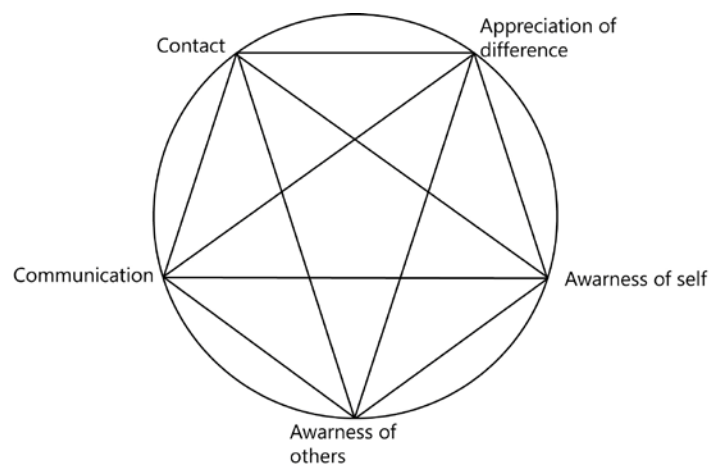
Figure 3: *Communication model*

The way the teacher portrays his professional responsibility is also quite important in maintaining this feeling of trust. This is partly linked to a person's perception and behavior. It can be noted that there is a connection between the teacher's perceptions of the student taught, his/her learning abilities and growth possibilities, which will influence the teacher's behavior towards him/her (Lappen, 2002, p. 73). A case in point may be what comes to a teacher's mind when a student mentions a certain background for example; all people form a certain school are good in mathematics and poor in Biology. This closes the teacher's mind to new knowledge and skills basing on his/her previous experiences.
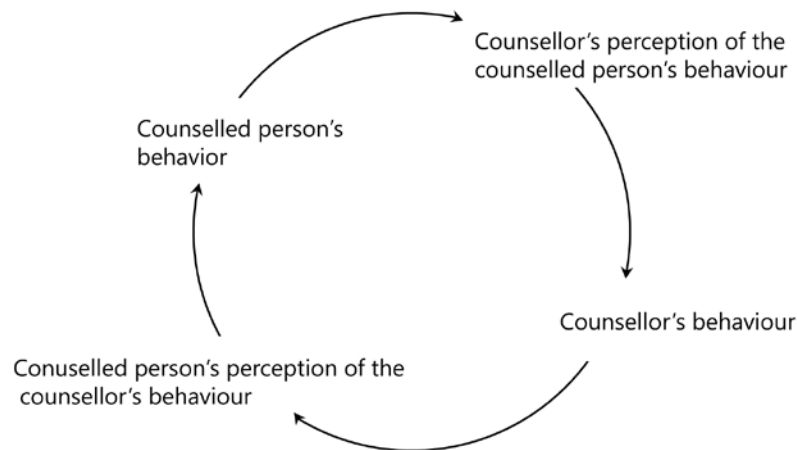
Figure 4: *Perception model*

The perception model indicates that the teacher's perception and behavior will more or less affect the student's behavior. It is therefore a point to emphasize that; the teacher becomes aware of his/her own perception and behavior.

Similarly, as the teacher evaluates the learner, the learner should also assess his/her learning process through reflections documented in learning logs. The log is a useful tool for knowledge creation, which consequently leads to 'individual learning assessment.' A *Log* is an often written record of performance, events or day-to-day activities. The records from the students, describing the action, what is learned from the action; and the consequences, reflections describing the possible changes in the actions that could be taken, to make an improvement in the outcome. This makes it possible for the learner to assess his/ her learning process. The teacher also acquires knowledge (skills, opinions, ideas and concepts) which lead to improvement of his/her practice; because both are subjects in the learning process (Bjerknes, 2002, p. 11).

2.5: Social Practice of Learning

Social practice of learning (SPL) refers to life-long learning, deep reflection and dialogue in a community. These elements make it possible for learning to be put in practice. SPL encompasses 'cross perspectival' and 'a meta-way of seeing meaning' which are critically needed for the knowledge-based economy. SPL can be identified with communities of practice (CoP), communities of learners (CoL) and the craft of learning as a social practice (Hung, et al., 2009, p. 205). In this learning concept, I would like to appreciate the CoP, learning as a social practice and cross-perspectival dependent on dialogues, and teachers as facilitators and researchers because they relate significantly to my understanding of learning.

2.5.1: Communities of Practice

Wenger et al (2002) defines communities of practice as people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis (Hung, et al., 2009, p. 206).

According to my experience and the context of my thesis, a CoP is more like a 'learning group' because of having a concern, common problem; meeting on an ongoing basis with an aim of deepening or improvement in knowledge and skills. As a result, these people develop a common way of responding to patterns and features in a community context which Gee (1997) calls discourses, and Senge (2002) calls shared vision. Such customary forms of communication and disciplinary practices arise through constant negotiation among the practitioners (Bazerman, 1988) in Hung, et al., (2009, p. 206). According to me communication, disciplinary practices like time management, participation, negotiations and compromise are characteristics of a good learning group or organization or community.

Explanations in a learning group or community or organization are developed by incorporating goals and standards, and intuitions and values that people bring to it, and that emerge from their interactions with each other, after induction into the practice. A *practice* is an activity of a certain sort; characteristically, an activity that involves an agreed approach to manipulation of one kind of material, aspect, in one way or another. The material or aspect reflects a form of advancement and development and is manifested in the community/group or organization. This according to me implies that *intuitions and values* are apart of learned knowledge and experiences. These explanations in the form of knowledge and experiences lead to improvement.

Wenger (1998) in Hung, et al., (2009, p. 206) further highlights that;

Communities of practice (CoP) are everywhere; it occurs at home, at work, at school and individuals belong to different communities of practice

Similarly, Gee (2004) points out that people in the 21st century see themselves as 'free agents', willing to commit themselves on an extended basis; but expect to continuously update their skills and knowledge from time to time, depending on their needs and drivers economy.

Wenger (1998) according to me appreciates the *diversity* attributed to a learning community or group of people from different backgrounds or vocations, which I also find important. Gee (2004) on the other hand appreciates an *update of one's knowledge* and *skills* to suit the needs of the present community; which according to me makes the question of 'how can I improve my practice' a rewarding one to every practitioner. Similarly, Gee (2004) appreciates the *role*

of documentation in one's improvement process, as he mentions that 'shape shifting portfolio people' must treat their achievements, skills, and experiences like a portfolio; ready to rearrange these skills, and experiences creatively, in order to define themselves as new (competent and worthy) for changed circumstances (Hung, et al., 2009, p. 206).

Gee also appreciates knowledge update as a team (organizational development); when he mentions that the future involves teams and collaboration, based on the idea of technological innovation in a fast-changing community, where knowledge gets out of date rapidly. This implies that working in collaborations as teams boasts knowledge updates (creation) individually and as team in order to meet the requirements of a rapidly changing community.

Practice is also a social activity which requires learned skills and knowledge. The skills borne from specific practices are usually *picked and learned through participation and enculturation* in those practices through modeling and apprenticeship, verbal dialogues and instruction; and other forms of social behavior and interaction. In a learning context, I appreciate that learning facilitated in a group can be attained through participation and gradual acceptance of another person's practice or culture (enculturation). Modeling and apprenticeship, verbal dialogues and instructions; can be used as tools to attain this. An ongoing activity to which new members are inducted is a practice; Lave and Wenger (1991) also refer to such a process as legitimate peripheral participation (Hung, et al., 2009, p. 207).

It's also inevitable to have an expert practitioner in a practice, who teaches or models the practices and whose performances by implications, would be better than those of others-the novice practitioners or learners. In a pedagogical context, it is worthwhile having a facilitator for a learning organization or group but the way the facilitator exercises his responsibility may promote or hinder learning. If the facilitator treats the novice practitioners like objects to be filled or taught, it reduces their creativity; and the learning outcome may not be sustainable. If the facilitator views learners as able to construct their own knowledge and skills; the learner's creativity increases and the learning outcome may be more sustainable.

2.5.2: Learning As a Social Practice and 'Cross-Perspectival'

Learning is generally internal to practices however; it should be both external and internal for educational establishments; where learning is researched and facilitated. I partly disagree with the claim that, what is learned should be evident to the community or learning group because learning to me is a complex, holistic, and multidimensional process. Lack of external evidence does not necessarily mean that one did not learn, because of the different dimensions of the learning process. The learning process also involves continuous reflections, which

makes learning a process and knowledge development will continuously take place (not static).

Social Practice of Learning (SPL) must cultivate life-long habits of questioning and reflection on learning and practice of what is learned.

The learning occurs experientially by ways of assimilation, through modeling enacted by experts and implicit appropriation of hints embedded in interactions within a practice. The innovations in knowledge, in standards and in skills, co-influence each other in a circular process of discovery and innovation. This verifies the need for the expert practitioners to develop models and implicitly raise suggestions during his/her interactions with the novice practitioner, in order to boast his/her experiential learning process.

Mjelde (2006) also describes learning as a process that takes place through activity and collaboration. She further mentions that learning through practice and experience; by trying and failing, and through action; which is the basis of true knowledge (Mjelde, 2006, p. 23). She associates this kind of learning with vocational education and training, where she appreciates Dewey's principle of learning by doing the task (2006, p. 97). For someone to benefit from his/her trial and error experiences it necessitates him/her to reflect upon his practice continuously; which validates my argument that 'learning by discovery' enhances the learner's creativity. In vocational education, this is evident in workplace learning for apprentices.

Considering learning to be a social practice, learning theorization (cultivation of knowledge about learning), along with abilities to design for learning; is not only needed but also cultivating dispositions, inclinations, and propensities or passions for learning for example a propensity indicating that one is a continuous learner. This can hardly be achieved if teachers as good facilitators, do not model these traits; where learners are always reflecting on their own learning orientations and epistemologies (Hung, et al., 2009, p. 208). For this to be developed, language is appreciated as an important aspect as Vygotsky does. Wenger (1998) mentions that language acquisition illustrates life-long learning in which learners practice the production of sound, and the use of words in both formal and informal contexts; which are a part of everyday life (Hung, et al., p. 208). This according to me verifies that language development for communication purposes is relevant in a learning organization. Language learning is noted as a continuous process, in which learners are engaged with their family members, friends, or teachers; in understanding their environments that are grounded in reality, attained through storytelling and narrations (Hung, et al., p. 209). SPL according to me appreciates stories and narrations as tools of facilitating learning; because the social

process of telling, acting, reasoning and dialoguing in the social practice cultivates dispositions of actions, desire, and feeling. This implies that SPL appreciates learning as a holistic complex process involving mental, social and emotional aspects (multidimensional), which I also agree with.

Learning as a 'cross-perspectival' necessitates that individuals in a team/group or organization remain intellectually open and flexible, confident, generous and humble (Hung, et al., 2009, p. 209). These in mind are reflected as characteristics of a good learning organization and group; and it necessitates the individual participants to continuously reflect and assess if they are fulfilling these characteristics, because they are relevant to people working as a team.

2.5.3: The Concept of Dialogue

The concept of *dialogue* is very important to SPL, which I also appreciate as a facilitator. Bohm (1990) in Hung, et al., (p. 209) defines a dialogue as a free flow of meaning that balances inquiry and advocacy, in one's attempt to influence others. The dialogue goes beyond understanding held by each member of a group, and this leads to a diversified understanding (larger, expanded perspective) which enables innovations to flourish. This can only be achieved if participants 'suspend' their judgments so that deeper levels of listening, synthesis, and meaning evolve. According to my experience, this is challenging and Ng (2005) finds guidelines relevant to this process, just as I do. He suggested speaking openly, freely, and constructively (voice); paying close attention to others, with heart and mind (listen); value the views of others, not being discouraging or hurtful (respect); and refraining from quick judgments and keep an open mind (Hung, et al., 2009, p. 209).

As people share openly and sensitively, their experiences increase; and a perception of shared meaning emerges. This is important for me who appreciates learning facilitated in a group. As trust increases between members of a group, expression of hidden thoughts and feelings becomes more evident.

Johnson and Johnson (2006) also highlight the guidelines to a good dialogue as:
- a dialogue uses the give and take principle and not a one way communication
- all participants obliged to help each other participate
- all participants to be concerned about the issue under discussion
- all participant having equal rights/ same status in the group
- appreciating that some participants' arguments may be better than theirs
- a dialogue being able to create a degree of disagreement, different points of views creating dynamics, discussions and possibilities of improvement and change

- a dialogue needs to be able to generate decisions, which consequently became basis for joint action (pp. 3-4).

McKenzie (2005) uses the leadership hexagon with 6E's to refer to these characteristics (pp. 23-24).

In a group dialogue, there is neither imposed conflict nor attempts to avoid conflicts. Bohm (1990), Senge (1990), Heifetz (1994), Ng (2005), Johnson and Johnson (2006) and I appreciate this because it allows a level of insight and creativity, which is not generally available to individuals or to groups that interact more traditionally. It is inevitable for people to come together, experience conflict, and change in personal values, beliefs, or behavior; and this may be why Senge (2000, p. 76) advocates for a trained facilitator. The facilitator acts as a skilled outsider who draws back the group to its purpose, in case of a side-tracked into debate, argument or manipulative 'consensus' building. These arguments and debates in a group according to me, lead to development of problem-solving skills.

2.5.4: Teachers as Facilitators and Researchers

SPL advocates for schools to be places where members of the community are engaged in 'learning' and 'meta-learning', both individually and collectively. The members of the group, learning organization, and practitioners are in constant dialogue on what constitutes good learning; and are reflecting on the practices of learning. The schools should also specialize in different theories and approaches to learning; and always refine these theories through their own unique practice, to enable different kinds of learners to experience learning (Hung, et al., 2009, p. 207). This implies that the aspect of SPL ensures that a school caters for differences in individuals, disciplines, contexts and situations; while focusing on both content and learning practice masterly, for practitioners and students; which I find relevant to learning facilitation.

Cross-perspectival learning necessitates teachers to be facilitators and researchers; who can deeply engage students on their own grounds, and facilitate synergistic and innovative idea formation. The teachers need to be boundary crossers, where they have the intellect and capacity to understand issues that are dialogued and be 'knowledge brokers' who add value to students' *original investments to knowledge*', by engaging multiple perspectives (Hung, et al., 2009, p. 210). For example; the teacher can ask a critical question in response to a student's behavior or suggestion in learning situation; which enables the student to reflect upon his/her behavior or suggestion, and hence improve. Like earlier mentioned, the teachers need to be aware of consequences of their roles in this process as they may either promote or hinder learning. A teacher as a 'knowledge broker' should be aware that adding value to

students' 'original investments to knowledge' may not be necessary all the time. The teacher should leave room for the student to discover on his/her own which encourages him/her to be creative and develop.

Both Donald Schön (1983) and Cervero (1988) emphasize the need to have individuals as researchers of their own practice. Hung, et al. (2009) advocate for teachers to be researchers in the craft of learning, which I also agree with because it's the only way the teachers can improve on what they are doing. The goals of these endeavors should be to find ways in which learning can be advanced, how to improve the learning process; and one way of reflecting and researching into one's craft is through narratives. In this report, I have written a narrative about my practice as facilitator at NPAYVTC, which Sfard and Prusak (2005) specially refer to as *identity*. Sachs (2003) also points out that '*identity and practice mirror each other'*, and explains an aspect of identity as negotiated experiences where we define who we are by the we experience ourselves through participation , as well as the way we verify ourselves through others (Hung, et al., 2009, p. 210). When these identities are described, they take the form of stories or narrations and this verifies why my report is written in a narrative form.

2.6: Systemic Thinking Theory

Systemic thinking is defined as a process of understanding and transforming complex situations. It' a way of thinking and being with a primarily assumption that, 'whole issues are different from the sum of their parts'(McKenzie, 2005, p. 6)**.** Complex situations are real experiences that cannot be defined. Systemic thinkers work with soft systems that is; human beings, who cannot be treated like objects. Systems thinking operate through enabling all stakeholders to see their roles, responsibilities, and the organization's strategic imperative as interdependent. Every system has three levels that is; the supra-system, the system, and the subsystem.

The system's environment (supra-system) encompasses all things not included in the system by its purpose that's weather changes, political situations, financial situation etc. Some aspects of the environment may have a close relationship, while other dimensions seem to be totally unrelated. However, systemic thinkers believe that all aspects in complex situations are interrelated, which I also agree with (McKenzie, 2005, pp. 9-12)**.**

The sub-system is the power house of a system, and includes the parts of the system that have to interact in an independent way, for the system to achieve a balance and express its purpose

on the supra-system. In the context of my research, the subsystem would be the instructors, the willing participants, and heads of sections, cooks, the leaders &students of NPAYVTC.

The system for instance can be the challenge, the group, or a team; and it is the focus of attention for leadership development. The system in the context of my research could be NPAYVTC. Every system is believed to have five characteristics that is; *purpose* (expresses the dimensions of the relationship between the system and environment), *boundaries* which includes their identification, articulation of aspects of the environment encompassed in the system, *coherence* (all dynamics within a system must have a sense of wholeness), *emergence* (the system as whole has characteristics that cannot be identified from studying their parts) and *hierarchy* (all issues looked at systematically are looked as having three levels of activity that is, the supra-system, system and sub-system). The ability to hold the three level of hierarchy on one's mind at the time while considering an issue and appreciating the way in which changes in one level affects the other levels is systemic thinking. The sense of wholeness is said to be an emergent property, as it occurs somehow unpredictably through the synergies of independence (McKenzie, 2005, pp. 9-10). According to me, the realism of this situation is a complex one because one has to rely on an emergent aspect, which definitely depends on state of mind, health situation among others.

The systemic thinking map

The relationship between the environment, system and sub-system is represented in a systemic thinking map below;
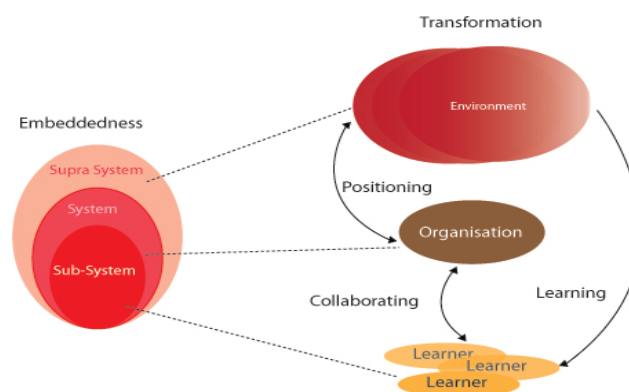
Figure 5: *The systemic thinking map; plots the inter-relationship between the various parts of an organization and its environment*.

This map is called a 'Holon', a term that describes the idea that all systems (organizations) are parts of a supra-system (their environment); while those themselves are composed of sub-systems (units, families, interest groupings people). These categories are clearly marked on the map. In a 'development Holon', the sub-system is the learning activities of the system (organization).

Any organization is the coordinating shell in which various sub-systems interact with each other. It's through the sub-system that the organization (system) knows about the environment (the supra-system). As the various people in the organization (each learning subsystem) assemble and share their knowledge of the environment, so the organization amends and develops ways of most effectively responding to, and positioning itself to, influence the environment (McKenzie, 2005, pp. 13-14). According to me, it can be appreciated the different parts of NPAYVTC influenced the fieldwork process. The challenge was that I may perhaps have failed to appreciate the influence of these different levels to the development process of NPAYVTC, and this was expressed in form of frustrations and generalization of observed actions. This is dangerous to a complex situation where it's believed that there are no right answers. This also depended on my ontological values, which influenced the way I interpreted certain situations.

In my theory and thesis, I would like to appreciate, discuss, and reflect about three of the theoretical arguments of systemic thinkers, which I find relevant to my research situation. These are; experiential learning, participatory leadership and complexity. This does not imply that the rest of their theoretical arguments are undermined.

2.6.1: Learning

Learning according to the systemic thinkers is about identifying the driving values, testing them against other world views; to create new meaning from which we can reflect, plan, and act in ways more appropriate to our conscious intention (McKenzie, 2005, p. 22). This according to me puts the learning process at a risk of being a group aspect and not an individualized process, which can be facilitated in a group.

Critical learning is defined as a coherent, self-reflective, self-organizing set of inter-connected processes of experiential and inspirational learning; which transforms experiences and insights into meaning, and hence action at the three levels of an organization. Experiential learning as a foundation concept for applying systemic thinking facilitates the exploration and utilization of the diversity of knowledge and perception, for an organization's staff to make new sense of opportunities; and therefore design innovative actions that enhance the robustness of an organization's relationships, and the marketplace position. This according to me implies that systemic thinking supports knowledge creation by the members of an organization and the organization, its members and environment will develop and keep updated (McKenzie, 2005, p. 15& 21).

The learning lemniscate is a way of describing two (experiential and inspirational learning) of the four types (propositional, practical, experiential and inspirational) of learning,

we use in our lives to generate knowledge. According to me however, inspirational and experiential learning involve cognitive, social and emotional dimensions; and would be termed as 'experiential'. This is because this learning encompasses the concrete, experiential, mental reasoning, and spiritual insights; which are the basis for new behavior and new value positions. The way one contributes to the organization is fundamentally a function of the way he/she views the world. The systemic thinkers appreciate the dimension of 'holism' and 'objectivism' which represent the belief position that, whole entities are different from the sum of their parts; and all knowledge can be referred to some permanent objective framework, in which we can ground our claims about knowledge, or goodness or rightness. This explains why the systemic thinkers believe that, there is no right answer to a complex situation; which I agree with. They further criticize the 'reductionism' and 'relativism' way of looking at the world in the opposite way. These different worlds(relativism, holism, objectivism, and reductionism) are employed unconsciously in everything one does (McKenzie, 2005, p. 17&22).
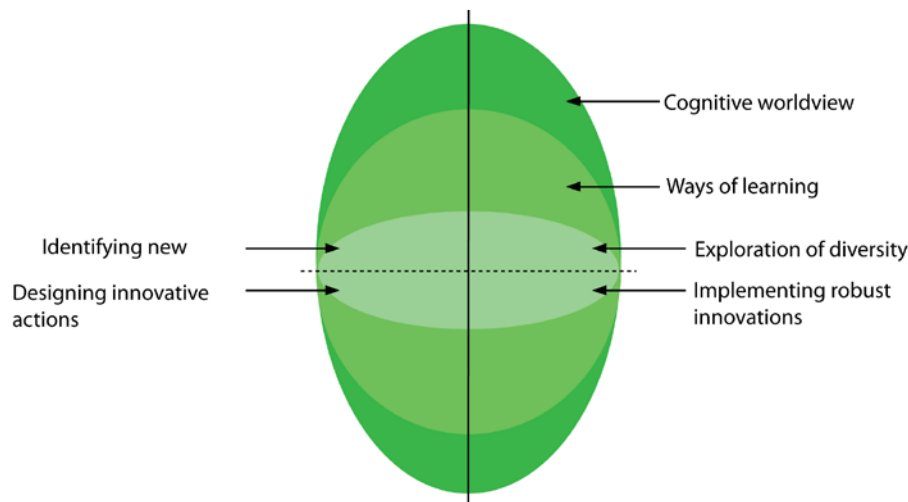
Figure 6: *Learning Lemniscate; maps the process that describes how this approach to learning is achieved*

From experience of the situation, the process explores one's own and others' recounting of the situation. The wider the activity, the better since it helps to ensure that our exploration is not dominated by a narrow selection of approaches to a situation. This diversity strengthens the quality of learning.

According to the context of my thesis, this can be reflected in criteria of learning group formation where; participants from different sections were meeting once a week to share their learning experiences. This also implies the number of participants in each group and their ontological values needs to be considered, to attain this diversity. In a seminar about systemic thinking held at HiAk on the 16th and 17th March, 2010, Bruce McKenzie mentioned a

number of 5-7 participants as being good for attaining diversity for a learning group. A smaller number limits diversity, and a big number reduces participation or engagement. Johnson and Smith (1991) also highlight that;

> *In general, groups of four or five members work best. Larger groups decrease each member's opportunity to participate actively. The less skilful the group members, the smaller the group should be. The shorter amount of time available, the smaller the group should be.*[11]

Johnson and Smith appreciate other factors which may affect the level of participation like how skillful the group member is, the time available together, which do not seem significant with the systemic thinkers. I take it for granted that the systemic thinkers have this at back of their minds, while developing their participatory leadership hexagon (s*ee section 2.6.2*). On the hand, Johnson and Smith could also enrich their group operational aspect by making use of the six aspects of the leadership (will be discussed in the next sub-heading) developed by the systemic thinkers.

The systemic thinkers also advise that when one identifies a relevant insight, he/she should record it because it can easily be lost; since one does not recognize the process of getting insights, as well as tracking them back. In this way, the meaning attached to a problem situation is enriched, and provides a more visual purpose for planning new behavior and duly acting on such plans in the concrete world (McKenzie, 2005, p. 22)**.** This according to me improves on the operations of an organization as a result improved performance of the sub-systems; and this will be recognized as change in the supra-system and vice-versa.

2.6.2: Participatory Leadership

There are many ways of describing and envisioning leadership, but the systemic perspective argues it as a function of a group rather than a function of any one individual. This is because there many factors in a group that must be operating in a group for effective leadership to emerge. Leadership exists when at least six factors represented in a hexagon form, are displayed throughout an organization (McKenzie, 2005, pp. 23-24).

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[11] Johnson and Johnson, *Cooperative learning:* Increasing College Faculty instructional productivity. ASHEFRIC Higher Education Report No.4. Washington, D.C.: School of Education and Human development, George Washington University: 1991
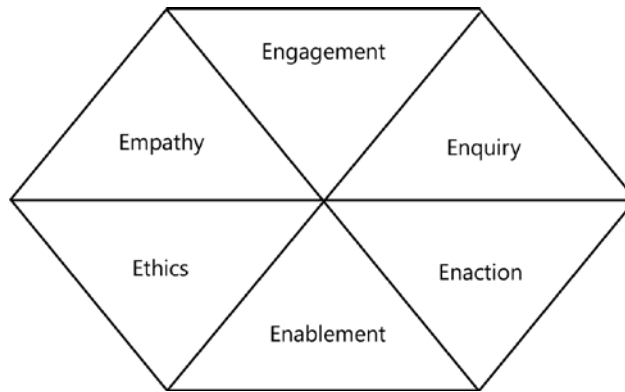
Figure 7: *Leadership hexagon*

The extent to which each of the factors is present; and whether various group members contribute to the factors, will influence the quality of leadership. These factors are;

   a) Enablement; all appropriate participants have to physically, intellectually, socially and emotionally participate in group activities. There should be equal chances for every participant to contribute to the discussion *(I think I can make a difference).*This attitude according to me empowers all group members.

   b) Engagement; every participant contributes to his/her full potential and experiential learning delays the decision making process, which increases the likelihood of every one's participation. This creates a sense of ownership when participants are able to identify their contribution *(I know I am making a difference)*. This makes the participants to be more optimistic related to change.

   c) Empathy; participants in a group have times of low energy. The type of task and level of one's energy, determine the extent and quality of one's contribution. This according to me creates a sense of being recognized and valued, as a participant in a group (*this is the right group for me to be making a difference with).*

   d) Enactment; since systemic thinkers believe that there's no perfect solution to a complex situation, causing an implementation action is important to a group. The participants should be able to identify what they have changed, which will have external and internal impact to the organization *(I can see where I made a difference).* I however believe that this change will be gradual under normal circumstances, and the participants should be patient with the impact.

   e) Ethics; exploring the similarities and differences in value assumptions about the matter at hand, is a critical factor in the emergence of group leadership. The ethical discussion that arises from value sharing and value clarification strengthens the mutual understanding and group communication *(the difference I am making has value)*. This

according to me boasts the aspect of developing a shared understanding related to the challenge at hand. I am hesitant to call it a shared vision because with it, only similarities between the individual aspirations are considered (r*efer to Senge's shared vision*).

f) Enquiry; Every group needs to build its corporate (shared) knowledge to function more effectively .This is because the activity participants and other stakeholders, are continually learning and sharing their learning; acquired from both the processes and outcomes of each activity. According to me, the participants can also ease the sharing by documenting the experiences they encounter during the learning group. This also limits the chances of losing some of the knowledge and experiences not shared as soon it's developed and discovered.

I agree with these leadership aspects but in the context of my research, I also appreciate the role of a leader when working with a learning group to ensure sustainability; not least development of leadership skills as well as being responsible. The challenge with the leader is the authority which he may impart subjectively and this may challenges the aspects of engagement, enablement, etc. It based on this that some groups formed a contract in form of rules and regulations to attain the leadership aspect.

2.6.3: Complexity

While the explicit functioning of a system may appear simple; the processes surrounding that system, and the way in which it is interpreted and used, may be far from clear to a system analyst. The systemic thinkers appreciate social complexity because several aspects are neglected by conventional methods that is; opaque assumptions underpinning change programs; problematic situations where, any cause-effect relationships are largely unknown; knowledge flow independence between key system nodes; and resilience status of organizational activities to changes in their environment (McKenzie, 2005, p. 30). According to my experience as a researcher, I have realized that my expectations from a research activity would be frustrated, because I neglect some or all the mentioned aspects. I therefore agree that conventional methods should learn to appreciate these aspects in complex situations.

Social complexity is based on the fundamental distinction between order and un-order, and its conceptual underpinnings lie in a broad range of disciplines; but are fundamentally informed by science of complex adaptive systems. Conversation and experience (narrative) are the means of revealing and influencing the patterns of human interactions.

Taylor (1991) assumes that processes are ordered; but time and resources have discovered the relationship between cause and effect. The systemic thinkers other than other approaches appreciate that in some situations, lack of order is not a matter of poor investigation, inadequate resources or lack of understanding; but rather a priori of the case. I agree with this because most of time, organizations assume the relationship between its different members to be a constant; which is not real.

Un-order emerges through interaction of many entities, and is not empirically determined order; hence no director or designer is in control. The patterns of an emergent order are not controlled by directing intelligence, but rather through self organization.

In an ordered system, it may be essential for the private and public sectors to determine the past relationships between cause and effect, in both success and failure; which is not possible with un-ordered systems, because patterns display retrospective coherence. There is no inherent repeatability, and patterns may appear as long as they can, but it's not guarantee (McKenzie, 2005, pp. 30-31). In this state, I agree with the systemic thinkers that un-ordered systems cannot achieve a defined goal, but can influence the direction of the journey and be open to new possibilities. This helps to solve the issue of recurring problems in a learning situation or organization, other than finding solutions which are not applicable.

The systemic thinkers therefore use a soft systems methodology (SSM) that aims at bringing about improvement in areas of concern, by activating the people involved in a learning cycle, which is ideally never ending. The learning takes place through interactive (circular) processes of using systems' concepts to reflect upon, and debate about perceptions of the real world; and again reflect upon the actual happenings using the systems concepts. Soft systems approaches have therefore been developed for use in 'messy' problem contexts, where there is no clear view of what constitutes the problem, or what actions should be taken to overcome the difficulties being experienced (McKenzie, 2005, pp. 36-37).

I appreciate the SSM basing on my experience during the fieldwork process. Certain issues kept rising now and again, but all attempted solutions would hardly work. As a learning experience, SSM has helped me to reflect on these different actions, sharing of perceptions, and the process of persuasion and debate of 'what' should be done. After consensus of 'what to be done' is reached, 'how' it can be done then becomes a focus.

2.7: Senge's five Disciplines of Organizational Learning

Senge, et al., (2000) recommend five disciplines for an effective learning process in an organization. They include; personal masterly, mental models, shared vision, team learning

and systems thinking. It can be appreciated that the use of these models in an organization may not occur in a linear way, but rather dependent on the situation at hand.

These disciplines have been an essential tool kit in my research planning, data collection, analysis and discussion of results. I chose to discuss and reflect about personal masterly, mental models, shared vision, and team learning because of how relevant they were in the research process; while appreciating that Senge (2000) does not believe in complexity (*see section 2.7.3*).

2.7.1: Personal Masterly

This refers to cultivating personal aspirations and awareness. Relating this to teaching and learning, it refers to one's vision or challenge. One's vision and current reality will change as one move through life; growing up, graduating from school, forming a career, starting a family, which depend on the choices one makes; and lead to new opportunities for choice. In the context of my field work, the participants with a challenge of improving their practice participated in the study; and we worked together to achieve these aspirations. This is because learning will not take place in an enduring fashion unless it is sparked by the learners' own ardent interest and curiosity. This means that the learner should know where he/she wants to go, and where he/she is (Senge, et al., 2000, pp. 59-60). As a facilitator in the process, it was also necessary to focus on my own capabilities and concerns both as a teacher and student, while working with these willing participants (Senge, et al., 2000, p. 63). This implied that the process involved risk-taking.

2.7.2: Mental Models

This refers to how one organizes the world. According to me, it relates to one's value system. One's mental models determine what he/she can see; people in new experiences are drawn to take in and remember only the information that reinforces their existing mental model. The differences in mental models explain why two people can observe the same thing, and explain it differently. Mental models bring tacit assumptions and attitudes to the surface (Senge, et al., 2000, pp. 67-69). According to me, mental models give an individual a sense of identity but they limit one's ability to change. It's therefore necessary for one to see the metaphorical pane of glass he/she looks through; and reform the glass by creating a new mental model, that serves one better. This necessitates one to reflect (slow down your thinking) and openly share your views, in order to develop knowledge.

2.7.3: Shared Vision

This discipline involves a set of tools and techniques used for bringing all the disparate assumptions into alignment around things people have in common that is; from individual

challenges to common challenges. People in a group build a set of commitment together; and catalyzing these goals and aspirations requires time, care, commitment, and responsibility. Informal networks are important in development of a shared vision in an organization, and this verifies why dialogues are relevant to organizations. Computer networks (electronic mails and computer conferencing) can also help people to keep in touch, and compare assumptions easily; but are inadequate for building shared meaning (Senge, et al., 2000, p. 73). This explains why documentation via blogs is a limited means of sharing experiences.

According to me, shared vision is not synonymous with shared understanding because it concentrates on aspirations that people have in common, and not the differences; which makes it a non-democratic process. This also reduces on the number of alternative approaches to a situation; which consequently limits diversity, and weakens the quality of learning. In complex situations, where there are no right answers to situations; shared understanding facilitates the exploration and utilization of the diversity of knowledge and perception in an organization's staff, to make new sense of opportunities (McKenzie, 2005, p. 22).

2.7.4: Team Learning

This discipline necessitates people in a team to think and work together. A classroom is appreciated as a team of people, who need one another to accomplish their mutual purpose; to develop competence together. I also relate team learning to a learning group, which implicitly includes writers of key books, staff, administrators, parents and students and school boards, curriculum development teams etc explicitly (Senge, et al., 2000, pp. 73-75). Team learning is influenced by all these different people, and systemic thinking theory appreciates this too. This however does not mean that the learning process is a group activity; but rather an individualized process facilitated in a group.

According to me, it also relates with 'participatory leadership' in systemic thinking (McKenzie, 2005, pp. 23-24); and the concept of dialogue, with a facilitator plays a significant role in attaining it (*refer to concept of dialogue*).

2.8: Summary of My Theory of Practice

Learning according to me is a complex holistic and multidimensional (cognitive, social and emotional) process emerging from education, experience and reflection about what is most relevant knowledge for an individual. Education in this case involves knowledge development in basic skills, technical, academics; on addition to understanding the value of the knowledge and processing it with one's inspirations, ambitions as well as creativity.[12]

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[12] http://www.motivation-tools.com/youth/what_is_education.htm

The learning processes involve practice, reflection and continuity; as one develops what is most relevant knowledge for him/her (Bjerknes, 2002).

Teaching and learning in Uganda is still understood as content delivery, based on prescribed curriculum; to prepare the students for examinations. Learning in this case is related to internalizing, memorizing& reproducing of facts, ideas and explanations given in the form of written literature (notes) to learners. This is synonymous with Freire's 'banking' concept of education; where the teacher's task is to 'fill' the students with the contents of his narrations, contents attached from reality, disclosed from totality that engendered them, and could give them significance. The students' role is to record, memorize and repeat the narrations without perceiving what they really mean or realizing their true significance.

Education therefore becomes an act of depositing, in which the students are depositories and the teacher is the depositor (Freire, 1972, pp. 44-46). In this concept, *knowledge* is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing.

The approach can be appreciated may be because it's less time wasting, and puts the teacher in a sound position in his/her classroom. However, the learning process as a multidimensional is interrupted, which reduces the learner's creativity. Individual differences also may not be catered for; which may lead formerly passive students to turn against their domestication, and attempt to demonstrate reality (Freire, 1972, pp. 48-49). This approach to learning further undermines the role of communication(dialogue) in learning facilitation (Freire, 1972, p. 50).

In response to the critics of the 'banking' concept; the relations model of didactics used for planning and evaluating pedagogical work, becomes useful. The model emphasizes the relations between six phenomena which are; learning experiences, resources, objectives, learning processes, subject matter, and evaluation. The model enables both the student and the teacher to be able to assess their learning process.

Complementary to the relations model of didactics is '*experiential learning*'; which necessitates one to make meaning from direct experience. Knowledge is developed from the process of action and reflection. Both the teacher and student are subjects in the learning process; and their relationship is maintained by dialogue, based on the communication and perception models. The teacher performs as a mentor or counselor.

SPL referring to life-long learning, deep reflection, and dialogue in a community; makes it possible for learning to be put in practice. SPL encompasses 'cross perspectival' and 'a meta-way of seeing meaning'; which are critically needed for the knowledge-based

economy. Learning is viewed as a social practice and teacher functions as a facilitator and researcher; where he/she acts as 'knowledge broker' and boundary crosser.

This concept also appreciates the role of communication (dialogues) and learning facilitated in groups, which are referred to as communities of practice.

Because teacher are working with human beings, who are soft systems; and not objects to be filled, the systemic thinking process of understanding and transforming complex situations was useful. This concept assumes that, 'whole issues are different from the sum of their parts'(McKenzie, 2005, p. 6). In relation to my theory of practice, I have appreciated discussed and reflected about three theoretical arguments of systemic thinkers which are; experiential learning, participatory leadership, and complexity, because of their relevance to the field work situation.

While appreciating that Senge (2000) does not believe in complexity, his disciplines of personal masterly, mental models, shared vision, and team learning have been useful; on addition to several others already mentioned. Personal masterly relates to one's awareness or aspirations; mental models relate to how one organizes the world (value system); shared vision involves bringing all the disparate aspirations into alignment around the things people have in common; and team learning involves getting people in a team to think and work together. In learning organization, dialogue guided by a facilitator in case of conflict; is the basis for these different disciplines.

CHAPTER THREE

3.0: THE RESEARCH METHODOLOGY

3.1: Introduction

As a graduate teacher whose vocational knowledge and skills are linked to Home Economics (Foods and Nutrition); my ontological and epistemological ideas are related to my experience as a trainee for three years at Kyambogo University (KyU) that is; 2003-2006 and a trainer of Foods and Nutrition in an upper Secondary school for the past four years in Uganda. It should be appreciated that these ideas are influenced by my social-construction approach to knowledge creation and belief in commitment, determination and compassion as important values, on addition to being very critical. Referring to chapter two, learning according to me is a complex holistic and multidimensional (cognitive, social and emotional) process; emerging from education, experience and reflection about what is most relevant knowledge for an individual. Education in this case involves knowledge development in basic skills, technical, academics; on addition to understanding the value of the knowledge and processing it with one's inspirations, ambitions as well as creativity.

The learning processes involve practice, reflection and continuity; as one develops what is most relevant knowledge for him/her (Bjerknes, 2002). This consequently influence how I think as well as my practice because what I value and how I think, influences my way of doing things (practice) as a researcher as well as MA student of vocational pedagogy (McNiff & Whitehead, 2009, pp. 8-10).

With an aim of developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL; the problem statement that guided the study is: *how can I develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator?* The instructors were practitioners in my practice, whose learning I was trying to influence; and they chose not to follow-up a series of SCL activities with their students, but rather practiced 'peer teaching' in our groups.

This chapter presents the fieldwork planning and implementation, the research design applied in this study, the research methods and tools, the participants in the study, data presentation and analysis, as well as discussion of findings in relation to scholarly literature and my research experience.

3.2: Fieldwork Planning

In a meeting held with NPAYVTC program manager, Nina; NUCOOP-TVET program developer, Trond and NPAYVTC's principal, Otim; a preliminary schedule for this fieldwork was suggested;

Period	Knowledge creation and Learning aspect
1. October 15th –November 15th 2009	▪ Working with instructors and Otim to share our knowledge and experiences regarding how to improve our own practice as facilitators in a technical vocational student- centred learning environment. ▪ Establishing the NPAYVTC blog and revitalize the individual blogs if possible. This would depend on whether the instructors want to have their document process on their blogs. The participants would suggest how they would like their documentation to proceed. I think documentation on the blog was worthwhile thinking about, or even better writing of personal logs.
2. November 15th -December 20th 2009	▪ Working together with Otim and instructors who would be analysing and documenting their technical vocational practice regarding their acquired competence **Period 1 and 2 will run parallel to each other depending on the participants' interests.**
3. January 2010	▪ Following of the sequence for those who would complete the first part of

	their program.
	At the end of this cycle, the participants were to assess their learning through the process (what is our situation now and where do we want to go (goal)? The cycle could then be repeated for those who wish to continue (ACTION RESEARCH CYCLE).

Figure 8: *Tentative Time Table*

The time table was subject to change to suit what the participants liked to work with, together with me during that period. Planning with all the participants was what I valued most.

According to the above timetable, the research was supposed to proceed in two phases that is; October-December, 2009 and January, 2010. This was however not the case because the Vocational Training Center's (VTC) time schedule changed; which consequently influenced our mode of action. The second phase did not proceed at all because of some health complication, fear of the political situation in the country at that time, as well as the urgent need to return to Norway before 1st February, 2010 as asked by HiAk.

From a methodological point of view, I wrote a tentative plan during my research planning which I sent to different administrative levels of NPAYVTC for some feedback. This according to me was because PAR is a methodology for intervention, development and change; that builds on a critical pedagogy put forward by Freire (1972), as a response to the traditional formal education (*refer to chapter two*). This would help me understand the context of how the participants wanted us work collaboratively, without suppressing any one's needs and interests. My not being a staff of NPAYVTC could have created some tension to the administration; and this was handled by my reality moving closer to what they wanted (Senge, et al., 2000, p. 59). This would also enlighten the participants and administrators about my presence at the VTC. This could however have been limited by having no feedback about the plan by any participants before and after reaching the field (r*efer to field work plan in Appendix 1*).

This was however no guarantee that these participants had nothing in mind regarding how they had wanted us to work with. I therefore asked the principal of the centre whether he/they had drawn any plan in preparation of how we were going to work together.

I learned that he did not have any plan, and was waiting for me so that we draw the plan together. We discussed and agreed to draw a plan with the participants who were interested in this process. This made me believe that they had some ideas about how they wanted to work, much as the ideas had not been documented yet. This determined our consecutive meetings (r*efer to chapter four for the process as it evolved).*

3.3: Research Design

3.3.1: Type of Research

With an aim of developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL, while working with willing instructors of NPAYVTC; a participatory action research (PAR) approach was used.

Participatory action research is a recognized form of experimental research that focuses on the effects of the researcher's direct actions of practice within a participatory community, with the goal of improving the performance quality of the community or an area of concern.[13]

It's also a reflective process of progressive problem solving led by individuals working with others in teams or as a part of a 'community of practice' to improve the way they address issues and solve problems.[14]

Reflecting upon these definitions and that of Greenwood and Levin (1998, pp. 4-6) as mentioned in section 1.6 of chapter one; the research methodology of action research is a conjunction between research (inquiry), participation (collaboration) and improvement or change.

This consequently led me to Whitehead and McNiff's action research living theory, concerned with the question of "how can I improve my practice?" In this approach to action research and human existence; individuals hold their lives to account, by producing explanations of their educational influences in their own learning, in enquiries of the kind (Whitehead & McNiff, 2006).

I found this theory important because it is a tool used for assessing the quality of my work in terms of originality, significance and rigor. It also addresses how action research is done and

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[13] http://en.wikipedia.org/wiki/Participatory_action_research

[14] http://en.wikipedia.org/wiki/Action_research

how the quality of one's own research would be assessed. The development of my living theory has emerged from a description of my own practice (as a facilitator in learning groups), as the research evolved. The theory generated is living because it's my own living theory of practice derived from present best thinking (incorporates yesterday into today) and holds tomorrow within itself (Whitehead & McNiff, 2006).

This approach was important for me because no one was telling me what to do, but rather offered ideas that I would try out for myself. This in the end has improved my practice as a researcher as well as a facilitator of instructors' learning groups

Unlike other conventional academic practices and organizations that study social problems without trying to resolve them, action research addresses issues and solves a problem, which justifies my choice of research approach. McKenzie (2005) however highlights that when working with soft systems; solutions to complex situations can hardly be found, suggestions to improve the situation can be generated, which I agree with him.

Similarly with the action research approach, the researcher researches with the people and not about people; this is seen in other conventional methods of social research. This approach creates a democratic argument between the researcher and the interested parties about what they would want to improve in their community or organization, therefore contributing actively and directly to processes of democratic social change and simultaneous creation of valid social knowledge.

PAR leads to broad participation of the members of the organization in the research process since the problems to be examined, cogeneration of relevant knowledge about them, execution of research techniques, taking action, interpretation of the results based on the action based on what has been learned; is all done with the researcher and the participants in the study. This is not the case with other conventional approaches (applied, qualitative or quantitative or mixed methods).

While other professional researchers in descriptive and explanatory research begin by defining the problems to be resolved, the researcher and members of the community who seek to improve their situation define what they seek to resolve, cogenerate relevant knowledge about it, take actions and interpret results of the actions based on their experience. In this study, the willing instructors and I therefore identified the challenges to be improved, drew a plan of action, implemented the plan and evaluated our learning process (*refer to chapter four*).

This generates a "living" truth which is a contrary to a "spectator" truth that oversimplifies reality, and gives general explanations achieved only by standing back and "spectating" the

human condition from a distance, seen in descriptive and explanatory research types. The 'living' truth concentrates on the particulars which fit in context of the research and ignores the generalities. This makes it an unlimited research methodology because it is not as close to reality as possible.

The 'living' truth however can only be fully understood from within the situation. The emerging picture may never be as clear-cut as that provided by 'spectator truth'. This is partly because this approach is based on trial and error approach to research. Evidence (data used to refute a belief, an assertion, hypothesis, or claim to knowledge) is problematic because it's developed from explanations of embodied values. This consequently makes the question of validity problematic (Whitehead, 2003).

To respond to this challenge, Carl Harns (2002) used video clips from classrooms, interviews and lectures together with written and audio texts; to communicate the meaning of educational practice. Fletcher and whitehead (2003) have also presented multimedia portfolios of evidence in a narrative form that include visual images of educational practices, to communicate meanings that cannot be adequately represented through word on pages, even the most poetic ones (Whitehead, 2003).

In a seminar facilitated by Jack Whitehead at HiAk on 3rd February 2010 about "creative ways of documenting research in improvement of one's own practice and related validity issues" in which I participated, we identified different ways of creating a public knowledge base using a question "How can embodied knowledge be made public?" Some suggested ways are; showing, sound and video recordings or conferences, authentic expressions and pictures or photographs, use of social media like blogs among others.[15]

In this research, the participants and I agreed to use sound recordings and digital photography, to expose our embodied knowledge and validate our 'Living' truth. The participants too chose to document their practice via their blogs.

The documentations from this research are also complemented by sound clips and photographs, narratives from the research process as well as word texts from some of the participants' blogs. This therefore gives a justification of my choice of research methodology. It was collaborative, based on non-expert equality concept which empowered all the participants, although it was important to realise that the action research of the group is achieved through the critically examined action of individual group members.

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[15] http://nucoop-aidah.blogspot.com/2010/02/creative-ways-of-documenting-research.html

As an action researcher, it was important for me to be flexible during the fieldwork without losing direction, being sensitive to the context of the field study, and adjust my approach accordingly; respecting those who did not want to participate in the process, listening to participants' own views, but not thinking that only their voices counts, using my own imaginations without imposing my views, as well as reflecting on my own role and legitimacy of my encroachment. This approach to research makes the process very bureaucratic and hence time wasting. Mikkelsen (2005) highlights that;

> 'Participation in development' is entangled in many dilemmas. Working with participation as a democratic principle, as a right, as methods and tools..., raises a variety of theoretical and operational challenges as well as normative and ethical considerations (Mikkelsen, 2005, p. 75)

Reflecting about the above quotation, listening to the concerns of the participants, to those who participated voluntarily or under pressure was the best lesson of all. It was useful in taking care of individual differences and attaining a certain level of democracy. McKenzie (2005) uses the leadership hexagon with 6E's as: enablement, engagement, empathy, enactment, ethics and enquiry to appreciate these dilemmas and improve the quality of participation (McKenzie, 2005, pp. 24-25).

3.3.2: Sampling Techniques

In preparation for this field work, I had learned that instructors at NPAYVTC had been working in groups at their sections to develop their version of SCL; and I became interested in working together with them to develop my practical ability in facilitating learning processes for a group instructors. In the first general meeting organized by NPAYVTC administration and I on the 26th October, 2009; I learned that these participants were not having these meetings. Fourteen participants were attending this meeting but only 10 were present to the end of the meeting.

Since the participants were not having learning group meetings at their sections, their number in each group depended on how they wanted to form their learning groups. I therefore asked them on how they wanted their learning groups to be formed. There was minimal response to this question and some of their suggestions were; to be given topics at their section levels, groups to be formed according to their sex, interests and departments.

The suggestions were made by men implying that, ladies' ideas were not expressed; which according to me did not portray democracy because majority of the participants' ideas or views were not represented. I may also have been unsatisfied with the suggestions because I

am a woman, who believes in equal opportunities for women and men to speak in public, and no one's views should be suppressed.

For validation purposes, I repeated what their suggestions were and summarized it as; one general meeting of NPAYVTC learning group once a week, and meeting twice a week at departmental levels. The number of participants in each learning group depended on the number of willing participants at the sections for the sectional learning group meetings, as well as the overall number of participants for NPAYVTC learning group. The sectional learning group meetings were three with numbers 2, 3 and 1 for building and concrete practice (BCP) section, carpentry and joinery (C/J), and adult literacy respectively. The participants discussed this further length in their learning groups (*see chapter four*). The number participants in the NPAYVTC learning group varied from 5-7 for the different subsequent meetings held.

The general NPAYVTC learning group was an opportunity for having a learning group diversity; which enriched the participants' learning experiences as well as building a collaborative relationship across different departments at the NPAYVTC (McKenzie, 2005, pp. 23-24) This was useful in sharing their experiences as an organization and forging of a way forward following development of a shared vision (Senge, et al., 2000, p. 73).

On the other hand, mixing instructors from different sections was limited by some participants being unable to meet consistently because of their different responsibilities at their departments. This could also have been an influence of cultural uniformity at the VTC and how the participants related to each other. Some of the participants in the learning groups were not at good terms with each other and this could have influenced the effectiveness of this learning group. This was evident in some of the audio recordings of the learning group dialogues from these general meetings, where direct and personal attacks to individuals were quite significant verbally and non-verbally. Relating to systemic thinking (McKenzie, 2005, p. 6) where all things in an organization are interrelated, this cannot be undermined.

The NPAYVTC learning also seemed to be reducing active participation of the members and decision making was also relatively difficult. As a facilitator, this challenge was handled by breaking this group into even smaller groups depending on the challenge at hand. This was aimed at ensuring full participation of the different members in the groups, as well as ensuring that their different ideas are well represented. Breaking up NPAYVTC learning group into smaller groups was no guarantee that all the participants would contribute towards the issue at hand. This according to me may have been an influence of their individual differences (personality masterly was key), cultural and gender influence (women are not supposed to

speak in public, the men know it all) and not least, having nothing to contribute to the issue at hand. This was also evident in sections' learning groups with 2 or 3 participants.

In summary, the number of participants in each group varied sometimes depending on responsibilities (official and family) at hand especially for the general meetings.

3.3.3: Validity of the Results

The data collected in this study are accordingly non-numerical thus; statistical tools for testing for the significance of the results, normally applied in quantitative research were not applicable. Referring to section 3.3.1 of this chapter, an action research educational living theory was used in assessing the quality of my findings in this thesis. To achieve research quality, it was therefore important that;

1. Set my own action research account
2. Comment on the process of what I am doing simultaneously
3. Generate my own living theory

In an attempt to improve the quality of my research, it has been important that;

- I demonstrate my competence in making scholarly judgment about my work (self assessment).

- I make standards of judgment to be used in assessing the quality of my account available to a group of action researchers or a wider educational community.

Referring to the seminar about "creative ways of documenting research in improvement of one's own practice and related validity issues" in section 3.3.1, four valid questions were also identified as important in strengthening the validity of my explanations in this thesis. These are;

- o Is my explanation as comprehensible as it could be? Does it make sense to the reader?
- o Could I improve the evidential basic of my claims to know what I am doing? Is it truthful?
- o Does my explanation include awareness of historical and cultural influences in what I am doing and draw on the most advanced theories of the day? Is it appropriate?
- o Am I showing that I am committed to the values that I claim to be living by?

These questions are important in judging my authenticity as a researcher while taking care of the nature of data generated and giving claims to knowledge throughout the research process (McNiff & Whitehead, 2009, pp. 23-27).

Similarly, Kvale (1989, pp. 84-89) recommended communicative and pragmatic validity as an extended way of posing the question of validity, rather than them being fixed

categories. Whereas communicative validity tests the validity of a knowledge claim in a dialogue, pragmatic validation is done in literal terms. The pragmatic concept of validity includes ethical dimensions, which represent a stronger knowledge claim than a mere agreement through dialogue (aesthetic dimension) which is noted in communicative validation. A discourse form of argumentation is in this case recommended with the communicative validation; where no social extension of power takes place and the only form of power taking place being a force of better argumentation. This is a key factor for a learning group dialogue as a means of facilitating SCL. The challenges in its applicability were not neglected for this field work and this puts me as researcher in a comfortable position of making my knowledge claims.

Basing on the above background to research quality (validity), I used three basic methods of validating the findings in this study that is; continuous analysis and reporting to receive feedback from the participants, the action reflective cycle with the participants as well as triangulation.

Continuous Analysis and Reporting

Throughout my field work process, I wrote a personal log of what I did, saw and heard, what others did, emotional tensions in the situation if any and how I reacted to them, the situations to be understood, my reflections about what happened (learned or new knowledge, expected and my former knowledge of the different parts of information gathered, if any (see *appendix 4*). This was to help me receive feedback from the different participants as well as administrators of NPAYVTC, which would consequently help me to improve what I was doing (Flick, 2007, p. 66).

This tool was partly inefficient because not many participants were able to give me some feedback regarding my reflections. This may be affiliated to the participants' not writing of their own logs from the different meetings; which made it challenging for them to improve my log with theirs. According to me, the reason for this could also have been an influence of the Teacher Centered Approach (TCA); where they perceived me as facilitator who knew everything I was doing. Log writing not being a common practice in learning assessment at this VTC, it was no surprise that these participants found it challenging to assess their own learning process (Nganda, 2009, pp. 48-50). I also hoped that the learning concept of 'experiential learning' would be put to use with this approach, but its results were not quite significant with log writing. This was also challenging for me to give some feedback to their logs, for our learning to be a two-way process (Bjerknes, 2002).

I found this method important both in data collection and validation because early and continuous data analysis discovers data gaps, surprising perspectives etc at an early stage (Mikkelsen, 2005, p. 97). This was helpful to me as a researcher because I became aware of the influence of my values, cultural beliefs to the research quality and take care of them during data collection and analysis.

Action Reflective Cycle

This tool can be used in validation of action research data by continuously reflecting on what you did, saw and heard; and change for the better, hence improvement. Since an educational living theory requires one to generate explanations of his/her educational influences on his/her learning, learning of others and learning for social transformations; it was useful for every participant in this study to continuously reflect so that he/she becomes aware of these influences. Action reflection cycles are useful in challenge identification, developing action plans, acting and gathering data, evaluating the influences of the actions, modifying concerns, ideas and actions in the light of evaluations; hence improvement.

The action reflection cycles required each participant and I to write a log from every meeting attended. This would then lead to improvement for the different participants and I.

My experience in the field was that the participants did and participated in different activities. It was however unusual for them to sit and reflect upon their actions from the different meetings; and this made log writing challenging to them. As a way of encouraging them to reflect, I always asked three questions after every meeting. These questions were

- What have we (you, others and facilitator) done in today's meeting?
- What have you learned (new knowledge) from that?
- What is wise to do in the next meeting to improve your practice?

Since the participants chose to document what they were doing via their blogs; their answers to the above questions would be expected on their blogs. This was however a challenge because most of them hardly did this. This made planning for the upcoming meetings as well as assessment of their improvement process complex (*refer* http://otim-yvtc.blogspot.com/ *and* http://nucoop-clara.blogspot.com/). This was however not evidence enough because some participants hardly documented anything from what we did; and those who tried to document did not continuously do it. This implied that some of the participants had no written record of their improvement process, much as they could easily speak about it during and after the meetings.

The advantage of this method of validation is that, the data gaps and surprises are identified at an early stage; which enables one to take care of them in the next sequences. Its challenge lies on its dependence on participants' continuous documentation and reflection. Regardless of this challenge, the method was useful because it encouraged me to document my field notes as soon as possible; and asking for feedback from individual participants about my reflections of what I saw and heard from them.

Triangulation

I also used triangulation method to validate the results. Holmarsdottir points out that validity of results in qualitative research is possible through triangulation and not necessarily involving large samples (Halmarsdotirr, 2007).

Denzin defines 'data triangulation' as the use of different sources of data as distinct from using different methods, in the production of the data (Flick, 2007, p. 42). Mikkelsen identifies five types of triangulation that is; data triangulation, investigator triangulation, discipline triangulation, theory triangulation and methodological triangulation (Mikkelsen, 2005, pp. 96-97). Methodological triangulation which involves 'within method' triangulation, that is; the same method used on different occasions, and 'between method' triangulation, when different methods are used in relation to the same challenge of study, was used. To implement this, different research methods were used in this study (semi-structured and conversational interviews, participant observations, learning group dialogues, and continuous analysis and reporting); with one set of data cross-checking another. Similarly the use of a variety of research tools (note-taking and log writing, audio recordings and digital photography) to complement each other, was aimed at increasing the validity of the results.

One person may find it irrelevant to mention the role of triangulation in data validation with the action research methodology; but my experience in the field causes me to clearly spell this out, based on my challenges for example; differences in culture and language barrier. This justifies the role of this validation method in my action research living theory.

3.4: Choice of Research Methods and Tools

In PAR, formal quantitative, qualitative and mixed methods are all appropriate in differing situations, as long as the reason for deploying them has been agreed upon by participants in the research; and used in a way that does not oppress any of the participants. Therefore; surveys, statistical analyses, interviews focus groups, ethnographies and life stories can all be

applied with this approach as long as they are agreed upon with the participants (Greenwood & Levin, 1998, pp. 3-7). This justifies why the instructors of NPAYVTC with their principal, Otim; suggested what they thought was a good approach for our cooperation. Referring to audio recording1 in appendix2, I showed the MP3 recorder to the participants and explained its use. I also asked for their suggestion related to using this tool in our meetings; and they were comfortable with it.

I used four methods in this research that is; qualitative semi- structured and conversational interviews, learning group dialogues, participant observation and continuous analysis and reporting during the research with participants' awareness. These methods were supplemented with several research tools which included audio recordings, note-taking and log writing as well as digital photography.

3.4.1: Learning Group Dialogues

Bohm (1990) in Hung, et al., (p. 209) defines a dialogue as a free flow of meaning that balances inquiry (asking) and advocacy (telling) in one's attempt to influence others. This implies that through dialogues, there are tendencies of people participating in it to influence each other, either positively or negatively.

In action research, dialogue is a fundamental objective contributing to practice and expresses itself publically.

Dialogue was useful to me during research planning, problem formulation, data collection and validation; since action research maintains that 'problems' are not defined by 'experts', but should be based on dialogue (Mikkelsen, 2005, pp. 36-37). Dialogue is an integrated action research technique which also consists of a variety of other methods like conferences, workshops, project groups, meetings among others. As a research method I used in this study, dialogues were developed with different administrators at the NPAYVTC, individual participants, as well as groups of participants.

From a research point of view, the success of a learning group dialogue as means of facilitating learning in the participants' groups was dependent of my being aware of group dynamics (Johnson & Johnson, 2006, pp. 3-4). These characteristics of a good dialogue have been discussed in section 2.5.3 of chapter two.

This method helped me to understand participants' responsibilities, needs, interests, availability for the research process, and plans for improvement. From a research point of view, this helped in bringing their realities close to mine; which reduced the possibilities of I being a threat to them individually, and NPAYVTC as a whole. Mikkelsen also encourages the action researcher to create a dialogue with those who are directly or indirectly affected by

the field study or intervention, and share decisions and responsibilities where feasible (2005, p. 75). This justifies my choice of research method with digital photography and note-taking as tools, to supplement the method and show evidence of the learning groups' dialogues.

3.4.2: Qualitative Semi-Structured and Conversational Interviews

Descombe and Patton in (Mikkelsen, 2005, pp. 171-175) mentioned that;

> *Interviews are not just interviews. They are questions on experience and behavior, on opinions and values, on feelings and needs, knowledge and background data, there are presupposition questions and neutral questions, simulation questions, etc., and these questions may address the past, present or future.*

To develop a good dialogue throughout this research process, qualitative semi-structured and informal conversational interviews were used. In qualitative interviews, only some of the interview questions and topic are predetermined. Many questions will be formulated during the interview. I used this method in the field during challenge identification as well as facilitation of all the learning group meetings. Kvale (1996) in Mikkelsen (2005, p. 169) mentioned that qualitative semi-structured interviews have in particular been used in social research, through treatment of both the theoretical underpinnings and practical aspects of the interview process. I therefore conducted the interviews following a guide, with a reflective approach.

Both simple open-ended and probing questions were used. Probing questions arose from unexpected relevant issues, which required direct answering without beating around the bush. Simple open ended questions were useful in self evaluation and continuous data analysis in the field. These questions were short which made data coding easier (Mikkelsen, 2005, p. 90). Some of the questions used have been incorporated with the type of data they generated (*see chapter four*).

The informal conversational interviews were used because they increase the salience and relevance of questions as the interviews are built on, and emerge from observations. On the other hand, different information is collected from different people using different questions since there is no predetermination of question topics or wording. There is however a high likelihood of the researcher losing focus of what he/she wanted to investigate. This was minimized by use of checklists in advance in order to sharpen my focus and help me memorize. I also used designed recording tools in the form of log tables to help me in further analysis of the collected data. I made brief notes during the interviews which I would transcribe in a more detailed way afterwards. I also used MP3 audio recorders to supplement the semi-structured and conversational interviews.

The validity of the interview data was achieved by summarizing participants' thoughts in an interview as well as asking for clarification. The use of the MP3 audio recorder and note-taking made the process more realistic. It was important for me to be aware of the interviewer effect during validation of the interview data. Descombe (2003) argues that people respond to questions differently depending on how they perceive the person asking the questions. In particular, the sex, age and ethnic origins of the interviewer have a bearing on the amount of information people are willing to divulge; and their honesty about what they reveal (Mikkelsen, 2005, p. 177). To minimize this effect, I used both conversational and semi-structured qualitative interviews with simple and probing questions complement each other during the whole field work process. This was because having outlines and issues to be covered specified in a research increases the comprehensiveness of the data and makes data collection somewhat systematic for each respondent. The interview also remains conversational and situational. Similarly, the informal conversational interviews increase the creativity of the researcher on grounds that, she/he is able to anticipate the gap between the data and make the questions more relevant; regardless of the situation thus closing the gap in between relevant data (Mikkelsen, 2005, pp. 171-172). The use of audio-recordings also minimized on the chances of me influencing the data to a certain extent, hence justifying my choice of research method. I also used photographs to keep record of discussed ideas of participants on the flip charts. These helped me in making the detailed notes in the form of my personal log after the specific meetings and field work process in general.

3.4.3: Participant Observation

This is referred to as a classical method of anthropology for understanding indigenous knowledge and symbols (Mikkelsen, 2005, p. 88).

Halmarsdottir (2007) underscores its importance in relation to my field work as;

- In identifying how the participants relate with each other during the learning group dialogue.
- In offering an excellent way of discovering how the gender aspect was affecting the effectiveness of the learning group; as well as demonstrating democratic values.
- For participants who have weak verbal skills, therefore offsetting my fears of a language barrier where; the instructors were not very conversant with the use of English language as a medium of communication, and more acquainted with the Arabic and vice versa.

Much as field observations have various dimensions as methods of data collection; the most significant one in this research was participant observation, because it is more

commonly used in qualitative research (Flick, 2006, pp. 219-220). Denzin (1989) defines this method as a field strategy that simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation, and introspection. This form of observation puts the researcher in a situation where he/she could influence what would be observed owing to his/her participation. The researcher should therefore interact with the participants during data analysis and assessing of interpretations, in order to disclose the interior perspectives of the observed persons. This was done with respect to research ethics (Flick, 2006, pp. 219-221). Secondly, following its three phases as distinguished by Spradley (1980, PP34); minimized on my participatory influence in this study, and these phases are:

- Descriptive observation, which provides the researcher with an orientation at the beginning field study. It provides non-specific descriptions and is used to grasp the complexity of the field as far as possible; and at the same time develop more concrete research questions and lines of vision;

- Focused observation which narrows the researcher's perspective on those processes and problems, which are most essential for one's research questions;

- Selective observation, towards the end of the data collection, is focused on finding further evidence and examples for the type of practices and processes, found in the second step.

Basing on the above, participant observation would therefore enrich the validity of the research data as a supplement to the other methods used in this study. For example this method was applicable during discussions in the learning groups to make sure that the dynamics of the learning group is taken care of (*refer to section 2.5.3 of chapter two*).

Evidence of what was observed was noted and reflected upon in a log-table form as well as photographed with a digital camera. I have discussed photography in a more detailed way here because its use in this field was more significant with this research method.

Cameras as tools for collecting data have recently been inaugurated by Becker (1986) and before summarized by Mead (1963) as important in social research, because they allow detailed recordings of facts; and provide a more comprehensive and holistic presentation of life styles and conditions. Photos and films are important as both data and instrument of knowledge (Flick, 2006, pp. 234-235). The digital camera was handy to me as a participatory action researcher during the learning group discussions because;

1. It can catch facts and processes that are too fast or too complex for the human eye.

2. It also allows non-reactive recordings of observations, and is less selective than observations.

3. It can also be analyzed by other people and this gives me as a researcher a variety of reflections.

4. It's incorruptible in terms of its perception and documentation of the world. They don't get tired, don't forget and make no mistakes; although they are noted to transform the world which they present into a specific shape.

However, Denzin (1989) in Flick (2006, pp. 235-237) discusses various methodological questions which centre on topics such as theoretical presumptions which determine what is photographed and when, which feature is selected from the photograph for analysis, and so on; which leave significant marks on the use of photographs as data or for documentation of relations. Similarly, photos tell the truth but are marked by the interpretation and ascription of meaning by those who take or regard them; they are also expressive when they are taken at the right moment. There is an influence of the medium; losing the moment's expressiveness by arranging subjects in the photo and the possibility of influencing or manipulating the photographic presentations. To minimize this, I did not organize or arrange any participants for the photos taken, and have not modified any during data presentation (*refer to chapter four*).

Gregory Bateson and Margaret Mead (1942) in Flick (2006, p. 234) came to conclude that visual material is not only accomplished against a certain theoretical background; but also perceived and interpreted from a specific point of view, which I also concur with.

Basing on this explanation, the digital cameras were used as supplementary tools to this field study in order to reduce on the inaccuracies related to their use as research tools; and this increases the validity of the findings.

3.4.4: Continuous Analysis and Reporting

Participatory methods mean potential participation of selected stakeholders in all stages of a study or project, from identification of the problem to evaluation with different degrees of intensity possible.

Referring to section 3.3.3, I wrote logs throughout the field work process. During this process, a portable computer was useful as tool of documentation as well as note-taking. I referred to written literature and my experience from the field during the data analysis. The written logs from the different meetings were shared with different administrators at NPAYVTC that is; the program Manager, the principal, secretary of NPAYVTC, and the concerned participants for a specific learning group meeting. This was done in order to receive feedback about my interpretations and create a diversified understanding of the participants' actions; which

consequently improves the data. The advantage of early or continuous analysis was that data gaps, surprising perspectives worth pursuing, etc., were discovered at an early stage. The analyst who also needs to report the data can start analyzing in the field (Mikkelsen, 2005, p. 97).

Referring to section 3.3.3, this method was limited by not receiving feedback about the different logs written, participants not writing their own logs, influence of TCA and it being a totally new approach to documentation of learning experiences. I also think that the participants did not respect and commit to what we agreed to do together, maybe because of differences in our values.

Consequently, I tried to listen to the recordings from the meetings with the available concerned participants and encouraged them to write their logs as they listened. This was aimed helping them to get started with recording their learning experiences; which would fill the gaps in my data and interpretations, as the participants compare their logs with mine. This would also improve both our logs.

This action was however taken too late and I was unable to try it out with all the different participants, and for all the different meetings. I anticipate that it affected the quality of data collected with this research method.

However, basing on my experience as a researcher and critical person; giving different interpretations to different data or actions of human beings leaves me quite comfortable with this choice of research method, based on its advantages in the field.

3.5: Participants in the Study

The target population was made of the willing instructors at NPAYVTC and Otim as participants in learning groups, concerned about improving their practice. Senge et al (2000) view learning as impossible to take place in an enduring fashion unless it is sparked by the learners' own ardent interest and curiosity. The learners should know where they want to go and where they are (p. 59). The aspect of how one can improve his/her practice is an important tool in this case. This explains why participating willingly was relevant in this study; the validity of my claim is based on the question I asked during our first general meeting as; 'do all of us want to be a part of this development process?' The participants were silent for some time and after a while, one participant mentioned, 'all of us here are interested in the process.' Another participant also mentioned that, 'those who will not be interested may not come for any of our next meetings.' I further emphasized that the process was for participants wanted to improve their practices as instructors (*refer to recording 2 of appendix*

2). As a result, four of the fourteen participants attending that meeting were unable to attend the meeting up to the end, and were not even a part of any other meetings held.

Emphasis on willing participation was to ensure that the participants remain accountable to every decision made by them, with optimism that the process would be smoother with the willingness. This was on the contrary not the case may be because the quality of participation was not assessed. McKenzie (2005) uses 6E's of enablement, engagement, empathy, enactment, ethics, and enquiry to asses leadership as a responsibility of every member in a group the process evolved (pp. 23-24).

Five instructors directly involved in facilitation of teaching and learning at NPAYVTC and their principal, Otim were involved in this study. These participants worked in two major groups that were section-based (C/J and BCP), and Otim chose to belong to C/J group because of his vocational background. The sixth participant belonged to NPAYVTC general learning group only, maybe because she was the only willing participant from her section (adult literacy). This did not prevent her from participating in the general meetings. According to me, this could have affected her level of participation because she hardly had any one to discuss her challenge with between the weeks until the next general meetings.

Referring to section 1.5.1 of chapter one, the instructors as practitioners in my practice chose not to follow-up a series of SCL activities with their students; but rather practiced 'peer teaching' in our groups.

For a more practical approach, participants chose one person each week, to take chair the responsibility of a facilitator (peer teaching) during our Friday general meetings. I hope that this also improved their practice in relation to facilitating SCL in learning groups.

Since the students are the final recipients with SCL, peer teaching was important in promoting democracy in learning to a certain extent. However, it would have been better if they followed up a series of activities with their students (*refer to chapter four and five)*. Students' learning groups could also have been initiated and the students' views taken care of through this experience (*refer to relations model of didactics*). This would promote sustainability of their development process even after my leaving the field.

3.6: Data Presentation, Analysis and Discussion

3.6.1: Data Presentation

The data is presented using three themes, X, Y and Z explained below. The themes have been developed from the research questions which guided the study.

Ankerborg (2002) in Mikkelsen (2005, p. 160) mentions that the criteria of whether something can be used as data is an internal logic between data and the formulated research questions; regardless of whether the data is text, image or number. He however advised that the data that relates to the research questions is necessary, but not sufficient. Basing on this, only the important findings in chapter four will be discussed in chapter five. Some of the data presented in chapter four is aimed at helping a reader of this report to understand the context in which the research was done.

The themes and their corresponding research questions are as below:

Theme X: learning groups' planning, organization and implementation

- How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?

- How have these learning groups been organized (leadership, contract or rules)?

Theme Y: Learning groups and student-centered learning

- What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?

- What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experiences related to this?

Theme Z: Sharing experiences in the learning groups in relation to improvement of practice

- How have the instructors been documenting and sharing their experiences and practices as a team?

- What have been the most important experiences discovered in the learning groups meetings?

I have then sorted, coded and categorized the data in themes X, Y and Z into various indicators or sub-themes developed from related literature of learning group dynamics, reflections during preliminary research activities, experiences from the research process and previous working life. Bryman (2001) in Mikkelsen (2005, p. 161) defines an indicator as a measure that is employed to refer to a concept when no direct measure is available. Coding helped me as a researcher to organize the raw data into conceptual categories and create themes, which can then be used to analyze the data. Coding is used at different degrees in qualitative research as open, axial or selective, but it is particularly associated with the

'grounded theory' approach to condense data into categories (Mikkelsen, 2005, pp. 181-182).

The sub-themes are;

<u>Theme X: learning groups' planning, organization and implementation</u>

- Planning meetings with Otim and Heads of sections
- planning meetings with all willing participants
    a. criteria of learning groups' formation
    b. Day, time, duration and frequency of learning group meetings
    c. Venue for the learning group meetings
    d. Organization of learning group (having a leader, rules or contract) formation

<u>Theme Y: Learning groups and student-centered learning</u>

- Participants' definitions and characteristics of a learning group
- Participants definitions, characteristics and indicators of SCL
- Influence of the gender aspect to an effective learning group dialogue

<u>Theme Z: Sharing experiences in the learning groups in relation to improvement of practice</u>

- Documentation and sharing of experiences and practice among participants to improve practice
- Learning experiences from the field work process
    a. Participants' most important experiences
    b. Personal experiences from the process
- Summary of what I learned from participants' and personal experiences

The data in these themes and sub-themes has been presented in the form word texts (said, done, heard), transcripts of participants' presentations on flipcharts, some participants' documentation on the blogs, image plates (photos together with their textual analyses) and audio recordings for more creativity and increase their validity (Flick, 2006, pp. 284-288). The method and tool of data presentation have depended on which tool gave a more significant evidence of action. Because the participants had a challenge of expressing themselves in English language, their 'living' truth (Whitehead, 2003) would hardly be understood by the reader if presented as citations. I have therefore tried to paraphrase most of their views basing on my understanding, so that the reader understands the research context and what the participants meant.

In the same way, I have not attached participants' name to the data presented because I did not discuss this with them during the fieldwork; apart from their principal, Otim.

3.6.2: Data Analysis and Discussion

The data was sorted, coded and categorized under the three main themes, X, Y and Z.

Theme X: Learning groups' planning, organization and implementation

Theme Y: Learning groups and student-centered learning

Theme Z: Sharing experiences in the learning groups in relation to improvement of practice

Bryman (2001) in Mikkelsen (2005, p. 168) shows the relevance of analyzing data in research. He says;

> *Regardless of which analytical strategy you employ, what you must not do is simply say- 'this is what my subject said and did-isn't that incredibly interesting.' It may be reasonably interesting but your work can acquire significance only when you theorize in relation to it. Many researchers are wary that, in the process of interpretation and theorizing, they may fail to do justice to what they have seen and heard; that they may contaminate their subjects' words and behavior…., your findings acquire significance in our intellectual community only when you have reflected on, interpreted and theorized your data. You are not there as a mere mouthpiece.*

Bryman's quotation above indicates that much as analysis of my data is important in attaching significance, reflection, interpretation and theorization; there is a risk of importing my own motives, values and preoccupations into the data analyzed and hence failing to do justice to what I saw or heard; which contaminates the subjects' words and behavior.

With an aim of achieving quality of an action report as I develop my educational living theory; I have used descriptive, explanatory and critical frameworks to ensure that my report attains multiple layers of increasing complexity (McNiff & Whitehead, 2009). I have done this using the frames below;

- Frame 1; saying what I did. I have described what happened in the field while working with instructors at NPAYVTC

- Frame 2; explaining why each activity was happening and for what purpose

- Frame 3; reflecting critically on the quality of the descriptions and explanations of actions, and producing an evidence base against which the validity of the claim can be tested.

- Frame 4; referring critically to literature and saying what I incorporate in my thinking, and what I disagree with, which I wish to challenge.

- Frame 5: showing how I am aware of my own biases. It involves understanding how my thinking is influenced by the 'norms' of a culture, and appreciating the validity of other people's opinions.

- Frame 6: showing how I appreciate that I was in a context that is shaped by historical, cultural and economic forces. It means appreciating the need to negotiate and compromise.

- Frame 7: Giving an analysis of the whole action-reflection process.

NOTE: I have underlined the important ideas in the different frames to enable the reader of this report, to understand the important logic and structure I have worked with in my report.

Rayner and Whitehead's inclusionality approach to educational accountability (2009, pp. 9-16) appreciates the role of one's values and those of others in development of one's educational living theory. Oliff-Cooper (2009) in Whitehead and Rayner (2009, p. 14) appreciates values of freedom, responsibility, and professional autonomy with public accountability; as a combination needed for offering a kind of accountability to enhance professional practice, who I also agree with. This also involves recognition of a rationally dynamic influence of one's social, cultural and ecological contexts in his/her learning, learning of others and learning for social change.

In my understanding, Rayner and Whitehead believe in co-existence where much as things may exist as particulars, they need each other for their proper functioning. I learned and agree with their argument that; one's ontological commitment to a passion for his/her values has its roots in significant events in the past (historical influences continue to influence what one does). Bearing this mind, I have used digital technology (audio recordings, photographs in image plates (photos with their textural analyses) as well as word texts in communicating meanings of flow of life affirming energy, with the values the instructors at NPAYVTC expressed during our educational relationships. Huxtable (2009) in Whitehead and Rayner (2009, pp. 19-20) demonstrates how my use of audio recordings and photographs provides evidence for justification of claims, that inclusional values that are being expressed in the embodied knowledge of the instructors at NPAYVTC; provide explanatory principles and living standards of judgment for a form of educational accountability.

3.7: Summary of Chapter Three

The research was planned to proceed in two phases that is October-December 2009 and January 2010. This was however not the case because the NPAYVTC time schedule changed which consequently influenced our mode of action. The second phase did not proceed at all because of some health complications, fear of the political situation in the country at that time as well as the urgent need to return to Norway before 1st February, 2010 asked by HiAk.

In this research, I used a participatory action research (PAR) approach which I appreciate as 'a reflective process of progressive problem solving led by individuals working with others in teams or as a part of a CoP, to improve the way they address issues and solve problems.' This consequently led me to Whitehead and McNiff's action research living theory concerned with the question of "how can I improve my practice?"

The instructors were not having learning group meetings at their section level as earlier learned. The participants in the study were willing instructors and Otim; who were practitioners in my practice and chose not to follow-up a series of SCL activities with their students; but rather practiced 'peer teaching' in our groups. Since they preferred their groups to be formed at the section levels, the number of participants in each group depended on that. They decided to have a general meeting for NPAYVTC and meetings at section levels every week. The sections' learning groups were two with participants' number 2, 3 for BCP and C/J sections respectively. The third section's group was supposed to be adult literacy but did not meet on a weekly basis because only one participant was interested in the process. This participant met with the NPAYVTC learning group; and number of participants in this group varied from 5-7 for the different subsequent meetings held.

To assess the quality of my findings, I referred and used the action research living theory (Whitehead & McNiff, 2006), inclusionality approach to educational accountability (Whitehead & Rayner, 2009), communicative and pragmatic validity (Kvale, 1989), and creative ways of documenting research in improvement of one's own practice and related validity issues. I used three basic methods of validating the findings for this study that is; continuous analysis and reporting to receive feed back from the participants, the action reflective cycle with the participants as well as triangulation.

The research was taken from a holistic approach to problem solving, where all the research activities were interrelated and four research methods were used that is; qualitative semi-structured and conversational interviews, learning group dialogues, participant observation and continuous analysis and reporting during this research with participants'

awareness. These methods were supplemented with several research tools which included audio recordings, note-taking, log writing and digital photography.

The data was presented using three themes; X: learning groups' planning, organization and implementation, Y: learning groups and student-centered learning and Z: sharing experiences in the learning groups in relation to improvement of practice. These themes have been developed from the research questions of the study. I have then sorted, coded and categorized the data in themes X, Y and Z into various indicators or sub-themes developed from related literature of learning group dynamics, reflections during preliminary research activities and experiences from the research process. The data in these themes and sub-themes has been presented in the form word texts, transcripts of participants' presentations on flipcharts, some participants' documentation on the blogs, image plates and audio recordings (Flick, 2006, pp. 284-288). Because the participants had a challenge of expressing themselves in English language, their 'living' truth (Whitehead, 2003) would hardly be understood by the reader if presented as citations. I have tried to paraphrase most of their views basing on my understanding, so that the reader understands the research context and what the participants meant. I have also not attached participants' name to the data presented because I did not discuss this with them during the fieldwork; apart from their principal, Otim.

To achieve quality of an action research report as I develop my educational living theory, I have described what happened in the field while working with instructors at NPAYVTC; explained why each activity was happening, and for what purpose; reflected on the quality of the descriptions of actions; engaged critically with literature, saying what I incorporate in my thinking, and what I disagree with; tried to demonstrate that I am aware of the influence of my own biases as I discuss the data; appreciated the need to negotiate and compromise, due to historical, economical and cultural influence; and analyzed the whole action-reflection process. This was done in chapters four, five and six of my report.

I have also used Rayner and Whitehead's inclusionality approach to educational accountability (2009, pp. 9-16), which appreciates the influence of values, social, cultural and ecological contexts in communicating meanings of flow of life affirming energy; as well as embodied knowledge of the instructors at NPAYVTC expressed during our educational relationships, to offer a kind of accountability and to enhance professional practice. Audio recordings and photographs were used to attain justified evidence to our knowledge claims.

CHAPTER FOUR

4.0: DESCRIPTIONS, EXPLANATIONS AND ANALYSES OF THE STORY OF ACTION

This chapter presents the descriptions, explanations and analyses of story of action; showing the situation as it unfolded as well as my research experiences, and what I have learned from the process. With an aim of developing a shared understanding of the usefulness of learning groups, as a part of the methodology in Student Centered Learning (SCL); the problem statement that guided the study is: *how can I develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator?*

The instructors were practitioners in my practice, whose learning I was trying to influence; and they chose not to follow-up a series of SCL activities with their students, but rather practiced 'peer teaching' in our groups.

I have therefore described what happened in the field while working with instructors at NPAYVTC; explained why each activity was happening, and for what purpose; and critically reflected on the quality of the descriptions and explanation of our (participants and I) actions, in order to produce a valid evidence (*see frames 1, 2 and 3 in section 3.6.2*).

The data has been presented using three themes X, Y and Z, which were developed from the research questions of the study as below:

Theme X: learning groups' planning, organization and implementation

- How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?
- How have these learning groups been organized (leadership, contract or rules)?

Theme Y: Learning groups and student-centered learning

- What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?
- What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experiences related to this?

Theme Z: Sharing experiences in the learning groups in relation to improvement of practice

- How have the instructors been documenting and sharing their experiences and practices as a team?

- What have been the most important experiences discovered in the learning groups meetings?

The data under themes X, Y and Z has further been coded and categorized into various indicators or sub-themes developed from related literature of learning group dynamics, reflections during preliminary research activities and experiences from the research process.

Theme X: learning groups' planning, organization and implementation

- Planning meetings with Otim and Heads of sections
- planning meetings with all willing participants
    a. Criteria of learning groups' formation
    b. Day, time, duration and frequency of learning group meetings
    c. Venue for the learning group meetings
    d. Organization of learning group (having a leader, rules or contract) formation

Theme Y: Learning groups and student-centered learning

- Participants' definitions and characteristics of a learning group
- Participants definitions, characteristics and indicators of SCL
- Influence of the gender aspect to an effective learning group dialogue

Theme Z: Sharing experiences in the learning groups in relation to improvement of practice

- Documentation and sharing of experiences and practice among participants to improve practice
- Learning experiences from the field work process
    a. Participants' most important experiences
    b. Personal experiences from the process
- Summary of what I learned from participants' and personal experiences

The data in these themes and sub-themes has been generated from and presented in the form word texts, transcripts of participants' presentations on flipcharts, some participants' documentation on the blogs, image plates and audio recordings of the participants and me (Flick, 2006, pp. 284-288). The data is in form definitions, explanations and experiences accompanied with reflections.

In response to these questions, four research methods were used that is; qualitative semi- structured and conversational interviews, learning group dialogues, participant observation and continuous analysis and reporting during this research with participants' awareness using a holistic approach where all research activities were interrelated. These methods were supplemented with several research tools which included audio recordings, note-taking, log writing, and digital photography.

The participants' 'living' truth (Whitehead, 2003) has been paraphrased to enable the reader understand the research context and what the participants meant; because the participants had a challenge of expressing themselves in English language. Similarly, their names have not been mentioned in this report because I did not discuss this with them during the fieldwork; apart from their principal, Otim.

4.1: Learning Groups' Planning, Organization and Implementation

The important findings in <u>theme X: learning groups' planning, organization and implementation,</u> have been generated from the research questions 1 and 2 below:

- How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?

- How have these learning groups been organized (having a leader, contract/ rules and regulations)?

The data in this themes is presented in sub-themes which are; planning meetings with Otim and Heads of sections, planning meetings with all willing participants, criteria of learning groups' formation; day, duration and frequency of learning group meetings, venue for the learning group meetings, organization of learning group (having a leader, rules or contract) formation.

4.1.1: Planning Meetings with Otim and Heads of Sections

When I reached the field, I reported to Otim, the principal of the NPAYVTC and other administrators available. I also informed them why I was at the centre. To understand the context in which we could operate, five meetings were held with the principal and I, and one meeting with the principal, heads of sections and I. These meetings were aimed at planning together with them, so that every participant feels seen and recognized for a more sustainable process.

In a dialogue with Otim, I asked whether he had a drawn any plan in preparation of how we were going to work together.

He informed me that he did not have any plan and was waiting for me, so that we draw the plan together. We then agreed to do that with all other participants interested in this process. This consequently led me to another question of what he wanted me to help in at the NPAYVTC towards SCL. He mentioned that they needed "redirection" and gave an example of the blogs. With a validation question about what 'redirection' meant to him in relation to SCL, he mentioned that it was opening of blogs, getting more information about SCL, and documentation of practice. Otim's not having any plan could be attributed to the influence of the teacher-centered approach to learning; where the teacher chooses what is to be done. This was also evident when the he mentioned that they needed 'redirection.' Not having a plan may also be affiliated to Otim's busy schedule, and lacked time to do so.

Otim and I also discussed the plan for meeting all the willing participants and I suggested to him, reading through my tentative methodology for this process. We agreed and I sent him a copy of the methodology to read through, and give his feedback about it. I however did not receive any feedback from him.

The principal also had no suggestion of the day we could meet all the other participants by the time of the subsequent meeting. He then suggested putting up a notice for a meeting with all the willing participants. I also suggested inviting the heads of sections to a meeting, to discuss a date and time for meeting all willing participants. The reason for my suggestion was to promote a more democratic process in decision making related to planning; which is characteristic of SCL.

Subsequently, Otim informed and invited the heads of sections for a meeting the day after at 11; 00am. The meeting was attended by five participants that is; the principal who chaired it, three participants who were representative of the adult literacy department, BCP and C/J. Tailoring, tie and dye section was not represented in the meeting because their head had a court case.

The meeting was aimed at setting a day, date and time when we could have our first general meeting with all willing participants, to draw our plan of action for the period of October-December, 2009.

In Otim's introduction to the meeting, he referred to the workshop held in February 2009 about 'improvement of practice' which I was a part of, as a foundation for my being back at NPAYVTC. As a facilitator, this laid a foundation for a good dialogue with the participants, which reduced tensions that may have been created by my presence. This was evident later on when the participants willingly shared their views about meeting dates; day and time (r*efer to recording 1 of appendix 2*).

Another point raised in his communication was documentation of practice on the computer and also in groups, which according to him meant; typed out on the computer, posted on the blogs or printed out in preparation for a discussion with the rest of the participants.

According to me, documentation of practice on computer was a good starting point for someone developing his/her living theory of practice. He also referred to documentation in groups which may imply that he viewed learning groups as useful methodology in NPAYVTC's improvement process.

He also mentioned of a summing up of our activities of October-December, 2009 in January, 2010 and be awarded (certificates or diplomas) according to each one's performance through his/her documentation. This presents learning as a build-up of small short processes. It can also be interpreted as the TCL where; the learning outcome is the focus rather than the learners and the process.

Referring to section 3.2 of chapter three, the second phase of the process did not take place; therefore awarding certificates or diplomas was also not done. On the other hand, the validity of this explanation was questionable because little was documented from the many meetings and discussions held (*refer to* http://otim-yvtc.blogspot.com/).

Otim also introduced other participants who had attended the meeting and their sections. His reasons for this were that, some instructors at the center could not read or write or express themselves in English. The validity of this claim was questionable because much as the center had instructors with a language challenge, all those who attended this meeting could read, write and express themselves in English to a certain degree.

According to me, introducing the attendants was a good initiative but for a more democratic environment where, all participants are seen and recognized; requesting participants to introduce themselves would be better. According to me, this would create a good foundation for an effective dialogue with the different participants for them to express their views.

The participants experienced difficulty with communicating in English but this did not limit their contribution to the discussion at hand (*refer to recording 1 of appendix 2*).

He further mentioned that both Dr. Elias and Nina were aware of my presence at NPAYVTC. This in mind could be one way of promoting sustainability of the process, because the different levels of the organization were involved in decision making; hence justifying the action-research approach. The quality of the action- research report could be questionable because these two administrators hardly gave any feedback to my written plan for the fieldwork as well as the field logs written during the course of this field work *(refer to*

appendix 1 and 4 for the fieldwork plan and logs respectively). This was de-motivating to me as a facilitator and was unable to write my logs as close to the experience as advised; knowing that the administrators' input was minimal.

The three other participants also gave their suggestions and contributions to the meeting discussion.

Participant one appreciated the program as a good one for each one's development, but suggested the program to be pushed to next year because the instructors were very busy with their students (setting examinations, revision, and practical analysis as well as covering the syllabus). Otim, the principal disagreed with him, with a reason that I was already in their midst. This according to me could have affected the participant's involvement in the development process between October-December. This participant did not attend all the meetings and hardly documented anything on his blog from the meetings he attended (*refer to* http://nucoop-abraham.blogspot.com/).

 This can also be attributed to the fact that he was taking up lessons for his Sudan School Certificate (SSC).

Participant two appreciated the program and suggested two or three times in a week as good times, which would not interrupt their programs with their students. He also suggested Saturday as a meeting day where; the participants could meet for two or three hours to share their experiences from their groups. Similarly, Otim intervened and mentioned, 'meeting three times in a week will be many times for me.' He alternatively suggested meeting once a week where; the participants would review their experiences in the groups as documentations, to receive feedback from different participants.

There were arguments for and against the suggested ideas, and I redirected the meeting by reminding the participants about the agenda for the meeting; which was setting a date and time for meeting willing participants, to draw our operational plan.

Participant three expressed her fear of disappointing me because of the nature of their work at the center. In my mind, disappointment was not something to worry about and I mentioned so. 'Disappointment' to her meant 'failure to meet at the agreed time with other participants.' According to me, disappointment would be a consequence of lack of commitment and accountability towards what each individual chose to be a part of.

As the three participants shared their ideas towards the discussion, I observed that their principal, Otim interrupted their discussion; and some participants stopped sharing of ideas. According to me, Otim was demonstrating his authority as the principal of NPAYVTC; which

led to him dominating the meeting, and suppressed some participants' ideas and participation in the process. The third participant for example, chose to keep quiet when Otim interrupted her views related to learning group (*refer to recording1 of appendix 2*). It cannot however be undermined that her being a lady could have been influential. This experience may also be attributed to TCL culture or influence; where the teacher or leader thinks, talks and knows everything the student needs (Freire, 1972).

In relation to the aim of the meeting, none of the participants had suggested a day, date and time for planning with the willing participants and Otim suggested a meeting on Monday 26th October, 2009. Similarly, Otim portrayed his role as the principal and made the decision as a leader. Other participants' contributions could have been influenced by the TCL where the teacher plans and decides what is taught and the students adhere. This is also evident when all the Participants agreed about meeting on Monday 26th Oct in the meeting hall (r*efer to recording 1 of appendix 2 and appendix 3*).

Different meeting times were however suggested that's 11; 30 and 11; 00. Majority of the participants agreed about 11; 00am and the meeting to last for two hours *(refer to appendix 3).*

Because of the observations and reflections from the meeting with the heads of sections, I shared the minutes from that meeting with the principal; and he suggested Saturday 24th October at 11:00am, as appropriate for validation and receiving feedback. Validation was useful to me as a facilitator because I learned different interpretations of terms and words as used in one's speech. This has helped me to be more accurate before drawing conclusions related to aspects discussed.

It also availed an opportunity for me to give and receive some feedback about what I had heard and interpreted from the meetings. These interpretations and reflections could perhaps help the individual participants to improve their practice; through discovery new ways of doing certain things for example, how to chair a learning group meeting with improved participation. A case in point was when Otim introduced the participants himself other than each individual participant introducing him/herself. After discussing my reflection about this with him, he invited the willing participants to each introduce him/herself in the planning meeting held on 26th October, 2009 (r*efer to recording2 of appendix 2*).

4.1.2: Planning Meetings with All Willing Participants

The data in this sub-theme has been presented using five indicators which are respectively; criteria of learning groups' formation, day and duration of learning group meetings, frequency

of learning group meetings, venue for the learning group meetings, and organization of learning group (having a leader or rules).

4.1.2.1: Criteria of Learning Groups' Formation

Referring to section 3.3.2 of chapter three the participants were not having previous learning group meetings at their section level, and new groups were formed. To take care of participants' views and ensure a democratic process, I inquired about how the participants wanted the learning groups to be formed (*refer to a transcript of photograph 1 of flipchart in appendix 5*).

The participants were quiet for some time, and two participants later suggested: 'to be given a topic at their 'units' for a meeting once a week' and 'forming groups according to interests, sex or departments' respectively (*refer to recording 2 of appendix 2*). These suggestions were made by male participants. It was unsatisfactory to me as a facilitator that these suggestions were representative of the fourteen participants who attended that meeting, on addition to them being made by male participants. To validate these suggestions, I repeated and summarized them on the flip chart for the different participants to read. This was aimed at creating an opportunity for the participants to give feedback (arguments for and against); but nothing was said.

To test the applicability of group formation criteria chosen, I requested the participants to join up with members of their sections to share and discuss their views with guiding questions below (*refer to a transcript of photograph 2 of flipchart in appendix 5*);

      i)   How often do you want to meet?

      ii)   Where do you want to meet?

      iii)   When do you want to meet?

      iv)   Would you want to have a leader in your group? If yes, choose one

      v)   How would you want to share/ document your experiences from the groups?

Pictures 1-3 respectively: *Different participants were discussing the questions above in their sections' learning groups. Whereas picture 1 and 3 portray a good learning group dialogue, picture 2 seems to be demonstrating individualized work according to me. The lady was reading a book as the gentleman wrote down the questions. The male participant also represented the group ideas.*

After a while, each group chose a representative who presented their views to all of us. Not surprising was that BCP learning group was not to meet at section level because one of the two participants (*refer to picture 3*) was busy with his SSC; proposed a general meeting instead. Similarly, the tailoring, tie and dye section preferred one general meeting once a week, and suggested to belong to groups with other sections (mix-up of participants from different sections). This verifies my uncertainty about the group formation criteria that was chosen.

Adult literacy section suggested both departmental and general learning group meetings, once a week. The C/J learning group preferred departmental meetings.

There were arguments for and against departmental learning group meeting which in mind could have been affiliated to a mind-set of discussing content in these learning groups; and not how to facilitate learning. I therefore emphasized that the groups would not necessarily discuss content but rather learning facilitation. I further suggested that either departmental or mixture of participants or both were all good options, depending on what they preferred. There was further discussion and Otim suggested leaving out general meetings because they would make decision making challenging. This led to another argument of either participants dividing in two groups; two sections to form a group or maintain departmental groups (*refer to recording 2 of appendix 2 and field log one on appendix 4).*

While considering the different suggested criterion for learning group formation above, the participants agreed about one general meeting (mix-up of participants); which split to two departmental meetings. The participants who were not comfortable with departmental meetings were free to join up any group they felt comfortable to be affiliated with.

Because participants had different suggestions related to how they wanted their groups to be formed, the agreed criteria could have hindered some participants' involvement in this development process; for example some attended only the planning meeting and did not attend any other meeting.

The answers to questions i-v have been discussed in the subsequent themes and subthemes and sections following a discussion these participants had the week after.

4.1.2.2: Day, Time, Duration and Frequency of Learning Groups' Meetings

General or NPAYVTC Learning Group Meetings

BCP, adult literacy and tailoring, tie and dye learning groups preferred Friday meetings for two hours; but their meeting times varied that is; 11:00-13:00, 10:00-12:00 and 14:00-16:00 hours respectively.

The participants finally agreed to meet for two hours from 11:00 to13:00 hours every Friday. During implementation, some of the participants hardly kept time and needed to be reminded about the meetings all the time. Others were unable to attend the meetings completely because they would have travelled or 'busy' with their daily activities. This to me required responsibility and commitment to what they decide to do. I also appreciate that these participants had other responsibilities which could keep them occupied but this was hardly communicated in advance. Being a learning process which needed time and patience, the participants are still learning how to cooperate in a learning group.

Five general meetings on dates 26th October, 6th November, 13th November, 20th November and 27th November were held respectively. A concluding or evaluation meeting for the October-December, 2009 activities, was also held on 1st Dec, 2009.

The participants agreed to have one general meeting once a week. One participant attending the NPAYVTC learning group meeting was not having departmental meetings and for continuity; it could have been more meaningful to her, if this meeting was held twice a week (r*efer to recording 2 of appendix 2).* However, it would perhaps be unfair to other participants meeting at their sectional levels; considering their busy schedules. This implied that the one participant hardly had any one to discuss and share within the course of the week. Evidence to this claim is that this participant did not have anything documented for all the meetings attended (*refer to* http://nucoop-nasra.blogspot.com/). She also hardly had her personal study using the experiences from the meetings, whereas other participants would try to have it done. A case in point was in the 3rd general meeting held on 13th November, 2009 where; she said that she had not done the personal study, hence had not discovered anything (*refer to recording 4 of appendix 2).*

Departmental Meetings

Much as three sections were consistently represented in the NPAYVTC learning group, two sectional learning groups were operational that is; C/J with three participants, and BCP with two participants.

C/J Learning Group

In a planning meeting with this learning group held on 3rd November, 2009, I asked the three participants to discuss the questions below;

- How many times shall we meet in a week?
- How long will our meetings last?
- When shall we be meeting?

The participants discussed and agreed to have two meetings every week each lasting for 45 minutes, Monday and Thursday. I suggested to them the idea of planning for their meetings with or without a facilitator, and they preferred to have the Monday meeting without a facilitator and Thursday meeting with a facilitator.

Three meetings times were also suggested that is; 11:00, 14:00 and 17:00 hours. Some participants did not agree on 17:00 hours because they would be so tired at that time. The participants agreed to meet at 11:00 and 14:00hours on Monday and Wednesday respectively. Subsequently, C/J learning group and I had four meetings between November and December, 2009; held on the 3rd, 9th, 12th and 19th November respectively.

Implementation of the Monday meeting without a facilitator was doubtable and for follow-up reasons, I went to the meeting venue twice to check out what the participants were discussing. The first time, the participants informed me that they had changed the meeting time from 11:00 to 14:00 hours. At 14:00 hours, the participants still reported late for meeting and one of them informed me that, "we did not know that we are supposed to meet." Another one said, 'In this meeting, only three of us (Otim and two other participants) are supposed to meet.' This according to me was an excuse because the two participants other than Otim had hardly documented anything from the two departmental meetings held earlier. One of the two participants later mentioned that he could not remember what we had agreed about, in relation with their departmental learning group meeting because he had not documented it. Consequently, the participants changed from meeting twice a week with and without facilitator (me) to meeting once a week with me, and share their ideas via the blogs during the second meeting time *(refer to recording6 on appendix 2)*. Sharing via the blogs, as a replacement for the meeting twice a week was also hardly done (*refer to* http://nucoop-yaka.blogspot.com/, http://joseph-nucoop.blogspot.com/ *and* http://otim-yvtc.blogspot.com/).

One may interpret this as lack of commitment to the process or failure to take up responsibility for their learning process. It can also be related to influence of the TCA culture.

BCP Learning Group

In a 15 minutes' meeting held on the 5th November 2009, the two participants (one male and female) of the BCP learning group shared with me their preferred meeting day, time, duration and frequency from discussion of questions i-iii highlighted in section 3.1.2.1 of this chapter. One of them reported that, 'we'll meet once a week during the morning hours for one hour.' This was done in his consideration to attend lessons for his SSC at 1400 hours daily. The meeting day had no been suggested and I used a phrase 'failure to plan is planning to fail' to address this challenge. Subsequently, I suggested planning and agreeing about a time and day to ease our collaboration and make it more effective. The participants hence suggested Monday, Tuesday and Wednesday and through discussion, they agreed to meet Wednesday at 9:00 hours (*refer to field log 3 in appendix 4).*

The implementation of the meeting day, time and duration was challenging partly because of the number of participants (2) in this learning group. We missed several meetings mainly because one of the two participants was unavailable; and the 2nd participant would also not turn up for the meeting. According to my experience; the number of participants in the group, participants' level of commitment to the process, SSC studies and other responsibilities; influenced the level of activity in this learning group. Consequently, two learning group meetings were held that is; 5th and 18th November, 2009 respectively.

The group also had a challenge of communication; the participants would hardly communicate changes in their learning group meetings, which necessitated me to look for the meeting details prior to the meeting. Referring to picture 2, these participants were occasionally acted independently, even when they decided to work in a group.

The group might have functioned better if there was good communication, increased participants' number, commitment to the learning group and not least 'participatory leadership'.

4.1.2.3: Venue for the Learning Group Meetings

The learning group meetings were all held within the premises of NPAYVTC. The participants agreed about meeting in the NPAYVTC meeting hall for their general meeting. The C/J learning group meetings were also held at the same venue whereas the BCP learning group meetings were held at their section's office.

I was optimistic that the meeting venues would influence the learning group meetings very positively; since all of them were within the participants' working environment, but this had some challenges. The meeting hall was advantageous because it had chairs to sit on, flipchart board for the flipcharts, and a white board for writing on. However, the meeting hall

was usually used as a workshop or meeting venue for NPAYVTC, governmental and non-governmental organizations; which affected the efficient functioning of the learning group meeting to be held. Whenever the room was booked for other activities, the learning group meetings would not be held, for example; C/J learning group meeting scheduled for 5th November, 2009 was not held because the venue was booked for another administrative meeting. As a facilitator, I suggested to the group to meet at their section's office whenever the meeting hall would be occupied; and in their meeting on 12th November, this was implemented. This venue was limited by lack of writing board or flipchart board and we improvised by importing a flip chart from the meeting hall, which we pinned on a nail in the office. Secondly, the office was located close to the workshop with a lot of noise; which interrupted the learning group dialogue to some extent. There were also interferences from students who frequently moved in and out of office; which could have hindered an effective learning group dialogue.

Similarly, the BCP learning group venue was limited by absence of a board where participants would write out and share their ideas. We therefore improvised and used plain paper as a writing area but this was not big enough for everyone to see and read the written ideas clearly. This according to me could have hindered experience sharing in the learning group.

4.1.2.4: Organization of Learning Group (Having Leader(s) or Rules)

Referring to a transcript of a photograph of flipchart 2 used on the 26th October, 2009; question (iv) required the participants to decide whether they wanted to have a leader in their learning group and if yes, to elect one. BCP learning group suggested a leader who was not a part of their group, may be because they were not comfortable with departmental learning group meetings (*refer to section 3.1.2.1 of this chapter*). Tailoring, tie and dye group wanted a leader but did not choose one (*refer to recording 2 on appendix 2*). Adult literacy group promised to elect their leader (*refer to a transcript of a photograph 3 of flipchart in appendix 5*), whereas the C/J learning group wanted to have a leader rotated on a weekly basis.

Realistically, having a leader was not a well implemented aspect in the NPAYVTC and sections' learning groups because some of the participants, who attended the meeting on 26th October, 2009 did not continue with the process. Secondly, the participants who continued had a challenge of documentation, which normally led to forgetting their raised ideas for example C/J group members did not implement their weekly rotational leadership until I reminded them about it (*refer to recording 6 in appendix 2*). During this meeting, two participants of the C/J learning group, other than Otim had not documented anything from the

meetings of 3ʳᵈ and 9ᵗʰ November, 2009 (*refer to* http://otim-yvtc.blogspot.com/). I further reminded them of willingness as the basis for effective participation in the process. This consequently led me to a question, "*what do we need to do for every one of us to feel comfortable (respected) in this group*?" One of the participants interpreted this as not being committed because of agreeing on several issues which were hardly followed or implemented; which influenced my attitude. He therefore suggested 'reorganizing and following up of rules.' Another participant suggested election of chairman and secretary of their learning group. I also mentioned that we could not follow rules that we had not set; which led me to another question as, "*Do we need to set rules*?" The participants were hesitant about setting up rules and I explained why I thought rules would help each one of us to be responsible, as well as promoting self evaluation. The participants' suggestions of rules were related to punctuality, every one's participating, communicating to everyone in case of failure to attend meetings. I also suggested two ideas related to group participation that is, agreeing that "all of us like what is good for each other ('I' expressions be replaced by 'we')" and "ask for clarifications during the learning group discussions." We discussed what each of these suggestions implied and some of the ideas raised during the process were, 'no criticising each other' and implementing an idea even when you are not the person who raised it'; to promote democracy and responsibility (*refer to recording6 on appendix 2).*

To effect self evaluation, I further suggested that the group decides on a leader for the weekly meetings as well as writing out the rules and regulations clearly on a paper for our reference. The participants selected a leader for the upcoming week that also had to write out the rules and regulations for our reference (*refer to a transcript of a photograph 4 of flipchart in appendix 5*).

BCP learning group meeting had no ground rules or contract set and this may have affected the quality of the learning group dialogue.

During the NPAYVTC meeting held on the 20ᵗʰ November, 2009 one of the two groups discussing the 'characteristics of a learning group' mentioned rules as one of them (*refer to a transcript of a photograph 5 of flipchart in appendix 5*).

NPAYVTC learning group had no ground rules written out but in a meeting held on the 13ᵗʰ November, 2009 where; we discussed what a learning group is and its characteristics, one of the raised characteristics of a learning group was 'rules and regulations' (*refer to a transcript of a photograph 8 of flipchart in appendix 5*). One of the two groups *(see pictures 4 and 5)* had not suggested rules and regulations but in their explanation of one their learning group characteristics (organized), they mentioned that rules were incorporated in that. I

expected the participants especially those from the C/J learning group; who had written their rules and regulations the day before to suggest some rules which would be used for the NPAYVTC learning group, but this was not the case. Some of C/J group's rules had been discussed as learning group characteristics for example; willing participation, communication, record keeping (documentation), organization and commitment. Not having rules for NPAYVTC learning group could have hindered its effective dialogue.

I also suggested the idea of having leader(s) in a learning group which the two groups *(see pictures 4 and 5)* appreciated; and the leader(s) would coordinate the learning group meetings. Group 2 however did not suggest having leader(s) as part of their learning group characteristics (*refer to a transcript of a photograph 8 of flipchart in appendix 5*).

To implement their desired idea, I suggested that the chairs the learning group meetings, since the participants chose not to follow-up a series of SCL activities with their students *(refer to section 1.5 of chapter one)*. As practitioners in my practice, I hope that chairing meetings would help them improve their practice through 'peer teaching'. Otim suggested a weekly rotational leadership; where names of leaders for the upcoming weeks were also raised. There were arguments for and against the names of leaders and one participant was finally chosen as leader for the subsequent general meeting (*refer to recording 4 on appendix 2*). This was applied in one general meeting but the leader would always seek my advice.

From a methodological point of view, having a leader to chair learning group meeting would put him/her in an ideal situation of learning facilitation (peer learning); which according to me would cause the leader to reflect on how he/she did it, and consequently develop his/her ability. During the meeting where this was implemented, I observed two cases; too much authority related to decision making(dictatorship) as well as failure to portray some authority (helplessness) (*refer to recording 7 on appendix 2*). This according to me demonstrates a necessary theme in most learning groups to be reflected about; related to how much authority the facilitator should portray. As a facilitator, I raised some questions to the leader whenever I noted the cases of dictatorship or helplessness; for example I asked a question related to how much the discussion would last when the leader had not suggested anything. His view was that the discussion time depended on participants; which according to me portrayed helplessness. Another case was when he gave all participants five minutes to discuss the three questions under discussion (*refer to recording 7 on appendix 2*). I observed that he was not

considering the two participants who were not a part of the previous meeting. I therefore suggested that these two participants be distributed among the two groups of participants who had attended the previous meeting. This was aimed at ensuring that the participants' differences are considered; which shows that they are seen and recognized. The long-term goal was to bring about diversity of ideas during the learning group dialogue.

Having a leader(s) to chair learning groups meetings and enhance peer teaching did not present a real classroom situation; because the leader had a different mindset related to the kind of participants he/she was working with. The way one acts with colleagues differs from how s/he does with students, and a real classroom experience may not be achieved.

4.2: Learning Groups and Student-Centered Learning (SCL)

The important findings in theme Y: learning groups and student-centered learning have been generated from research questions 3 and 4 below;

- What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?
- What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experiences related to this?

The data in this theme is presented in sub-themes which are; participants' definitions and characteristics of a learning group, participants' definitions, characteristics and indicators of SCL; and influence of the gender aspect to an effective learning group dialogues. This is because the study was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL.

4.2.1: Participants' Definitions and Characteristics of a Learning Group

In this sub-theme, I have presented data related to definitions and characteristics of learning groups in two sub-sections.

In a meeting held on the 6th November, I left the participants with an experience for self-study related to 'what a learning group is' and 'the characteristics of a good learning group'; in preparation for the next general meeting. In the meeting held on the 13th November, one participant (lady) who attended that meeting had missed the previous meeting. The second lady had attended the previous meeting but had not done her self-study in relation to the experience. The three gentlemen who attended the meeting were all from C/J learning group and had done their self-study individually (*refer to recording 4 on appendix 2*).

To cater for the individual differences and learn from the male participants' discoveries; each of the gender categories (male and female) came together and discussed the two questions (*refer to a transcript of a photograph 7and 8 of flipcharts in appendix 5*).

Answers to these questions after our discussion have been discussed in the sub-sections below.

Pictures 4 and 5: *Groups 1 and 2 respectively formed according to gender categories. The participants were discussing their understanding of a learning group. I observed that there was a good learning group dialogue and the participants were contributing to the discussion. This was evident during the learning group presentations.*

4.2.1.1: Definitions of a Learning Group

For the lady participants to be encouraged during this discussion, I gave them the first priority; not necessarily because I am a lady but rather, to ensure that they feel seen and accepted despite of them missing the previous meeting and not carrying out a self-study respectively. From the methodological aspect, it cannot be undermined that this could have been influenced by my value of 'equality for all' as well as being a lady.

Referring to pictures 4 and 5 above; groups 1 and 2 defined a learning group as '*a group of people which comes together to share their knowledge, skills or ideas*' and '*a group formed of 3-6 people to share their ideas on how to improve on their practice*' respectively (*refer to a transcript of photograph 7 of flipchart in appendix 5*).

These definitions led me to a dialogue with all participants where; I shared what I understood by their definitions and suggested some ideas in an attempt to develop a shared understanding. 'Coming together' meant face- to-face meeting; 'share knowledge' meant discussing and improving practice related to achieving an individual or common goal. This was a way of mirroring what the participants had mentioned, as well as affirming my interpretations related to their understanding.

I also suggested that the participants in the learning group agree or plan to meet (when, where and how long) with an example of their learning groups. Furthermore, I suggested the number in a group can also be two (2); to justify BCP learning group which had two participants. Since participants had mentioned 'face-face meeting', I suggested an alternative of a web-supported discussion.

Learning being a process; I suggested that the participants join up with their group members, to generate a new learning group definition.
Group 1 and 2 discussed and generated their new definitions as; '*an organized team meeting together to share or discuss knowle*dge, *skills, ideas and experiences; either physically or via emails, blogs, to mention but a few'* and '*a group of 2-6 people who agree to meet and share their experiences for achievable goals, either physically or via computer supported network*' respectively.
According to me, their new definitions were influenced by my suggestions as well as their experiences as participants in learning groups.

In order to develop a shared understanding of a learning group from their new definitions; we selected the most relevant ideas and we defined a group as; '*an organized team of 2-6 people who agree to meet and share or discuss their knowledge, skills, ideas and experiences for achievable goals either physically or via a computer supported network.*'
There were arguments for and against each group's definitions and as a facilitator, I suggested that each of the participants writes out his/her definition of a learning group and post it on his/her blog; as their selected tool of documentation. One of the five participants who attended the meeting wrote out his definition and posted it on his blog while others did not (*refer to* http://otim-yvtc.blogspot.com/, http://joseph-nucoop.blogspot.com/, http://nucoop-nasra.blogspot.com/ *and* http://nucoop-yaka.blogspot.com/).

The participants of the BCP learning group were unable to attend the meeting on 13th November, 2009. To learn their understanding of a learning group, we discussed what a learning group is and its characteristics in their meeting of 18th November (*refer to recording 8 on appendix 2*). The two participants defined a learning group as '*in the learning group, a learner takes a full responsibility for his/her learning'* and '*a collaboration where people come together to share ideas and discuss together, in order to learn together'* respectively. These definitions according to me were different and I challenged the second participant by questioning how the participants in the learning group come together; where I also suggested 'agreement'. The participant understood 'agreement' as a characteristic of learning group and

he mentioned other characteristics like; cooperate, participate, help each other and know each other.

To develop a shared understanding of a learning group, I inquired about how many people a learning group could have. One participant mentioned '*coming together to identify what you want to learn.'* My interpretation of this was that the participant did not understand the question being asked. The response did not match with the asked question. I presume that there was a communication or interpretation challenge in the group.

Another participant mentioned that 'one participant cannot be in a learning group. 2-4 people can share ideas and learn something which you may never have heard of'. I also suggested that the group could have more than four people although four has been recommended as a good number.

I further suggested that before participants in the group come together, they agree and that makes a learning group an organized group; meeting can either 'face-face' or via computer-supported network; for them to continue discussing even when they cannot meet 'face-face' .

I then mirrored what participant one and two had earlier mentioned of each participant taking responsibility for his/her learning when learning is facilitated in a group, and identifying what the participants want to learn as a 'common goal'.

Subsequently, the participants discussed and developed their shared understanding of a learning group as '*an agreement between 4-6 people to learn together physically or via a computer-supported network. They should have aims and fully participate to achieve a common goal.'* These participants were asked to document what they had learned on their blogs as agreed upon. One participant documented something for her blog (http://nucoop-clara.blogspot.com/) while the second participant's blog was not active, hence did not write.

4.2.1.2: Characteristics of a Good Learning Group

Referring to pictures 4 and 5 taken from the meeting held on the 13th November, 2009; groups 1 and 2 discussed and wrote down their characteristics of a good learning group on flipcharts.

During the group presentation, group1 mentioned and explained their characteristics as; organized (meant having objectives and rules and regulations), cooperate (friendly and work together), flexibility (meant understanding each other), good network (meant communication via telephones or verbally), presentable (meant participating willingly and ready to give), and brainstorm (meant sharing ideas).

These characteristics according to me could have come from their understanding of a learning group and experiences discovered from being a part of a learning group.

Group 2 also presented and explained their characteristics as; be organized, have objectives, keeping records, be committed and should have rules and regulations.

It was surprising that the participants in group2 did not mention some of the ideas raised as their contract in their meeting held on 12th November, yet it was just a day after for example; participation for all, communication, having a leader and time keeping (*refer to a transcript of a photograph 4 of flipchart in appendix 4*). One may interpret this as disagreement about rules but according to me, it may have been the challenge of documenting. It was even evident when one participant in C/J group clearly mentioned that, 'expressing ideas verbally is easy but putting them on paper is hard' (*refer to recording 3 on appendix 2*). Similarly, their leader of the upcoming meeting (19th November) did not clearly write down the rules on paper for our reference, as agreed until the subsequent meeting day (*refer to recording 6 on appendix 2*). This acts as a justification for my claim.

Referring to my experience related to documentation in form of personal logs as well as posting on their blogs while working with the different groups, I emphasized the relevance of record keeping to one's learning process. I also suggested the idea of having a leader where; the participants gave their views about it. The two groups appreciated having a leader who would coordinate the learning group meetings, especially C/J or group 2; perhaps because they were already implementing the idea in their departmental learning group. This group did not however suggest it as part of their learning group characteristics (*refer to a transcript of a photograph 8 of flipchart in appendix 5*); perhaps because they did not realistically mean to implement the idea or their response related to fear of responsibility or as an effect of not documenting. Similarly, learning being a process according to me, the participants may be appreciated to be developing their process; and I suggested that each participant becomes more responsible for his/her learning process.

I also suggested to each group to refer and learn from their different characteristics; and identify some ideas they needed to improve on their lists respectively. This was aimed at encouraging 'learning by discovery' of their most important knowledge.

In a discussion with the BCP learning group on 18th November (*refer to recording 8 on appendix 2*) where, one of the participants of the group was noting the shared ideas; the participants mentioned and the explained learning group characteristics. They include; learning from each other, sharing ideas (cooperation), helping each other, and knowing each other (knowing where each member of the group comes from). Since the participants mentioned about cooperation, I inquired about what we needed to do for us to cooperate well. Cooperation to the second participant meant 'understanding what she is talking. This

participant according to me might have thought that participants in the learning group agree all the time, which is not necessarily the case.

The participants suggested communication as important to achieve cooperation, and they added it to their list of characteristics. I also suggested that 'we should like what is good for each other when in a group and ask for clarification during the discussion'; and explained what I meant by each of them. This was aimed at ensuring that every participant feels empowered to exercise his/her authority; to attain democracy in the group. The participants found the suggestions as good and added them to their list of characteristics.

4.2.2: Participants' Definitions, Characteristics and Indicators of SCL

In this sub-theme, I have presented data related to definitions, characteristics, and indicators of a SCL in three sub-sections. Three questions were used to generate this data which are respectively; what is SCL, what are the characteristics of SCL, and how do you know that you are facilitating SCL?

Referring to a meeting on 13th November, I gave two questions related to what SCL is and its characteristics as experiences for self-study; in preparation for the next meeting.

In the next meeting held on the 20th November where, the group leader chaired the discussions; two of the participants attending had missed the previous meeting. The leader was not mindful of them as they generated answers to the questions; and I suggested the two participants to be distributed among the two groups of participants who had attended the previous meeting. According to me, this would ensure that they are more involved in the discussion; and this was evident during the discussion (*see pictures 6 and 7*). This would also lead to development of a diversified understanding of SCL, since the participants formed two groups, 1 and 2 with participants from different sections.

Pictures 6 and 7: *Are respectively groups 1 and 2 discussing what SCL is, its characteristics and indicators. Group 1 and 2 were a mix-up of participants from different sections*

4.2.2.1: Definitions of SCL

Referring to a transcript of a photograph 5 and 6 of flipcharts in appendix 5; groups 1 and 2 discussed and presented their definitions of SCL as; 'a facilitation approach for students to get involved in their learning process' and 'self-directed learning through sharing experiences in learning groups and internet supported network' respectively. The participants of group1 related SCL to facilitation of students' learning and the teacher functions as a facilitator whereas those of group 2 emphasized self-direction and experience sharing through learning groups, with less emphasis to the need of facilitation. According to me, both facilitation (need of a facilitator) and self-direction are relevant in SCL and learning group could be a means of attaining this. The students' interests, knowledge and experience are also important in this process. Their definitions could have been developed from their previous teaching/learning experiences as well participating in the different learning groups.

4.2.2.2: Characteristics of SCL

Similarly, the participants in their groups 1 and 2 presented their characteristics of SCL (*refer to a transcript of a photograph 5 and 6 of flipcharts in appendix 5).* Their characteristics could also have been developed from their experiences as participants in the learning groups.

During the group presentations, group1 mentioned and explained SCL characteristics as; willing participation of individuals in groups, sharing of experiences, rules and regulations, record keeping, time keeping, and comfort of each participant. Group 2 also mentioned and explained SCL characteristics as; communicating, having interest, being responsible, sharing of ideas, keeping time, correct documentation.

According to me, these participants related SCL characteristics to those of the learning group for example they mentioned characteristics like record keeping, time keeping, rules and

regulations etc. This could be partly because they may have first experienced SCL through their learning groups. This can also be interpreted as learning groups being useful means of facilitating SCL.

It cannot however be undermined that some of their mentioned characteristics like sharing ideas; commitment or willing participation, being responsible and correct documentation are directly linked to SCL.

4.2.2.3: Indicators of SCL

In response to the question related to how the instructors would know that they were facilitating SCL; group1 discussed and mentioned their indicators of SCL which are, when we have the learning group, when learners in the group are participating willingly, and when learning groups have a documentation of what is shared. The participants of group 1 further related SCL to a learning group with characteristics such as documentation and willing participation (*refer to a transcript of a photograph 5 and 6 of flipcharts in appendix 5).* I interpret this in two ways that is; their initial experience related to SCL was through learning group and participants appreciating learning groups as a useful methodology in facilitating SCL. According to me, assessment of learning through learning logs or other tools is important in facilitation of SCL. This is because learning to me is a process (*refer to section 2.1 of chapter 2*); which I find important in SCL.

Group 2 also discussed and mentioned their indicators of SCL; when the students contribute more ideas than the facilitator, when students have improved their practice, and when the student becomes creative. They emphasized that students' generating of more ideas than the facilitator avails him/her time to do his private work, and this helps the student to learn more ideas.

I also relate students' generating of more ideas relevant to both the student and the facilitator being active in the learning process; which helps both of them to improve, other than only the student improving which the participants raised. This makes learning a two way process and not one way. Creativity according to me is important in SCL because the teacher perceives the students as able to construct their own knowledge; implying that the teacher does not view the students as objects to be filled.

In attempt to develop a shared understanding of SCL, I related SCL to educational planning (Tobiassen, 2002) where; I emphasized the teacher's reflection about all the aspects (learner's experiences, subject matter, resources, evaluation, to mention but a few) in the plan. Referring to this model was to help the leader (chairperson) of the meeting to reflect upon his facilitation role, while keeping as close to the students as possible. I am also aware that some

of the terms used in this explanation may have new to the participants in the learning groups, but was an easier way of relating to teaching and learning in a real classroom situation according to me.

4.2.3: Influence of Gender Aspect to an Effective Learning Group Dialogue

Since the study was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL; it was worth understanding the participants' experiences related to the influence of gender and cultural values to the effectiveness a learning group dialogue. The participants preferred to leave the cultural aspect out of their discussion, since they were coming from different cultures; which I respected. Referring to pictures 4 and 5 taken from a meeting held on the 13th November, 2009; the participants discussed this question in their groups 1 and 2.

Group 1 (*see picture 4*) expressed that; ladies are not supposed to speak in the midst of many men; they will be looked at as 'spoilt'. Similarly, women are the inferior, family tails with their work being in the kitchen; whereas the men are superior, family heads, and whatever they say is right. This makes the ladies to feel shy and may not express their ideas freely in public, which consequently leads to overshadowing them. I challenged group about how they would help the ladies in their classrooms or learning group, being aware of that; and they mentioned encouraging them by sharing their examples and experiences. This justifies why I opted and preferred that the ladies and gentlemen discuss their experiences related to this challenge separately.

Similarly group 2 (*see picture 5*) mentioned that ladies fear and feel shy to express themselves in public, which makes them less encouraged to learn. I therefore challenged them related to how they would motivate the ladies in their classrooms to learn where; one of the participants suggested use of techniques to bring them close to the rest of the students in class.

According to me, it was evident that both group 1 and 2 appreciate ladies as shy, and may fear to express their ideas in a classroom or learning group; because they are perceived as weak and inferior, which I occasionally noticed during the learning group discussion. This may be attributed to one's personality or individual differences as well as one's level of self-esteem. I handled this aspect by encouraging the ladies to participate during the discussions as well as paying special attention to them; every time I realized that their ideas were being suppressed.

4.3: Sharing Experiences in the Learning Groups In Relation To Improvement of Practice

The important findings in theme <u>Z: sharing experiences in learning groups in relation to improvement of practice</u> have been generated from research questions 5 and 6 below;

- How have the instructors been documenting and sharing their experiences and practices as a team?
- What have been the most important experiences discovered in the learning groups meetings?

The data in this theme is presented in sub-themes which are; documentation and sharing of experiences and practice among participants to improve practice; learning experiences from the field work process (participants' most important experiences and Personal experiences). This is because the study was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL.

4.3.1: Documentation and Sharing Of Experiences and Practice among Participants to Improve Practice

Referring to a transcript of photograph 2 of flipchart in appendix 5, question (v) required participants to suggest how they wanted to document and share experiences from their learning groups. Some participants suggested blogs whereas others did not suggest any (*refer to recording 2 of appendix 2 and a transcript of photograph 3 of flipcharts in appendix 5*). As a facilitator, I suggested different alternatives for documenting and sharing experiences like logs, blogs, type and email and type, print, and discuss, with their advantages and disadvantages according to my understanding. I mentioned that the suggested methods could be used in a combination for example log and email; and challenged them to make a choice of which method (s) of documentation to opt for.

C/J, BCP, and NPAYVTC learning groups decided to document and share their experiences via their blogs (*see field logs 2 and 3 of appendix 3*). As a facilitator, I documented my learning group experiences using logs which; I printed out for sharing with participants, in order to receive feedback and improve. The logs were also sent the top administrators of NPAYVTC via email, but hardly received feedback from them.

We also shared our experiences during the non-formal conversations held with the participants.

The participants' choice of documentation tool was challenging related to implementation because some participants had lost their passwords to the blogs. We however handled this challenge by opening up new blogs (*refer to* http://otim-yvtc.blogspot.com/).

Other participants remembered their passwords but were unable to document their experiences and practice continuously; whereas others did not document at all (*refer to* http://otim-yvtc.blogspot.com/, http://joseph-nucoop.blogspot.com/, http://nucoop-nasra.blogspot.com/ http://nucoop-yaka.blogspot.com/ *and* http://nucoop-clara.blogspot.com/).

At the end of each meeting, the participants were asked to mention and write what they had discovered from meeting either as individuals or groups (*refer to section 4.3.2a of this chapter*). This was however limited by time, and the participants were unable to share their experiences at the end of each meeting, which always caused me to ask them to do it on their blog. This was hardly done and have learned as a facilitator that, in SCL where the students have to develop their own knowledge from experiences, it is important to document as close to the experience as possible and continuously reflect upon it to make it better. Therefore, I should have planned for more time at the end of each meeting for documentation in logs to be done; in order to encourage the participants to document their experiences.

4.3.2: Learning Experiences from the Fieldwork Process

This sub-theme relates directly to evaluation of what was discovered by both the participants and I during the field work process (learning evaluation). Referring to section 1.5 of chapter one, the instructors as practitioners in my practice decided not to follow-up a series of SCL activities with their students; but I hope that what they learned through peer teaching helped them improve their practice. Peer teaching however does not portray to a real classroom situation, and would have been better if they had followed up a series of activities with their students; in order to develop their ability in facilitating learning processes in a real classroom situation.

4.3.2a: Participants' Most Important Experiences

Relating to the participants' most important experiences which they shared as either individuals or groups (*see picture 8, 9 and 10 below*) during the meetings or via their blogs; I will pay more attention to those related development of one's practical ability in facilitating learning processes through learning groups; in order to improve his/her practice as a facilitator.

Referring to a transcript of a photograph 9 of flipchart in appendix 5, C/J learning group claimed to have learned different ways of documenting; in order to receive feedback *(also refer to recording 3 of appendix 2)*. On the contrary, these participants experienced a challenge of implementing the different documentation tools in their practice. This may either be due to the choice of documentation tool or participants being in a learning process. It can

also be affiliated to not writing the experiences as close to the meetings as possible; which leads to tendencies of summing up of the meeting experiences. This was evident when Otim, a participant of this group mentioned that, he forgets what was discussed in the meetings after two or three days; if he does not document as soon as possible (*refer to* http://otim-yvtc.blogspot.com/).

Similarly, participant 5 (*refer transcript of photograph 20 of flipchart in appendix 5*) learned that, daily documentation helps one to evaluate him/herself as well as reflecting about the chosen tool of documenting experiences.

Pictures 8, 9 and 10: *Are respectively BCP and C/J learning groups' representatives as well as individual participants presenting their learning experiences from the learning group meetings*

BCP learning group claimed to have learned that; 'planning without work schedule is planning to fail' (*see field log 3 of appendix 4*). One participant of this group further highlighted that time management helps participants to work together and know each other.
These participants too had a challenge of implementing their plan; where they missed several meetings, which slowed down their improvement process.

Similarly, Otim appreciates that careful planning with learners related to what is to be done makes the learning process two way (students and facilitator); and the students will learn for life since they will have contributed to the solution (*refer to* http://otim-yvtc.blogspot.com/).

Referring to a transcript of participants' experiences posted on their blogs, participant1 highlights the relevance of proper language use; careful listening and understanding in group discussions, which I also find important.

Relating with learning groups and SCL; participant2 further claims that, 'the learner in a learning group has full responsibility for his/her learning' (*see* http://nucoop-clara.blogspot.com/); which is characteristic of SCL.

Referring to http://otim-yvtc.blogspot.com/, Otim appreciates that learning is self-interest (commitment) and self discovery, and can be quicker in groups as people share ideas. Otim verifies the importance of one's interest (commitment) in learning; and that learning through discovery is better if students are working in groups (*also see a transcript of photograph 10 of flipchart in appendix 5*).

Relating with the learning group, participant1 further highlights the relevance of willing participation, being responsible, keeping comfort of each other, having rules, leader(s) as well as record keeping (documentation) (*refer to* http://otim-yvtc.blogspot.com/ *and* http://nucoop-clara.blogspot.com/). This is also evident in a transcript of photographs 10, 11 and 12 of flipcharts in appendix 5; with recommendations related to respect of each one's opinion and organizing the group with guidelines or rules to enhance learning. They claimed that the relationship between the learners is more equal which promotes improvement.

Referring to a transcript of a photograph16 of flipchart in appendix 5, participant1 also appreciates that self evaluation and commitment are relevant in SCL. Participant 4 also advised that participants in a learning group need to be committed to their learning group activities (*refer to a transcript of photograph19 of flipchart in appendix 5*).

Referring to a transcript of photograph17 of flipchart in appendix 5, participant2 mentions that; learning is a process where; small steps are taken towards achieving one's goal, whom I agree with. It's therefore paramount that one keeps record of these small steps in his/her learning process, and as concrete as possible.

In a meeting held on the 1st December, 2009; five participants and I evaluated our learning experiences from being participants in NPAYVTC learning group using a question; '*what have you learned from being a participant in NPAYVTC learning group?*' Every two participants discussed the question and because of uneven numbers; I was also participated in one of the groups and some of our learning experiences were (*refer to a transcript of photographs 13, 14 and 15 of flipchart in appendix 5*);

- Lack of openness in a learning group limits participation; which contradicts characteristics of a learning group
- Facilitation of SCL through learning group is good because it gives the facilitator time to do his/her extra work, other than following up the students
- In SCL, the students are directly involved in developing their learning experiences and the teacher/facilitator comes in to help the students in their development and forging a way forward.

- Characteristics of SCL and the difference between SCL and TCL
- When working with SCL facilitated in groups, the facilitator needs to be patient with participants for example; with their documentation because learning is a process
- Chairing learning group meetings; leadership skills
- How to present one's self in public(presentation skills)

4.3.2b: Personal Experiences from the Process

Since my focus in this study was developing my practical ability in facilitating learning processes, while working with instructors in their learning groups, my most important experiences are those related to learning group formation, planning and organization; participants' understanding of learning groups and Student Centered Learning (SCL); as well as documentation of learned experiences from the field work process. The study was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL.

When planning for PAR and SCL; proper planning/time tabling should be put into consideration. I experienced that some participants were unable to comply with their development process between October–December, 2009 because the time of the year did not favor them; due to their busy work schedule then. This affected their involvement and participation in the learning group activities.

Facilitation of SCL in learning groups necessitates me, a facilitator to reflect upon the criteria of learning group formation continually and alter the participants in each group if necessary; to improve the quality of dialogue and increase activity in a learning group. In a situation where the facilitator comes in as an outsider, I realized that I did not know what the participants based on to select their criteria of learning group formation; which could influenced the field work process.

Student Centered Approach (SCA) is challenging to implement exclusively. The teacher or facilitator needs to incorporate some ideas in TCA especially with decision making; in order to enhance the learning process. The challenge will depend on which TCA aspects can be incorporated in SCA.

For participants whose self-drive and motivation may be low, I experienced that the facilitator needs to identify their strong points and build their motivation basing on that. It's therefore the facilitator's role to boast motivation among the participants; since even those motivated to learn may be de-motivated depending on how the facilitator portrays his/her roles. This is aimed at catering for individual differences of the different participants.

The learning group can be organized with rules or contract; which should be written out for the group's reference and evaluation; and change where necessary. It is however no guarantee that the group activity will run smoothly with the contract.

When working with PAR and SCL; the facilitator needs to appreciate that there are factors in the participants' environment which may influence their behavior and attitudes. At NPAYVTC for example, the participants' behavior in their learning groups was influenced by TCA; where the participants would agree with whatever the facilitator suggested and later fail to implement it.

As a facilitator, I had to be patient with change while reminding the participants of the challenge at hand; and creating an environment which promotes reflection as one gradually improves towards SCL. This is because learning is a process.   .

Having a leader(s) in a learning group to chair learning group meetings with or without a facilitator helps participants to develop their communication and facilitation skills. In the context of this thesis, having a leader to chair the learning group meetings was a way of promoting sustainability of the learning group dialogues, when the field work comes to an end. When the leader takes up the challenge of chairing the meeting, the facilitator needs to leave the leader accountable to the group's progress; except if he/she exercises too much authority (dictates) or too low authority (helplessness). I experienced that every time I tried to take up the chairperson's role, he would relax and forget that he was chairing the meeting. This would help him to develop his critical reflection skills related to his practice; which leads to improvement.

On the contrary, I do not agree with participants' experiences where; they argued that SCL avails time for the facilitator to do his/her extra work. According to my experience while facilitating learning groups of NPAYVTC, students experiencing SCL for the first time need some good time together with the facilitator, to share their learning experiences and forge a way forward accordingly.

In a learning group, the influence of gender and cultural values, as well as personality or self esteem of the different participants affected activity or quality of dialogue (r*efer to field logs 1, 2 and 3 in appendix 4*).

For participants experiencing SCL for the first time; documentation and sharing of experiences and practices should initially be done with the logs of what is done, learned and smart to do. This tool of documentation encourages one to reflect upon his/her experiences continuously; which leads to improvement. I experienced that this documentation tool encourages one to document as close to the learning experiences as possible, to ensure that

s/he does not forget. As one masters the importance of documentation with SCL, s/he can adapt other tools of sharing experiences like blogs, without discarding the log. Log writing is relevant for both the students and facilitator; since they are both subjects in the learning process.

In a learning organization or group, lack of commitment at one level of the organization affects the organization's development process for example; participants' failure to keep time as well as regular attendance of learning group meetings slowed down both individual and organizational (NPAYVTC's) development process.

4.4: Summary of Chapter Four

The important findings in this chapter were those linked to the research questions of the study. These findings were presented using three themes, X: <u>learning groups' planning, organization and implementation</u>, Y: <u>learning groups and student-centered learning</u>, and <u>Z: sharing experiences in the learning groups in relation to improvement of practice.</u>

The data in these themes and sub-themes has been generated from and presented in the form word texts, transcripts of participants' presentations on flipcharts, some participants' documentation on the blogs, image plates and audio recordings of the participants and me (Flick, 2006, pp. 284-288). The data is in form definitions, explanations and experiences accompanied with reflections.

Under theme X: <u>learning groups' planning, organization and implementation</u>, the research process started with my reporting to the principal and administration of NPAYVTC, where I also inquired about the plan for our collaboration between 15th October and 6th December. The principal had no drawn plan which may be analyzed as an influence of the TCL or he was busy with his daily activities. He suggested drawing a plan with me; where he wanted me to 'help in re-direction' related to getting more information about SCL. A planning meeting with heads of sections was organized by Otim and me where; a day, date and time for meeting all willing participants were set *(refer to appendix 3).* During the process, some heads of sections were not in support of the development process because of their busy work schedules, whereas others were. Several aspects also rose up like improvement of practice, documentation in groups, and learning assessment; where the participants would be awarded certificates.

In a planning meeting with all willing participants, I learned that participants were not having any meetings at their sections. With my inquiry about how the participants wanted their learning groups to be formed, they suggested several options like gender, interests, two

sections to form a group; but agreed about one general meeting (mix-up of participants) which split to two departmental meetings of 2 and 3 participants respectively.

The general meeting (NPAYVTC learning group) was held every Friday for two hours from 1100 to 1300 hours.

The departmental meetings were held once and twice a week for BCP and C/J learning groups respectively. C/J learning group suggested two meetings weekly, each lasting 45 minutes to be held on Monday and Thursday at 1100 and 1400 hours; without and with a facilitator respectively. Four meetings were held with a facilitator, and for two weeks; no meeting without a facilitator was held. In a dialogue with these participants and me, they promised to substitute the meeting time with documentation of their learning process on their blogs; which was also hardly done. Towards the end of the process, this group had one meeting without a facilitator and shared their experiences (*see theme Z*).

BCP learning group had two meetings with a facilitator, held on Wednesdays at 900hours. Implementation of the meeting day, time and duration was challenging partly because of the number of the participants and the communication challenge. Other factors like participatory leadership may also not be undermined.

All the meetings were held within the premises of NPAYVTC. General meetings and C/J meetings were planned to progress in the meeting hall whereas the BCP meeting took place at the section's office. The C/J and general meetings were limited by the venue being used for other workshops of NPAYVTC and other organizations at the time of the meeting; and we instead met at either the Principal's or section's office. The BCP section's office and other improvised venues like the Principal's office were limited by writing board, size of the room, closeness to workshops; which affected and interfered with the participation process

Initially, the learning groups did not have rules and leader(s). Faced with some challenges like irregular meeting attendance, lack of time respect, lack of respect for each other's ideas, C/J learning group and I suggested some rules to help us develop a good learning group dialogue. BCP learning group had no ground rules written out.

Similarly, the C/J and NPAYVTC learning groups selected leader(s) who would be rotated on a weekly basis through the participants; to chair the meetings. BCP learning group had no suggested leader(s).

Having leader(s) according to me promotes responsibility and initiates sustainability of both individual and organizational development. However, the leader may influence participation negatively due to the way s/he exercises her/his authority in a group.

Having leader(s) and rules hardly improved participants' involvement in the learning group discussion, and related challenges faced in our learning groups.

In theme <u>Y: learning groups and student-centered learning</u>, data was developed in relation to participants' understanding (definitions and characteristics) of a learning group as well as SCL (definition, characteristics and indicators).

Groups 1 and 2 defined a learning group as '*a group of people which come together to share their knowledge, skills or ideas*' and '*a group formed of 3-6 people to share their ideas on how to improve on their practice*' respectively. Our shared understanding was partly influenced by my value system and experience where; I suggested some ideas related to number of participants in a learning group, meeting either face-to face or via computer-supported network, and agreement or planning to meet. Consequently, we defined a learning group as '*an organized team of 2-6 people who agree to meet and share or discuss their knowledge, skills, ideas and experiences for achievable goals either physically or via a computer supported network*'

The two participants of BCP group defined a learning group as '*in the learning group, a learner takes a full responsibility for his/her learning*' and '*a collaboration where people come together to share ideas and discuss together in order to learn together*' respectively. Relating to our experiences and organization of the world, our shared understanding of a learning group was developed from my inquiry about how many people make a learning group; and suggestions related to agreement or plan to meet, and meeting either face-to-face or via computer-supported network. The participants' new definition of a learning group was '*an agreement between 4-6 people to learn together physically or via a computer-supported network. They should have aims and fully participate to achieve a common goal.*'

Group 1's characteristics of a learning group were; having objectives, rules and regulations, being friendly, understanding each other, communicating verbally, participating willingly, and sharing of ideas.

Group 2's characteristics of a learning group were; be organized, have objectives, keeping records, be committed and having rules and regulations. It was surprising that the participants in group2 did not mention some of the ideas raised as their contract for example participation for all, communication, having a leader and punctuality/ time keeping (*refer to a transcript of a photograph 4 of flipchart in appendix 4*). I also emphasized the relevance of record-keeping and suggested having a leader as well as referring to each group's characteristics of learning

groups to promote learning by discovery and enrich their understanding (knowledge and experiences) about a group.

BCP group's characteristics of a learning group were; learning from each other, sharing ideas (cooperation), helping each other and knowing each other (knowing where each member of the group comes from). Other characteristics arising from our dialogue and some of their raised characteristics like cooperation were; communication, liking what is good for each other as well as asking for clarification about any idea during the group discussion.

These characteristics according to me could have come from their understanding of a learning group and the experience gained from being a part of a learning group.

Referring to flip chart 5 and 6 in appendix 5; group 1 and 2 discussed and presented their definitions of SCL as '*a facilitation approach for students to get involved in their learning process*' and '*self-directed learning through sharing experiences in learning groups and internet supported network'* respectively.

During the group presentations, group1 mentioned and explained SCL characteristics as; willing participation of individuals in groups, sharing of experiences, rules and regulations, record keeping, time keeping, and keeping comfort of each participant. Group2 also mentioned and explained SCL characteristics as; communicating, having interest, being responsible, sharing of ideas, keeping time, and correct documentation.

The participants of group1 related SCL to a learning group with characteristics such as documentation and willing participation (*refer to a transcript of a photograph 5 and 6 of flipcharts in appendix 5)*; may be because their initial experience related to SCL was through learning group. I also appreciate that assessment of learning through learning logs or other tools is important in facilitation of SCL.

The participants' indicator of SCL were; when we have the learning group, when learners in the group are participating willingly, when learning groups have a documentation of what is shared, when the students contribute more ideas than the facilitator, when students have improved their practice, and when the student becomes creative.

According to me, it was evident that participants related SCL to learning groups, may be because their initial experience with SCL was through their learning groups.

In relation with the influence of gender aspects to an effective learning group dialogue; it was evident to me that both group 1 and 2 appreciate ladies as shy and may fear to express their ideas in a classroom or learning group, because they are perceived as weak and inferior; which I also usually noticed during the learning group discussion. According to me, this may be attributed to one's personality and level of self-esteem. I handled this aspect by

encouraging the ladies to participate during the discussions as well as paying special attention to them.

Throughout the field work process, some participants were unable to communicate in English and during the dialogues, some ideas may not have been understood due to this limitation for example; when I asked BCP learning group about how many participants could make up a learning group, one of them replied '*coming together to identify what you want to learn.* This is evident in the documentations on their blogs (*refer to* **http://otim-yvtc.blogspot.com/** *and* **http://nucoop-clara.blogspot.com/**).

Referring to field logs 2 and 3 of appendix 3, the participants of BCP, C/J and NPAYVTC chose to share their experiences and practice via their Blogs. Their choice of documentation tool was challenging because some participants were unable to document their experiences and practice continuously whereas others did not document at all. I documented and shared my experiences and practice from the process using the field logs. We also shared also experiences during the non-formal conversations held with the participants

I will reflect about participants' most important and my personal experiences from the field work process presented in sections 4.3.2a and 4.3.2b in chapter five and draw what I learned. What I learned is related to developing my practical ability in facilitating learning processes, while working with instructors in their learning groups; and these experiences are related to learning group formation, planning and organization, participants' understanding of learning groups and SCL; as well as documentation of learned experiences from the field work process.

CHAPTER FIVE

5.0: ANALYSES AND DISCUSSION OF THE EXPLANATIONS OF ACTION

This chapter demonstrates how the important findings in chapter four have been discussed. The important findings are those related to the research questions of the study. With an aim of developing a shared understanding of the usefulness of learning groups, as a part of the methodology in Student Centered Learning (SCL); the problem statement that guided the study is: *how can I develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator?*

The instructors were practitioners in my practice, whose learning I was trying to influence; and they chose not to follow-up a series of SCL activities with their students, but rather practiced 'peer teaching' in our groups.

The important findings were presented with three themes X, Y and Z; which were linked to the research questions of the study:

Theme X: learning groups' planning, organization and implementation

- How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?
- How have these learning groups been organized (leadership, contract/ rules)?

Theme Y: Learning groups and student-centered learning

- What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?
- What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experience related to this?

Theme Z: Sharing experiences in the learning groups in relation to improvement of practice

- How have the instructors been documenting and sharing their experiences and practices as a team?
- What have been the most important experiences discovered in the learning groups meetings?

The data has also been discussed under related themes and sub-themes in this chapter. The data is in form definitions, explanations and experiences accompanied with reflections; and has been generated from and presented in the form word texts, transcripts of participants'

presentations on flipcharts, some participants' documentation on the blogs, image plates and audio recordings of the participants and me.

During the analysis and discussion; I have <u>critically referred</u> to literature of key writers, to test the validity of the valve base of my practice and that of the participants. Similarly, I have tried to demonstrate that I am <u>aware of the influence of my own biases</u> as I discuss the data; which has made consider the opinions of others. I have also tried to <u>appreciate that I was in a context shaped by historical, cultural and economic forces</u>; which required me to negotiate and compromise (*see frames 4, 5 and 6 in section 3.6.2*).

Learning groups were used in the field work to encourage participants to be more involved in their learning process; and to ensure that, what is discussed is retained longer than when the same content is presented in other instructional formats. This is highlighted by Johnson and Smith (1991) as;

> *Students learn best when they are actively involved in the process. Johnson, Johnson, and Smith reported that, regardless of the subject matter, students working in small groups tend to learn more of what is taught and retain it longer than when the same content is presented in other instructional formats. Students who work in collaborative groups also appear more satisfied with their classes.[16]*

5.1: Learning Groups' Planning, Organization and Implementation

The important findings discussed in theme <u>X: learning groups' planning, organization and implementation</u> are related to;

- The challenges suggested by Otim, for discussion in the learning groups
- How the learning groups were formed (criteria)
- Where the meetings were held (venue)
- How long the meetings lasted (duration)
- How often the meetings were held (frequency)
- And how the groups were organized (leader (s) or rules)

The process started with planning meetings with the principal, heads of sections, and willing participants in relation to our plan of collaboration between 15th October and 6th December; where we set days, time, duration, and frequency for the learning group meeting.

The overall planning process with the willing participants was relevant because I applied the PAR approach where; the researcher and members of the community who seek to improve

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[16] http://teaching.berkeley.edu/bgd/collaborative.html

their situation, define what they seek to resolve and cogenerate relevant knowledge about it (1998, pp. 4-6).

Since I was trying to develop my practical ability in facilitating learning processes for a group of instructors, I relate this planning to the relations model of didactics used for planning and evaluating pedagogical work (Tobiassen, 2002, pp. 42-47). The model emphasizes the relationship between six phenomena which are; learning experiences, resources, objectives, learning processes, subject matter, and evaluation; where the participants and I were obliged to reflect upon all the aspects in our plan and how we were implementing it, for our improvement process. The challenge with using the model was that it consumes time; and majority of the participants were unable to reflect upon our plans, in order to improve them.

During the planning process, some heads of sections were in support of the development process whereas others were not, because of their busy work schedules. Variations in personal aspirations and awareness (personal masterly) could have led to the supports for and against the process; since learning will not take place in an enduring fashion unless it is sparked by the learners' own ardent interest and curiosity (Senge, et al., 2000, pp. 59-60). The relevance of the different participants feeling ready for the process; was to enable them discover where they are, and anticipate where they want to go. Their arguments for and against the process could also been affiliated to how each organizes the world (mental models). Since one's mental models determine what s/he can see; the participants' differences in mental models could have influenced how the different participants appreciated the process; because two people can observe the same thing, and explain it differently. These differences hence necessitated me to reflect (slow down my thinking), and openly share my views in order to develop knowledge.

The arguments for and against the process could have made the process problematic hence complex; where Certain issues kept rising now and again, but all attempted solutions would hardly work. Soft systems approaches could have therefore been developed, for use in 'messy' problem contexts where; no clear view of what constitutes the problem or what actions should be taken to overcome the difficulties being experienced was known (McKenzie, 2005, pp. 36-37). The participants' alternatives of when they preferred the process to proceed should have been well-considered.

5.1.1: Challenges Suggested for Discussion by Otim, the Principal

During the planning process; the principal, Otim and I discussed what he wanted me to help NPAYVTC with, where he mentioned; *re-direction with opening of blogs, getting more information about SCL and documentation of practice.*

According to me, documentation of practice on computer was a good starting point for someone developing his/her living theory of practice. Documentation in groups may imply that, he viewed learning groups as useful means of facilitating their learning processes. Gee (2004) in Hung, et al (2009, p. 206) appreciates the *role of documentation* in one's improvement process, whom I also agree with. Much as the participants preferred documentation via their blogs; assessment of one's improvement either individually or as group through writing 'learning logs' of what is done, learned and smart to do would help participants to improve their practice. This is because the log helps one to reflect upon whatever s/he does in his/her practice, which is important in SCL.

There was also an emphasis on learning assessment where, the participants would be awarded certificates at the end of the process. According to my experience, some participants could also have chosen to be a part of the process because of the certificates or diplomas to be awarded; and not necessarily their commitment to the process. Referring to figure 2 (modes of learning), this could be due to the influence of Teacher Centered Approach (TCA) culture at NPAYVTC; where more emphasis is put on the learning outcome and not necessarily the process. This was evident when majority of the participants who were a part of the process, were unable to document anything related to our different meetings between 15th October and 6th December (*refer to* http://otim-yvtc.blogspot.com/, http://joseph-nucoop.blogspot.com/, http://nucoop-nasra.blogspot.com/ *and* http://nucoop-yaka.blogspot.com/). The participants too did not show any commitment to the process and I usually dragged them to attend the meetings.

It's also appreciated that the participants were not used to Student Centered Approach (SCA) to learning where; learning is a process, and the learner identifies the most relevant knowledge for his/her improvement process.

Since their principal, Otim had highlighted re-direction on their blogs, getting more information about SCL and documentation of practice as challenges; we subsequently discussed our understanding of learning groups and SCL in the learning groups, as a background for these challenges (*see sections 4.2 and 5.2*).

5.1.2: Criteria of Learning Group Formation

The participants suggested several options for forming their learning groups such as; gender, interests, but agreed about one general meeting (mix-up of participants) which split to two sections' learning groups of 2 and 3 participants respectively. There were arguments for and against sections' learning groups; which in my mind could have been affiliated to a mind-set of discussing content in these groups, and not learning facilitation approaches.

Being an action-research process where democratic values are highly appreciated, the criterion of learning group formation portrays a good level of democracy according to me. Wenger (1998) in Hung, et al., (2009, p. 206) mentioned that;

> *Communities of practice (CoP) are everywhere; it occurs at home, at work, at school and individuals belong to different communities of practice*

According to me, CoP is synonymous with learning groups because in both, participants are noted to have a common concern or challenge (*see section 2.5.1 for characteristics of CoP*). Referring to Wenger (1998)'s idea highlighted above, it's possible for someone to be a part of different learning groups for example; section's and general (NPAYVTC) learning groups. The challenge I foresee related to being a part of two learning groups is creating time for the activities in both groups, especially in a context of this research; where participants continually reported to be very busy with their daily work activities. With one's commitment however, this is possible I suppose. It's also possible if one is acquainted with SCA to learning.

One of the challenges related to formation of the learning groups was the number of participants in each group; especially with BCP group which had 2 participants. This could have limited activity and diversity of ideas. This does not however mean that it's only the number of participants that matters in the learning group; since this number depended on the number of instructors in each section at NPAYVTC, and their willingness to participate in the field work process. Some sections at NPAYVTC had a low number of instructors, for example BCP section had two instructors; and we had nothing to do to change this.

Johnson and Smith (1991) also highlight that;

> *In general, groups of four or five members work best. Larger groups decrease each member's opportunity to participate actively. The less skilful the group members, the smaller the group should be. The shorter the amount of time available, the smaller the group should be.*

Other than the number of participants in the learning group, Johnson and Smith appreciate other factors which may affect the level of participation or engagement like how skillful the

group member is, the time available together which may also hinder proper learning group functioning. These factors could also have affected the participants' involvement in the learning groups at NPAYVTC.

I preferred the mix-up of participants in the general NPAYVTC; where the number of participants ranged between 5 and 6; because the participant were more involved, which promoted development of a diversity of ideas and strengthened learning quality. The systemic thinkers describe experiential and inspirational learning using a learning lemniscate. Learning to them encompasses the concrete, experiential, mental reasoning, and spiritual insights; which are the basis for new behavior and new value positions (McKenzie, 2005, p. 17&22). The way one contributes to the organization or learning group is fundamentally a function of the way s/he views the world (ontology). As one experiences the situation, one's own and others' recounting of the situation is explored in the process; and the higher the number of participants, the wider and better the activity. This is because the exploration is not dominated by a narrow selection of approaches to a situation.

This implies to me that, if diverse ideas should be generated in a group; the number of participants in the group should be relatively high. There should however be a limit of 5-7 participants in the learning group, according to me.

On the other hand, NPAYVTC learning group also seemed to be reducing participation of the different members; and decision making was very difficult too. The number of participants (5-6 participants) seemed big, which limited participation and decision making. As a facilitator, this challenge was handled by breaking this group into even smaller groups (2 or 3 participants) depending on the challenge at hand. This was aimed at attaining full participation of the different members in the groups, as well as ensuring that their different ideas are well represented.

Breaking up NPAYTVC learning group into smaller groups did not also guarantee the different participants to contribute towards the issue at hand. I therefore think that, the participants' level of participation may have been influenced by their individual differences (personality masterly), cultural and gender influence (women are not supposed to speak in public, the men know it all), and not least; having nothing to contribute to the issue at hand. This was further evident in even sections' learning groups with just 2 or 3 participants.

Regardless of the number of participants in the learning group, how skillful they are and the time available; each participant in the learning group needs to portray participatory leadership

(McKenzie, 2005, pp. 23-24), where the 6E's of enablement, engagement, empathy, enactment, ethics and enquiry are all incorporated during the learning group dialogue. Participatory leadership will improve participants' involvement in the learning group, and the quality of learning will be strengthened.

5.1.3: Days, Time, Duration, and Frequency of Learning Groups' Meetings

The different groups (NPAYVTC, BCP and C/J) and I agreed about the meeting days, time, duration and frequency. As earlier mentioned in section 5.1.1; we discussed our understanding of learning groups and SCL, as a background to the challenges indentified by Otim during the learning groups' dialogues.

There were challenges related to poor time management, missing of meeting for some participants or groups which could have slowed down individual and NPAYVTC's development process for example; whereas C/J learning group held four departmental meeting, BCP had two between 15th October and 6th December. Even with these challenges, it was necessary for me to cater for these differences in the development process because; all aspects in complex situations are interrelated (Mckenzie, May 2005, pp. 9-12)**.** Catering for the differences was aimed at developing my practical ability in facilitating learning processes, for a group of instructors.

C/J, BCP and NPAYVTC meetings lasted for 45minutes, 1hour and 2hours respectively. Since the participants and I were less skilled with use of learning group dialogues, frequency of meetings was relevant to our improvement process. Experiential learning (Bjerknes, 2002, pp. 8-11) embraces learning as multidimensional; with cognitive, emotional and social dimensions, hence linking to a more holistic approach as Dewey's experience concept (1963) does. Dewey focuses on the principles of continuity and interaction in an integrated form, while labeling educationally worthwhile experiences; which I relate to the aspect of meeting frequency in a learning group. Meeting once a week limits continuity and interaction, whereas meeting twice or more times promotes it. C/J learning group which chose to meet twice a week met more (four times), which developed continuity in the learning process; as compared to BCP learning group which met once a week (two times). For BCP learning group, their learning process was still in its initial process by December 6th, 2009.

5.1.4: Venue for the Learning Group Meetings

All the meetings were held within the premises of NPAYVTC. General meetings and C/J meetings were planned to be held in the meeting hall whereas the BCP meeting took place in the section's office. The C/J and general meetings were limited by the venue being used for

other workshops of NPAYVTC and other organizations at the time of the meeting, and we would instead meet at alternatives venues like principal's office and section's office. Learning resources in the relations model of didactics (Tobiassen, 2002, pp. 42-47) demonstrate the relevance of how large the classroom is, time at one's disposal, learning materials and teaching equipment, to educational planning. The availability of the room, its size, and availability of other learning materials may either promote or constrain learning. The meeting hall for C/J and general meetings was big in size, had a white board and flipchart board; which could have increased participation in the learning group, therefore making the learning process better.

Otim's office, BCP and C/J section's offices lacked a writing board and room size was small in relation to the number of participants. This may have affected the level of activity in the learning group where; engagement and enablement dimensions of the 6E's (McKenzie, 2005, pp. 23-24) could have been hindered. I noted that every time meetings were held in these venues; participants would neither freely move nor break into smaller groups. Similarly, they would not write out their ideas on the boards or flipcharts; which according to me limited ownership of the process.

Holding the meetings in for example the principal's office could have been viewed as a private meeting, according to me; and this may have hindered the different participants' involvement in the learning group dialogues. Preferably, a more public place could have been used, for example a classroom.

5.1.5: Organization of Learning Groups (Having Leader (s) or Rules)
Initially, the learning groups did not have rules or contract and leader(s). Faced with some challenges during the implementation process, for example; lack of time respect, no respect for each other's ideas, to mention but a few; the participants of C/J learning group and I suggested some rules to enhance commitment of different participants in the group (*refer to a transcript of a photograph4 of flipchart in appendix 5*). NPAYVTC did not have rules written out, but the participants suggested them as a characteristic of a good learning group. BCP learning group did not have rules written out but suggested some ideas like liking what is good for each other as a part of the characteristics of a good learning group (*see section 4.2.1.2*).

Similarly, C/J and NPAYVTC learning groups selected leader (s) who were to be rotated on a weekly basis throughout the different participants. BCP learning group had no leader.

Having leader(s) and rules did not improve participation and the challenges faced in the learning group continued; hence groups' consciousness about participatory leadership (McKenzie, 2005, pp. 23-24) could have made a difference. The systemic thinkers perceive leadership as a function of a group, rather than a function of any one individual. This is because there many factors that must be operating in a group for effective leadership to emerge. According to me, having leader(s) to chair learning group meetings promotes responsibility, develops one's leadership skills; and initiates sustainability of both individual and organizational development for NPAYVTC. On the contrary, the leader (s) may influence participation negatively due to the way s/he exercises authority in a group.

The different challenges in the learning group could have been improved when at least the six factors (6E's) of enablement, engagement, empathy, enactment, ethics and enquiry are displayed throughout the organization or group (McKenzie, 2005, pp. 23-24). The challenge I foresee while considering these factors is, slowing down the development process; and this might lead to loss of some relevant knowledge developed in the process, as participants in the groups try to appreciate each other's interests. This challenge can however be minimized by documenting of most important knowledge, either individually or as a group during and as the last activity of the learning group dialogue; in order to keep track of one's learning process.

5.2: Learning Groups and Student-Centered Learning (SCL)

The important findings discussed in theme Y: learning groups and student-centered learning are related to;

- How participants defined learning groups and SCL,
- The suggested characteristics of a learning group and SCL,
- Indicators of SCL
- And the influence of gender aspect to an effective learning group dialogue.

This was done in an attempt to develop a shared understanding about the usefulness of learning groups, as a part of the methodology in SCL; and also as a background to Otim's suggested challenges for discussion (*see section 5.1.1*).

For both the discussions about learning groups and SCL, there were participants who were unable to attend some meetings for example; female participants, BCP learning group's participants, and those who had not taken a self-study about learning groups and SCL. Subsequently, the female participants discussed in an independent learning group whereas BCP learning group discussed their learning group definitions and characteristics, at the section's group. In an attempt to develop my practical ability to facilitate learning processes, I

catered for these individual differences; and ensure that these participants are enabled and engaged. In the relations model of didactics used for planning and evaluating pedagogical work (Tobiassen, 2002, pp. 42-47), the learners are the most aspiring resources for change from Teacher Centered Approach (TCA) to Student Centered Approach (SCA) to learning. Similarly, with participatory leadership (McKenzie, 2005, pp. 23-24), engagement and enablement of participants ensures that the different participants contribute and participate to their full potential during the group discussion. This explains why I was tried to ensure engagement of the different participants.

SPL views learning as a 'cross-perspectival ' which necessitates teachers to be facilitators and researchers, who can deeply engage students on their own grounds and facilitate synergistic and innovative idea formation (Hung, et al., 2009, p. 210). This proved it necessary to be concerned about the different participants, so that I promote their improvement, basing on their different interests.

5.2.1: Participants' Definitions and Characteristics of a Learning Group

Group 1 and 2's (see pictures 4 and 5) initial definitions of a learning group had a similar characteristic relating to a group as a means of sharing knowledge and experiences. Group 2's definition demonstrates unique ideas related to number of participants (3-6) in a group, and groups as a means of improving of practice (*see section 4.2.1.1 of chapter four*).

In an attempt to develop a shared understanding of the usefulness of learning groups, as a part of the methodology in SCL; I suggested ideas related to planning to meet, meeting either face-face or via a web supported network, through our dialogue. The participants' new definitions of a learning group were influenced the dialogue, my suggestions and their experiences discovered from being participants in groups. Consequently, new ideas like 'organized team' for group1 and emphasis on number of participants (2-6) in a group for group 2 were noted. Both participants adopted the ideas of computer-supported network.

BCP group's initial understanding of a learning group was related to a learner taking full responsibility for his/her learning; and collaboration, where people share ideas to learn together. Their understanding was partly influenced by our dialogue, where I also suggested ideas related to number of participants in a group; agreement to meet among others. Consequently, their new definition included ideas about agreement, number of participants, meeting physically or via computer-supported network, having a common goal and all participating (*refer to section 4.2.1 of chapter four*).

Wenger et al (2002) relates a learning group to communities of practice (CoP) where, people who share a concern, a set of problems, or a passion about a topic; deepen their knowledge and expertise in the area by interacting on an ongoing basis (Hung, et al., 2009, p. 206). Interactions through dialogues leads to development of a common way of responding to patterns and features in a community context; which Gee (1997) calls discourses, and Senge (2000) terms team learning and shared vision (pp. 71-76).

In a dialogue with group 1 and 2 (*see pictures 4 and 5*), there were arguments for and against our shared understanding of a learning group; which was developed from their definitions and my suggestions. Variations in personal values, beliefs and behavior as disciplines, related to 'personal masterly' for the participants in a group; there is neither imposed conflict nor attempts to avoid conflict (Senge, et al., 2000, pp. 59-60). Bohm (1990), Senge (1990), Heifetz (1994), Ng (2005a), Johnson and Johnson (2006); and I appreciate conflict because it develops a level of insight and creativity, that is not generally available to individuals or groups that interact more traditionally (Hung, et al., 2009, p. 209). I also think that the state of conflict allows free-flow of tacit knowledge (embedded values); which Senge, et al. (2000) refer to as mental models (p. 67).

In a state of conflict, debate or argument, the facilitator acts as a skilled outsider who draws the group back to its purpose (Senge, et al., 2000, p. 76). According to my experience, the facilitator should also be very critical even as s/he draws the group back to its purpose so that s/he does not humiliate any one; while considering that s/he is working with soft systems (human beings), who may be living in different complex situations (Mckenzie, May 2005, p. 6).

The participants of BCP learning group eliminated ideas like 'participant in the group taking up full responsibility for his/her learning' from their definition; which according to me would enrich it, perhaps because of the Teacher Centered Learning (TCL) culture. With TCL, it is believed that the teacher is always right; which minimizes the learner's creativity.

It is also inevitable to have a facilitator for the learning group (Hung, et al., 2009, p. 207), but s/he should be mindful of the way s/he influences the learning process; especially in an environment, where Teacher Centered Approach (TCA) culture is significant (Freire, 1972, pp. 44-46). I therefore think that, BCP participants' elimination of some of their ideas may have caused by how I suggested my ideas to them; and this could have influenced the way they were perceived. The way I suggested my ideas is partly influenced by the TCA to learning, which I am trying to change from; and some of my values related to authority.

Group 1, 2 and BCP learning group discussed and generated their characteristics of a learning group. There were similarities and differences related to the characteristics mentioned. Being *organized with objectives and rules* was common for groups 1and 2; whereas *sharing ideas and communication* were common to group 2 and BCP learning group. *Record keeping* was exceptional to group 2; *flexibility and willing participation* were exceptional to group 1; and *learning from each other, helping each other, knowing each other, liking what is good for each* as well as *asking for clarification during the group discussion*, were exception to BCP learning group.

Learning as a 'cross-perspectival' necessitates that individuals in a team or organization remain intellectually open and flexible, confident, generous, and humble (Hung, et al., 2009, p. 209). Bazerman (1988) in Hung, et al (2009, p. 206) suggests communication, disciplinary practices like time management, participation, negotiations and compromise; which according to me, are characteristics of a good learning group or organization. Relating this to the raised characteristics; *sharing ideas, willing participation* and *communication* are synonymous with *openness, generosity* and *being flexible* according to me. I also appreciate the disciplinary practices of *time management*, *negotiation* and *compromise;* as characteristics of a good learning group, much as they were not a part of the participants' raised characteristics.

During implementation of these characteristics, I appreciate participatory leadership (McKenzie, 2005, pp. 23-24) where; the 6E's of enablement, engagement, empathy, enactment, ethics and enquiry are incorporated during the learning group dialogue. The 6E's strengthen participants' involvement in the learning group dialogues. The challenge I foresee while considering these factors is, slowing down the development process; and this might lead to loss of some relevant knowledge developed in the process, as participants in the groups try to appreciate each other's interests. Similarly, I also think that participatory leadership may present a risk of learning to be a group process rather than an individualized process, because individuals will focus on how to ensure that every participant in a group contributes to the group discussion; rather than what each learns from the learning group dialogue. This can however be minimized by each *documenting* or *keeping record* of his/her most important knowledge during the learning group dialogue, or as the last activity of the learning group dialogue; in order to keep track of one's learning process. Each participant can then share his/her experiences with the different participants in the group.

In relation tp record keeping, Gee (2004) in Hung, et al (2009, p. 206) appreciates the *role of documentation* in one's improvement process. He mentions that, 'shape shifting

portfolio people' must treat their achievements, skills, and experiences like a portfolio; ready to rearrange these skills and experiences creatively, in order to define themselves as new (competent and worthy) for changed circumstances.

Since documentation aims at assessment of one's learning process; according to me, using 'learning logs' of what is done, learned, and smart to do, is a useful tool for attaining this. The log helps one to reflect upon whatever s/he does in his/her practice, which is relevant in SCL.

The differences in the characteristics of a learning group are related to the fact that people working in a team (team learning) do not think alike (Senge, et al., 2000, p. 73), and it's unlikely that they ever will; because one's contribution to any discussion in a group is fundamentally a function of the way s/he views the world (ontology), employed unconsciously in everything s/he does (McKenzie, 2005, p. 17&22). Johnson and Johnson (2006) present a dialogue as able to create a degree of disagreement, *different points of views*; which creates dynamics, discussions and possibilities of improvement and change (pp. 3-4).

According to me, *different points of views* help in analysis of complex situations (problematic situations); where any cause-effect relationships are largely unknown (McKenzie, 2005, p. 30). This consequently presents different alternatives for trial in complex solutions, in order to identify one which can suit the situation better.

5.2.2: Participants' Definitions, Characteristics, and Indicators of SCL

The participants of group1 (*see picture 6*) related SCL to facilitation of students' learning and the teacher functions as a facilitator. Participants of group 2 (*see picture 7*) emphasized self-direction and experience sharing through learning groups, with less emphasis on the need of facilitation (*see section 4.2.2.1*). These definitions could have been developed from their previous teaching and learning experiences, as well as being a part of the different learning groups.

According to me, both facilitation (need of a facilitator) and self-direction are relevant in SCL; and learning groups could be a methodology of attaining this. The students' interests, knowledge and experiences are also important in this process.

SCL is synonymous with 'experiential learning' which is an alternative for 'learning about' (TCL); and necessitates students to make meaning from direct experience. It is learning by doing, and knowledge is developed from the process of action and reflection; other than it being a gift bestowed to students by the teacher in TCL (Freire, p. 45). An individual also learns by doing and discovering, and by reflecting and integrating what has brought about

learning (Bjerknes, 2002, pp. 8-11). Basing on the explanation above verifies why the participants related SCL to learning groups, perhaps because their most important experiences with SCL have been discovered through learning groups.

Referring to systemic thinking theory, critical learning is also achieved through experiential learning and inspirational learning; which transforms experiences and insights into meaning, and hence action at the three levels of an organization. It involves coherence, self-reflection and self-organizing; which according to me corresponds with *discovery*, *exploration*, and *knowledge creation* by the members of an organization or learning group (McKenzie, 2005, p. 15& 21)**.** This means that with SCL, students explore, discover and create knowledge most relevant for them.

Since I appreciate both facilitation and self-direction in SCL; it's important that the teacher performs as a mentor, who aims at locating the learner's needs, makes the learner aware of it, and helps him/her take his/her learning responsibility (Inglar, 2002, p. 25). Similarly the teacher needs to perform as a counselor (reflective), who regards knowledge as something relativistic; depending on the factors such as the learner's interests and abilities, the structures and traditions of society in which s/he lives and is being socialized into; and this counselor appreciates learning facilitated in groups (Inglar, 2002, p. 34). The teacher as a counselor can also incorporate gestalt's counseling strategy where, s/he functions as a facilitator or mirror; who helps the student to learn by discovery from his/her actions (Inglar, p. 31). I think that gestalt's counseling strategy enables the learner to make choice from many alternatives, but s/he may be limited by failure to appreciate other people's ways of thinking; because of the influence of mental models and personal values.

Similarly, Social Practice of Learning (SPL) advocates for teachers to be researchers and facilitators in schools, who specialize in different theories and approaches to learning; and should continuously refine these theories through their own unique practice, to enable different kinds of learners to experience learning (Hung, et al., 2009, p. 207). This according to me enables the teacher (facilitator and researcher) to cater for differences in individuals' disciplines, contexts, and situations, while focusing on both content and learning practice masterly for practitioners and students; which I find relevant to learning facilitation (SCL).

When the teachers act as researchers in the craft of learning, it helps them to improve their practice as 'knowledge brokers', who add value to students' 'original investments to knowledge' (Hung, et al., 2009, p. 210). According to me, the teacher needs to be aware that adding value to students' knowledge is not necessary all the time; s/he therefore needs to

create an environment, where each student discovers his/her own knowledge; and this will develop the learner's creativity.

In a similar way, groups 1 and 2 related SCL characteristics to those of the learning group for example; *record keeping*, *time keeping, rules* and *regulations, documentation* and *willing participation,* among others (*refer to a transcript of a photograph 5 and 6 of flipcharts in appendix 5).* This was partly because their initial experience related to SCL might have been through learning groups. Referring to figure 2 (*modes of learning*), the characteristics of SCL are also linked to those of experiential learning (Bjerknes, 2002, pp. 11-12). It therefore evident that some of their mentioned characteristics such as; *sharing ideas, commitment, willing participation, being responsible* and *correct documentation* are directly linked to SCL.

In addition, former concrete experience is the basis for the learning process, and a point of departure for learning in SCL; which verifies why the participants related SCL to learning groups.

The student is also noted to be an active and self-reliant subject, constructing her own knowledge and competence; and assessment of learning through learning logs or other tools is therefore relevant with SCL. Documentation is important because the learner, the learning process, and the learning result are all appreciated in SCL. The learner is perceived as able to construct his/her own knowledge and competence, basing on his/her experiences. This according to me promotes sustainability of the learning process and promotes creativity; since the teacher does not perceive students as objects to be filled.

According to me, *students' generating of more ideas* is relevant to both the students and the facilitator, because they are both subjects in the learning situation; and this enables both of them to improve their practice. It therefore makes learning a two way process and not one way, noted in Teacher Centered Learning (TCL). I therefore do not agree with the participants' thinking related to only the student (s) improving his/her practice, which makes learning one way (*see section 4.2.2.2*).

During facilitation of the learning process, both the communication (links *awareness of self, awareness of others, appreciation of differences, contact and communication)* (pp. 74-75) and perception (*connection between the teacher's perceptions of the student taught, his/her learning abilities and growth possibilities*) models (Lappen, 2002, p. 73) are important. The teacher should endeavor to communicate well and perceive the students positively; which will consequently influence his/her behavior towards the students.

In an attempt to develop a shared understanding about the usefulness of learning groups, as a part of the methodology in SCL; proper language use or development, and explanation of terms was important. For example, when I inquired about how many participants could make up a learning group in a discussion with BCP group; one of the participants replied '*coming together to identify what you want to learn' (refer to audio recording 8 in appendix 2).*

Referring to Vygotsky (1979), conversation and language are crucial factors in learning facilitation; they act as tools for expressing ideas, asking questions and through it, concepts and thinking are established (Bjerknes, 2002, pp. 13-15). This may be a challenge for people who are unable to communicate well verbally or express their ideas in a certain language; which was the case in my situation. Also referring to Hanks in Lave and Wenger (1991, p. 15), learning takes place in a participation framework, and not in an individual mind; though mediated by differences of perspectives of the co-participants. Because what is learned through a conversation or dialogue varies from individual to individual; I find it important for individuals to develop their language skills during social interactions, in order to attain the shared understanding.

Relating language development to learning as a social practice, Wenger (1998) also highlights the relevance of language acquisition to life-long learning where; learners practice the production of sound, and the use of words in both formal and informal contexts in everyday life (Hung, et al., p. 208). Since some participants in NPAYVTC learning groups had a challenge of expressing themselves in English, I used stories and narrations during learning facilitation through learning groups. I did this because the social process of telling, acting, reasoning, and dialoguing in the social practice; cultivates dispositions of actions, desire, and feeling. This also relates closely to my understanding of learning as a complex, holistic and multidimensional process (*refer to section 2.1*); as opposed to Vygotsky, Lave, and Wenger's intellectual learning perspective.

5.2.3: Influence of Gender Aspect to an Effective Learning Group Dialogue

It was evident to me that both group 1 and 2 (*see pictures 4 and5*) appreciate ladies as shy and may fear to express their ideas during the learning group dialogue, because they are perceived as weak and inferior; which I also usually noticed during the learning group discussion (*see section 4.2.3*). According to me, this may be attributed to one's personality and level of self-esteem; which I approached by encouraging the ladies to participate during the discussions, as well as paying special attention to them.

Being an action-oriented research process where, I was trying to develop my practical ability in facilitating learning processes for instructors in learning groups; it was important for me to understand how participation of ladies in the learning groups can be influenced by their gender, basing on many studies that have shown ladies' particular exclusion from rapid attempts to development (Mikkelsen, 2005, p. 70). Kapoor (2002) in Mikkelsen (2005, p. 71) highlights that some cultures or socio-political environments devalue women's public roles, moving them to be passive to men. He further encouraged formation of same sex groups, since women may hardly participate in mixed groups; but the mixed groups avail an excellent opportunity for eliciting gender differences and concerns. This verifies why I suggested same sex groups for discussions about influence of gender during a learning group dialogue (*see pictures 4 and 5*); and mixed groups while discussing SCL (see pictures 6 and 7).

On addition, the participants in these different groups need to portray participatory leadership (McKenzie, 2005, pp. 23-24), where the 6E's of enablement, engagement, empathy, enactment, ethics and enquiry are incorporated in the learning group dialogue. This strengthens participants' involvement in the learning group discussions and improves the level of self esteem of different participants, ladies inclusive.

5.3: Sharing Experiences in the Learning Groups in Relation to Improvement of Practice

The important findings discussed in theme Z: sharing experiences in learning groups in relation to improvement of practice are related to;

- How participants and I documented and shared our experiences and practice as team, we encountered in our different learning processes.

- The summary of this chapter presents what I have learned from the participants' and personal experiences from the process (*see section 4.3.2*); leading to improving my practice as facilitator and researcher.

5.3.1: Documentation and Sharing of Experiences and Practice among participants to Improve Practice

Referring to section 4.3.1, the participants of C/J, BCP and NPAYVTC learning groups chose to document and share their experiences and practice via their blogs. I also documented and shared my field experiences using a learning log. We together shared our learning experiences through informal conversations (dialogues) during learning group meetings. The participants' choice of documentation tool was challenging and consequently; some of them were unable to document their practice and experiences continuously, while others did not document at all.

Gee (2004) in Hung, et al (2009, p. 206) appreciates the *role of documentation* in one's improvement process; which I also appreciate. Senge, et al (2000) encourage the use of informal network (dialogues in organization) to develop a shared understanding (p. 73); which explains why we shared our experiences via the learning group dialogues. They also encouraged the use of computer networks (blogs inclusive) as good at helping people keep in touch; but with criticism as inadequate in building shared meaning. This explains why blogs are not good tools for sharing experiences; especially in a context where computer use is still developing, and participants are experiencing SCL for the first time.

According to my experience with the use of Blogs in my year field work process, blogs were noted to be an excellent way of receiving feedback and encourage reflection (Nganda, Kenyi, & Ateng, 2009a, pp. 4-6). This will however be possible only if someone documents on a daily basis, and the learning logs can help one to achieve this. In our collaborative report (Nganda, et al., 2009a), we noted that writing coherently is one of the most difficult and time-consuming tasks for a human being to undertake. As a result, many blogs are not updated which; minimizes the chances of sharing knowledge and experiences among the different participants. This explains why I opted to document my experiences using learning logs in my second field work process. I also continuously encouraged the participants of NPAYVTC to write their logs but it seemed inapplicable. Subsequently, I worked together with different participants in developing their logs; which required time, commitment and follow-up, since learning is a process. By the end of the field, their log writing was still a mystery, but hoped that with practice; continuity would be achieved. Basing on this discussion and experience, I would think that for participants experiencing documentation of practice with SCL for the first time; the use of learning logs as a documentation tool, would encourage one to document on a daily basis, and as close to the experience as possible. This consequently leads to continuous reflection and improvement as a result.

5.3.2: What I Learned from Participants' and personal experiences from the fieldwork process

In this sub-theme, I have presented what I learned from both the participants and personal experiences and practice in the field. What I learned is related to how I tried to develop my practical ability in facilitating learning processes, while working with instructors in their learning groups; as a part of the methodology in SCL. I have therefore learned the following:

1. In SCL and PAR, it is inevitable for me the facilitator or researcher to plan with the students or participants respectively. During the planning, it is important to appreciate and consider any factors which promote or hinder the implementation of the plan for example influence of the Teacher Centered Approach (TCA), time of the year (McKenzie, 2005, pp. 9-12). This enables me, the facilitator or researcher to refrain from quick conclusions; which encourages me to evaluate the process with the students or participants. As a result, both the students and I will contribute to the improvement process, learning will be two way (Bjerknes, 2002, pp. 8-12) and the process will be more sustainable.

2. In SCL, it's important for me to be aware of the different ways or tools one can apply to document his/her practice and learning experiences; with their advantages and limitations. This enables me to reflect upon the selected tool(s) in relation to my learning process. The preferred tool must encourage me to reflect continuously and a learning log can be one of the alternatives; especially if I am experiencing SCL for the first time. It encourages me to document on a daily basis, and as close to the experience as possible.

3. SCL just like any learning approach requires communication or proper language use and perception during the discussions (Lappen, 2002, pp. 73-75). These aspects increase the awareness and understanding of the facilitator and students related to the subject of discussion.

4. In SCL, the student takes up full responsibility for his/her learning and the facilitator acts as a counsellor or mentor. According to my experience as a MA student in Vocational pedagogy, where this has been applied; the student's interests, level of motivation, and commitment will enhance his/her responsibility towards his/her learning process. It's therefore my role (facilitator) to ensure that students do not become less enthusiastic to their learning process.

5. It is evident that SCL incorporates the aspect of learning by discovery, which is appreciated better if students are working in groups. From my experience as a participant in a learning group; being a part of a learning group has helped me to discover new ideas in my learning process. This is only possible if I assess my

learning daily, through reflections about what I have experienced as new knowledge or skills to my practice. The group can help one to develop his/her critical reflection skills, therefore assessing the learning process better.

6. For me to facilitate SCL in a group effectively; I need to continuously reflect about the criteria of group formation, group organization with either leader(s) or rules, influence of gender and cultural aspects, as well as other factors in one's environment like political situation, health; as possibilities to promote or hinder activity and participation (McKenzie, 2005, pp. 9-12). With these considerations, the different participants will feel engaged enabled, emphatic, ethical and enquire about how to develop a shared understanding (McKenzie, 2005, pp. 23-24). If I fail to do so, challenges related to frustrations, lack of respect for each other's ideas, missing of meetings, and lack of commitment will be significant in the learning process.

7. Similarly, I have learned that facilitation of SCL in learning groups is time consuming especially for participants experiencing SCL for the first time. As a facilitator, I need to avail time for my students as they gradually work together to achieve their goals.

8. As a teacher or educator interested in improving my practice towards learning facilitation with SCA, it's literally necessary to have some knowledge related to the differences between SCL and TCL. This acts as a knowledge base for reflection; which gradually leads to improvement. Not having this knowledge makes it challenging or impossible for me to assess my old and new practice.

9. I have also come to appreciate that SCL is challenging to implement exclusively. As a facilitator, I need to incorporate some of the aspects of TCL; while reflecting about how the chosen aspect(s) have been useful during implementation, and to what extent they have benefited my students and me. This enables me to evaluate the relevance of the chosen aspect(s) to my students and me, and opt for others if necessary.

10. While facilitating SCL in groups, I need to encourage the different participants in a learning group to be committed and responsible; while considering that one's lack of commitment to the group's activities, not only slows an individual's learning process but also that of the group.

CHAPTER SIX

6.0: CONCLUSION, RECOMMENDATIONS AND WAY FORWARD

In this study, I set out to experience, discover and document *how I can develop my practical ability in facilitating learning processes, while working with willing instructors of NPAYVTC in learning groups, as a facilitator.* The instructors were practitioners in my practice, whose learning I was trying to influence; and they chose not to follow-up a series of SCL activities with their students, but rather practiced 'peer teaching' in our groups.

This was aimed at developing a shared understanding of the usefulness of learning groups, as a part of the methodology in Student Centered Learning (SCL).

 In this chapter, I have developed an analysis of the whole action-reflection process (*see frame 7 in section 3.6.2*); which has led me to conclusions, recommendations and a way forward basing on my explanations, analyses and discussion of the story of action.

Referring to section 4.3.2, it is evident that both the participants and I have learned and improved our practice as a result of participating in this process. For example; the participants appreciate how learning groups can be a useful means for facilitating SCL, the differences between Student Centered Learning and Teacher Centered Learning (TCL), the relevance of commitment to one's learning process and group; as well as being responsible. Since the participants chose not to follow-up a series of SCL activities with their students, what they claim to have learned might be theoretical. The participants however tried to practice what they learned through peer teaching; which I believe helped them to put some of the theoretical ideas into practice. Peer teaching however does not present a real classroom environment.

Referring to section 5.3.2, what I have learned is related to how learning groups can be a practical methodology in facilitating SCL. This has developed my practical ability in facilitating learning processes in learning groups; hence improving my practice as a facilitator and researcher.

6.1: The Research Questions Addressed by the Study

- How have the instructors' sections learning group meetings been planned (when, where, how often (frequency) and how long (meeting duration)?

- How have these learning groups been organized (leadership, contract/ rules and regulations)?

- What was the participants' understanding of learning groups (definition and characteristics) and SCL (definition, characteristics and indicators)?

- What is the influence of gender aspect to the effective functioning of the instructors' learning groups and their experience related to this?

- How have the instructors been documenting and sharing their experiences and practices as a team?

- What have been the most important experiences discovered in the learning groups meetings?

6.2: Conclusion

My learning experience as a researcher as well as facilitator of NPAYVTC learning groups throughout this process; has been enriching, motivating as well as challenging, related to being critical, initiating and developing situations for action. Having been trained under TCL to a greater extent in my previous training; adjusting to SCL through mentoring processes for the two years at HiAk, required that I become responsible for my learning process, be committed and have a self-organized study plan for my working. This has helped me to achieve the goals for the Master's Degree (MA) in Vocational Pedagogy.

The mentoring processes with my mentors and other experienced people, have led to development of my knowledge and skills of critical thinking, developing and analyzing situations; which I presume have been reflected in this report. Secondly; mentoring has helped me to develop collaborative learning skills through the 'International English speaking learning group'; as well as my mentors. The knowledge and skills of being critical, collaborative learning, developing and analyzing situations is presumed to be lacking in the teacher-centered mode of learning (TCL).

As earlier mentioned in this report, my learning process has been based on the concept of 'experiential learning', synonymous with learning by doing; which has enabled me to share my experiences with learning group participants and administrators of NPAYVTC, members of my learning group (International English speaking learning group) as well as my mentors. Sharing experiences with different people especially my learning group, has created a feeling of dependence on each other for our success; and has promoted receiving feedback about situations or challenges. This has helped me to develop my practical ability in facilitating learning processes; and hence improving my practice as a facilitator and researcher.

The answers to the research questions above have been presented in chapter four and later discussed in chapter five using ideas of key writers (literature) critically as well as personal reflections; while demonstrating awareness about my own biases, and appreciating that I was

in a context shaped by historical, cultural and economic forces. Basing on objective two of this study, of developing a shared understanding of how self-propelled learning groups can be a sustainable methodology of facilitating SCL; I will draw some conclusions in relation to our experiences from the field:

- SCL requires one to be committed to his/her learning process; and can be better facilitated in a learning group, because the group increases participants' involvement in their learning processes as well as promoting learning through discovery. Similarly, the participants in the group should show commitment to each other's learning process. Lack of commitment of one or more participants will not only slow down the individual's learning process, but also that of his/her group.

- The learning group should have a facilitator who performs as a mentor or counselor to the group. The facilitator needs to be mindful of the way s/he exercises his/her authority; since it either promotes or hinders learning. The facilitator must therefore perceive his/her students as able to construct their own knowledge and skills.

- With SCL facilitated in groups, the facilitator must plan for meetings with the different participants in the groups. There should also be an allowance for the groups to meet without the facilitator, to promote sustainability and for participants to develop leadership skills.

- The facilitator needs to appreciate that there are factors in one's learning environment, which may either promote or hinder implementation of the drawn plan. According to my experiences, planning to meet NPAYVTC instructors towards the end of their academic year; could have hindered their involvement in the development process.

- The number of participants for each group may range from 5-7 to increase diversity of ideas in the different groups. This also affected the level of activity in NPAYVTC's learning groups.
  Small groups will reduce this diversity; and big groups minimize participants' involvement in the discussion, and make decision making hard. These participants should preferably come from different backgrounds to enrich diversity in the group.

- The learning group meetings should be held within the participants' vicinity if possible, and if this is a challenge; the group can plan to have online meetings via an internet supported network. Internet supported network however limits dialogue. The meeting venue should also be big enough for the different participants to move freely, take notes, and participate actively during the learning group dialogues.

- The learning group can be organized with either a contract or leader (s) or both. This is however not a solution to the challenges faced in the learning groups. The different participants hence need to portray participatory leadership that is; engagement, enablement, empathy, enactment, ethics and enquiry (McKenzie, 2005, pp. 23-24). They should also be willing to speak openly, freely, and constructively; listen carefully to each other, with heart and mind; value and respect the views of others, and not discouraging or hurting them; and keep an open mind, while refraining from quick judgments (Hung, et al., 2009, p. 209).

- Learning as a process necessitates different learners in groups to keep record of their learning experiences; and the learning log could be an initial documentation tool for those experiencing SCL for the first time. Other tools like blogs can be incorporated with time, and documentation should be done as close to the experience as possible to minimize chances of forgetting; which leads to just summing up experiences. The documented experiences should also be as concrete as possible. Documentation or record-keeping enhances self-evaluation.

- Similarly, learning being a process; the facilitator needs to be patient with different students in relation to their learning processes, while considering their interests.

- In a learning group, participants have different mental models; which influence their way of explaining situations. The facilitator needs to be aware of the participants' pane of glasses, in order to understand why one may be reasoning in a particular way.

- Because of participants' different mental models in a group, proper language use and explanation of the different terms used during a learning group dialogue, will partly enhance development of a shared understanding.

- In a learning group, gender and cultural aspects in society influence activity and participation. The facilitator needs to be aware of this and identify how best the level of self- esteem of especially ladies, can be raised during the learning group dialogues. This is one way of catering for individual differences among participants in a group.

- For a teacher interested in developing his/her practical ability in facilitating learning processes, awareness of the differences between TCL and SCL enhances his/her self-evaluation process. During the process, the teacher needs to appreciate that the influence of TCL will be significant for some time; and that change will be gradual, hence requiring some time.

Similarly, s/he needs to be aware that implementing SCL exclusively is a challenge; and s/he can incorporate some aspects of the TCL with an aim of increasing learning outcome, though with continuous reflection about the aspects.

- In SCL, the facilitator needs to create a learning environment where different learners feel motivated to achieve their goals. Failure to do so may lead to not least drop-out.

6.3: Recommendations and Way Forward

Basing on the objectives, purpose and significance of this study in section 1.5 of chapter one; the learning experiences from this fieldwork documented in chapter four are useful to me as facilitator and researcher, to the participants and NPAYVTC as whole, and NUCOOP-TVET project. The recommendations and way forward have therefore been categories basing on the three beneficiaries that are; the researcher and facilitator, the participants and NPAYVTC as a whole, and NUCOOP-TVET project.

6.3.1: To the Researcher and Facilitator

As a researcher and facilitator in action research and Student Centered Learning (SCL) respectively, I should always plan with the participants or students in an organization or institution in relation to the time most conducive to take on the research process. Much as this was done with the principal of NPAYVTC, it was evident in our dialogues that the chosen time was not convenient for all the participants; which limited their participation in the process.

When opting for SCL facilitation in groups, the number of participants in each group can range between 5-7 in order to increase activity and make decision making easier. Relating to diversity, 5-7 participants from completely different backgrounds enrich the learning group dialogue. For situations where the participants are few, groups of 3-5 participants are recommended.

When working with SCL especially with participants experiencing it for the first time, the facilitator should plan that the participants document their learning experiences as the lat activity in the meeting; and not as assignment. This will energize the participants, and when they are acquainted with this experience; they can be challenged to do it as an assignment.

In a learning group, it should not be a habit to meet participants all the time. Only meet the participants according to the drawn plan and when they request the facilitator to do so.

In a learning group, the facilitator should appreciate individual differences and be mindful of them for example; value system, gender and cultural differences. This will consequently cause the facilitator to be patient with the different participants' learning processes.

In SCL, the facilitator should always create a learning environment where; different learners feel motivated to achieve their goals.

As an educator in vocational education, having acquired advanced training in the field of vocational pedagogy; I intend to continue developing this knowledge and experiences related to facilitation of SCL in learning groups, through sharing my experiences with colleagues at KyU. I also look forward to another opportunity of working with similar projects in Sudan. With the Master's Degree (MA) in vocational pedagogy and other developed experiences I will gain through working with students and staff at KyU; I would like to undertake doctoral studies based on critical reflection and experiential learning about my facilitation process, if given another chance. South Sudan can also be a focus area.

6.3.2: To the Participants and NPAYVTC as A Whole

The participants of NPAYVTC need to develop an attitude of commitment to any process they choose to be a part of willingly. It was evident that some participants were not only uncommitted to their own learning processes, but also to that of their different learning groups. The participants should be aware that lack of commitment not only affects individuals but also the group's learning process.

The participants also need to not only listen and suggest ideas for their learning process, but also put the suggestions into practice; this is the only way they can assess how effective the suggested ideas could be.

When working in learning groups, the participants also need to appreciate that they have different mental models; and learn to respect each other's ideas, as they develop the idea of being 'critical friends'.

On addition, the participants need to appreciate and implement the idea of documentation of learning experiences, if SCL is to be effective. Documenting of experiences should be done as close to the experience as possible, to minimize chances of forgetting the experiences; and learning log is a useful tool for this.

When working in a learning group, the participants need to portray the six faces of participatory leadership that are; engagement, enablement, empathy, enactment, ethics, and

enquiry, while speaking openly, listening attentively, and keeping an open mind to each other. These are however theoretical categories, which may be hard to evaluate.

If the participants plan to implement SCL in their practice as teachers at NPAYVTC, they need to plan with their students relating to how best it could be done; in order to ease the evaluation process, and promote a more sustainable learning experience. Similarly, the participants should be more practical in such processes, by choosing to learn experientially with the students.

To the administration of NPAYVTC, they need to encourage all the different tutors to be a part of such development processes; with awareness that when one or two participants choose not to be a part of them, it slows down both the individual's and organization's development process.

Similarly, the administration needs to be more involved in the process; by giving feedback to both the facilitator and participants related to what is done in such development processes. This enhances sustainability of the process.

As a way forward, the participants are advised to continue reflecting on the experiences discovered through this process, as they listen to the audio recordings from the meetings over and gain; they can then document these experiences in their logs and blogs, to receive feedback from different people. This will help them improve their practice and forge a smart way of facilitating learning processes for their students practically.

NPAYVTC administration needs to follow-up how the participants, who were involved in this process, have implemented the learned experiences in their own practices; and share these experiences with their colleagues who were not a part of the process.

6.3.3: To NUCOOP-TVET project

In order to continue with the decentralized bachelor of Technical Vocational Education for Teachers (TVET) program, NUCOOP-TVET project needs to plan more closely with the different Vocational Training Centers (VTCs) and institutions which have appreciated the program.

Secondly, there is a need for a follow-up of the different activities held with the different participants in form of workshops; related to how they have developed their learning experiences further, for purposes of improvement. This follow-up should preferably be done physically, much as internet support may also be useful.

The project coordinator and developer also need to get back to the participants of NPAYVTC who were promised to have diplomas or certificates at the end of the process. This will be one way of ensuring that the good relationship between NPAYVTC and the project is not lost.

Finally, similar workshops should be planned for the different participants to continue with this development process. The workshops should preferably be at equal time intervals, and the participants need to choose which times are most convenient for them. This will minimize cases of organizing workshops and few or no participants attend.

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