

# Circumstantial Analysis of Preferred Teaching Styles (A Case Study of Computer University, Loikaw)

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**Abstract**— This Computer studies is a very important subject in our country because of its numerous and widespread application in addressing individual, organizational and societal problems. The research work examined the effect of attitudes on performance of teachers in Computer University (Loikaw) in Kayah State, Myanmar. Teachers' preference to a particular or multiple teaching styles from certain inherent and external conditions that influence their choice. The descriptive research approach was used with a sample size of 16 teachers from computer university, Loikaw, Kayah State, Myanmar. This paper embarks on a circumstantial analysis of preferred teaching styles used by computer teachers. The research instrument that was used in the study was the questionnaire for the teachers in the computer university. Therefore research articles relevant to our topic were reviewed to find answers to our research questions. Based on the findings of this study, recommendations were made. The university should organize seminars to upgrade and update teachers' knowledge.

**Keywords**— Computer Studies, Students, Teachers, Strategies, Performance.

## I. INTRODUCTION

Teaching in any subject of study revolves around teachers channelling instructional styles to meet the varied needs of their learners of which history is no exception. The teaching of history have span across many instructional styles which in all have attempted to deliver the contents of history to its learners. History teachers have adopted models such as the line of development, the colligatory model, the covering law model and finally, the unique or narrative law model all with the intention of teaching the subject Expert style is highlighted by teachers who have the knowledge and know-how in the subject matter. Teachers who demonstrate this model teach detail and in-depth alongside their attitude of always encouraging their students to excel in their studies.

Teachers who practice this style require their students to always be prepared and emphasize the diffusion of information to the maximum. The danger associated to this style are that the overt display of knowledge by teachers to an extent intimidate learner and also the underlying thought process of teachers to a lesser extent is not clear to students. The formal authority style is when a teacher of this style always gives positive or negative feedback to the students. They assume that the teaching should be done in a standard form, accurate, and accepted by students which include

teaching goals set by the school, and students' behavior rules enshrined in school law. Teacher with this style prefer to use a structured teaching. The flip side of this style is that it leads to rigid, standardized ways of managing students concerns (Audette& Roush, 2013; Shaari et al,2014).

With the personal model style, teachers teach using personal examples that is they 'teach by examples'. Teachers tend to act as models to students on how to think and behave. They tend to direct and guide the students to observe and imitate the method shown after that. Facilitator style emphasized teacher interaction with students. They provide guidance and give direction by asking questions, giving options to explore, give recommendations of alternatives and develop criteria for selection. The overall goal is to develop students' ability to be self-reliance, initiative and responsible. Teachers with this style prefer to teach using projects by providing guidance and support. The flip side of this style is that teachers are tempted to believe their style is the best way while students may feel inadequate if they are not able to meet teachers' expectation (Audette& Roush, 2013; Shaari et al,2014).

In the area of teaching styles classification, Onstein and Miller (1980) have classified the teaching styles as expressive teaching styles and instrumental teaching styles. Expressive or dramatic teaching style refers to the emotional relationship created by teachers to the students as whole, including warmth, authority, sympathy, trust and some emotional aspect shown by the teacher. The use of the expressive teaching style works to control the students, managing classroom activities as well as negative or positive feeling toward teaching. The expressive teaching style imbibes a sense of confidence in students and understands the purpose of education in general.

Evans' (2004) research on teaching styles conducted in the United Kingdom revealed that trainee teachers demonstrated two styles that is the holistic and the analytic style. The Holistic style was seen as a formal style, flexible, interactive, spontaneous and full attention given to an individual. The style was more concerned to global learning, learning process, and working as a team. Analytical style also was a more formal style, control, direct, structured, sequential, and concerned on details compared to holistic style. Individuals with this style preferred to work alone and in their interactions with students, they were more impersonal, inflexible and provided a more detailed response.

## II. APPLICABLE AREA OF COMPUTER

The purpose of this study is to investigate the attitudes of the teachers towards computer studies and the long term effect on the society. The statement of the problem is the gap between an existing situation and the ideal situation.

Fisusi (2000) said it will be an arduous if not impossible task to list all the area of application of computers. The application areas are however, categorized into two namely:

- i. Business data processing
- ii. Scientific data processing

Business data processing is used to distinguish those operations relating to management control of business from other application areas such as those relating to science e.g. pay roll, air reservation, computation of results, office automation etc. business data processing is characterized by the need of establish, retain and process files for producing useful information that would aid further decision in the company. It involves the following:

- I. Large volume of input data
- II. Limited automatic operation

Now take a look at some of the common application areas in which computers are being applied.

### A. Computer Science and Engineering

The greatest asset of the computer is its ability to compute accurately and at high speed. While human can perform operation in minutes, the computer can perform more complex calculation in the order of 10.7 seconds. It also has the ability to take decisions at very fast speed by comparing data base containing thousands of names in a speed as that of light to determine whether a name is in the data base. Scientists and researchers take advantages of these characteristics by applying the computer in the theory or hypothesis development. He can store his data in the computer and then harness the accuracy and high speed of computation offered by the computer to test all possible hypotheses on the data in order to configure a theory relating to the data, Fisusi (2000).

Statistical analysis of data can also be done fast and accurate by applying the computer as against manual analysis which may involve hours and days of calculation. Also certain problem that cannot be represented in mathematical form or those whose mathematical form cannot be solved by any known analytical method can be solved by simulation techniques. This would involve building a mathematical model to approximate the problem. The simulation of the solution can be applied on the computer using generated data and thereby determine whether the solution will be a good one or not.

### B. Medical and Health Services

Computers are used for keeping medical records in hospitals. Community health workers also require the use of computers in records and monitoring epidemic D diseases and community health programs.

### C. Industry and Technology

The community has a wide range of industrial applications in production process; the computer has become very useful. Computers are also used in industry for the control of machinery as robots (computer aided manufacturing), launching of spaceship and satellites into orbits cannot be achieved with the desired accuracy without the aid of computers.

### D. Education and Literature

At all levels of education primary, secondary and tertiary computers are now used as instructional aids. Computer can be used in education as a teaching tool through the use of computer assisted learning (CAL).

### E. Computer Assisted Learning(CAL)

Computer is hereby being used to assist in learning and instruction. This involves the development of software that can be used as a learning tool by the students. The computer would present a lecture for the students to learn and would also test their mastery of the subject matter. This it does by asking questions, the response of which determines the progress or other wise of the students the computer program would proceed to the next lecture depending on the accuracy of the answers supplied by the students.

Computer Assisted Learning has the following advantages

- a) Students can learn at their own pace. It eliminates the slow learners delaying the brighter students.
- b) Learning takes place at the students own convenient.
- c) It is devoid of distractions such as noise etc

Some of the disadvantages are

- a) Students-teacher interaction is not guaranteed.
- b) Lack of learning aid
- c) Computer has no human feeling; hence lectures are not humorous and lively

## III. RESEARCH QUESTIONS

Specifically, the following research questions and hypothesis were addressed in this study:

Question1: What are the preferred teaching styles used by Computer teachers?

Question2: What are the basic facts of Computer teachers' choice of teaching style?

Question3: What are the Computer Teachers' attitudes towards characteristics of successful teachers along selected dimensions?

Questions 1: Preferred teaching styles used by Computer teachers

**TABLE I**

No.	Teaching Style	Sum (N)	Mini Rank	Max Rank
1.	Coach style	16	0	0
2.	Cooperative style	16	1	7
3.	Direct instructional style	16	0	0
4.	Inquiry-based style	16	1	7
5.	Lecture style	16	1	2

Question 1 Table shows the rank of teaching styles preferred by Computer teachers. From the table the most preferred teaching style is the inquiry based style of teaching and the cooperative style of teaching. This followed by the Lecture style of teaching as the second ranked preferred style adopted by computer teachers. The other teaching styles are zero ranked.

#### Question 2: Computer teachers' choice of teaching style

No.	Statement	Sum (N)	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	My personal orientation, beliefs and values influence my teaching style.	16	1	1	13	1
2.	The purpose and design of the course influence my teaching style.	16	0	5	9	2

3.	The classroom/ class size/ class number influence my teaching style.	16	0	7	6	3
4.	The developmental abilities of my students influence my teaching style.	16	0	5	7	3
5.	My current rank or status in the University influences my teaching style.	16	0	11	3	2
6.	The availability of teaching materials influences my teaching style.	16	0	4	7	5
7.	The presence of the University principal influences my teaching style.	16	2	11	3	0
8.	The presence of the Department head influences my teaching style.	16	2	12	2	0
9.	The duration of the timetable for teaching influence my teaching style.	16	0	1	15	0
10.	The current University location influences my teaching style.	16	5	9	2	0

**Question 3: Computer Teachers' attitude towards characteristics of successful teachers long selected dimensions.**

(1-never, 2-seldom, 3-about half of the time, 4-usually, 5-always)

No.	Teaching Styles and Strategies	Sum	1	2	3	4	5
1	I use discussion as a teaching strategy for the subjects that I teach	16	0	2	7	4	3
2	I encourage independence and creativity from my student	16	0	0	6	3	2
3	I encourage learning through group interaction	16	0	5	9	2	0
4	I facilitate and monitor appropriate interaction among students	16	0	0	8	4	4
5	I am flexible in dealing with students' needs (due dates, absences, and leave)?	16	3	8	4	1	0
6	Critical thinking and problem solving are important skills for my students	16	0	0	2	4	10
7	I provide timely, constructive feedback to students about assignments and questions	16	0	0	4	8	2
8	I provide student activities that are based on concepts of active learning and that are connected to real-world applications	16	0	0	3	12	1
9	As a teacher, I support student-centered learning	16	0	0	10	4	2
10	As a teacher, I view myself as facilitator	16	0	0	5	9	2

#### IV.SUMMARY

Research questionnaires were used to obtain relevant information from the teachers from the selected university. The sample that was used comprised of 200 students and 16 teachers from the university. The result of the analysis showed that: there is a significant between attitudes and performance, there is no relationship between the attitudes of males and females, there is a relationship between teacher qualification and attitudes, a relationship exist between interest and performance and finally that there is a relationship between the instructional materials available and the attitudes of teachers. Based on the outcome of this research work, the researcher concluded that attitude has effect on performance. There is also no significant difference between attitudes of males and females. They both have favorable attitudes towards computer studies. Therefore, gender difference does not affect the attitudes and performance in computer studies.

#### V. RECOMMENDATIONS

Based on the finding of this study, the following recommendations were considered appropriate.

1. Computer science teachers in the secondary schools should undergo constant seminar and in-service programme to upgrade their knowledge.
2. The university should improve on the basic laboratory equipment, audio-visual aids, alternative power supply facilities, free Wi-Fi facilities etc.
3. The use of instructional materials is highly important to motivate the student and also the teaching methods must be reviewed so that there would be lasting impressions on students.
4. The university should organize enlightenment programmes to enlighten parents on the needs to encourage and support their children to learn computer science in order to have better understanding towards this age of information technology.
5. There should be no gender discrimination in providing opportunities and scholarships to students for further studies in computer science.
6. University should encourage both teachers and students by providing a better condition of service to teachers to arouse their interest and awarding scholarships to students who perform brilliantly in the subject matter.

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