



AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF EFFECTIVE  
TEACHING INSTRUCTORS AT ASSUMPTION UNIVERSITY OF  
THAILAND

by  
MS. CHEN, LAI TSUN-PIN

A Thesis of the Twelve-Credit Course  
ED 7000 Master's Thesis

Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Education  
in Educational Administration  
Assumption University

December 2003

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มหาวิทยาลัยอัสสัมชัญ  
ASSUMPTION UNIVERSITY

## Faculty of Education

### THESIS EXAMINATION COMMITTEE'S APPROVAL

This is to certify that the Thesis entitled:

#### AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF EFFECTIVE TEACHING INSTRUCTORS AT ASSUMPTION UNIVERSITY OF THAILAND

presented by

Ms. Chen, Lai Tsun-Pin  
ID. 421-9617

has been accepted in partial fulfillment of the requirements for  
a Master of Education degree in  
**Educational Administration**

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## ABSTRACT

**Thesis Title** : An Analysis of Personality Characteristics of Effective Teaching Instructors at Assumption University of Thailand

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**Thesis Major Advisor** : Assoc. Prof. Dr. Kitima Preedeedilok

**Thesis Co-advisor** : Dr. Sen Keoyote

**Level of Study** : Master of Education

**Program of Study** : Educational Administration

**Faculty** : Faculty of Education

**Year** : 2003

The purpose of this study was to find out the relationships between personality characteristics and effective teaching factors. For personality characteristics as measured by the Cattell's sixteen personality factor questionnaire (16 PF) Form A, and teaching effectiveness as measured by the effective teaching checklist (instructors questionnaire) of selected being effective teaching instructors. Overall, the data indicate that only 37% of the respondents were effective instructors. Five of the sixteen personality characteristics were represented in this study, which showed the correlation coefficient with the effective teaching factors.

From analyzed the data the following results were found:

The analyzed data found that there were 57 effective teaching instructors and 96 ineffective teaching instructors in Assumption University of Thailand. There was no significant difference of effective teaching instructors regarding their age; a young instructor could be trained as an effective teaching instructor if they had certain types of personality characteristics.

However, the instructor who had different gender or different nationalities with certain types of personality characteristics will have different level of performance.

For gender groups there were personality characteristics significant differences regarding their gender. There were Factor A (Cool and Reserved vs. Warm), Factor I (Tough-minded vs. Tender-minded) and Factor L (Trusting vs. Suspicious). Female instructors tended to be cooler and reserved than male instructors; female instructors tended to be more tough-minded than male instructors; female instructors tended to be more trusting than male instructors.

For nationalities groups there were Factor C (Affected by feelings vs. Emotionally stable) and Factor F (Sober vs. Enthusiastic). The result showed American instructors tended to be more emotional stable than European instructors; American instructors tended to be more enthusiastic than Asian instructors.

Moreover, there were significant correlations between 5 personality characteristic

factors of the effective teaching instructors with effective teaching factors. These factors were Factor A (Warm vs. Reserved, and Cool), Factor B (Abstract thinking vs. Concrete thinking), Factor C (Emotional stable vs. Affected by feeling), Factor L (Suspicious vs. Trusting) and Factor Q4 (Tense vs. Relaxed).

Significant correlations were found between the following pairs variables:

1. Positive correlation between Factor A and teaching factor “Instructional variety”, “Engagement in learning process”, and “sum score of effective teaching”.
2. Negative correlation between Factor B and “sum score of effective teaching”.
3. Positive correlation between Factor C and effective teaching factor “Lesson clarity”.
4. Positive correlation between Factor L and effective teaching factor “Student success”.
5. Negative correlation between Factor Q4 and effective teaching factor “Lesson clarity”.

Those instructors in Assumption University, personality who tended to be more cool, reserved, impersonal, detached, formal, and aloof, could more variability or flexibility during the presentation of a lesson, they also can more easier maintaining on task behavior; limiting opportunities for distracting and getting students to work on think through and inquire about the content; and the instructors who got this certain type of personality will more easier to reach the task of effectiveness.

The instructors who tended to have more concrete-thinking, be less intelligent and have a lower scholastic mental capacity, they will find it more difficult to reach the task of effectiveness.

The instructors who tended to be emotionally stable, mature, faces reality, calm and higher ego strength, are more logical, more step by step, more clear and audible delivery free of distracting mannerisms.

The instructors who tended to be more trusting, self-reliant, no-nonsense, rough and realistic will spend more time on tasks that will afford moderate to high level of success, especially during expository or didactic instruction.

The instructors who tended to be tense, frustrated, overwrought, highly driven, will find it more difficult to be logical, step by step, and clear and audible delivery free of distracting mannerisms.

This study showed that systematic observations could have an important role to play in further research on teaching effectiveness. Nowadays, it is universally accepted that the teacher is the most important component of education, school improvement efforts and educational reform will most depend on the quality of outcomes in teaching learning processes. For the purpose of the study, personality characteristic is defined as an identifiable pattern in the manner that school administrators could have better



information in screening, recruiting the suitable teachers, and planning to provide training programs to meet diverse strengths and weaknesses.



## CHAPTER I

### INTRODUCTION

#### *Background of the study*

Teaching is creative work. It involves building people. It takes patience and understanding. Only a person who loves teaching and students can be a good teacher. Students are individuals in their own right with their own unique personalities and problems. This means that each student needs individual care and attention. Only a person of great patience and understanding can function effectively in such a role. Teaching is a highly skilled activity, which requires an immediate response to events as they develop. Improvement in teaching is the result of integration of refinement in how teachers and administrators think about effective teaching. Effective teaching teachers, in turn, are reward by the students' success.

As "Faculty Manual" of Assumption University (1990) clearly described:

**Teaching is creative work with its basic material: the minds, the hearts and the ambitions of impressionable young who want and need proper guidance.**

**Teachers should have but one motive – service to mankind. Not all students are bright, but even the slowest will gain if the teacher crusades for service.**

**Teaching is enduring work. A teacher affects eternity. He will never know where his influence will reach.**

**Excellence in teaching begins with the realization that what students learn is more important than what the teacher teaches. A teacher is considered to be the manager and facilitator of the learning process.**

It is to see teaching holistically, as complex, interconnected sets of tasks, purposes, requirements, and constraints. At the heart of the realities of change for most teachers is the issue of whether it is practical. Judging changes by their practicality seems, on the surface, to amount to measuring abstract theories against the tough test of harsh reality, but there is more to it. In the ethic of practicality among teachers is a powerful sense of what works and what does not, not in the abstract, or even as a general rule, but for a particular teacher in a particular context. For teachers, the realities of teaching are the practicalities of teaching.

Successful teachers are both effective and responsible. They want teaching success and a respectful way to interact, in other words, good learning and human satisfaction. Effective teaching is essentially concerned with how best to bring about the desired pupil learning by some education activity. (Kyriakon, 1988) The term effective teaching also derives largely from a psychological perspective on thinking about teaching. However, teaching involves more than knowledge of how to perform individual behaviors. It is much like an artist who blends color and texture into a painting to produce a coherent impression, so must an effective teacher blend individual behaviors to promote student achievement.

The criterion of effectiveness model has implied that teaching behavior is a function of teacher personality and the power of personality measures, as predictors of teacher behavior would depend upon the interacting conditions being held.

Personality characteristics are the part of the field of psychology that most considers people in their entirety as individuals and as complex beings. The personality represents those characteristics of the person that entails patterns of feeling, thinking, and behaving. Personality is determined in part by needs, which predispose a person to behave in a certain way in a given situation. In other words, the individual who occupies a given role has needs to fulfill. These are personalized needs and may not be associated with the needs of the school system. The proportion of role and personality factors determining behavior varies with the specific act, the specific role, and the specific personality involved. (Cherie and McNeil, 1996)

The relation between teacher personality characteristic traits and effective teaching performance was through the prior research, which found the important evidence of personality characteristic traits to the teaching professional, as well as to the scores that a candidate should receive, in order to perform most effectively in the teaching profession. The study of teaching learning processes, what the individual teachers feel at any given moment will depend upon a number of factors. Such as their own temperament, their relationship with the children concerned, with colleagues, or with administrators, the way about the subject to be taught, the state of their private lives outside school, and so on.

Therefore, a clear understanding of the differences of personality characteristics and identification of the relationships between personality characteristics and effective teaching performances would provide useful information in screening and recruiting

teachers. That would be of mutual satisfaction for the teachers, school administrators, parents, and the students.

After the economic booms of the late 1980s, the Thai Ministry of Education, in 1991, proposed a modification to the Private Schools Act of 1954 (modified in 1982). This was to allow for the additional establishment of international schools and many international programs were allowed to open at universities throughout the country. One of the concerns is the quality and effectiveness of the teachers. Quality outcomes are becoming the most important part of educational reform in many countries, it is considered in Thai National Education Act Chapter 1 Section 6: Education shall aim at the full development of the Thai people in all aspects; Section 9: Setting of educational standards and implementing system of quality assurance for all levels and all types of education; Chapter 4, Section 30: Educational institutions shall develop effective learning processes. It is also considered by MUA's policies and projects highlighted in Quality and Excellence: The MUA strives to encourage universities to offer an international standard level of education, bearing in mind that quality is the key to produce qualified students.

To realize this vision in Thailand's international schools and international programs in higher education, teachers with effective teaching need to be identified to provide a guideline for future teacher recruitment and further training programs. The need becomes apparent because personality traits of many teachers working at international schools or international programs of higher education in Thailand do not respond to the



present environment and situation. Some personality traits tend to deprive the teachers of achieving good working performance and impede the quality outcomes of the students. With inferior working performance, such teachers may have to leave their job.

The problem adversely affects the quality of education and causes budget wastage on teacher recruiting. This seriously disrupts the smooth function of school administration.

Assumption University is the first International University in Thailand. It is a non-profit institution administrated by Brothers of St. Gabriel, a worldwide Catholic religious order, founded in France in 1705 by St. Louis Marie De Montfort, devoting to education and philanthropic activities. The University is an international community of scholars, enlivened by Christian inspiration, engaged in the pursuit of truth and knowledge, serving the human society, especially through the creative use of interdisciplinary approaches and cybertechnology. The lecturers are recruited from Thailand, Southeast Asia, and various countries throughout the world. In the year 2000, approx 1,065 foreign students enrolled at Assumption University representing more than 51 countries. (ABAC bulletin, 2000-2001)

Working in a different country and teaching to multi-culture groups of students produced various forms of stress for lecturers, for example, unhappiness, conflicts, difficulties in adapting to new situations, and burnout. All these will cause lecturers to pose a serious problem for the quality of teaching and the learning process. It seems

reasonable to suspect that teachers' personality characteristics might associate significantly with rated teaching effectiveness.

To find out the significant difference in personality characteristics of effective- teaching teachers will be an important job, that will provide the school administrator information for future recruitment of suitable teachers, planning of a training program, establishing an enjoyable working atmosphere, increasing student achievements, and quality enhancement of education.

The result of this study could illuminate the personality characteristics of effective teaching teachers, especially those who teach in international programs throughout kindergarten to higher education in Thailand. This would provide helpful information for use in the human resource programs in retaining qualified teachers, which is one of the most important factors leading to quality education.

### ***Statement of the Problem***

Quality outcomes are becoming the most important part of the educational reform. To implement this vision in Thailand, international schools and many international programs are going to open in the near future. Effective teaching teachers are needed to bring out and identify as a predictor for future teacher recruitment or as an indicator for planning in service training programs.

Over the years thinking about effective teaching has been approached in a number of

different ways. Until the 1960s research on effective teaching was largely dominated by attempts to identify attributes of teachers, such as personality traits, sex, age knowledge and training, which might have a bearing on their effectiveness. The most intransigent of difficulties has been to establish teacher effectiveness criteria shown to be related to teacher personality. In conclusion of Lomax's (1973: 301-327) study, "it must be recognized that very little is known about the relationship between personality characteristics and teacher effectiveness"

The problem is because personality traits of many teachers who are working at international programs in Thailand cannot fit with the present environment and situation. (Suvichakorn Chinapha, 1995) It tends to deprive them of achieving good working performance, and impede the quality outcomes of the students, or they may have to quit the job. The problem seriously affects the quality of education and causes budget wastage on teacher recruiting and teacher training programs. This seriously disrupts the smooth functioning of school administration.

The early role-model approach soon gave way to another, which attempted to identify the psychological characteristics of a good teacher: personality characteristics (e.g., achievement-motivation, directness, and flexibility), attitude (motivate to teach, empathy toward children, and commitment), experience (years of teaching, experience in subject taught, and experience with a particular grade level), and aptitude/achievement (scores on ability tests, college grade-point average, and student teaching evaluations). The proportion of the individual filling the role and personality

factors determining behavior vary with the specific act, the specific role and the specific personality involved.

In 1931, Cattell asked 254 people, including directors of education, teacher trainers, school teachers and pupils, to write down the ten most important traits of the good mature teacher. The ten most important qualities of the good young teacher; and the qualities which normally distinguish the young male and the young female teacher (Kyriakon, 1988) The result found that the five qualities of the good teacher most frequently reported were personality and will, intelligence, sympathy and tact, open-mindedness, and a sense of humor.

Effective teachers are always looking for better ways to teach. This is why curiosity, experimentation, and risk-taking are so important to teachers, throughout their ability to reflect on their behavior and use their reflective judgment to improve their teaching.

## ***Research Questions***

This study sought to answer the following questions:

1. How many instructors could be identified as effective teaching instructors at Assumption University?
2. What are the personality characteristics of effective teaching instructors at Assumption University?
3. Are there significant differences of personality characteristics of effective teaching instructors according to age, gender and nationality?
4. What are the relationships between effective teaching factors and personality characteristics?

## ***Research Objectives***

1. To identify the effective teaching instructors at Assumption University.
2. To classify effective teaching instructors by demographic data.
3. To find out the personality characteristics of effective teaching instructors as identified by Cattell's 16 PF.
4. To compare the personality characteristics of effective teaching instructors at Assumption University as classified by age, gender, and nationality.
5. To find out the relationships between effective teaching factors and personality characteristics of Cattell's 16 PF.



### ***Hypothesis***

1. There were significant differences of personality characteristics of effective teaching instructors as classified by age.
2. There were significant differences of personality characteristics of effective teaching instructors as classified by gender.
3. There were significant differences of personality characteristics of effective teaching instructors as classified by nationality.
4. There were relationships between effective teaching factors and personality characteristics of Cattell's 16 PF.

### ***Significance of the Study***

One of the most important parts of educational reform is achieving quality outcomes. Currently, many teachers employed in international schools of Thailand cannot adapt to the present environment and situation, hence affecting their performance and the students' quality outcome. In many extreme cases, they quit their job leading to budget wastage. All these factors interrupt the smooth functioning of school administrators.

Teaching involves the construction of people. It is a creative job that requires patience and understanding. Only those who possess interest in students and teaching can become an effective teaching teacher, as each student has a unique personality that will require individual care and attention.

**42842** e . 1

The early role model identified the psychological characteristics of a good teacher. This takes into consideration factors such as personality, attitude, experience and aptitude/achievement.

Effective teachers always search for ways to improve their teaching ability. Hence, curiosity, experimentation, and risk taking are very important factors for an effective teaching teacher.

In general, it is most significant to recall that the resulting data of this study will provide essential information for the school administrators to recruit suitable teachers, and establish a pleasant working atmosphere. Therefore, increasing the achievement of students, and most importantly, enhancing the quality of education.

The results of this study could provide useful information for the school administrators of international schools throughout Thailand. Personality measures are widely used in the selection and development of employees (Borman, Hanson, & Hedge, 1997). Research over the past 15 years has indicated that personality dimensions are related to on the job performance in a variety of occupations. This is a good way to think that personality testing provides information to hiring professional, compliments and other selection measures. (Mary L. Kelly, 16PF Manual, 1999)

To find the significant differences in personality characteristics in effective teachers, will provide better information for school administrators in recruiting suitable teachers

in future. It is also useful in preparing training programs, establishing a good working atmosphere, retaining present teachers, helping to increase the achievement outcomes of students, enhancing quality of education, and will not waste the budget in order to hire teachers from abroad.

### ***Theoretical Framework***

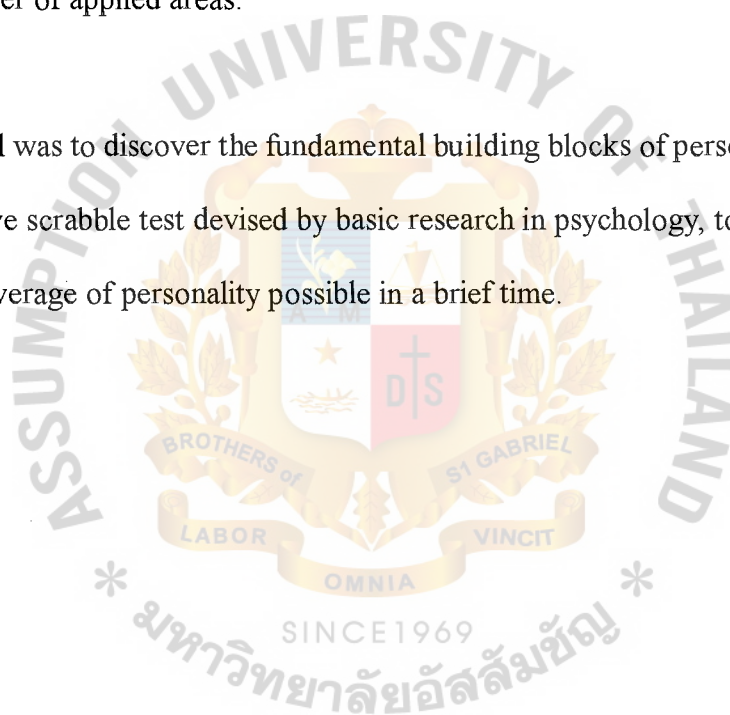
This theoretical framework on effective teaching was based upon Borich Gray D. (1992) conclusion regarding five key behaviors in effective teaching: lesson clarity, instructional variety, task orientation, engagement in the learning, and student success. Effective Teaching is the kind of teaching that helps learners succeeds in their study. This directed researchers to study the impact that specific teacher behaviors had on the specific cognitive and affective behaviors of their students. These ways of studying classroom behavior have made the student and teacher-student interaction in the classroom the focus of modern definitions of effective teaching. The goal was to discover which teacher behavior promotes desirable student performance.

For the personal characteristics of effective teaching lecturers in this study, researcher used Cattell's Sixteen Personality Factors (16 PF) instrument to measure. This theory is developed from Cattell's (1954) Sixteen-Dimensional trait theory, which is composed of 16 Factors: Factor A (Warm – Cool, Reserved). Factor B (Abstract Thinking – Concrete thinking). Factor C (Emotional Stable – Affected by Feeling). Factor E (Dominant – Submissive). Factor F (Enthusiastic – Sober). Factor G (Conscientious Conforming – Expedient). Factor H (Bold – Shy). Factor I (Tender Minded – Tough

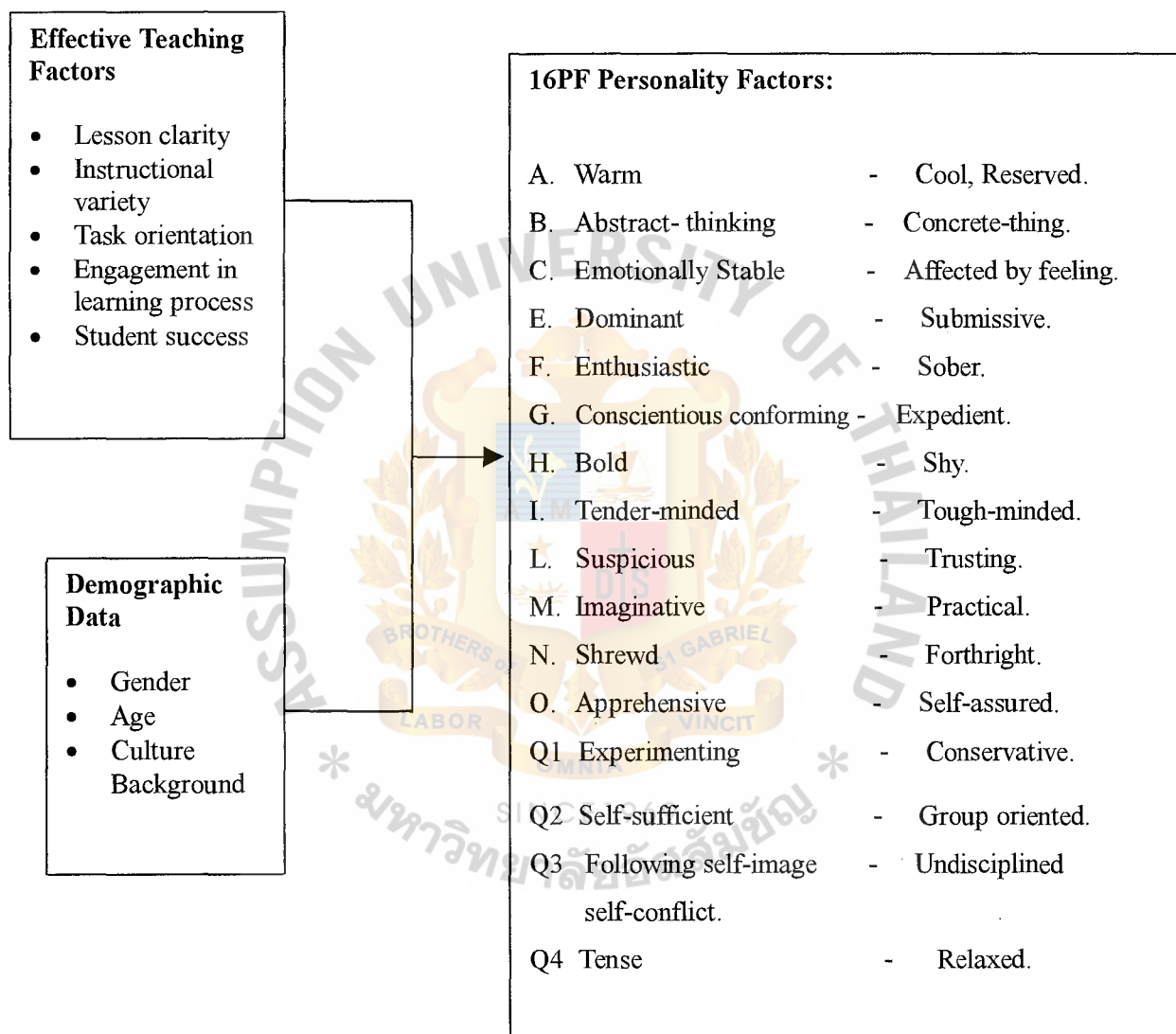
Minded). Factor L (Suspicious – Trusting). Factor M (Imaginative – Practical).

Factor N (Shrewd – Forthright). Factor O (Apprehensive – Self-assured). Factor Q1 (Experimenting – Conservative). Factor Q2 (self-sufficient – Group Oriented). Factor Q3 (Following Self-imaging – Undisciplined Self-conflict). Factor Q4 (Tense – Relaxed). This theory has been praised for providing scientific rigor to the study of personality an area that typically lacks such rigor and providing tools that can be used in a large number of applied areas.

Cattell's goal was to discover the fundamental building blocks of personality, the 16 PF is an objective scrabble test devised by basic research in psychology, to give the most complete coverage of personality possible in a brief time.



## Conceptual Framework



### ***Scope and Limitation of the study***

The scope of this study is as follows:

1. Only the instructors at Assumption University of Thailand
2. This study only used effective teaching and 16 PF for personality; other instruments were not used in this study.

The limitations of this research are:

1. The instrument of Cattell's 16PF Questionnaire has too many items. It might be difficult for the respondents to answer. This might be cause for biasing the data. The researcher made content validity and reliability acceptable.
2. The indicators to identify the group of effective and ineffective teaching instructors may have various factors, which are not included in this study.
3. The results of the study may not be applicable to all International universities, Thai universities, and other school levels in Thailand.

### ***Definitions of terms***

#### ***Personality Characteristics***

Personality characteristics mean uniqueness of each individual, relatively consistent pattern of thoughts, feeling and behaviors. In this study the personality characteristics are based on Cattell's 16PF scale, which include 16 personality factors. The following will be illustrated in both dimensions of the high and low scores, they are:



**Factor A - H:** Warm, outgoing, kindly, easygoing, participating, likes people.

L: Cool, reserved, impersonal, detached, formal, aloof.

**Factor B – H:** Abstract thinking, more intelligent, bright, higher scholastic mental capacity.

L: Concrete-thinking, less intelligent, lower scholastic mental capacity.

**Factor C – H:** Emotionally stable - mature, face reality, calm.

L: Affected by feelings, emotionally less stable, easily annoyed.

**Factor E – H:** Dominate, assertive, aggressive, stubborn, competitive, bossy.

L: Submissive, humble, mild, easily led, accommodating.

**Factor F – H:** Enthusiastic, spontaneous, heedless, expressive, and cheerful.

L: Sober, restrained, prudent, taciturn, and serious.

**Factor G – H:** Conscientious, conforming, moralistic, staid, and rule-bound.

L: Expedient, disregards rules, self-indulgent.

**Factor H – H:** Bold. Venturesome, uninhibited, can take stress.

L: Shy, threat-sensitive, timid, hesitant, and intimidated.

**Factor I – H:** Tender-minded, sensitive, overprotected, and intuitive.

L: Tough-minded, self-reliant, no-nonsense, rough, and realistic.

**Factor L – H:** Suspicious, hard to fool, distrustful, and skeptical.

L: Trusting. Accepting conditions, easy to get on with.

**Factor M – H:** Imaginative, absent-minded, absorbed in thought, impractical.

L: Practical, concerned with “down-to earth” issues, steady.

**Factor N – H:** Shrewd, polished, socially aware, diplomatic, calculating.

L: Forthright, unpretentious, open, genuine, artless.

**Factor O** – H: Apprehensive, self-blaming, guilt-prone, insecure, worrying.

L: Self-assured, secure, feels free of guilt, untroubled, self-satisfied.

**Factor Q1** – H: Experimenting, liberal, critical, open to change.

L: Conservative, respecting traditional ideas.

**Factor Q2** – H: Self-sufficient, resourceful prefers own decisions.

L: Group-oriented, a “joiner” and sound follower listens to others.

**Factor Q3** – H: Following self-image, socially precise, compulsive.

L: Undisciplined self-conflict, lax, and careless of social rules.

**Factor Q4** – H: Tense, frustrated, and overwrought, has high drive.

L: Relaxed, tranquil, composed, has low drive, unfrustrated.

These personality characteristics are identified by responses to the personality factor questionnaire (16PF) which measures the personality variable as the set of primary scales by Cattell's Sixteen-Personality Factor Questionnaire (16PF). This 16PF questionnaire has been an instrumentation which measures the above 16 factor traits of personality.

### ***Effective Teaching***

Effective teaching is the kind of teaching that makes the learner succeed in their study.

Effective teaching is essentially concerned with how best to bring about the desired pupil learning by some educational activity. In this study effective teaching will mention some factors which show the teachers behavior as effective teaching teacher, some factors that indicate effective teaching are as follows: lesson clarity, instructional

variety, task orientation, engagement in learning process, and student success.

***Lesson clarity*** – This key attribute refers to how clear and interpretable a presentation is to the class. Logical, step-by-step order, clear and audible delivery free of distracting mannerisms.

***Instructional variety*** — This key behavior refers to the variability or flexibility during the presentation of a lesson. It includes the planned mixing of different classroom behavior, variability in instructional materials, questioning, types of feedback, and teaching strategies.

***Task orientation*** – This key behavior refers to how much classroom time the teacher devotes to the task of teaching an academic subject. The more time dedicated to the task of teaching a specific topic, the greater opportunity students have to learn.

Achievement (content) orientation as opposed to process orientation, maximum content coverage, and time devoted to instruction.

***Engagement in learning process*** – This key behavior refers to the amount of learning time devoted to an academic subject. It is related to a teacher's task orientation and to content coverage. Maintaining on task behavior. Limiting opportunities for distraction and getting students to work on, think through, and inquire about the content.

***Student success*** – This key behavior refers to the rate at which students understand and

correctly complete exercises. High and moderate success rates are correlated positively with student learning outcomes. 60-70% of time is spent on tasks that afford moderate-to-high levels of success, especially during expository or didactic instruction.

### ***Positive Correlation***

Refers to a relationship between personality characteristic and effective teaching factors these two variables both tend to change in the same direction.

### ***Negative Correlation***

Refers to a relationship between personality characteristic and effective teaching factors these two variables both tend to change in the opposite direction.

### ***Instructor***

Instructor means full-time teaching staff in the university, their responsibility upon teaching and learning process. In this study the term “instructor” is used as a general term for all teaching staff who teaches at Assumption University of Thailand.

### ***Assumption University***

Assumption University was initially originated from Assumption Commercial College in 1969 as an autonomous higher education institution under the name of Assumption School of Business. In 1972, with the approval of Ministry of Education, it was officially established as Assumption Business Administration College or ABAC. In May 1975, it was granted new status as “Assumption University” by the Ministry of

University Affairs.

The university is a non-profit institution administered by a religious order, founded in France in 1705 by St. Louis philanthropic activities. The congregation has been operating many educational institutions in Thailand since 1901.

The university is an international community of scholars, enlivened by Christian inspiration, engaged in the pursuit of truth and knowledge, serving the human society, especially through the creative use of interdisciplinary approaches and cyber technology.

### ***Age***

The age means a stage of life. In this research it will be divided into three groups by: 20-39 years old, 40-59 years old, and 60 or above 60 years.

### ***Gender***

The gender means the fact or condition of human being. In this study it will be divided in to two groups: male and female.

### ***Nationality***

Nationality means ideas, customs, skills, and arts of a people or group, which are transferred, communicated, or passed along, to succeeding generations. Different race and different nationality will have different culture background, and different ways of

thinking, behaving, perception and acting. It will be another factor to influence the personality characteristics and teaching style. In this study the nationality of instructors is based on their beliefs, furthermore they are divided into following four regions; American, European, Asian, and other. This has been done in order to compare the differences between instructors of different cultural backgrounds.

### ***Research Expectation***

1. The researcher hopes to attain knowledge and understanding of effective teaching assessment methods.
2. The researcher hopes to use standard 16 PF questionnaires to find out personality characteristics of the international community of Thailand, and find out the relationships between effective teaching and personality characteristics of Cattell's 16 PF.
3. The researcher envisions that the findings of this study can provide information and indicators for school administrators to use in personnel recruitment, or other training program planning, and for better working atmosphere. Hence, quality outcomes of education could be achieved.



## Chapter II

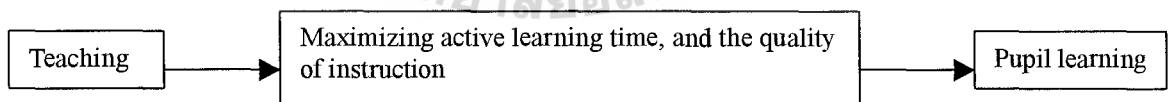
### REVIEW OF RELATED LITERATURE

#### *Effective teaching teacher*

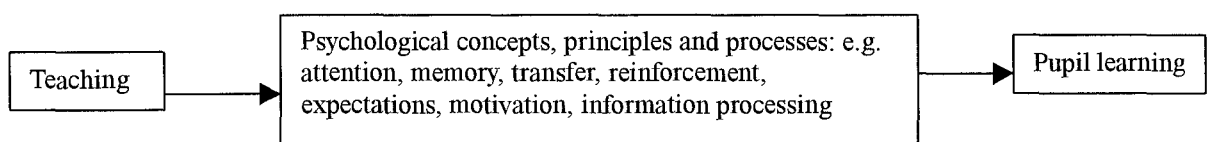
Chris kyriakon (1988) stated that effective teaching is essentially concerned with how best to bring about the desired pupil learning by some educational activity.

Over the years, thinking regarding effective teaching has been approached in a number of different ways. There appear to be three main models for thinking about effective teaching. These are complementary but each of them makes a useful and important contribution to the understanding of effective teaching. Firstly, as the following illustrates, there are three models for thinking about effective teaching:

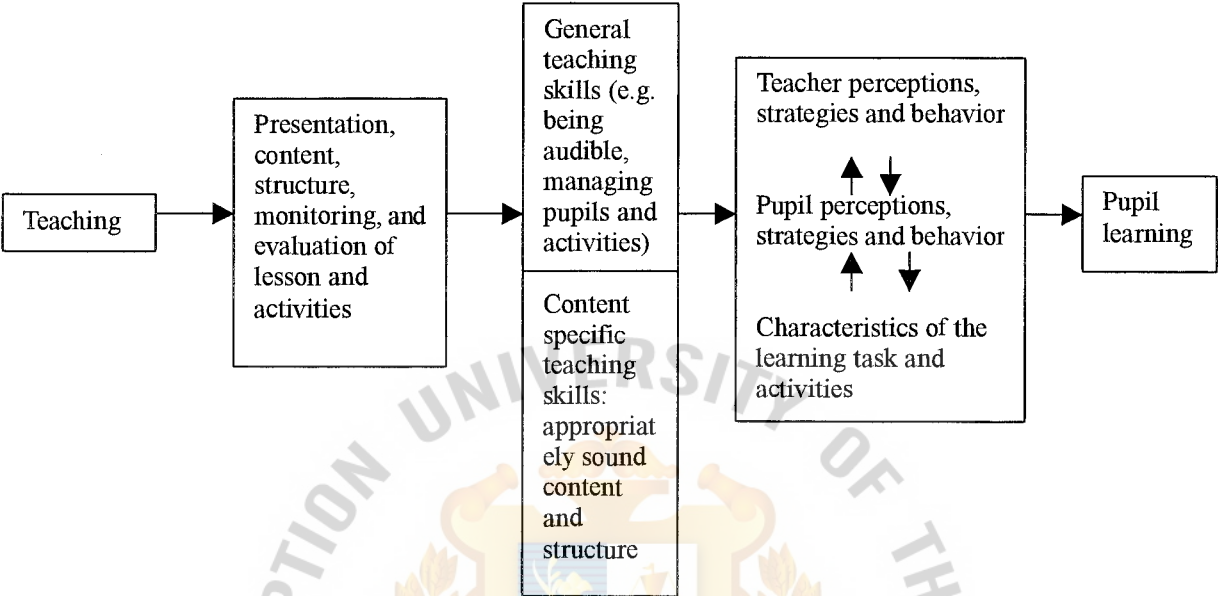
Model 1: A surface level of analysis



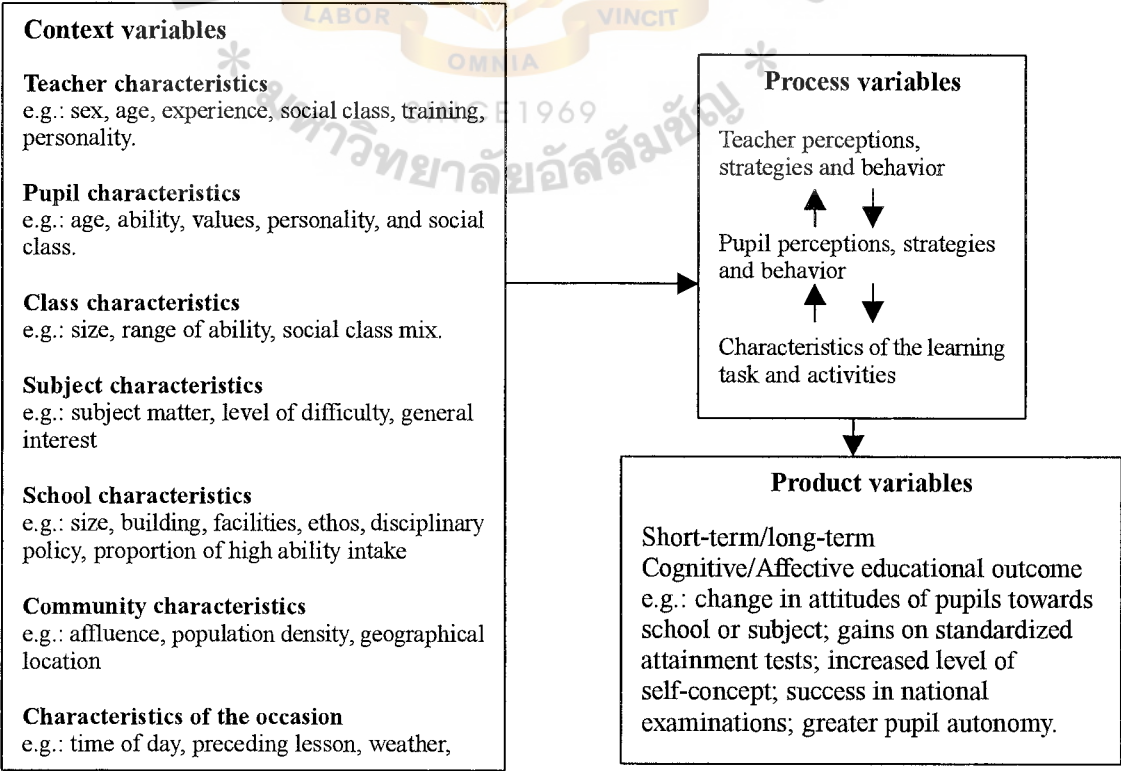
Model 2: A psychological level of analysis



Model 3: A pedagogical (craft of teaching) level of analysis



Secondly, there is a need to take into account the context and the nature of educational outcomes desired, as shown in the following diagrams:



Many previous researches and literatures about effective teaching teachers are as follows:

Mckeachie and Kulik 1975; P. A. Cohen 1981; Marsh 1982, from their research they found that effective teaching is systematic, stimulating, and caring.

Ebro, 1977 – Alumni Distinguished Teaching Award at Ohio State, observation of classes identified the following characteristics of effective teaching:

1. The teachers got right down to business. They began class promptly and were well organized.
2. They taught at an appropriately fast pace, but stopped regularly to check student comprehension and engagement.
3. They focused on the topic and their instructional objectives and did not get sidetracked. Their explanations were clear.
4. They used humor that was in keeping with their individual styles.
5. They practiced good classroom management techniques, holding the attention and respect of the group.
6. They interacted with students by providing immediate answers to questions or comments and corrective feedback when needed. They praised student answers and used probing questions to extend the answers.
7. They provided a warm classroom climate by allowing students to speak freely, including personal humor or other attempts to relate to students as people.
8. They used non-verbal behavior, such as gestures, walking around, and eye contact

to reinforce their comments.

UTMU – University Teaching Methods Unit, in 1980 pointed out the results in this article: “Improving Teaching in Higher Education”, and had the criteria for assessment of teaching. The objectives of a course must:

1. Reflect full knowledge of discipline;
2. Reach the standard required to contribute to the specified degree;
3. Specify clearly the norms, knowledge and academic development of the students;
4. Be appropriate to previous knowledge and academic development of the students;
5. Be attainable by the students within the constraints of available time and the facilities which are provided.

The methods of presenting knowledge required:

- 1) Choice of economical and efficient means for learning, whether by lectures, teaching in carrels, programmed instruction, etc;
- 2) Other learning situations which have been devised (whether in laboratories, by presentation of essays or class papers, etc) to give the opportunities for understanding of norms and for the cultivation of skills that are objectives of the course;
- 3) Testing and examining procedures that are both valid and reliable checks of the whole range of course objectives. Such procedures should test the stated objectives and nothing else.

The teacher must communicate his interest and enthusiasm in the discipline and show a concern so that individual students come to share it. Elena M also pointed out Carnine's (1983) identification:

Effective teacher's activities are covering a substantial amount of academic material by structuring the day to spend most of the time on core curricular areas; using highly structured materials that elicit repeated, accurate responses by students; conducting instruction in small-group settings; and providing immediate, relevant feedback to students.

Englert (1983) reinforced the significance of the attributes of effective teaching, and indicated four teacher behaviors that are linked to achievement in children. Maintaining a high level of content coverage, providing successful practice activities for students, providing feedback to signal the beginning and the conclusion of individual learning trials, and maintaining a high level of student task involvement....

The effectiveness of a teacher in meeting a child's educational needs, include:

1. Clear and accurate information concerning their child;
2. Assistance with the opportunity for frequent communication;
3. Assistance with behavior management; and
4. Help with making connections with other parents for mutual support.

Brophy, J., & Good, T. in 1986 studied the relationship between teacher behavior and student achievement. (Handbook of research on teaching, 3<sup>rd</sup> ed.) An authoritative review of the major findings of teacher effectiveness research over the past 25 years.

Brophy and Good in 1986 pointed out that “Effective teaching” should include:

1. Quantity and pacing of instruction;
2. Whole class versus small group versus individualized instruction;
3. Giving information;
4. Questions;
5. Reacting to student responses;
6. Handling set work and homework assignment;
7. Context specific findings.

Borich, G., & Nance, D., in 1990 studied with the title: “The effective teacher program.” The result provides twenty-seven activity booklets for the new teacher, containing extensive examples, entertaining classroom dialogues, and practical observation instruments for effective teaching keyed to this and its companion value.

Peterson, K., Bennet, B. & Sherman, D. 1991 studied “Themes of uncommonly successful teachers of at-risk students” (Urban education, 26(2), 176-94)

They concluded that successful teachers should have:

1. Classroom as a place of belonging and identity;
2. Clearly defined academic program;
3. Immediate response to student difficulties;
4. Coaching on academic and social strategies for success;
5. Expectations for success made visible and relevant;
6. Identifiable theme in classroom;
7. Small classes.



Chickering & Gamson, (1991) said that effective teaching teacher consistently identify knowledge of subject matter, organization skills, enthusiasm, clarity, and interpersonal skills.

Phillip Hughes, (1991) investigated “Teachers’ beliefs about teaching”. He pointed out that all teachers have beliefs about effective teaching. The teacher responded with six statements as follows:

Effective teaching occurs when:

1. Flexible teaching styles are used;
2. It is based on students’ needs;
3. Careful teacher pre-planning is undertaken;
4. Students are self-motivated;
5. Students are grouped according to their learning difficulties;
6. The teacher models appropriate learning processes.

Each of these statements is a knowledge claim, a belief about the conditions required for the effective teaching of their chosen class.

Brigitte A. Rollett, (1992) studied “How do expert teachers view themselves?” The expert teachers’ have self positive imaging: running the full spectrum from teachers’ concern for and understanding of individual children, class management, and handling of the intricate social relationships in the school community to considerations and initiatives regarding the curricula, didactic skill, and providing for their own professional development.

Teachers attributed affective qualities such as patience, tolerance, empathy, and love for and acceptance of children, flexible in their teaching.

The expert teachers revealed themselves as optimistic, outreaching, loving personalities, interested in children and concerned about their needs, able and happy in relating with them and willing to put in any amount of time and effort necessary to make a success of this.

Borich Gray D. (1993) investigated titled “Clearly out standing making each day count in your classroom. A self- development guide for the classroom teacher.” This study pointed to 6 characteristics of effective teachers:

1. Teachers who believe in themselves discover a purpose for teaching that is greater than presenting only course content;
2. The concepts of success and failure do not exist, at least in their professional lives;
3. They know what they value and focus their behavior outwardly on those values; They know what they value because they are conscious of their real purpose for teaching;
4. They take joy in creating, innovating, and changing. They play at teaching in unconventional ways;
5. They are long-term planners and thinkers;
6. The importance successful teachers place on their relationships with others. They are team players.

Lowman (1996) wrote that “focusing on the characteristics of exemplary instructors offers a place for us to begin to understand the complex human interactions that constitute teaching and learning of the highest order”. Lowman categorized their distinct teaching qualities into two categories:

1. Intellectual excitement - Enthusiastic, knowledgeable, inspiring, humorous, interesting, clear, organized.
2. Interpersonal rapport – Concerned, helpful, dedicated, caring, encouraging, challenging, and available.

Gair, Reavley (1996) stated “Excellence in Teaching” was Enthusiasm, Empathy, and Listening.

Feldman, 1996: In Feldman’s opinion, the following characteristics of effective teaching were ranked as moderately important both in regard to student achievement and also from students’ overall perspective: teachers’ elocutionary skill, clarity of course objectives and requirements, teacher’s knowledge of subject matter, and teacher’s enthusiasm. The six that “weighed” heaviest by students are as follows:

1. Teacher’s stimulation of interest in the course and its subject matter;
2. Teacher’s clarity and the ability to be understood by students;
3. Students’ perceived outcome or impact of instruction;
4. Intellectual challenge and encouragement of independent thought (by the teacher and through the coursework);
5. The teacher’s sensitivity to class level and rate of progress;

6. The teacher's advance preparation and organization of the course.

Armstrong, Henson, & Savage, (1997) briefly summarized research indicates the following:

1. The effective teacher plays a central, dominant role in the classroom but involves students in planning and organization;
2. Successful teachers set high goals and communicate these goals to students;
3. Effective teachers work mostly with the entire class and less often with small groups, sometimes providing independent work;
4. Effective teachers maintain a brisk lesson pace, requiring public and overt student participation;
5. Effective teachers use little criticism, shape student responses so that they are correct, hold students responsible for their work, and attend to students equitably;
6. Effective teachers set and maintain clear rules for student's academic and social behavior.

Shelleyann Scott and Robert G. Baker, (1998) determined the effectiveness of a teacher professional preparation course, by examining the transfer of complex models of teaching by newly graduated teachers. Five steps are considered major components, to be effective in a teaching/learning program:

1. Presentation of theory or description of skill or strategy;
2. Modeling or demonstration of skills or models of teaching;
3. Structured and open ended feedback (provision of information about performance);

4. Practice in simulated and classroom settings;
5. Coaching for application (hands on, in classroom assistance with the transfer of skills and strategies to the classroom)

Arends (1998) contended that effective teaching requires the following characteristics as prerequisites for teaching. Effective teaching teachers must be academically able and care about the well being of students. At the same time, they must produce results, mainly those of student academic achievement and social learning. However, these characteristics need another four higher-level attributes to make teaching effective.

These attributes of effective teaching teachers are:

1. Personal qualities that allow them to develop authentic human relationships and to create democratic classrooms.
2. Positive dispositions toward knowledge. They need to have command of at least three broad knowledge bases that deal with subject matter, human development and learning, and pedagogy.

They need to use this knowledge to guide the science and art of their teaching practice.

- 1) A repertoire of teaching practices that is known to stimulate student motivation in order to enhance student achievement of basic skills, and to develop their higher-level thinking skills that all contribute to producing self-regulated learners.
- 2) Personally disposed toward reflection and problem solving. They consider learning to teach a lifelong process, and they can diagnose situations, adept, and use their professional knowledge appropriately to enhance student learning and to improve schools.

Teachers, regardless of their grade levels, their subject areas, or types of schools in which they teach, are required to perform three important functions:

1. Provide leadership to groups of students. The leadership functions of teaching are to plan, motivate and coordinate work so individuals can work interdependently to help formulate and assess important organizational goals.
2. Perform interactive functions of teaching. They provide direct, face-to-face instruction to students creating models of teaching, teaching strategies and procedures, and the wisdom of practice contained in the repertoire of experienced teachers.
3. Demonstrate organizational functions of teaching.

According to Arends (1998), teachers are organizational members working with colleagues, parents, and others. They need to have good relationships with colleagues, agreeing on common goals. They must be able to relate to others or to attend to their own personal growth and psychological well being within a complex organizational setting. Through this it means they become influential professionals with their colleagues and beyond the confines of their school.

Moreover, they must develop good working relationships with colleagues engaged in cooperative planning efforts, based on agreed goals and assist in the creation of a common means for achieving those goals that leads to institution wide effectiveness. They must have a repertoire for entering into institution-wide dialogue about important educational issues.



In addition, the teachers must have a personal philosophy of education; have a willingness to be agents of social change; be accountable for services provided; possess knowledge base, care deeply about all human beings, including themselves, display fairness towards all students in addition they should be humorous and open-minded, have a broad general education, and demonstrate effective techniques of instruction and classroom management.

Elena M Valenzuela (1998) clearly pointed out that “good teaching and effective instruction include a variety of special considerations”, that determines an effective teacher highly relies on the teaching experiential, training, and personality attributes. The effective teaching teacher not only helps children learn more, but also may accelerate the children’s learning. Therefore, teacher effectiveness depends highly on the amount learned and the time and environment in which learning takes place.

Tauber, Robert T. (1998) investigated the topic: “Good or Bad, what teachers expect from students they generally get”, and found that teachers’ expectation can predict changes in student achievement and behavior beyond effects accounted for by previous achievement and motivation. Teachers who effectively use the self-fulfilling prophecy can, and should help students become their own.

Center for Research on Education, Diversity & Excellence (CREDE) standards for “Effective teaching” in 1999 are as follows:

1. Joint productive activity;

2. Language and Literacy development;
3. Contextualization;
4. Challenging activities;
5. Instructional conversation;
6. Modeling and demonstration;
7. Student directed activity.

Edwin S. Ellis, Lou Anne Worthington, Martha J. Larkin, University of Alabama, in 2000, overview of the effective teaching principles:

1. Students learn more when they are engaged actively during an instructional task;
2. High and moderate success rates are correlated positively with student learning outcomes, and low success rates are correlated negatively with student learning outcomes;
3. Increased opportunity to learn content is correlated positively with increased student achievement. Therefore, the more content covered, the greater the potential for student learning;
4. Students achieve more in classes in which they spend much of their time being directly taught or supervised by their teacher;
5. Students can become independent, self-regulated learners through instruction that is set in a deliberate and careful frame work;
6. The critical forms of knowledge associated with strategic learning are (a) declarative knowledge, (b) procedural knowledge, and (c) conditional knowledge. Each of these must be addressed if students are to become independent,

self-regulated learners.

7. Students can become more independent, self-regulated learners through strategic instruction;
8. Students can become independent, self-regulated learners through instruction that is explicit;
9. By teaching sameness both within and across subjects, teachers promote the ability of students to access potentially relevant knowledge in novel problem-solving situations.

Greg Kearsley, (George Washington University, 2000), summarized the characteristics of Exemplary Teachers as:

1. They must be very knowledgeable and enthusiastic about their subject matter;
2. Have charisma, good presentation skills and a good sense of humor;
3. Ability to get students engaged/excited about the subject they teach;
4. Can present material so that it can be understood easily;
5. Are student-centered and “tuned in” to students concerns;
6. Can adopt different roles (expert, counselor, facilitator, moderator, etc).

Roller, C. (Ed. 2001) studied the topic of “Learning to Teach Reading: Setting the Research Agenda.” A review of research on Effective fourth-grade Teaching:

1. Providing explicit instruction;
2. Using classroom routines;
3. Challenging and involving students;

4. Creating a variety of reading materials;
5. Engaging in lots of constructive teacher-student exchanges;
6. Offering variety of reading materials;
7. Scheduling frequent library visits;
8. Crafting stimulating curricular activities;
9. Asking many inferential questions;
10. Displaying student work prominently.

Gary, D. Borich (1992) claimed the indicators for an effective teacher gaining a moderate-to-high rate of success as being:

1. Establishes unit and lesson content that reflects prior learning (e.g., planning lesson sequences that consider task-relevant prior information);
2. Administers correctives immediately after initial response (e.g., shows model of correct answer and how to attain it after first crude response is given);
3. Divides instructional stimuli into small chunks (e.g., establishes bite-size lessons that can be easily digested by learners at their current level of functioning);
4. Plans transitions to new material in easy to grasp steps (e.g., changes instructional stimuli according to a pre-established thematic pattern so that each new lesson is seen as an extension of previous lessons);
5. Varies the pace at which stimuli are presented and continually builds toward a climax or key event.

Effective teaching is concerned not only with success but also with appropriate values. Educators have always been concerned with measuring and evaluating the progress of their students. As the goals of education have become more complex and with the increasing demand by all parts of our pupils, parents, taxpayers and other decision makers-for accountability on the part of educators, these task of measurement and evaluation have become more complicated.

The successful performance is the goal of the educator; it includes knowledge and spirit development. When students succeed, it means the teacher's teaching is effective.

However, there can be no single definition of the effective teacher because there is no simple definition. Effective teaching varies with the age of the student population, background, subject matter etc. Therefore, multiple definitions are more accurate to describe what effective teaching is.

The above study research summary will provide solid indicators in identifying effective teaching. An effective teaching teacher is a good person who meets the community ideal for a good citizen, good parent, and good employee. He or she is expected to be honest, hardworking, generous, friendly, and considerate, and to demonstrate these qualities in their classrooms by being authoritative, organized, disciplined, insightful, and dedicated.

An effective teaching teacher is one who has an achievement-motivated personality with a strong commitment and rich teaching experiences. He or she is expected to have a motivation to teach empathy towards children, and good records at college GPA and student teaching.

An effective teacher is one who concerns students' learning outcomes. They are expected to demonstrate five key behaviors in teaching, namely, lesson clarity, instructional variety, task orientation, and engagement in the learning processes, student success. (Borich Gray D. 1992, Hunter, M. 1994, Orlich, D., Harder, R., Collahan, R., & Gibson, H. 1998, cited in Dr. J. R. Ouyang, Kennesaw State University, 2000)

### ***Lesson clarity***

All teaching and learning procedures in school deal with subject matter or content. All considerations on effectiveness and responsibility in teaching must take content into account. We find from the earliest descriptions of educational processes that the main attention of pedagogy has focused on goals and content as the substance of education. Effective teaching teachers will be responsible with regard to the goals of the curriculum and the needs of the students. If the importance of the content is neglected who will clarify the lesson and content for the students? One that views effectiveness as a result of teachers' and students' mutual desire to master a certain subject matter. Effective teaching teachers clearly delineate goals or intended outcomes, they select or develop a curriculum, including assignment and tests that is linked directly with goals



or intended outcomes, and they are able to deliver the identified curriculum to the students. Content diagrams can also be effectively used as organizational devices, when teaching students complex abstract concepts. Critical features are depicted in conceptual categories, characteristics, examples and non-examples

Gary, D. Borich (1992) regarded the indicators for an effective teacher being lesson clarity:

1. Informs learners of the lesson objective (e.g., describes what behaviors will be tested or required on future assignments as a result of the lesson).
2. Provides learners with an advance organizer (e.g., places lesson in perspective of past and/or future lessons).
3. Checks for task-relevant prior learning at beginning of the lesson (e.g., determines level of understanding of prerequisite facts or concepts and researches, if necessary).
4. Gives directives slowly and distinctly (e.g., repeats directives when needed or divides them into smaller pieces).
5. Knows ability levels and teaches at or slightly above learners' current level of functioning (e.g., knows learners' attention spans).
6. Uses examples, illustrations, and demonstrations to explain and clarify (e.g., uses visuals to help interpret and reinforce main points).
7. Provides review or summary at end of each lesson.

### *Instructional variety*

The critical forms of knowledge associated with strategic learning are (a) declarative knowledge, (b) procedural knowledge, and (c) conditional knowledge. Each of these must be addressed if students are to become independent, self-regulated learners. Students can become more independent, self-regulated learners through strategic instruction. Strategic instruction, a cognitive-behavioral modification approach derived from operant, social, and cognitive learning theories, assumes that students' thinking processes, like observable behavior, can be altered through mediation. A strategic approach to teaching is not designed to teach content, but designed to enable students to use their existing knowledge in an optimal fashion when learning content.

Responsible, effective teaching is serious consideration, selection, and design of the instructional means, activities, materials, tasks, and the like in light of normative and moral criteria. (Fritz K. Oser, Andreas Dick, Jean-Luc Patry, 1992)

The conception of learning has changed, of particular interest and importance is the idea of learning as a constructive process. The conception of teaching should follow the conception of learning to change, justifiably related to know constructive socially and knowledge-based changing process. In relating the changes in the teacher's role to undergo radical changes. The new conception for a teacher as a facilitator, there are a few instructional and situational ingredients, such as arousing and maintaining intrinsic motivation and providing "Procedural facilitation" (Malone and Lepper, 1985. Cited from Fritz K. Oser, Andreas Dick, Jean-Luc Patry, 1992) according to the above

reasons, the effective teaching teacher in terms of instruction during teaching and learning process, will provide the various methods to consider the needs of students.

Gary, D. Borich (1992) pointed to the indicators for an effective teacher being variety:

1. Uses attention-gaining devices (e.g., begins with a challenging question, visual, or example);
2. Shows enthusiasm and animation through variation in eye contact, voice, and gestures (e.g., changes pitch and volume, moves about during transitions to new activity);
3. Varies mode of presentation, (e.g., lectures, asks questions, then provides for independent practice);
4. Uses a mix of rewards and reinforces (e.g., extra credit, verbal praise, independent study, and so on);
5. Incorporates student ideas or participation in some aspects of the instruction (e.g., uses indirect instruction or divergent questioning);
6. Varies types of questions (e.g., divergent, convergent, to clarify, to solicit, to redirect).

### ***Task orientation***

Task orientation help students understand what is being learnt and to integrate new information with that which is previously learned. Helping students to distinguish between important and unimportant information, and assisting students to store the new information in an organized manner, this enhances future retrieval.

The primary objective of schooling is instilling knowledge, skills, and values that can ensure the child's development as a complete human being in his or her society and culture.

Effectiveness is best estimated in relation to your own goals of teaching. Generally, effective teaching is systematic, stimulating, and caring. The clear dominance of an accountability oriented measurement paradigm is evident in the methodology. At the same time, they know their subject well enough to teach it, they can also clearly orientate the task to their students, and students can have well prepared classes. Therefore, a clear task orientation is important in being an effective teaching teacher.

Gary, D. Borich (1992) regarded the indicators are for an effective teacher being task oriented:

1. Develops unit and lesson plans that reflect the most relevant features of the curriculum guide or adopted text (e.g., each unit and lesson objective can be referenced back to curriculum guide or text);
2. Handles administrative and clerical interruptions efficiently (e.g., visitors, announcements, collection of money, dispensing of materials and supplies) by anticipating and pre-organizing some tasks and deferring others to non-instructional time;
3. Stops or prevents misbehavior with a minimum of class disruption (e.g., has pre-established academic and work rules to "protect" intrusions into instructional time);

4. Selects the most appropriate instructional model for the objectives being taught;
5. Builds to unit outcomes with clearly definable events (e.g., weekly and monthly review, feedback, and testing sessions).

### ***Engagement in the learning process***

Students learn more when teachers are engaged actively during an instructional task.

Learning is increased when teaching is presented in a manner that assists students in organizing, storing, and retrieving knowledge.

Effective teaching is not solely dependent upon the teachers. Students too have responsibilities to learn. An indirect but powerful way of improving teaching is to improve the ways in which students learn.

“Teaching is a highly skilled activity which requires of the teacher an immediate response to events as they develop. He or she must attend not only to long-term goals but also to the urgent details of individual pupils’ participation in the lesson. The teacher must judge instantly whether the moment requires a suggestion, an invitation to explain, a discouraging glance, and anecdote, a joke, a reprimand, or the setting of a new task. These immediate decisions depend necessarily upon intuitive judgment....

(Barnes, Britton, and Torbe, 1999. Cited from Tom Russell, Hugh Munby, 1992).

In the classroom, teachers behave in various predictable ways. They explain, question, direct, supervise, praise, and reprimand as they attempt to engage various methods in

instruction. Tomorrow's teachers must be the risk taker, an innovator, and most importantly they must stimulate and motivate students to participate in the process of learning. If the teacher can consider the needs of the students, and engage teaching methods to be the center with students in the learning process, it will be successful effective teaching.

Gary, D. Borich (1992) stated the indicators for an effective teacher engaging students effectively in the learning process as follows:

1. Elicits the desired behavior immediately after the instructional stimuli (e.g., provides exercise or workbook problems with which the desired behavior can be practiced);
2. Provides opportunities for feedback in a non-evaluative atmosphere (e.g., asks students to respond as a group or covertly the first time through);
3. Uses individual and group activities (e.g., performance contracts, programmed texts, games and simulations, and learning centers as motivational aids);
4. Uses meaningful verbal praise to get and keep students actively participating in the learning process;
5. Monitors seatwork and frequently checks progress during independent practice.

### ***Student success***

This key behavior refers to the rate at which students understand and correctly complete exercises. The first behavior for obtaining a moderate-to-high success rate takes place during unit planning, identifying unit outcomes and choose a logical lesson sequence to



achieve them. Although some unit outcomes may be achieved by presenting content in any order, the cost in instructional time with such a haphazard approach can be considerable. (Borich, D. 1992)

High and moderate success rates are correlated positively with student learning outcomes. 60-70% of time is spent on tasks that afford moderate-to-high levels of success, especially during expository or didactic instruction.

An effective teaching teacher is consciousness of how, what, who, and why they teach. The “how” is through their past teaching experiences, and the proper delivery of the instruction to reach each student in their preferred learning modality. The “what” is the subject matter and academic/social level appropriate to the students’ needs. The “who” is all children who come in the classroom and in the world around the teacher. The “why” is because of the love for children and teaching. It should strive to enhance student’s hands and create minds to think, hearts to love, and bodies to grow healthy.

Effective instruction is the responsibility of the teacher, as well as that of the support service personnel, a child’s family members, and administration. There should be continuous collaboration and consultation in regards to students’ progression, regression, and any other meaningful changes between all individuals dealing and coming in contact with a student’s education and well being.

Meeting the child’s needs is truly a shared concern by teachers and administrators, and

that input from effective teaching teachers should be genuinely sought and respected. In other words, we are looking for a sense of effective teaching that must emerge over time and that eventually yields higher involvement and commitment and finally, success. Thus, the criterion for success needs to include curricular goals, as well as goals oriented to the cognitive domain, social domain, and general domain. (Fritz K. Oser, Andreas Dick, Jean-Luc Patry, 1992)

### ***The Personality characteristics, and context relating to the 16-PF***

#### ***Concept of Personality***

The concept of personality has been given a variety of meanings. Personality is the part of the field of psychology that most considers people in their entirety as individuals and as complex beings. Why we are the way we are. There is no definition of the word “personality” with which all personality theorists would agree. Each theorist presents us with his or her own understanding of the term. The field of personality is concerned with individual differences. Although they recognize that all people are similar in some ways, psychologists interested in personality are particularly concerned with the ways people differ from one another. Personality represents those characteristics of the person that account for consistent patterns of feeling, thinking, and behaving.

If we learn anything from our experiences with other people it is this: they are all, in some ways, unique and all, to a degree, consistent in their behavior. That is, all human beings possess a distinct pattern of traits and characteristics not fully duplicated in any

other person; furthermore, many of these characteristics are quite stable over time. Thus, if you know someone who is optimistic, confident, and friendly today, the chances are they will continue to show the same traits in the future. Moreover, this person will probably also demonstrate such traits in many different situations. These two features form the basis for a useful working definition of personality, which can be defined as the unique and relatively stable pattern of behavior, thoughts, and emotions shown by individuals. (Jerald & Robert, 1997:109) It often thinks of behavior as resulting from stable personal traits which can say that our behavior is determined by a complex interaction between our personality traits and the external environment; both are important and can affect what we do or say. Almost all social scientists accept this view–interaction perspective. The degree of “match” between employees’ characteristics and their jobs is known as person-job fit. These offer support for the importance of considering individual difference variables in efforts to enhance both productivity and job satisfaction. The fit between individuals’ personal traits and the requirements of their jobs, the more positive are the results. That personality is indeed real and calls attention to its potentially important effects. (Jerald & Robert, 1997:109)

The concept of personality has been given a variety of meanings. For Getzel’s theory of administration as a social process, personality was defined as the dynamic organization within the individual of those needing disposition that govern his unique reaction to the environment (Halpin, 1958). Catell is optimistic concerning the use of personality tests in helping place people in the right vocation.

There are many educators who have attempted to describe the personality with various concepts. Sanford (1970) defined the personality as the dynamic organization within the individual of those psychological systems that determine his unique adjustments to his environment. It is that which predicts behavior, given the situation. Cattell (1963) mentioned that today the individual differences could be assessed readily by personality measures of ability. Personality is that which permits prediction of individual differences-freed of intra-individual variations of response in a defined situation.

White (1965) indicated that personality characteristics of the individual play an important part in his selection of occupations that are typically considered to be professional, it may well be that personality characteristics play an important part in determining the manner in which the person will adjust to the professional role.

Each of the personality theories described so far includes ways of describing differences among people. A trait theory can be defined as a formal system for describing and measuring the ways in which personalities differ. We try to capture the essence of one another by applying labels to various aspects or personality. One way in which we can approach the analysis of personality is to systematically study the individual characteristics comprising a personality. We can describe the various dimensions of his personality in terms of certain characteristics called traits. (Peter Gray, 1991:590)

The trait approach has had a great influence in work on psychology. This is particularly evident in selection, and vocational guidance, where the aim is to establish whether one or more persons will be good at and / or enjoy certain kinds of work. The idea that people have stable characteristics, which strongly influence their behavior, is central to those endeavors, since it offers the prospect of matching individuals to work environments which suit them. (John, Cary, Evan, 1998:30)

Traits are behaviors or characteristics that distinguish two or more people from each other and are relatively enduring. The aim of the trait theorist, therefore, is to reduce this superfluity of traits down to their common factors or common denominators. The aim is to emerge with a series of dimensions on which all individuals can be characterized, and which will include all the significant factors in personality. The trait theorist assumes that behavior is guided by broad traits or dispositions that manifest themselves under many different kinds of situations. The theorist's task is to identify each person's position on these personality dimensions by comparing him with others. Trait theory is a quantitative methodology. This methodology is called psychometric because it aims to quantify individual psychological differences. It is decided beforehand which dimensions are considered significant and test questions which are operationally defined as measurements of these characteristics, are then devised.

A trait can be defined as a relatively stable predisposition to behave in a certain way. It is considered to be part of the person, not part of the environment. People carry their traits with them from one environment to another, though the actual manifestation of a



trait in the form of behavior depends on an interaction between the trait and the environment. (Peter Gray, 1991: 590) A trait theory is simply a statement of the source that traits account for the greatest statistically measured variation among people. Theories differ in the number of source traits they identify and the description of those traits. We can divide traits into many different kinds according to our interests.

Gordon Allport, a leading proponent of trait theory, has differentiated three kinds of traits: cardinal, central, and secondary. Allport (1937) believes that people have generalized dispositions that guide most of their behavior. He calls this disposition a cardinal trait. Central traits are less pervasive than cardinal traits, although they too influence a wide variety of behaviors. Those traits that are more situation-specific and less consistently present Allport calls secondary traits. Allport classifies traits according to the generality of their influence. Allport described personality as “the dynamic organization within the individual of those psychophysical systems that definition is carefully chosen.”

Raymond B. Cattell, another leading theorist, also clusters common traits, which are universal and unique traits, which belong to a particular individual, this theorist talks about surface manifestation. To uncover source traits, Cattell uses the technique of factor analysis. Cattell divides source traits into what he calls environmental-mold traits and constitutional traits. Both of these sources can be either general or specific, according to the range of their influence. Raymond B. Cattell stated a tentative definition of personality. “Personality is that which permits a prediction of what a



person will do in a given situation.”

Trait theorists take a homothetic approach to the study of personality. This approach is comparative and attempts to understand an individual by comparing him with others.

Trait theory is based on several assumptions. The first assumption is that any difference between people that is seen as significant will have a name. Secondly, these names, known as traits, are conceived as continuous dimensions. In general, trait theories assume that people vary simultaneously on a number of personality factors. These traits are of both the conjunctive and disjunctive form.

What traits do people like most? Researcher Norman Anderson (1968) wondered which trait people value most, and had college students rate a list of 555 traits for desirability. For each of the traits, respondents indicated how much they would like someone who is \_\_\_\_\_. The top ten are sincere, honest, understanding, loyal, trustful, trust-worthy, intelligent, dependable, open-minded, and thoughtful. The bottom ten is deceitful, dishonorable, malicious, obnoxious, untruthful, dishonest, cruel, mean, phony, and liar. (Ronald Evans, Laura Hubbs-Tait. 1991:54)

### ***Cattell's Sixteen-Dimensional Theory***

Raymond Cattell (1905), a British-born psychologist who has spent most of his research career in the United States is one of the pioneers who attempt to describe personality in terms of measurable traits. (Peter Gray, 1991:592) His undergraduate degree was in chemistry, and his goal in psychology was to develop chemistry of

personality. Cattell wished to develop a system by which an infinite number of different personalities could be described in terms of a finite number of trait dimensions.

Cattell's approach to the study of personality first measures a large group of individuals in as many ways as possible. L-data provide information about a person's everyday behavior; Q-data is obtained from performance on personality questionnaires and inventories; T-data is obtained from performance on objective tests. (B.R. Hergenhahn, 1994:258) The measures then are inter-correlated and displayed in a correlation matrix. The measure that is moderately or highly correlated is thought to be measuring the same attribute. This procedure is called factor analysis, and the attributes it detects are called factors or traits. Cattell describes a number of different types of traits. His most important distinction is between surface traits and source traits. Surface traits are those that are actually measured and are, therefore, expressed in overt behavior of some kind. Source traits are those that are the underlying causes of overt behavior. Some source traits are genetically determined and are called constitutional traits. Other source traits are shaped by one's culture and are called environmental-mold traits. Cattell also distinguishes between ability, temperament, and dynamic traits. Ability traits determine how well a task is performed. The most important ability trait is intelligence; cumulated knowledge of the type learnt in school and is thus gained through experience. Although crystallized intelligence is gained through experience, one's ability to effectively utilize such information is also largely genetically determined. Temperament traits are constitutional and determine a person's emotional makeup and style of behaving. (B.R. Hergenhahn, 1994:259)

Dynamic traits are those that set the person in motion toward a goal; in other words, they determine a person's motivational makeup. Cattell distinguishes two categories of dynamic traits: ergs and metaergs. (B.R. Hergenhahn, 1994:247) Ergs are roughly equivalent to instincts, biological needs, or primary drives. Metaergs are learned drives, divided into sentiments and attitudes. Sentiments are predisposition to act in certain ways to classes of objects or events. Attitudes are specific responses to certain objects or events. Because ergs are at the core of one's motivational patterns, sentiments are said to be subsidiary to ergs, and because attitudes are dependent on sentiments, attitudes are said to be subsidiary to sentiments. (B.R. Hergenhahn, 1994: 249) Cattell diagrams the relationships among ergs, sentiments, and attitudes in what he calls the dynamic lattice. The fact that humans almost inevitably take indirect routes to satisfy ergic tensions is referred to as long circuiting.

To explain how personality develops, Cattell postulates three types of learning: classical and instrumental conditioning and structured learning. The latter is the most important type of learning because it involves a change in one's entire personality. Cattell has shown the relationship between various early home environments and the development of various personality traits. He also found support for Adler's assertion that birth order and family size significantly impact personality development. Cattell attempt to determine the relative contributions of heredity and environment to the development of various traits. He finds that some traits have a very strong genetic component, (e.g. intelligence) and some have practically none (e.g. superego strength). Overall, Cattell concludes that about one-third of personality is determined by genetics

and about two-thirds by environmental influences.

Cattell believes that psychopathology can result from either an abnormal configuration of the normal source traits or from the possession of one or more of the 12 abnormal traits. Cattell believes that trait analysis should precede psychotherapy and analysis will provide an accurate diagnosis of the problem, and will suggest the most effective method of treatment. Also, trait evaluation should occur throughout therapy to determine how treatment is affecting the client's total personality.

Factor analysis yields personality traits when applied to humans whereas it yields syntality when applied to the study of specific groups. (B.R. Hergenhahn, 1994:260) Existing and experimental societies can be evaluated in terms of their ability to produce "the greatest good for the greatest number" of people. The information gained can be used to create more effective societies.

Cattell is a determinist; he believes that an individual's traits are specified. When these traits are weighted or loaded according to their importance in a given situation, and when temporary influences such as fatigue, illness, or anxiety are taken into consideration, a person's behavior can be predicted with considerable accuracy. Prediction is made by including as much information about a person as possible in a specification equation. (Richard M. Rychman, 1985: P.222)

Cattell's theory rests on a solid foundation of empirical research. He uses the factor

analytic technique to discover personality traits and then, once discovered, he uses them to describe and predict a wide variety of behaviors. The research done using his 16 PF questionnaire alone is vast. Perhaps no other personality theorist has performed or stimulated as much empirical research as Cattell.

Cattell's theory has been criticized for containing too many subjective elements for assuming that human behavior is more consistent than it actually is, for concentrating too much on groups and group averages at the expense of the unique individual, and for implying that the source traits have actual physical existence.

However, Cattell's theory has been praised for providing scientific rigor to the study of personality, an area that typically lacks such rigor, and providing tools that can be used in a large number of applied areas, for example, clinical diagnoses, vocational and marital counseling, and personnel selection.

### ***Cattell's 16-PF Model***

Stephanie Jones, 1993 points out that 16-PF (16 Personality Factors) is a very popular, and fairly quick-to use inventory. The industrial society, in their guide to assessment and selection rated the 16-PF most highly relevant among the many personality questionnaires, which have been successfully developed for use with normal populations, and which have shown promise in personnel selection.

16-PF has rapidly become accepted in the psychometric field, and is one of the most

well known standard tests. Devised by Cattell from 1946-9, the 16-PF is based around the proposal that an individual's personality consists of 16 different personality factors, a conclusion which was also based on the application of factor analysis to statements about the individual's personality.

This personality questionnaire, based on the first Cattell model, but considerably refined over the years, has provided a profile of the individual's personality. There are several textbooks and researches on each of these different personality types. This test, used prescriptively, looks at combinations of personality types and provides a picture of the individual, combining 16 unrelated factors. Cattell used factor analysis to uncover the deep, basic traits that underline human behavior. The 16PF scales that he derived measure temperament – a person's characteristic style of thinking, perceiving, and acting over a relatively long period of time and in a wide range of different situations.

These personality traits are manifested in a set of attitudes, preferences, social and emotional reactions, and habits. Each trait has its own history, and is derived from a complicated interaction between inherited disposition and learning from experiences.

The 16-PF can be used, among other applications, for identifying personalities, which fit specific profiles for occupational applications. For example, it would be possible to identify a sales person profile, a manager profile, a researcher profile and a number of other profiles, which can be matched against individuals.

Personality predicts performance research over the past 15 years has indicated that



personality dimensions are related to performance on the job in a variety of occupations (Barrick & Mount, 1991; Bouman, et. al, 1997; Goodstein & Lanyon, 1999; Salgado, 1997; Tett, Jackson & Rothstein, 1991). In fact, Hough (1998) recently noted that “personality measures can contribute to the Industrial Organization (I/O) psychologists’ tool kit used to predict job performance.” This is a good way to think of personality testing—it provides information to the professional that compliments other selection measures (E.g., cognitive ability measures, job knowledge tests, bio-data, etc.) that the professional may be using. (Alan D. Mead and Mary L. Kelly, 1999)

16-PF includes a list of just over 100 statements on a self-scoring sheet. In completing 16-PF, it is simply a case of choosing between two statements given, with the option also to choose a midway answer. Thus there are three options to each statement. In the instructions, the tester is asked to choose the first natural answer which comes into their minds and not opt for the in-between option too often, perhaps only every four or five times.

Time needed to complete the test is about 30 minutes. In the feedback, the 16-PF results are then related specifically to personality characteristics which have been well validated. The 16-PF results can be examined in some depth to produce a detailed report, or can be used just to create a quick profile. The 16-PF, examines personality types according to 16 personality factors, and is also useful for analyzing stress levels and anxiety. 16-PF provides a good, basic personality description, which is of value as a general tool for use in interviews for selection, and sometimes for career development

and team building. It can be useful for comparing one person with other employees. 16-P F types can be linked to particular corporate cultures, especially relating to the amount of risk required in operating in a certain corporate environment. It is easier to falsify than some other tests, the basic personality type can be revealed during the feedback, which would show up any attempts to falsify it. 16-PF is good static value of personality type, and useful for predicting behavior, especially in teams. The questions are very general, and easy to complete, with an entirely open mind, without necessarily thinking of the implications of any of the answers. (Stephanie Jones, 1993:58)

The 16 PF questionnaire was developed by Catell in 1949 to measure source traits of individual personality. It was the first questionnaire based on systematic scientific research into the basic dimensions of human personality. Rather than choosing a group of traits as a priority and then constructing a test to measure them, Raymond B. Cattell's (1945) goal was to discover the fundamental building blocks of personality. Through a long series of factor-analytic studies of behavior ratings and questionnaire data, Cattell's theory relies heavily on the use of the statistical method of factor analysis.

As Makhnach, Alexander V. Institute of Psychology, Moscow, Russia, 2000.

Concluded:

**Correlation plays a major role in factor analysis. A correctional measure describes the degree to which variables are related to one another. A correlation can be positive or negative; the sign indicates the direction of the relationship. The correlation coefficient is derived mathematically and it specifies the degree to which the variables relate. A correlation of +1.00 or -1.00 is considered a perfect or strongest correlation that can be obtained. Thus, the closer to +/-1.00, the larger the correlation between the variables**

Cattell (1946) systematically analyzed and reduced Allport and Odbert's (1936) list of all traits describing human personality to sixteen basic underlying dimensions that held together as unitary traits-or the 16 PF primary factors. More than 50 published studies have replicated the basic structure of these sixteen traits (Cattell & Krug, 1986). Cattell also developed separate measures of how the traits change and develop throughout the life span (Cattell, 1979; 1980). Since its initial publication in 1949, the 16 PF questionnaire has undergone four revisions (1956, 1962, 1967-1969, 1993). The latest revision was undertaken in 1993 for purposes of re-standardizing on a current population sample, updating and improving item content, and generally refining the questionnaire. (Mary L. Kelly, 1999. 16 PF Select Manual).

The factors assessed were warm, abstract-thinking, emotionally stable, dominant, enthusiastic, conscientious conforming, bold, tender-minded, suspicious, imaginative, shrewd, apprehensive, experimenting, self-sufficient, following self-image and tension. (Russel & Karol, 1994)

### ***A brief orientation to the 16PF test***

The Sixteen-Personality Factor Questionnaire (16PF) is an objective scrabble test devised by basic research in psychology to give the most complete coverage of personality possible in a brief time. The test was designed for use with individuals aged 16 and above. The personality factors measured by the 16PF are not just unique to the test, but, also, rest within the context of a general theory of personality. Nearly 10 years of empirical, factor-analytic research preceded the first commercial publication of the

test in 1949.

Since it was first developed in the late 1940's, the 16 PF has been extensively researched. A bibliography of more than 3,400 titles has been assembled, nearly all of them scientific research studies. Such a depth of research produces two things. First, a confidence in what the test is measuring. It has been proven reliable and useful in a vast number of settings. It has been translated into many other languages, and the same structure of sixteen personality factors has been found in those cultures as well. Second, all the research provides a base of understanding about what the factors mean in various setting.

For convenience, each factor is listed with its alphabetic designation and brief descriptions of low and high scores. These 16 dimensions or scales are essentially independent. Any item in the test contributes to the score on only one factor so that no dependencies were introduced at the level of scale construction. Moreover, the experimentally obtained correlation among the 16 scales is generally quite small so that each scale provides some new piece of information about the person being tested.

The evaluation of the 16 PF has reflected Cattell's use of the factor analytic approach in identifying the basic structure of human personality. The 16 PF scales are bipolar in nature, in addition to the primary scales, the 16 PF uses "standardized ten" (sten) score scales. Sten scores range from 1-10, with a mean of 5.5 and a standard deviation of 2. Scores that fall farther from the mean (either in the high or the low direction) are

considered more extreme. The more extreme a score is toward a given factor pole, the more likely that the descriptors for the scale's pole will apply for that score and that the trait will be apparent in the examinee's behavior. Historically, 16 PF stens of 4-7 have been considered to be within the average range; stens of 1-3, in the low range; and stens of 8-10, in the high range. In a sten distribution, most people are expected to score in the middle (theoretically, about 68% obtain a score within plus-or minus one standard deviation from the mean). About 16% score at the low end, and another 16% score at the high end.

Translations of the 16PF into more than 40 languages and adaptations for five other English-speaking cultures are also available to facilitate international comparisons. (Administrator's Manual for the Sixteen Personality Factor Questionnaire, 1991)

### ***Design and construction of the test***

Ten to 13 items are provided for each scale in Form A and Form B. In Form C and Form D, there are eight items for the Factor B scale, seven items for the motivational distortion scale, and six items for each of the remaining scales. The questions are arranged in a roughly cyclic order determined by a plan to give maximum convenience in hand scoring situations and to insure variety and interest for the examinee.

Three-alternative answers are provided for each of the questions, this is particularly the case with adults of average or higher intelligence for whom Forms A, B, C, and D are designed. The primary difference between Form A and B, on the one hand, and Form C

and D, on the other, is in their length and therefore, the time required for administration. Form A or Form B will generally require about 45-60 minutes each for administration, while Form C or Form D require approx. 25-35 minutes each.

In research situations and in all cases where maximum precision is needed, it is suggested that, wherever possible, at least two forms be used (E.g., A+B or C+D). On the other hand, where time is limited, modern psychometric understanding clearly supports the use of a single form that measures all 16 factors, rather than expenditure of the same total available time in longer and more valid measures of only a few factors. From our experience, when time allows only one form of the 16PF to be utilized, the most frequently selected form is Form A. Beyond the time differences, the reading level required for completing the various forms is the only other important difference. The reading level of Forms A and B is approximately 7-8<sup>th</sup> grade, while Forms C and D require reading ability of only 6-7<sup>th</sup> grade. (Administrator's Manual for the 16PF, 1991)

Kinberley P. Pritchett (1998) Study "An Identification and Analysis of Key Attributes of the Change-Adaptive Personality". Change is occurring at a rate never imagined possible in times past. Individuals are being forced personally and professionally to deal with the change, or in other words, to become change-adaptive. Organizations require people who can thrive on change to move the business forward. Pervasive, continuing resistance is no longer acceptable if a company hopes to succeed in today's fiercely competitive marketplace. This study attempted to combine several different areas of study and empirically identify key attributes involved in the construct of



change-adaptability. In addition, two different treatments (“change-awareness” handbooks and training) were utilized to determine if one’s level of change-adaptability could be raised. Results indicated that optimism and positive reappraisal, and flexibility accounted for approximately 34% of the variance of change-adaptability. Neither gender nor age was related to the construct of change-adaptability. No change, regardless of treatment was seen in supervisor ratings or one’s overall level of change-adaptability. However, significant changes did occur with regard to the participant questionnaire that tested specific goals of the training program. (1998, the second place winner in IPAT research contest)

Pamela Lynn Hamiton (1997) studies “The Relationship between Personality Assessment Feedback and Enhanced Self-Concept in Adolescents in a Secondary School”. The purpose of this study was to explore the relationship between personality assessment feedback, and enhanced self-concept in adolescents in a secondary school. The sample consisted of 60 junior level secondary students, at a private college preparatory institution located in St. Petersburg, Florida. The relationship between personality assessment feedback and enhanced self-concept in adolescents in a secondary school setting was examined employing a dependent t-test. Assessment instruments used included the sixteen-personality factor questionnaire, fifth edition (16 PF) and multidimensional self-concept scale (MSCS). Findings revealed a statistically significant positive relationship between personality assessment feedback and enhanced self-concept in adolescents in a secondary school setting. (1997 the first place winner in IPAT research contest).

Lion, Cynthia L., (1996) study of “Personality and self-selection into various job facets: A longitudinal study.” the main purpose of which was to examine the longitudinal relationship between personality and job-facet choice. The question in this study was: Do people with similar dispositions (personalities) choose similar jobs? In order to study behavior over time, it was necessary to address the notion of personality stability. Research was examined that predicted the fit between the job and the person. Based on this research, it was predicted that there would be a longitudinal correlation between certain job facets and individuals with similar personality types. Three personality measures were used to describe personality; the major thinking in this study was that there was a longitudinal, causal relationship between personality and job-facet choice. A number of the specific predictions were as expected. Gender was not as useful as personality in predicting job-facet choice. The observational method for measuring personality traits was somewhat more useful than the self-report method, but the results did not strongly differentiate between the two methods. (Dissertation Abstracts International v.57 no.1 July 1996)

Kolar, David William, (1995). Carried out a study on “Individual differences in the ability to accurately judge the personality characteristics of others” The ability to accurately judge the personality characteristics of others was examined. Two criteria were constructed to determine whether or not individuals differed in their ability to accurately judge personality. The first criteria evaluated how well an individual’s personality judgments of another person agreed with that person’s self-judgments. The second criterion determined how well personality judgments provided by a judge

predicted the behavior of a target subject across three situations. Further analyses examined the personality characteristics of good judges of personality. No sex differences were found in the ability to accurately judge personality. Results indicated that the personality characteristics of male and female judges differed. (Dissertation Abstracts International v. 57 n. 1 July 1996)

***Cattell's sixteen source traits or personality factors***

- A. Warm vs. Cool, Reserved.
- B. Abstract-thinking vs. Concrete-thinking.
- C. Emotionally stable vs. Affected by feeling.
- E. Dominate vs. Submissive.
- F. Enthusiastic vs. Sober.
- G. Conscientious conforming vs. Expedient
- H. Bold vs. Shy.
- I. Tender-minded vs. Tough-minded.
- L. Suspicious vs. Trusting.
- M. Imaginative vs. Practical.
- N. Shrewd vs. Forthright.
- O. Apprehensive vs. Self-assured.
- Q1 Experimenting vs. Conservative.
- Q2 Self-sufficient vs. Group-oriented.
- Q3 Following self-image vs. Undisciplined self-conflict.
- Q4 Tense vs. Relaxed

**Factor A** (Warm versus Cool, Reserved) indicates the tendency to be warm with people versus the tendency to be more reserved socially and interpersonally. Reserved people tend to be more alone and are uncomfortable in circumstances involving frequent interactions with other people. Warm people are more social and prefer situations dealing with people.

**Factor B** (Abstract thinking versus Concrete thinking) is concerned with intelligence. High scorers show the ability to solve reasoning problems more correctly. Russel and Karol (1994) stated that even though reasoning is not a personality trait, it is a factor in 16-PF because it directly affects many personality traits.

**Factor C** (Emotional Stability versus Affected by feelings) relates to an individual's ability to cope with everyday living. High scorers tend to be able to cope, manage events, and recover from upsets quickly. Low scorers tend to be upset with all the little things in life that come their way. They feel that they have no control over life and react to it rather adept to it.

**Factor E** (Dominant versus Submissive) involves the exertion of one's desire over the other. High scorers tend to be forceful, vocal and pushy in trying to obtain what they want. Low scorers tend to avoid conflict and give in to the wishes of others.

**Factor F** (Enthusiastic versus Sober) is concerned with natural self-expression and spontaneity. High scorers are enthusiastic, and seek attention. They are drawn to social

events and are less playful they are perceived as dry and not entertaining.

**Factor G** (Conscientious conforming versus Expedient) is concerned with the issues of cultural standards of right and wrong. High scorers follow rules and regulations and customs behavior. They can be perceived as staid and rigid or inflexible. Low scorers are more lenient and choose not to be bound by rules or regulations.

**Factor H** (Bold versus Shy) relates to the tendency to be among people. High scorers seek social highlight and contacts. They are as comfortable in new social situations as they are in old. Low scorers are shy of public events that would put them in the spotlight. They are uncomfortable speaking in front of people. They are timid and shy.

**Factor I** (Tender-minded versus Tough-minded) is concerned with people's sensitivities and sensibility. High scorers make judgments based on personal values and are more sentimental than their counterparts. Low scorers are more practical and more interested in how things work. They are more objective in their opinions than high scorers.

**Factor L** (Suspicious versus Trusting) is related to the feeling of trust in other people's motives and intentions. High scorers tend to be distrusting and doubtful. They are afraid of being taken advantage of and are always on guard. Low scorers' view the world as fair. They anticipate fair treatment and good intentions from others.

**Factor M** (Imaginative versus Practical) is related to the way people think and pay attention. Abstracted people (high score) are oriented toward internal mental processes and ideas. They generate a lot of ideas and are creative. Grounded people (low scorer) pay more attention to practical matters, observable information, and the realities of things affecting them.

**Factor N** (Shrewd versus Forthright) addresses the tendency to be forthright and open versus private and non-disclosing. High scorers are always on guard with a wall in front of them. They may maintain their privacy at the expense of developing a close relationship. Low scorers are straightforward and genuine. They are self-revealing and open.

**Factor O** (Apprehensive versus Self-assured) concerns self-confidence. High scorers worry about things and tend to feel insecure. They have a strong sense of obligation which comes with anxiousness and guilt. Low scorers are confident of them and can be too secure to the point of being insensitive to the feedback of others.

**Factor Q1** (Experimenting versus Conservative) is related to people's acceptance of new ideas, new ways of doing things, and questioning the status quo. High scorers look for better ways of doing things, experiment, and are more tolerant of changes. Low scorers prefer to do things in traditional ways. They prefer things to be predictable and familiar and do not like people who are different or unusual.



**Factor Q2** (Self-sufficient versus Group-oriented) looks at the desire to associate with other people or to be independent in one's life. High scorers are self-reliant and make decisions for them. They plan and do things without depending on others and sometimes even prefer to be alone and not ask for help. Low scorers tend to want to be in-groups, to do things as a team, and usually seek social approval of their actions.

**Factor Q3** (Following self-image versus Undisciplined self-conflict) is concerned with being organized. Keeping things in order, and having plans prior to doing anything. High scorers tend to be organized and have strong control of their emotions and behavior. They are comfortable in predictable situations and find it hard to deal with unpredictability. Low scorers tend to be easy – going, leave things to chance, and are unorganized. They are more prone to impulses and, to a certain extent, may be inconsiderate.

**Factor Q4** (Tense versus Relaxed) is associated with nervous tension. High scores are prone to restlessness and affect self control. They are often frustrated when things are not moving or not going according to their liking. Low scorers tend to be relaxed and satisfied. In the extreme, it could lead to laziness and inactivity due to their inclination not to change or push themselves.

## *Assumption University of Thailand*

### *History and development*

Thai education was systematically established during the reign of King Chulalongkorn (Ministry of Education, 1976). With the threat of colonialism by the Western powers at her borders and influenced by the king's western style of educational background, political and educational modernization of the country rapidly took place. Thai education has gone through many reforms and modifications to suit the changing times and political environments (Ministry of Education, 1976:12). At present, responsibility for the administration of education in Thailand is divided among four government agencies. The Office of the Prime Minister is in charge of the policy and planning. The Ministry of Education is responsible for pre-primary, primary, secondary education, teachers' education, vocational education, and non-formal education. The ministry of university Affairs is responsible for higher education and the Ministry of interior is in charge of municipal schools (Office of the National Education Commission, 1992).

Initiatives to start international schools in Thailand began in 1951 when the American Embassy contacted the Ministry of education with the intention of establishing an educational institution for the children of American expatriates working in Thailand, in 1957. After repeated requests from foreign embassies and organizations, the Ministry of Education permitted the establishment of "foreign school" on a perquisite basis (Worakij, 1991, cited in Suvichakorn, 1995). The Ministry of Education in 1957 officially recognized the first international school in Thailand, namely the International

School Bangkok. At that time, the related regulations stated that the school must enroll students from all foreign nations. The headmaster was required to be a Thai national and the owner was to be either a Thai national or a Thai organization. In addition, the school must follow the Private School act of 1954 sec 20 (1) (Worakij, 1991, cited in Suvichakorn, 1995). Ruamrudee International School was permitted to enroll students of foreign nationals including the children of Thai nationals who were stationed in foreign countries in June of 1963 (Special Policy School Division, 1990). In the following year, with continued requests from the British embassy, Bangkok Pattana International School was established in January 1964. Each of these three schools used English as the medium of instruction. Subsequent to these “first” international schools in Thailand and with the increasing number of foreign nationals working in Thailand, additional international schools were permitted on a case-by-case basis starting in the year 1991.

Assumption University was originally initiated in 1969. It was formally established in June, 1972 and accredited by the Ministry of Education and Ministry of University affairs in May, 1975. The founding father of this institution is Brother Bernard Mary of the Brothers of St. Gabriel, a Catholic religious order, devoted to education and other philanthropic activities in Thailand and other countries. In 1990, it was granted the new status of “Assumption University” by the Ministry of University Affairs.

An international school provides education for students without any restriction or limitation on nationality, religion and form of government. It adopts an international

curriculum and media from which students from various countries can participate. English is used as the medium of instruction. For the establishment of international schools or colleges, their policies, rules, regulations, and standards are stipulated by the MOE in accordance with the Cabinet's resolution. Thailand has played an active role in international cooperation and exchange in education to keep up with changes in the world community. Major activities include an intergovernmental program, foreign loans for educational development, overseas studies and training, and regional and international conferences. In addition, international schools and colleges in Thailand as well as education for Thai residents overseas have been promoted. (Education in Thailand 1999 by Office of the National Education Commission)

Nothing is more important to a university than the quality and vigor of its faculty. The attitudes and practices of the faculty must be attuned to fit the new environments. To enhance the quality of instruction and research in Assumption University, the faculty must assume a high sense of responsibility.

In order to produce a faculty that is characterized by maturity, good judgement and a great concern for the welfare of their students, instructors must be imbued with current educational philosophy. Faculty to students; professionals ready to assist their community and nation in the solution of its problems; and active participants in faculty self-management by serving on appropriate university committees.

### *The Paradigm Shift*

#### *From teacher-centered to student-centered*

As the father of the active learning model, Dewey envisioned the role of a teacher as a leader of a group activity, rather than an authority figure who imparted knowledge. Student-centered learning and active learning must be key concepts that underscore the nature of teaching and the learning process. Dewey viewed learning as individual development, not as acquiring information poured in from a dogmatic teacher. Thus, the aim of educational institutions should be “development from within”.

#### *Manager of the learning process*

Excellence in teaching begins with the realization that what students learn is more important than what the teachers teaches. A teacher is considered to be the manager of the learning process.

The managed-learning process calls for drawing information from the participating learners, keeping them involved and engaged in learning, and recognizing their progress when they have learned. The emphasis is on what the learner learns. The learner is the most important person in the process-not the teacher. The teacher assists the learner in acquiring skills, knowledge, and techniques, and helps the learner integrate this information for application in the non-academic world.

According to Kuczarski & Kuczarski (1995), the three stages of managed-learning are:

1. Discovery. The teacher should know what students already know before the lesson is taught.
2. Teaching. The mode of delivery of the subject contents must be considered so as to bring out optimum results.
3. Application. Try out or the use of knowledge or skill must be provided so that the teacher knows whether learning has occurred or not. At the same time, learners must find out for themselves what they have learned correctly and evaluate their own level of learning achievement.

In the managed-learning process, the learners assume responsibility for their own learning. (P. 6-8)

### ***Inquiring into the teaching and learning process***

In his book “Learning to Teach” Arends (1998) states that the ultimate purpose of teaching is “to assist students to become independent and self-regulated learners.” This primary purpose stems from two underlying assumptions, namely:

1. Knowledge is not entirely fixed and transmittable but is something that all individuals, students and adults alike, actively construct through personal experience; and
2. The most important thing that students should learn is how to learn.



## *The Faculty (Instructors)*

### *Selection*

The University exercises great care in the selection of its instructors because it knows that no matter how noble its ideals are they will never be realized unless its teachers are imbued with the same ideals.

The recruitment and selection of a instructor is the responsibility of the Dean of the respective faculty. The proposal for a new appointment will be forwarded to the Vice President for Academic Affairs and the President for approval. Each faculty is responsible for administering appropriate exam(s)/interview(s) in order to properly evaluate an applicant's knowledge in the specific area, English proficiency, and teaching ability.

Since the University uses English as its medium of instruction, fluency in English is a must for all applicants. However, fluency in English alone does not guarantee acceptance. Applicants must have a thorough grasp of the subject or subjects they wish to teach and must demonstrate the ability to impart such knowledge to the students.

In addition, the applicant must possess the following qualities:

1. Sociable nature;
2. Willingness to abide by the University regulations;
3. Willingness to work hard;
4. Thorough grasp of the nobility of the teaching profession;
5. Initiative and enthusiasm.

### ***Being an instructor***

Teaching is creative work. It involves building people. It takes patience and understanding. Only a person who loves teaching and students can be a good instructor. Students are individuals in their own right with their own unique personalities and problems. This means that each student needs individual care and attention. Only a person of great patience and understanding can function effectively in such a role.

Students must be respected. They have ideas, opinions, and feelings. Which must be understood and appreciated.

Instructors are facilitators. They make it easier for students to learn, to think, to search, and to develop; in short, to grow.

Quality can be assured to stakeholders only in so far as it begins with the personal quality of the instructor. The process of learning should be the outcome of teaching preparation, teaching delivery, and teaching evaluation. Instructors of quality must possess quality in all teaching areas and other related activities.

### ***The main duties of an instructor are as follows:***

The first duty of an instructor is to understand the University, what it stands for and what its aims (its philosophy and objectives) are.

The second duty is to get a thorough grasp of the different programs of study and how they interrelate with each other.

The third duty is to understand the rules and regulations of the University, nature and scope of his/her own work within the framework of the philosophy and objectives of

the University and the various programs of study.

As responsible adults, lecturers will prepare their lessons before going to class, be punctual, and see to it that the class period is fully utilized.

Instructors will be available to students when they are needed and will take an interest in each of the students.

Instructors will do what they can to help their students in any ethical way possible.

***Other responsibilities are***

***Attending University Functions***

University functions. Such as wai khru ceremony, last orientation, academic exhibitions, commencement, etc, offer the lecturers unique opportunities to show their sense of participation and oneness. They must not only be willing, but also eager to take part in such functions.

***Attending Faculty Meetings***

Faculty meetings, whether at the University or departmental level, are held when needed. Faculty meetings are held to exchange ideas, to offer criticisms and encouragement and to solve problems. Therefore, all should actively participate.

***Proctoring Exams***

All full-time lecturers have the duty to proctor on the following occasions.

1. Entrance Examination;
2. Quizzes;
3. Mid-semester Examination;
4. Final Examination.

The office of Administrative Affairs provides the proctoring schedule and all instructors are requested to follow the schedule faithfully.

Examination days are working days and all lecturers are expected to be present unless on personal leave or on other university assignments.

### *Advisory role*

Most students need some help and guidance to complete their university education successfully. To provide them with such help, students are assigned an advisor whom he/she can consult with whenever he/she has any problem.

In order to fulfil his/her role the advisor must know the:

1. Programs and requirements;
2. Rules and regulations of the University;
3. Sequence in which courses are to be taken;
4. Basic contents of the courses;
5. Academic standing of the student;
6. Rules on probation and dismissal;

To be an effective advisor the instructor has to be:

1. Patient and understanding;
2. Firm but fair;
3. Available to help the student;
4. Interested in the student and his/her problems;
5. Full of initiative to follow up on the student and his/her performance.

### ***Professional integrity***

This means honesty to oneself, one's duty and one's students. Instructors should accomplish their work and do it well. They should be fair to all their students. They should constantly evaluate themselves and their performance. Their motto should be **“ONLY MY BEST WILL DO”**.

### ***Social responsibility***

No education is complete if it does not instill in students' social responsibility.

Assumption University owes its origin to those who were imbued with love for their fellowmen. Such people are conscious of their sacred duty to improve and uplift others around them.

Assumption University instructors must walk in the footsteps of these pioneers.

Assumption University instructors can best fulfill their social obligations by helping their students to become conscientious, compassionate, and law-abiding and morally sound citizens.

As lecturers of Assumption University, they should be in the vanguard of research in this country. They can also serve the country and community by writing books adapted to the needs of the Thai community.

## ***Relationship between Effective Teaching and Personality***

### ***Characteristics***

Personality measure is widely used in the selection and development of employees. (Borman, Hanson, & Hedge, 1997) There were many researches waned these sort of predictors during the 1960's, 1970's, and 1980's when the prevailing opinion was that these measure had little predictive validity. (e.g., Guion & Gottier, 1965, cited in 16PF select manual, 1999), research over the past 15 years has indicated that personality dimensions are related to performance on the job in a variety of occupations.

The early role-model approach soon gave way to another, which attempted to identify the psychological characteristics of good teacher: personality characteristics (e.g., achievement-motivation, directness, and flexibility), attitude (motivate to teach, empathy toward children, and commitment), experience (years of teaching, experience in subject taught, and experience with a particular grade level), and aptitude/achievement (scores on ability tests, college grade-point average, and student teaching evaluations) Over the years, only a few personality measures have been developed that relate specifically to teaching.



Consequently, the usefulness of many personality tests in predicting a teacher's classroom behavior must be inferred from their more general success in the mental health field. Although certain for effective teaching, personality tests have provided few insights into the positive social behavior that may be needed for effective teaching. The following list is some of the personality characteristics that have a certain intuitive appeal it is worth noting why they have not been useful criteria for defining good teachers. They are permissiveness, dogmatism, authoritarianism, achievement-motivation, introversion-extroversion, abstractness-concreteness, directness-indirectness, and locus of control, anxiety. (Levis, 1987, cited in Borich Gray D. 1992)

Effective teachers are always looking for better ways to teach. This is why curiosity, experimentation, and risk-taking are so important to teachers, throughout their ability to reflect on their behavior and use their reflective judgment to improve their teaching.

Fielding, Marianne A.; Gall, Meredith D. in 1982, studied the following title: "personality and situation correlates to teachers stress and burnout". The objective of this study was to determine whether teachers' personality characteristics affect their perceptions of stress and burnout and whether school climate interacts with personality factors to influence stress and burnout. The result found teachers having negative attitudes and beliefs about students, an external focus of control, and low tolerance for ambiguity report more stress and burnout than other teachers. These results suggest that pre-service teacher education programs should focus on developing an internal locus of control, positive and realistic attitudes toward students and tolerance of new situations.

Patricia Hedges, (1997) in his research paper having provided an historical review of the development of theories of personality; this paper discusses the significant research that has been undertaken in this area. He argues that there will be cases where a mismatch between teacher and pupil temperament will exist, with potentially serious consequences. The final section introduces a program designed to increase self-understanding, heighten awareness and ultimately lead to more satisfactory relationships and to more effective learning and teaching.

Javed Iqbal Shah, (2000) in his article “The Impact of personality dynamism in teaching” points out that teaching is an honorable profession. The personality of a teacher, and how he or she behaves and interacts with the students leaves an indelible impression on minds of most people. No one can deny the fact that each of us learnt many things from our teachers. In this paper, it found various factors or characteristics that are pre-requisite for a dynamic personality of an effective teacher and how these factors contribute towards substantial improvements in learning situations in teacher training and educational institutions. The following factors are affecting the personality of a teacher:

1. Attitude toward teaching and learning.

Most of the experts agree that if an individual does not possess a positive attitude toward the profession of teaching and learning, he can never become an effective teacher.

2. Intelligence and general ability.

The characteristic that has a rich tradition of practical, empirical and theoretical support

is the intelligence or general ability of a teacher. In general, people with high general ability and intelligence adapt themselves more easily to intellectual problem situations.

### 3. Cognitive style.

In the study of human characteristics, researchers have consistently found differences in the way people approach different types of perceptual problems, or the way in which they process information. The personal characteristics are usually referred to as cognitive styles. The intensity of the cognitive styles affects the personality of a teacher either in positive or negative way. (Witkin, Mooore, Goodenough, and Cox, 1977, cited in Javed Iqbal Shah 2000)

### 4. Ego development.

Ego development is characterized by increasing differentiation and complexity in impulse control, interpersonal style, conscious preoccupation and cognitive style. In order to develop a dynamic personality, ego maturity is paramount. Relative stability of ego maturity suggests that knowledge about a teacher's level of ego development may be important in the teacher's choice of strategies.

### 5. Moral character.

Most researchers have dedicated their professional lives to the study of the human capability of making moral and ethical judgements. Lawrence Kohlberg who lends direction to the matching of educational environments to differences in moral decision making.

Lucille Ann Marion, (1995) in her dissertation findings also gives the evidence that certain aspects of personality type have significant influences upon conflict-handling

behavior, an improved understanding of the role of personality type in conflict management provides for more effective management of the individuals within that process.

Howard R. D. Gordon, Marshall University and Richard Yocke in West Virginia University Institute of Technology, in 2000 studied the “Relationship between Personality Characteristics and Observable Teaching Effectiveness of Selected Beginning Career and Technical Education Teachers”. The result found some recommendations:

1. Career and technical education administrators need to recruit and encourage more qualified individuals to enter the profession.
2. West Virginia Department of Education should assess the credentials of beginning career and technical education teachers on an ongoing basis.
3. In-service and pre-service providers should structure workshops to address diverse strengths and weakness of beginning industrial and health occupation education teachers. Emphasis on the following teaching effectiveness competency statements should be included:
  - 1) Uses a variety of cognitive levels in strategies of questioning;
  - 2) Demonstrates proper listening skills;
  - 3) Provides positive feedback to students on their performance; and
 Implements an effective classroom management system for positive behaviors.

We can view the school as a social system. A social system refers to activities and

interactions of group members brought together for a common purpose.

Jacob Getzels and Egon Guba (1988:171-184), conceive the social system as involving independent and interactive. In school systems, for each individual who occupies a given role, there are role expectations. Role expectations represent not only the duties and actions expected from each role player but also the expectations concerning the quality of performance. The individuals chosen to occupy the roles are different from one another in action and in reaction, and we can analyze these differences in terms of personality.

Personality is determined in part by needs, which predispose a person to behave in a certain way in a given situation. In other words, the individual who occupies a given role has needs which he tries to fulfill. These are personalized needs and may not be associated with the needs of the school system. The proportion of role and personality factors determining behavior varies with the specific act, the specific role, and the specific personality involved. (Cherie and McNeil, 1996) Therefore, the relationship between personality characteristics and the role-play in effective teaching has a solid influence relationship. Relevant individual characteristics might include a person's job satisfaction and the extent to which he or she tends to be well organized. (John, Cary, Ivan, 1998:48)

### *Chapter III*

## **RESEARCH METHODOLOGY**

### ***Population and Sample***

#### ***Population***

The population consists of 381 full time instructors in the first semester of 2001 academic year at Assumption University of Thailand.

#### ***Sample***

The sample size for this study will consist of 180 full-time instructors, according to the table of Krijcie and Morgan. In this study, stratified random sampling by using the faculties as the stratum is used. Twenty-three faculties are sampled by using simple random sampling technique from each faculty.

#### ***Instrumentation***

Two questionnaires will be distributed to 180 instructors. They are effective teaching instructor factor checklist (instructors questionnaire), and Cattell's 16 PF questionnaire.

#### ***Effective Teaching Factors Checklist (Instructors Questionnaire):***

Effective teaching checklist was used to determine the effective and ineffective teaching instructors, 5 experts checked the content validity and calculated a reliability of 0.727.



This instrumentation is used for determining the Effective teaching instructors, it consists of two parts: Part I - Personal background, and Part II - Effective teaching checklist. The results of the questionnaire will be used to identify two groups of lecturers: effective, and ineffective teaching instructors.

Part I of the questionnaire contains items on personal data – gender, age, and nationality. Part II of the questionnaire contains items in teaching practices checklist. The following are some examples.

**Part I: Personal Background**

Please “3” in the box:

Gender

☐ Male

☐ Female

Age

☐ 20-39 yrs

☐ 40-59 yrs

☐ 60 or above yrs

Nationality

☐ American

☐ European

☐ Asian

☐ Others

**Part II: Effective Teaching Factor checklist**

Please put “3” in blank column after your consideration:

ITEM	level of occurrence				
	Always	Very Often	Fairly Often	Seldom	Never
	5	4	3	2	1
1. Takes personal responsibility for student learning and has positive expectations for every learner.					
2. Matches the difficulty of the lesson with the ability level of students and varies the difficulty when necessary to attain moderate-to-high success rates.					

### ***Cattell's 16PF Questionnaire***

The sixteen personality factor questionnaire (16 PF) is an objectively scorable test devised by basic research in psychology to give the most complete coverage of personality possible in a brief time. It was originally developed by Catell and other psychologists and has been in existence for over five decades. The personality profiles, which can be created using the 16 personality factors, are reasonably effective in an applied situation in predicting adjustment of an individual entering a particular group. The questionnaire consisted of 187 items providing 16 primary factor scales or personality as well as impression management index. The first took about 35-50 minutes to complete. Majority of the questions in 16 PF were indirect, asking about interests which the subject would not necessarily perceive to be related to the trait in the question.

The data in the answer sheets were checked against the provided keys. The raw score for each scale was converted to sten score from the norm provided with the test. The instrument had been thoroughly tested for its reliability. It has been claimed that it can be used for the evaluation of personality in people of different population groups because of its culture friendliness (Prinsloo 1992).

This instrument is used to identify the teacher personality characteristics. It was developed by Cattell in 1949, called Cattell's Sixteen Personality Factor (16PF) Questionnaire form A.

### ***Cattell's 16PF Questionnaire (form A):***

**Example:** Please consider the following question; there are some questions to see what attitudes and interests you have. There are no “right” and “wrong” answers because everyone has a right to his/her own views. To be able to get the best advice from your results, you will want to answer them exactly and truly.

Write your name and all other information asked for on the top line of the answer sheet. There are three possible answers to each question. Fill in the left-hand box if your answer choice is the “a” answer, in the middle box if your answer choice is the “b” answer, and in the right-hand box if you choose the “c” answer.

1. I have the instructions for this test clearly in mind.

☐ a. yes,      ☐ b. uncertain,      ☐ c. no.

2. I am ready to answer each question as truthfully as possible.

☐ a. yes,      ☐ b. uncertain,      ☐ c. no.

### ***Collection of Data***

The Vice President of Academic Affair of Assumption University in Thailand was contacted and asked permission to enter each faculty and department to obtain the data. When the Vice President of Academic Affair granted permission, adequate numbers of questionnaire copies accompanied by a cover letter was forwarded to the instructors.

### ***Treatment of Data***

The collected data was analyzed by using SPSS program. To analyze the data in accordance with the research objectives and hypothesis, different statistical measures will be utilized.

For descriptive purposes, percentages, means, standard deviation was used.

### ***Effective Teaching Instructor Questionnaire***

The criteria for classifying effective teaching instructors are as follows:

1.00-1.49	
1.50-2.49	Ineffective Teaching Attributes;
2.50-3.49	Fairly Effective Teaching Attributes;
3.50-4.49	
4.50-5.00	Effective Teaching Attributes.

### ***Cattell's 16PF Questionnaire***

For Cattell's 16PF Questionnaire, average short-interval reliability is 0.08; long-interval reliability is 0.52, (IPAT staff 1991:10-14)

Analysis of variance was used to determine different personality characteristics of the teachers and the F-ratio was computed with .05 level of significance. The correlation, Pearson  $r$  was used to determine the relationship between effective teaching indicators and personality characteristics, with degree of freedom in the  $t$  table, .05 and .01 represents the probability of alpha error.

To test the hypothesis concerning personality among effective teaching teachers, the mean and standard deviation scores for each of effective teaching scale, and 16 PF scales were computed for the two groups and compared. The mean, t-test, and Chi-square will be used to compare gender, age, and nationality. Correlation coefficient will be used to find the relationship between personality characteristics and teaching effective factors. The .05 levels was the criterion of significance.



Chapter IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Presentation

The data for this study was gathered from 180 full time instructors who taught in semester 1 of 2001 academic year at Assumption University. Total scores for effective and ineffective teaching instructors were tabulated. 180 questionnaires were submitted to 180 full-time instructors. A total of 153 useable questionnaires were returned out of 180-sample size (85% response rate).

A mean score 3.5 was used to determine what must be achieved in each effective teaching factor, this then becomes the criteria to select the 57 effective and 96 ineffective teaching instructors. The numbers of effective and ineffective teaching instructors are shown in Table 1.

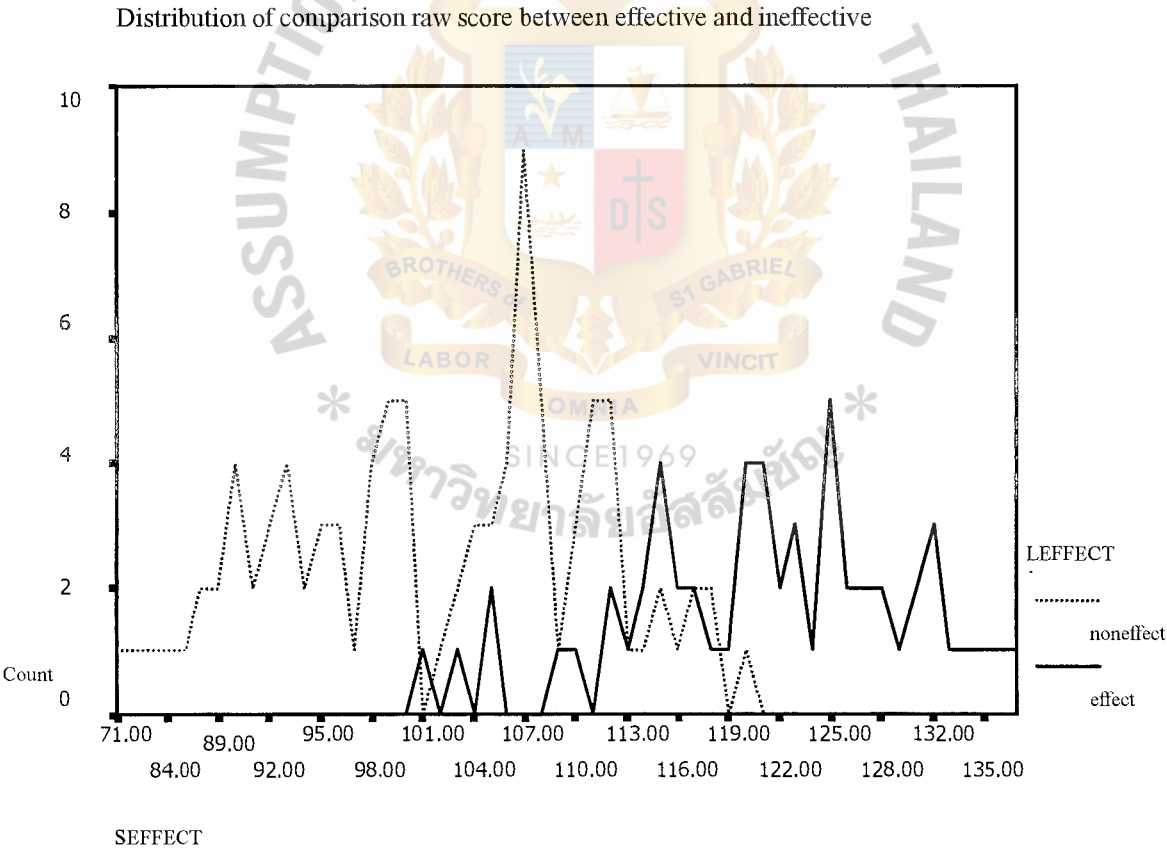
Table 1: Classification of respondents by effective and ineffective teaching instructors

Categories of instructors	Number of instructors
Effective teaching instructor	57
Ineffective teaching instructor	96
Total	153



The rational for the selection of effective and ineffective teaching instructors used the self-evaluation instrument (effective teaching checklist) to make the cutting point at natural gaps in scores, wherever, possible. The range in raw scores for the higher effective-teaching instructors was from 140 to 76, while the lower raw score was from 76 to 71. The distribution of comparison between effective and ineffective scores was illustrated in Table 2.

**Table 2:** Distribution of raw score range between effective and ineffective teaching



For determining personality characteristics, each characteristic was bipolar, or in a simpler sense, they have opposite meaning on two ends of a personality continuum. The standardization tables convert raw score to what are called stens. The standard sten score from one to three indicates low score for the factor, eight to ten indicates a high score on that factor, the score with the sten limits of five to six, constitute the norm of the general adult population.

After hand scoring and converting raw scores to sten scores, the personality characteristic factors and sten scores of effective teaching lecturers were: Factor A (sten = 3.96) tends to be cool and reserved; Factor B (sten = 4.37) tends to be concrete thinking; Factor C (sten = 5.82) tends to be emotionally stable; Factor E (sten = 5.02) tends to be submissive; Factor F (sten = 5.54) tends to be enthusiastic; Factor G (sten = 4.79) tends to be expedient; Factor H (sten = 6.53) tends to be bold; Factor I (sten = 4.98) tends to be tough-minded; Factor L (sten = 4.81) tends to be trusting; Factor M (sten = 6.79) more imaginative; Factor N (sten = 5.00) tends to be forthright; Factor O (sten = 5.23) tends to be self-assured; Factor Q1 (sten = 2.70) more conservative; Factor Q2 (sten = 6.19) more self-sufficient; Factor Q3 (sten = 5.60) tends to be following self-image; Factor Q4 (sten = 5.76) tends to be tense.

The 16 PF questionnaire profiles in sten score and personality characteristics of 57 effective teaching instructors are illustrated in Table 3.

**Table 3:** The 16 P F questionnaire profiles in sten score and personality characteristics of 57 effective teaching instructors.

Sten score of		Standard Ten Score (Sten)										
effective	Low Scores	Average										High Score
teaching	Description											Description
instructors		1	2	3	4	5	6	7	8	9	10	
3.96	Cool, reserved	.	.	.	.	A.	.	.	.	.	.	Warm
4.37	Concrete thinking	.	.	.	.	B	.	.	.	.	.	Abstract thinking
5.82	Affected by feeling	.	.	.	.	C	.	.	.	.	.	Emotional Stable
5.02	Submissive	.	.	.	.	E	.	.	.	.	.	Dominant
5.54	Sober	.	.	.	.	F.	.	.	.	.	.	Enthusiastic
4.79	Expedient	.	.	.	.	G.	.	.	.	.	.	Conscientious conforming
6.53	Shy	.	.	.	.	H.	.	.	.	.	.	Bold
4.98	Though-minded	.	.	.	.	I	.	.	.	.	.	Tender-minded
4.81	Trusting	.	.	.	.	L	.	.	.	.	.	Suspicious
6.79	Practical	.	.	.	.	M	.	.	.	.	.	Imaginative
5.00	Forthright	.	.	.	.	N	.	.	.	.	.	Shrewd
5.23	Self-assured	.	.	.	.	O	.	.	.	.	.	Apprehensive
2.70	Conservative	.	.	.	.	Q1	.	.	.	.	.	/experimenting
6.19	Group oriented	.	.	.	.	Q2	.	.	.	.	.	Self-sufficient
5.60	Undisciplined	.	.	.	.	Q3	.	.	.	.	.	Following
5.75	self-conflict Relaxed	.	.	.	.	Q4	.	.	.	.	.	self-image Tense

\_\_\_\_\_ = mean of the Effective Teaching instructors

*Instructors at Assumption University as classified by age, gender, and nationality*

The 153 responded instructors at Assumption University as classified by age resulted in: 35 effective teaching instructors in 20~39 years of age; 18 effective teaching instructors in 40~59 years; 4 effective teaching instructors in 60 or above years of age.

Whereas, there were 52 ineffective teaching instructors between 20~39 years of age; 27 ineffective teaching instructors in 40~59 years and 17 ineffective teaching instructors 60 years old or above. Numbers of effective and ineffective teaching instructors classified by age group it shown below in Table 4.

**Table 4:** Classification of effective and ineffective teaching instructors by age group

Categories of Instructors	Age	Age	Age	Total
	20~39	40~59	60 or above	
Effective Teaching Instructors	35	18	4	57
Ineffective Teaching Instructors	52	27	17	96
Total	87	45	21	153

When 153 responded instructors at Assumption University were classified by gender: there were 18 male effective teaching instructors; 39 female effective teaching instructors; 49 male ineffective teaching instructors and 47 female ineffective teaching instructors. The numbers of male and female instructors in effective and ineffective teaching groups is shown in Table 5.

**Table 5:** Classification of effective and ineffective teaching instructors by gender

Categories of Instructors	Male	Female	Total
Effective Teaching Instructors	18	39	57
Ineffective Teaching Instructors	49	47	96
Total	67	86	153

153 responded instructors at Assumption University when classified by nationality: resulted in 3 American effective teaching instructor, 2 European effective teaching instructors, and 52 Asian effective teaching instructors. On the other hand, there were 5 American ineffective teaching instructors, 3 European ineffective teaching instructors, 86 Asian ineffective teaching instructors and 2 other ineffective teaching instructors. The numbers of each group classified by nationality is shown in Table 6.

**Table 6:** Classification of effective and ineffective teaching instructors by nationality

Categories of instructors	American	European	Asian	Others	Total
Effective teaching instructors	3	2	52		57
Ineffective teaching instructors	5	3	86	2	96
Total	8	5	138	2	153

*Analysis and interpretation of data*

*Identification of effective teaching instructors*

Descriptive statistics were used to identify effective and ineffective teaching instructors. A mean score of 3.5 was adopted as a criterion for determining effective or ineffective teaching of each effective teaching factor as well as the sum score of effective teaching.

57 instructors were determined as effective teaching instructors and 96 instructors were determined as ineffective teaching instructors. From 96 ineffective teaching instructors there were 57 instructors who got a score above 3.5, when determined by the sum score, however, for each effective teaching factor, they were still considered ineffective teaching instructors. These



instructors were partially effective teaching instructors, hence for the purpose of this study; they were generally classified in the ineffective teaching group.

The number of effective and ineffective teaching instructors and the mean scores of each effective teaching factor is illustrated in Table 7.

**Table 7:** The mean scores to determine effective and ineffective teaching instructors.

	N	Lesson clarity	Instructional variety	Task orientation	Engagement in learning process	Student success	Sum Score
Effective teaching instructors	57	4.40	4.40	4.32	5.24	3.61	4.39
Ineffective teaching instructors	96	3.83	3.68	3.61	4.32	2.92	3.67

***Personality characteristics of effective teaching instructors***

To analyze the personality characteristics of effective teaching instructors as identified by Cattell’s 16 PF. After hand scoring and converted raw scores to sten scores, the personality characteristic factors and sten scores of effective teaching instructors were shown: Factor A (sten = 3.96); Factor B (sten = 4.37); Factor C (sten = 5.82); Factor E (sten = 5.02); Factor F (sten = 5.54); Factor G (sten = 4.79); Factor H (sten = 6.53); Factor I (sten = 4.98); Factor L (sten = 4.81); Factor M (sten = 6.79); Factor N (sten = 5.00); Factor O (sten = 5.23); Factor Q1 (sten = 2.70); Factor Q2 (sten = 6.19); Factor Q3 (sten = 5.60); Factor Q4 (sten = 5.76).

The 16 PF questionnaire has a standardized answer key to calculate the raw score for each factor, a nom table (showed in Appendix C) also provided the criteria for converting the raw score to sten score by the Institution of Personality and Ability Test (IPAT). For 16 PF sten score, the population average (or mean) for a sten distribution is fixed at 5.5. The exact limits of stens 5 and 6 (4.5 - 6.5) extend, respectively, a half standard deviation below and above the mean, constituting the solid center of the population, while the outer limits for sten 1 and 10 are 2 ½ standard deviations below and above the mean. One would normally consider sten scores of 4 through 7 to be average, since they fall within one standard deviation of the population mean and therefore represent approximately two-thirds of all the obtained score. Sten scores of 1,2,3, and 8, 9, 10 are generally considered to be greater importance for profile interpretation since they are more extreme and occur far less frequently in a normal population. (16PF administration manual, IPAT 1991)

From the analyzed data, based on 16 PF capsule descriptions of the 16 primary personality factors, Factor Q1 displayed the lowest mean sten score. Moreover, this low score represents the person is confident in what they have been taught to believe, and accept the “tried and true,” even when something else might be better. They are cautious and compromising in regard to new ideas. Thus, they tend to oppose and postpone change, are inclined to go along with tradition, are more conservative in religion and politics, and tend not to be interested in analytical “intellectual” thought.

Whereas, the other 15 Factors fell in the average sten score category, a mean score of 5.5 as a cutting point. Hence, Factor A showed a tendency for cool and reserved, the people who score

lower on Factor A tend to be stiff, cool, skeptical, and aloof. They like things rather than people, working alone, and avoiding compromises of viewpoints. They are likely to be precise and “rigid” in their way of doing things and in their personal standards. In many occupations these are desirable traits. They may at times tend to be critical, obstructive or hard.

Factor B represents concrete thinking. The person scoring lower on Factor B tends to be slow to learn and grasp, dull, and given to concrete and literal interpretation. This dullness may be simply a reflection of low intelligence, or it may represent poor functioning due to psychopathology.

Factor C represented emotional stability. The person who scores higher on Factor C tends to be emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group moral. This person may be making a resigned adjustment to unsolved emotional problems.

Factor E represented submissive. Individuals scoring low on Factor E tend to give way to others, to be docile, and to conform. They are often dependent, confessing, and anxious for obsessional correctness.

Factor F represented enthusiasm. The people scoring high tend to be cheerful, active, talkative, frank, expressive, effervescent, and carefree. They are frequently chosen as elected leaders. They may be impulsive and mercurial.

Factor G represented expedient. People who score lower on Factor G tend to be unsteady in purpose. They are often casual and lacking in effort for group undertakings and cultural demands. Their freedom from group influence may lead to antisocial acts, but at times makes them more effective, while their refusal to be bound by rules causes them to have less somatic upset from stress.

Factor H represented bold, sociable, ready to try new things, spontaneous, and abundant in emotional response. Their “think-skinnedness” enables them to face wear and tear in dealing with people and grueling emotional situations, without fatigue. However, they can be careless of detail, ignore danger signals, and consume much time talking. They tend to be “pushy” and actively interested in the opposite sex.

Factor I represented tough-minded people, who score lower on Factor I tend to be tough, realistic, “down to earth,” independent, responsible, but skeptical of subjective, cultural elaboration. They are sometimes unmoved, hard, cynical, and smug. They tend to keep a group operating on a practical and realistic “no-nonsense” basis.

Factor L represented trust. The person who scores lower on factor L tends to be free of jealous tendencies, adaptable, cheerful, uncompetitive, and concerned about others, a good team player. They are open and tolerant and usually willing to take a chance with people.

Factor M represented imaginative. Individuals with higher scorers on Factor M tend to be unconventional, unconcerned over everyday matters, self-motivated, imaginatively creative,

concerned with “essentials,” often absorbed in thought, and oblivious of particular people and physical realities. Their inner-directed interests sometimes lead to unrealistic situations accompanied by expressive outbursts. Their individuality can cause them to be rejected in-group activities.

Factor N represented forthright. Individuals who score lower on Factor N have a lot of natural warmth and a genuine liking for people. They are uncomplicated, sentimental, and unvarnished in their approach to people.

Factor O represented for self-assured, individuals with lower scores on factor O tends to be unruffled and to have unshakable nerve. They have a mature, unanimous confidence in themselves and their capacity to deal with things. They can, however, be secure to the point of being insensitive to the feedback of others.

Factor Q2 represented for self-sufficient, individuals who score higher on Factor Q2 are temperamentally independent, accustomed to going their own way, making decisions and taking action on their own. They discount public opinion, but are not necessarily dominant in their relations with others; in fact, they could be hesitant to ask others for help. But simply do not need their agreement or support.

Factor Q3 represented an individuals self-image. People who score higher on Factor Q3 tend to have strong control of their emotions and general behavior, are inclined to be socially aware and careful, and evidence what is commonly termed “self-respect” and high regard for social

reputation. They sometimes tend, however, to be perfectionist and obstinate. Effective leaders, and some paranoids, are high on Q3.

Factor Q4 represented for tense, individuals who score higher on Factor Q4 tend to be tense, restless, fretful, impatient, and hard driving. They are often fatigued, but unable to remain inactive. Their frustration represents an excess of stimulated, but undischarged, drive. Extremely high-tension level may disrupt school and work performance.

*Comparisons of the personality characteristics of effective teaching instructors by age, gender and nationality.*

*Testing of hypothesis:*

Hypothesis No. 1: There were statistically significant difference of personality characteristics between effective teaching instructors of different age, gender, and nationality.

To test this hypothesis, chi-square and t-test were used.

Firstly, the 57 effective teaching instructors were classified into three groups by age, the first group consists of 35 instructors from 20-39 years old, the second group consists of 18 instructors from 40-59 years old and the third group consists of 4 instructors who are 60 years old or above.

The chi-square test obtained significant values as follows: Factor A ( $\chi = 1.848$ ), Factor B ( $\chi = 0.671$ ), Factor C ( $\chi = 1.179$ ), Factor E ( $\chi = 0.921$ ), Factor F ( $\chi = 3.568$ ), Factor G ( $\chi = 3.646$ ), Factor H ( $\chi = 1.736$ ), Factor I ( $\chi = 1.609$ ), Factor L ( $\chi = 1.435$ ), Factor M ( $\chi = 1.103$ ), Factor N



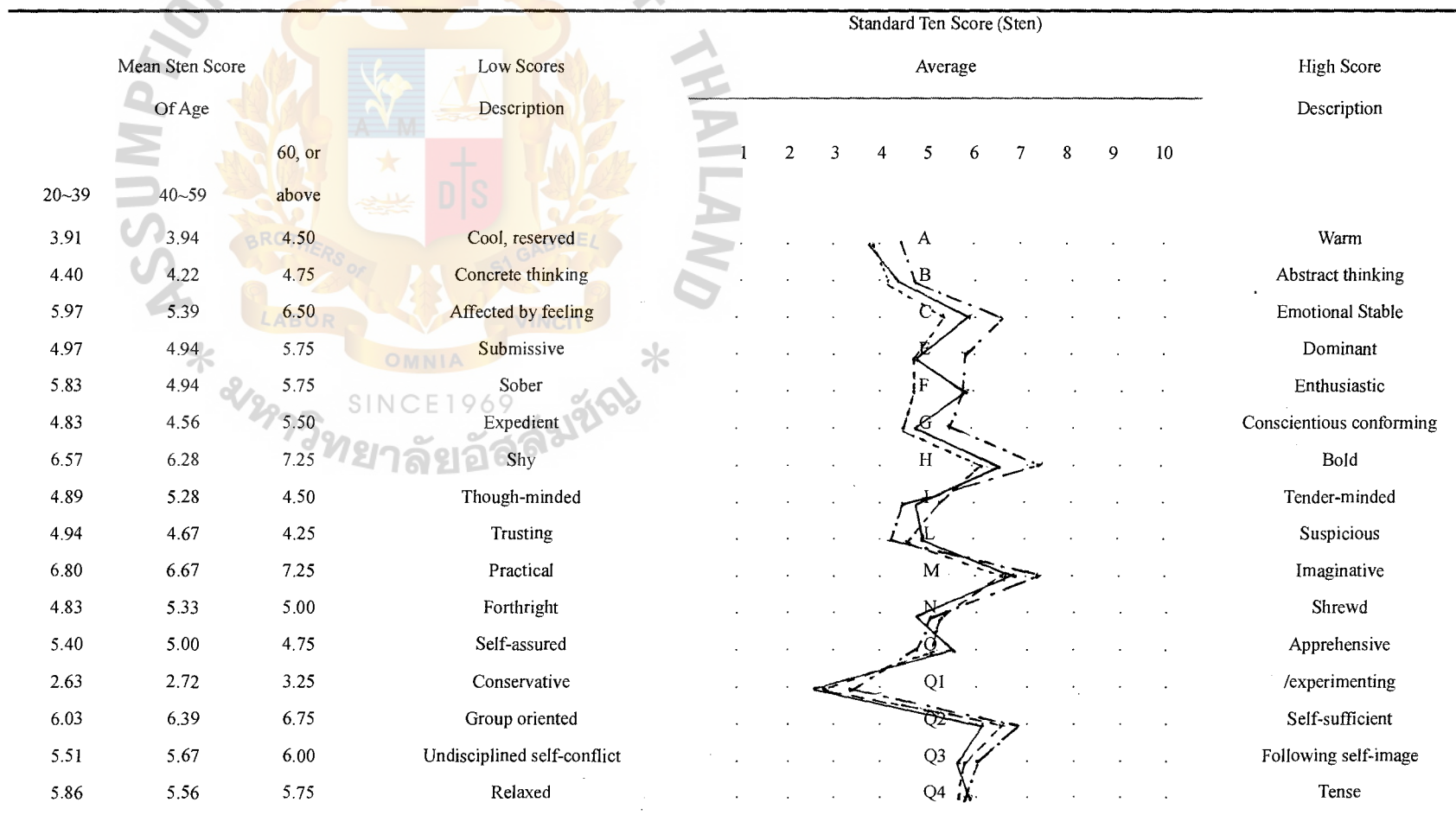
( $\chi = 2.292$ ), Factor O ( $\chi = 0.511$ ), Factor Q1 ( $\chi = 2.529$ ), Factor Q2 ( $\chi = 2.768$ ), Factor Q3 ( $\chi = 0.680$ ), and Factor Q4 ( $\chi = 1.290$ ) with 2 degree of freedom. These values were below the critical value of 5.991 for a significant difference at the .05 level as shown in Table 8.

Therefore, the hypothesis is rejected. It may be concluded that there is no evidence to show significant differences in personality characteristics of effective teaching instructors in any age levels.

**Table 8:** Chi-square tests of the relationship between age groups and personality characteristics in effective teaching group.

Factor	Chi-square	df	Sig.
A	1.85	2	0.397
B	0.67	2	0.715
C	1.18	2	0.555
E	0.92	2	0.631
F	3.57	2	0.168
G	3.65	2	0.162
H	1.74	2	0.420
I	1.61	2	0.447
L	1.44	2	0.488
M	1.10	2	0.576
N	2.30	2	0.318
O	0.51	2	0.774
Q1	2.53	2	0.282
Q2	2.77	2	0.251
Q3	0.68	2	0.172
Q4	1.29	2	0.525

**Table 9:** The differences in personality characteristics of instructors in different age group



———— = Age 20~39,      ..... = Age 40~59,      - - - - = Age 60, or above

### Gender

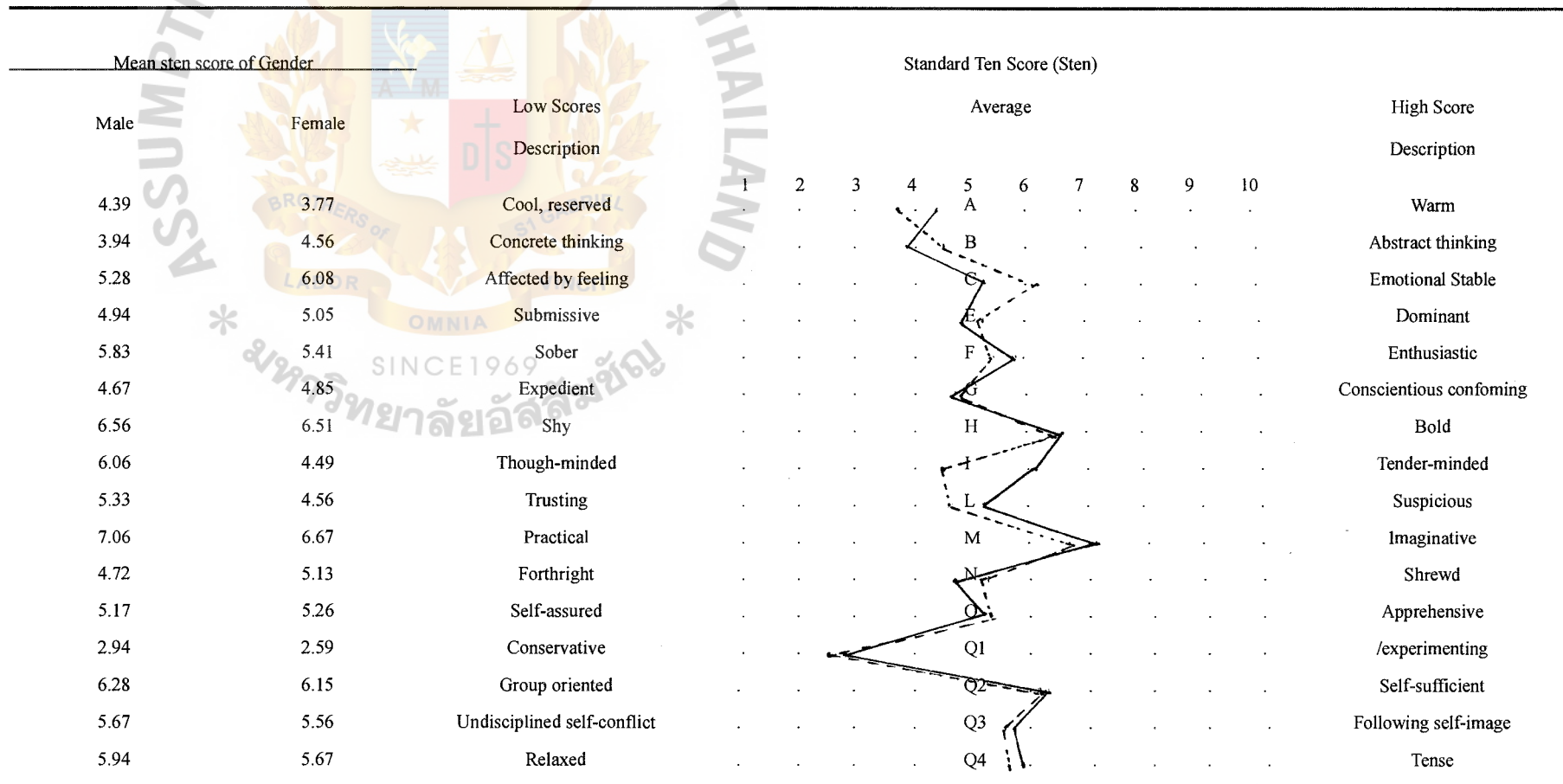
Secondly, a test for gender group was conducted. The 57 effective teaching instructors when grouped by gender resulted in 18 males and 39 females.

Using T-test to test this hypothesis. The T-test significant values obtained with 55 degree of freedom were as follows: Factor A ( $t = 2.399$ ), Factor B ( $t = -1.820$ ), Factor C ( $t = -1.685$ ), Factor E ( $t = -0.233$ ), Factor F ( $t = 1.032$ ), Factor G ( $t = -0.579$ ), Factor H ( $t = 0.105$ ), Factor I ( $t = 4.109$ ), Factor L ( $t = 2.511$ ), Factor M ( $t = 1.149$ ), Factor N ( $t = -1.364$ ), Factor O ( $t = -0.241$ ), Factor Q1 ( $t = 1.356$ ), Factor Q2 ( $t = 0.395$ ), Factor Q3 ( $t = 0.299$ ), and Factor Q4 ( $t = 0.724$ ). Where showed  $t$  critical values of Factor A, Factor Factor L and I were greater than 2.000 that needed significance at .05 levels. Therefore, the hypothesis was accepted. It can be concluded that there were differences between gender group in personality characteristic Factor A (Cool and reserved vs. Warm), Factor I (Tough-minded vs. Tender-minded) and Factor L (Trusting vs. Suspicious) of effective teaching instructors.

**Table 10:** T-Test for personality characteristic differences of the effective teaching of instructors compared by gender

Factor	t	df	Sig.	Factor	t	df	Sig.
A	2.04	55	0.020	L	2.51	55	0.015
B	-1.82	55	0.074	M	1.15	55	0.256
C	-1.69	55	0.098	N	-1.36	55	0.178
E	-0.23	55	0.817	O	-0.24	55	0.810
F	1.03	55	0.307	Q1	1.36	55	0.181
G	-0.58	55	0.565	Q2	0.40	55	0.694
H	0.11	55	0.917	Q3	0.30	55	0.766
I	4.11	55	0.000	Q4	0.72	55	0.472

**Table 11:** The differences in personality characteristics of the Male and Female instructors



———— = Male instructors

----- = Female instructors

*Nationality:*

Thirdly, nationality was used as a criterion to determine whether personality characteristics were related to their nationalities or not. There were 3 Americans, 2 Europeans and 52 Asian instructors in effective teaching group.

Chi-square was used to test this hypothesis. The data obtained with 2 degrees of freedom were shown as follows: Factor A ( $\chi = 3.277$ ), Factor B ( $\chi = 1.404$ ), Factor C ( $\chi = 8.270$ ), Factor E ( $\chi = 2.795$ ), Factor F ( $\chi = 7.591$ ), Factor G ( $\chi = 1.726$ ), Factor H ( $\chi = 0.517$ ), Factor I ( $\chi = 1.549$ ), Factor L ( $\chi = 0.198$ ), Factor M ( $\chi = 4.458$ ), Factor N ( $\chi = 0.644$ ), Factor O ( $\chi = 1.632$ ), Factor Q1 ( $\chi = 2.096$ ), Factor Q2 ( $\chi = 4.877$ ), Factor Q3 ( $\chi = 1.077$ ), Factor Q4 ( $\chi = 2.531$ ).

From Table 12 these values showed that Factor C and Factor F had greater critical value of 5.991 for a significance difference at the .05 levels. Therefore, the hypothesis was accepted. It may be concluded that nationality of instructors does have significant differences associated with personality characteristics. These factors were Factor C (Affected by feelings vs. Emotionally stable) and Factor F (Sober vs. Enthusiastic).

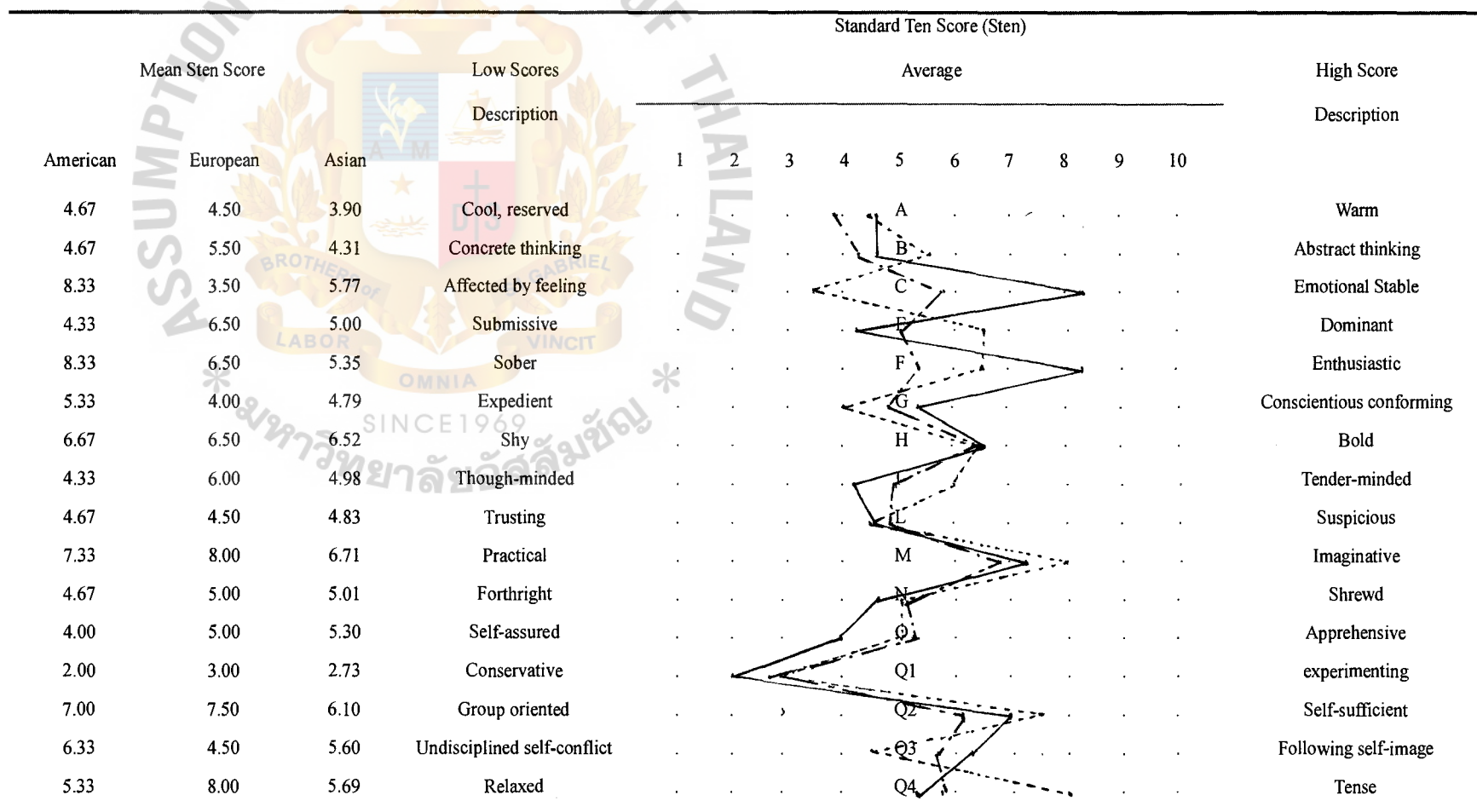
**Table 12:** Chi-square tests the differences in nationality of effective and ineffective teaching instructors.

Factor	Chi-square	df	Sig.	Factor	Chi-square	df	Sig.
<b>A</b>	3.28	2	0.194	<b>L</b>	0.20	2	0.906
<b>B</b>	1.40	2	0.496	<b>M</b>	4.458	2	0.108
<b>C</b>	8.27	2	0.016	<b>N</b>	0.64	2	0.725
<b>E</b>	2.80	2	0.247	<b>O</b>	1.63	2	0.442
<b>F</b>	7.59	2	0.022	<b>Q1</b>	2.10	2	0.351
<b>G</b>	1.73	2	0.422	<b>Q2</b>	4.88	2	0.087
<b>H</b>	0.52	2	0.772	<b>Q3</b>	1.08	2	0.584
<b>I</b>	1.55	2	0.461	<b>Q4</b>	2.53	2	0.282





**Table 13:** The differences in personality characteristics of instructors with different nationality



———— = American,      ..... = European,      - - - - - = Asian.

*Find out the relationships between effective teaching factors and personality characteristics of effective teaching instructors*

Hypothesis No. 4: There is a relationship between effective teaching factors and personality characteristics of effective teaching instructors.

To test this hypothesis and to find out the relationships between effective teaching factors and personality characteristics of effective teaching instructors, Pearson correlation coefficients were computed, the results of which are shown in Table 14.

Factor A: analyzed data ( $r = 0.321$ ) showed positive correlation which means that personality characteristic factors A with teaching factor “Instructional Variety” were significant at the 0.05 level (2-tailed). A data ( $r = 0.280$ ) showed positive correlation is significant at the 0.05 level (2-tailed) with teaching factor “Engagement in Learning process”. A data ( $r = 0.263$ ) showed positive correlation is significant at the 0.05 level (2-tailed) with sum score of effective teaching.

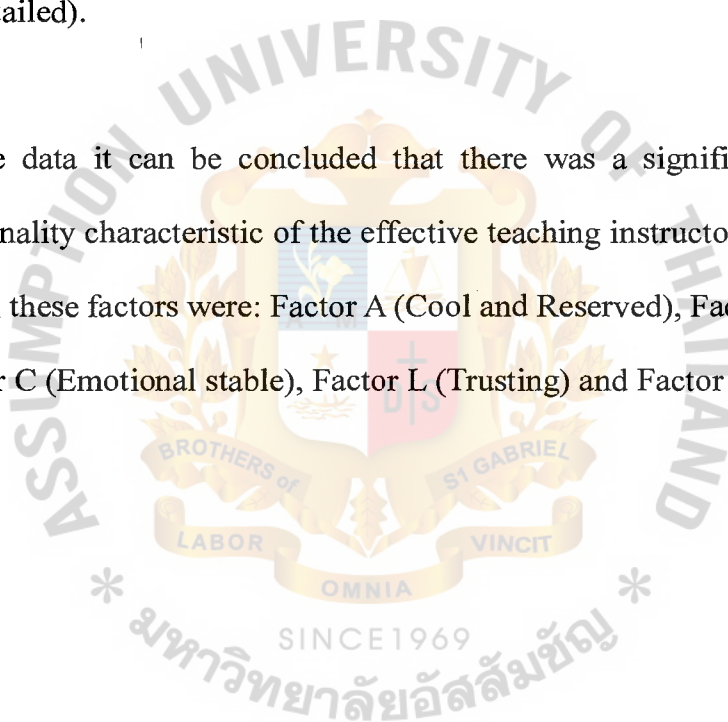
Factor B: analyzed data ( $r = -0.264$ ) showed negative correlation that personality characteristic factor B with “sum score of effective teaching” was significant at 0.05 level (2-tailed).

Factor C: analyzed data ( $r = 0.361$ ) showed positive correlation that personality characteristic factor C with effective teaching factor “Lesson clarity” was significant at 0.01 level (2-tailed).

Factor L: analyzed data ( $r = 0.267$ ) showed positive correlation that personality characteristic factor L with effective teaching factor “Student success” was significant at 0.05 level (2-tailed).

Factor Q4: analyzed data ( $r = -0.304$ ) showed negative correlation that personality characteristic factor Q4 with effective teaching factor “Lesson clarity” was significant at 0.05 level (2-tailed).

From the above data it can be concluded that there was a significant correlation between 5 personality characteristic of the effective teaching instructors with effective teaching factors, these factors were: Factor A (Cool and Reserved), Factor B (Concrete thinking), Factor C (Emotional stable), Factor L (Trusting) and Factor Q4 (Tense).



**Table 14:** Distribution of  $r$  score in correlation coefficients between personality characteristics and effective teaching factors.

	Lesson clarity		Instructional variety		Task orientation		Engagement in learning		Student success		Sum score of effective process	
	$r$	Sig.	$r$	Sig.	$r$	Sig.	$r$	Sig.	$r$	Sig.	$r$	Sig.
<b>A</b>	.046	.735	<b>.321*</b>	.015	.227	.089	<b>.288*</b>	.030	.014	.930	<b>.263*</b>	.048
<b>B</b>	-.181	.178	-.209	.119	-.149	.209	-.209	.118	-.189	.160	<b>-.264*</b>	.047
<b>C</b>	<b>.361**</b>	.006	-.018	.896	.043	.753	.171	.203	.038	.780	.182	.175
<b>E</b>	.071	.601	-.088	.513	.012	.927	.083	.537	-.082	.545	.009	.950
<b>F</b>	.089	.510	.200	.135	.017	.898	.146	.279	-.064	.635	.125	.354
<b>G</b>	-.176	.574	-.247	.063	-.160	.236	.003	.980	-.186	.166	-.176	.190
<b>H</b>	.187	.163	.220	.100	.096	.176	.220	.100	-.014	.764	.211	.116
<b>I</b>	-.191	.154	.130	.336	-.013	.923	-.100	.457	.055	.686	-.046	.736
<b>L</b>	-.113	.403	.074	.585	-.114	.399	.105	.437	<b>.267*</b>	.045	.049	.715
<b>M</b>	-.141	.296	-.009	.946	.103	.447	-.151	.261	-.153	.237	-.103	.446
<b>N</b>	-.069	.612	-.191	.154	-.062	.645	.096	.475	-.036	.788	-.070	.603
<b>O</b>	-.093	.493	-.063	.641	-.111	.412	-.203	.129	-.064	.636	-.155	.249
<b>Q1</b>	.088	.514	-.006	.967	-.046	.736	.085	.529	.128	.344	.070	.607
<b>Q2</b>	-.136	.312	.038	.780	-.078	.565	.025	.851	.058	.666	-.030	.823
<b>Q3</b>	.100	.459	-.055	.682	.030	.827	.086	.524	-.078	.566	.034	.804
<b>Q4</b>	<b>-.304*</b>	.022	-.066	.623	-.146	.278	-.078	.564	-.076	.573	-.193	.150

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

On the basis of these results, the hypothesis was accepted. It may be concluded that there were significant relationships between effective teaching factors and personality characteristics of effective teaching instructors with respect to Personality Factors A, B, C, L, and Q4. It is noteworthy that Personality Factor A was the single most influential factor.

It might be concluded for the instructors in Assumption University, that those who scored a low sten score for personality Factor A tended to be more cool, reserved, impersonal, detached, formal, and aloof. Moreover, they are also able to provide more variability or flexibility during the presentation of a lesson, maintaining more easily on task behavior and finally limiting opportunities for distracting and capable of getting students to work on think through and inquire about the content. Generally, the instructors who got this certain type of personality will more easier to reach the task of effectiveness.

For Factor B, the instructors who scored a low sten score tended to have more concrete-thinking, be less intelligent and have a lower scholastic mental capacity. These instructors will be more difficult to reach the task of effectiveness.

For Factor C, the instructors who scored a higher sten score tended to be emotionally stable, mature, faces reality, calm and higher ego strength. They can more logical, more step by step, more clear and audible delivery free of distracting mannerisms.

For Factor L, the instructors who scored a low sten score tended to more trust, self-reliant, no-nonsense, rough and realistic. They will spend 60-70% of times on tasks that afford moderate to high level of success, especially during expository or didactic instruction.

For Factor Q4, the instructors who scored a higher sten score tended to be tense, frustrated, overwrought, has highly driven. These instructors find it more difficult to show logical, step by step, and clear and audible delivery free of distracting mannerisms.





## *Chapter V*

### **CONCLUSION, DISCUSSIONS AND RECOMMENDATIONS**

The purpose of this study was to determine the relationship between instructor's personality characteristics and effective teaching factors at Assumption University of Thailand. The relationships between effective teaching instructors and their personal data (age, gender, and nationality) were also investigated.

Effective teaching is characterized by several behaviors: lesson clarity, instructional variety, task orientation and engagement in the learning process, and praising students appropriately. Clearly articulated objectives make learning more meaningful and useful by providing a structure for planning, delivering, and assessing instruction. Subject matter knowledge is one of the essential characteristics of an effective teacher, and subject matter experts agree that skillful delivery of fundamental concepts include the use of a conspicuous strategy, strategically integrated training scaffolding, and structured review sessions. Effective teaching includes a variety of special considerations; one of these is related to the teacher's personality attributes.

Personality is an enduring characteristic of an individual's behavior; attitude and feelings in everyday social situations make one's personality. There are many influences on an individual's personality, including culture, genetic makeup, and early family life. Studies have shown that people with certain personality characteristics are more

suitable for specific occupations or special activities. Personality characteristics are influenced by environment and situation in which people are placed.

The relationships between teacher personality characteristic factors and effective teaching factors were ascertained by previous research. The proportion of role and personality characteristic factors determining behavior varies with the specific role and the specific personality involved. Therefore, the relationships between personality characteristics and the role-play in effective teaching have a solid influence relationship. It seems reasonable to suspect those teachers' personality characteristics factors might correlate significantly with rated teaching effectiveness.

Personality characteristic factors of many teachers working at international schools in Thailand do not respond to the present environment and situation. Some personality characteristic factors tend to deprive the teachers of achieving good working performance and impede the quality outcomes of the students.

To find out the significant difference in personality characteristics of effective teaching instructors could illuminate on desirable personality characteristics of effective teaching instructors and could be used as an indicator to the future teacher recruitment.

## ***Conclusion***

The main aspects of the problem explored were:

1. Are the personal data (age, gender, nationality) of the instructors significantly related to personality characteristics?
2. Were there significant correlation of effective teaching factors and personality characteristics to those of effective teaching instructors?

From the data analyzed the following results were found:

The analyzed data found that there were 57 effective teaching instructors and 96 ineffective teaching instructors in Assumption University of Thailand. And there was no significant difference of effective teaching instructors regarding their age, but there were personality characteristics significant differences regarding their gender and nationality. For gender groups Factor A (Cool and Reserved vs. Warm), Factor I (Tough-minded vs. Tender-minded) and Factor L (Trusting vs. Suspicious). For nationality groups Factor C (Affected by feelings vs. Emotionally stable) and Factor F (Sober vs. Enthusiastic).

Moreover, there were significant correlations between 5 personality characteristic factors of the effective teaching instructors with effective teaching factors. These factors were Factor A (Warm vs. Reserved, and Cool), Factor B (Abstract thinking vs. Concrete thinking), Factor C (Emotional stable vs. Affected by feeling), Factor L (Suspicious vs. Trusting) and Factor Q4 (Tense vs. Relaxed).

Significant correlations were found between the following pairs of variables:

1. Positive correlation between Factor A and teaching factor “Instructional variety”, “Engagement in learning process”, and “sum score of effective teaching”.
2. Negative correlation between Factor B and “sum score of effective teaching”.
3. Positive correlation between Factor C and effective teaching factor “Lesson clarity”.
4. Positive correlation between Factor L and effective teaching factor “Student success”.
5. Negative correlation between Factor Q4 and effective teaching factor “Lesson clarity”.

### ***Discussion***

From this study, one can see that there was no significant difference between personality characteristics and age of teaching instructors.

It is possible to conclude that personal data of age could not be used to determine the degree of effective teaching of the instructors.

However, significant differences were shown between personality Factor A (male sten = 4.39, female sten = 3.77), Factor I (male sten = 6.06, female sten = 4.49), and Factor L (male sten = 5.33, female sten = 4.56), with personal data of Gender. Based on sten scores, female instructors represented to be cooler and reserved than male lecturers; female instructors represented to be more though-minded than male instructors; female

instructors were more trusting than male instructors.

Significant differences were also shown between personalities Factor C (American sten = 8.33, European sten = 3.50, Asian sten = 5.77) and Factor F (American sten = 8.33, European sten = 6.50, Asian sten = 5.35) with personal data of nationality. Based on sten score that showed American instructors tended to be more emotionally stable than European instructors; American instructors tended to be more enthusiastic than Asian instructors.

These findings agree with the theory of Alan E. Kazdin, who published via the Internet, 2001:

“There are many influences on an individual’s personality, including culture, genetic makeup, and early family life. Studies have shown that people with certain personality characteristics are more suitable for specific occupations or special activities.” “In 1997 a team of British scientists reported that they had located evidence of genes that might help explain some differences in personality traits between males and females.”

These results provide some information for school administrators that gender and nationality could be indicators and factors to influence or determine instructors’ personality characteristics.

However, there was significant correlation between personality characteristics and effective teaching factors. The personality characteristic Factor A (Cool and Reserved)

had positive correlation with effective teaching factor “Instructional variety”; “Engagement in learning process” and sum score of effectiveness. Factor B (Concrete thinking) had negative correlation with the sum score of effectiveness. Factor C (Emotionally stable) had positive correlation with “Lesson clarity”. Factor L (Trusting) had positive correlation with “Student success”; and Factor Q4 (Tense) had negative correlation with “Lesson clarity”.

Based on the findings, it agrees with Harry G. Murray, J. Philippe Rushton, and Sampo V. Paunonen, 1990 study on “Teacher personality traits and student instructional ratings in six type of university courses” the results from this study found:

“Teaching effectiveness in each type of course could be predicted with considerable accuracy from colleague ratings of personality; and the specific personality traits contributing to effective teaching differed markedly for different course types.”

From these findings, it might be further concluded that the personality characteristics of instructors could be used as an indicator to determine whether they teach effectively or not. An implication is that training may become more efficient when new staffs are to be trained or recruited on the basis of a screening and selecting process that takes personality characteristics into account.

Based on this study, there were no differences between the performance of younger and older instructors; a young instructor could be trained as an effective teaching instructor if they had certain types of personality characteristics.



Moreover, the instructor who had different nationalities or different gender with certain types of personality characteristics will have different level of performance. This point of view may provide information for administrators in international schools throughout Thailand, because every international school was vexed in financing and recruiting the foreign teachers every year.

Another finding was there were significant correlation between personality characteristics and effective teaching factors. The relationship between the two sets of variables implies that certain personality characteristic types of instructors are more towards effective teaching.

Those instructors in Assumption University, that who tended to be cooler, reserved, impersonal, detached, formal, and aloof. They are able to provide more variability or flexibility during the presentation of a lesson, maintaining more easier on task behavior; limiting opportunities for distracting and capable of getting students to work on think through and inquire about the content. Generally, the instructors who demonstrate this certain type of personality will be more effective in practicing their task.

The instructors who tended to have more concrete-thinking, less intelligent and have a lower scholastic mental capacity, will find it more difficult to reach the task of effectiveness.

The instructors who tended to be emotionally stable, mature, faces reality, calm and

higher ego strength, are more logical, step by step, more clear and audible delivery free of distracting mannerisms.

The instructors who tended to be more trusting, self-reliant, no-nonsense, rough and realistic, who will spend more times on tasks that will afford moderate to high level of success, especially during expository or didactic instruction.

The instructors who tended to be tense, frustrated, overwrought, find it more difficult to show logical, step by step and clear and audible delivery free of distracting mannerisms.

Today's education is concerned with "whole man", "lifelong" education; the influences are far and deep. Hence, the personality characteristic was an important indicator to select and recruit suitable teachers to give them a qualified training program in order to increase the quality of education.

From additional analyzed data of this study, it can be assumed that the personality characteristics of effective and ineffective teaching instructors in Assumption University tended to be similar. The differences of stens score between the two groups were minimal, thus indicating close similarity in personality characteristics as shown in Table 15, with the use of sten scores of 3.50 – 7.50 the range indicating neutral factors only Factor Q1 (effective sten = 2.70, ineffective sten = 2.72) of the 153 effective and ineffective teaching instructors were in the lower range.

Based on 16 PF criterion, it might be described that the person who got low scores on Factor Q1 (sten = 2.70) are confident of what they have been taught to believe and accept the “tried and true.” Even when something else might be better, they are cautious and compromising in regard to new ideas. Thus, they tend to oppose and postpone change, are inclined to go along with tradition, and more conservative in religion and politics, and tend not to be interested in analytical “intellectual” thought.

The illustrated results might explain that the instructors in Assumption University might be influenced by strong organizational culture. Moreover, the result also reflected that the situation when instructors received the questionnaire, most of the instructors were refusing to respond, but after researcher’s explanation they changed to cooperate. Hence, a major conclusion can be drawn that the instructors in Assumption University of Thailand were more alike than different. This result also provides information for administrators in ABAC, which could help them to motion new policy and reform activity.

The findings from this study also agree with “The impact of personality dynamism in teaching” by Javed Iqbal Shah, (2000) in which he points out that teaching is an honorable profession. It found various factors or characteristics that are pre-requisite for a dynamic personality of effective teachers and how these factors contribute towards substantial improvements in learning situations in teacher training and educational institutions.

**Table 15:** The sten score and comparison in personality characteristics of effective and ineffective teaching instructors

				Effective Teaching	Ineffective Teaching
Factor	Description			Sten Score	Sten Score
A	Cool, reserved	vs.	Warmth	3.96	3.69
B	Concrete thinking	vs.	Abstract thinking	4.37	4.36
C	Affected by feeling	vs.	Emotionally stability	5.82	5.33
E	Submissive	vs.	Dominance	5.02	4.26
F	Sober	vs.	Enthusiastic	5.54	5.00
G	Expedient	vs.	Conscientious conforming	4.79	4.92
H	Shy	vs.	Bold	6.53	6.23
I	Tough-minded	vs.	Tender-minded	4.98	5.49
L	Trusting	vs.	Suspicious	4.81	4.59
M	Practical	vs.	Imaginative	6.79	6.85
N	Forthright	vs.	Shrewd	5.00	5.21
O	Self-assured	vs.	Apprehensive	5.23	5.36
Q1	Conservative	vs.	Experimenting	2.70	2.72
Q2	Group oriented	vs.	Self-sufficient	6.19	6.31
Q3	Undisciplined self-conflict	vs.	Following self-image	5.60	5.31
Q4	Relaxed	vs.	Tense	5.75	5.74

N = 153

Another interesting finding was the comparisons in personality characteristics sten score of effective teaching instructors in Assumption University of Thailand and sten score of university professor in the typical 16 PF occupational profiles. Some differences showed on Factor B, C, F, H, I, L, and Q1. From the comparisons that the extremely differences which sten scores fall into outside the range of neutral indicating.

From Table 16 the data shown on Factor B (ABAC lecturers sten = 4.4, 16 PF university professor sten = 8.0), Factor F (ABAC lecturers sten = 5.5, 16 PF university professor sten = 2.6), and Factor Q1 (ABAC lecturers sten = 2.7, 16 PF university professors sten = 7.5)

Based on the results of comparison, which showed that personality characteristics of effective teaching instructors in Assumption University of Thailand tended to be more concrete thinking (Factor B), more enthusiastic (Factor F), and more conservative (Factor Q1). On the other hand, the university professors in typical 16PF tended more abstracts thinking (Factor B), more sober (Factor F), and more experimenting (Factor Q1).

The information provided some pictures about personality characteristic differences in different countries or different cultural background and societies. A study to replicate this research using teachers in international schools in other regions of East and Southeast Asia would provide more complete information. This information may be useful in teacher recruitment and selection.

**Table 16:** The personality characteristic sten score of effective teaching instructors in Assumption University of Thailand and typical 16PF occupational profiles

Description of Occupational Group	N	A	B	C	E	F	G	H	I	L	M	N	O	Q1	Q2	Q3	Q4
1. Business Executives	178	7.8	5.8	5.6	6.0	5.3	5.3	6.6	5.7	5.3	5.8	6.2	5.9	6.5	5.5	5.9	5.7
2. Industrial Plant Foremen	71	5.4	5.9	4.7	5.0	4.1	6.0	5.0	5.1	5.6	5.6	6.0	6.0	6.4	5.8	5.2	5.8
3. Priests	40	6.4	6.0	7.7	6.9	5.9	4.5	6.1	7.5	4.5	5.5	1.8	3.4	2.9	4.5	5.3	6.2
4. Psychiatric Technicians	75	6.5	5.5	7.2	5.2	4.5	4.8	6.6	7.3	4.5	4.6	4.4	4.2	4.8	5.0	7.1	5.2
5. Scientists, Research	144	3.4	6.8	6.9	7.2	3.5	3.4	6.5	7.1	4.1	5.6	5.5	3.6	6.2	6.5	6.8	5.1
6. Sales Supervisors	137	7.2	5.7	5.4	6.3	6.0	6.3	6.7	3.8	5.8	5.4	6.5	4.9	5.6	5.0	5.5	5.2
7. Store Managers	107	6.9	4.4	4.2	4.7	4.0	5.8	5.1	5.6	6.1	5.7	5.7	6.5	5.4	5.0	5.6	6.3
8. Teachers (Elementary and junior high school)	59	7.8	6.1	7.1	5.6	6.2	4.4	7.1	7.2	4.5	5.2	5.5	4.5	4.5	4.8	6.2	6.4
9. Administrators, University	69	4.8	6.7	7.4	6.7	3.9	3.8	7.2	6.8	3.6	4.9	5.8	3.2	5.7	5.8	7.2	4.7
10. Professors, University	81	5.0	8.0	4.5	3.5	2.6	3.1	4.7	7.1	6.1	6.9	5.3	5.2	7.5	7.8	6.2	5.2
11. Effective teaching instructors in Assumption University of Thailand	57	4.0	4.4	5.8	5.0	5.5	4.8	6.5	5.0	4.8	6.8	5.0	5.2	2.7	6.2	5.6	5.8



### ***Recommendations:***

The understanding of personality characteristics of being an effective teacher must be taken into consideration for the issue of improving quality of education. In order to be successful in the selection of good instructors and to understand which instructors would teach effectively, following suggestions should be considered:

1. The advisability of perception of the instructors regarding effective teaching.
2. Future research should focus on those instructors who tend to be cool and reserved in personality factor A, as this characteristic affects Instructional Variety and Engagement in learning process.
3. University and colleges should be concerned with the effective teaching perspective.
4. Select teachers with appropriate characteristics required for being effective teaching teacher. Also, the school should provide and initiate training programs that will build upon their innate characteristics.
5. Schools should explore the relationship between personality characteristics and the organizational climate of the school.
6. Research concerning the area of personality characteristics of administrators in Thailand related to organizational effectiveness should be conducted.
7. Develop a precise instrument for the purpose of screening for effective teaching instructors in the recruitment process or in advanced training.

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## *Appendix A*

### Letter to Vice President for Academic Affaire

Dear Rev. Bro. Dr. Bancha Saenghiran,

My name is Chen, Lai Tsun-Pin (Tina). I am a student in class II, faculty of M-Ed. Presently I am working on my thesis research with a topic of “An Analysis of Personality Characteristics of Effective Teaching Instructors at Assumption University of Thailand”. In order to collect information from the instructors in ABAC, I would like to ask your permission to allow me to perform questionnaire survey in the campus. The information that I collected from questionnaires will only be used for educational purposes.

I look forward to your assistance in making this study research a success. Your kind permission will be highly appreciated.

Yours Sincerely,

---

Ms. Chen, Lai Tsun-Pin

---

Advisor: Assoc. Prof. Dr. Kitima Preedeedilok

*Appendix B*

**Letter to Instructors**

Dear Instructors,

I am a graduate student in Faculty of Education (M.Ed. Class II). I am working on my thesis for the time being. I would like to request your support and assistance to complete these educational research questionnaires. Information provided will be treated as strictly confidential. The administrators or others will not see it.

There are 2 questionnaires for you to fill:

1. The first one is an "Instructor questionnaire" in which please put a "3" sign in the blank column. It will take you about 5-10 minutes to complete this questionnaire.
2. The second one is called Cattell's 16PF questionnaires, please put either a "×" or a "√" on the answer sheet, and please give your first natural answer which flash into your mind and not opt for the in-between option too often.

Answering this questionnaire should take you about 30 minutes.

I appreciate your support and the time that you spend on making this educational research. Thank you very much!

Yours Sincerely

---

Ms. Chen, Lai Tsun-Pin

---

Advisor: Assoc. Prof. Dr. Kitima Preedeedilok

### *Appendix C*

## **Interpretation of Low Score and High Score for Each Primary Factor of the 16 PF**

### **The Primary Source Traits Covered By the 16 PF Test**

<b>Factor</b>	<b>Low score (1-3) Description</b>	<b>High score (8-10) Description</b>
<b>A</b>	Cool. Reserved. Impersonal, detached, formal, aloof	Warm, outgoing, kindly, easygoing, participating, likes people
<b>B</b>	Concrete-thinking. Less intelligent Lower scholastic mental capacity	Abstract-thinking, more intelligent, bright Higher scholastic mental capacity
<b>C</b>	Affected by feeling, emotionally less Stable, easily annoyed	Emotionally stable, mature, faces reality, calm
<b>E</b>	Submissive, humble, mild, easily led, accommodating	Dominant, assertive, aggressive, stubborn, competitive, bossy
<b>F</b>	Sober, restrained, prudent, taciturn, serious	Enthusiastic, spontaneous, heedless, expressive, cheerful
<b>G</b>	Expedient, disregards rules, Self-indulgent	Conscientious, conforming, moralistic, staid, rule-bound
<b>H</b>	Shy, threat-sensitive, timid, hesitant, intimidated	Bold. Venturesome, uninhibited, can take stress
<b>I</b>	Tough-minded. Self-reliant, no-nonsense, rough realistic	Tender-minded, sensitive, overprotected, intuitive
<b>L</b>	Trusting. Accepting conditions, easy to get on with	Suspicious, hark to fool, distrustful, skeptical
<b>M</b>	Practical, concerned with "down-to earth" issues, steady	Imaginative, absent-minded, absorbed in thought, impractical
<b>N</b>	Forthright, unpretentious, open, genuine, artless	Shrewd, polished, socially aware, diplomatic, calculating
<b>O</b>	Self-assure, secure, feels free of guilt, untroubled, self-satisfied	Apprehensive, self-blaming, guilt-prone, insecure, worrying
<b>Q1</b>	Conservative, respecting traditional ideas Conservatism of temperament	Experimenting, liberal, critical, open to change
<b>Q2</b>	Group-oriented a "joiner" and sound follower, listens to others	Self-sufficient, resourceful, prefers own decisions
<b>Q3</b>	Undisciplined self-conflict, lax, careless of social rules	Following self-image, socially precise, compulsive
<b>Q4</b>	Relaxed, tranquil, composed, has low drive, unfrustrated	Tense, frustrated, overwrought, has high drive

Appendix D

Effective Teacher Questionnaire

Part I: Personal Background

Please “3” in the box:

Gender

☐ Male

☐ Female

Age

☐ 20-39 yrs

☐ 40-59 yrs

☐ 60 or above yrs

Nationality

☐ American

☐ European

☐ Asian

☐ Others

Part II: Effective Teaching Attributes Checklist

Please considered of the following items, and then indicate the frequency of its occurrence. Please have “√” in blank column:

Item		Level of Occurrence				
		Always	Very	Fairly	Seldom	Never
Clarity	1. Informs learners to link lesson content what level of complexity the content will be used					
	2. Provides learners with an advance introduction with which to place lesson content in perspective					
	3. Checks for task–relevant prior learning at beginning of lesson and re-teaches when is necessary					
	4. Gives directives slowly and distinctly; check for understanding along the way.					
	5. Knows learners’ ability levels and not give the instruction under or above their current level of functioning					
	6. Uses examples, illustrations, or demonstrations to explain and to clarify content in text and workbooks.					
	7. To restate or review main ideas at the end of the					



	lesson.						
<b>Variety</b>	8. Uses attention—gaining of most learners.						
	9. Shows enthusiasm and animation through variation in eye contact, voice, and gestures.						
	10. Varies activities with which the instructional stimuli are presented (e.g., lecturing, question, discussion, practice)						
	11. Uses a mix of rewards and reinforcements that are timely and meaningful to the students.						
	12. Uses student ideas and participation to foster lesson objectives when appropriate.						
	13. Varies types of questions and probes.						
<b>Task Orientation</b>	14. Develops unit and lesson plans in accordance with text and curriculum guide						
	15. Handles administrative and clerical interruptions efficiently						
	16. Stops misbehavior with a minimum of disruption to the class always uses.						
	17. Generally, uses indirect instruction strategies for teaching methods for achieving lesson objectives.						
	18. Establishes end products (e.g., reviews, tests) that are clearly visible to students.						
<b>Engagement</b>	19. Provides for guided practice, to ask learners to attempt the desired behavior or skill after instruction has been given.						
	20. Provides correctives for guided practice in a non-evaluative atmosphere.						
	21. Uses individualized or attention-getting strategies to promote interest among special types of learners when appropriate.						
	22. Uses meaningful verbal praise. Not always uses same verbal cliches.						
	23. Monitors seatwork by circulating and frequently checking progress.						
<b>Student success</b>	24. Unit and lesson organization reflects task-relevant prior learning.						
	25. Administers corrective immediately after initial response.						
	26. Divides lessons into small, easily digestible pieces.						
	27. Plan transitions to new content in small, easy-to-grasp steps.						
	28. Establishes momentum (e.g., pacing and intensity gradually build toward major milestones).						

## *Appendix E*

### **Sixteen Personality Factor (16PF) Questionnaire**

(INSTITUTE FOR PERSONALITY AND ABILITY TESTING, INC. 1991.EDITION, FORM A)

**What to do:** Please consider the following questions, there are some questions to see what attitudes and interests you have. There are no “right” and “wrong” answers because everyone has right to his/her own views. To be able to get the best advice from your results, you will want to answer them exactly and truly.

Write your name and all other information asked for on the top line of the answer sheet.

There are three possible answers to each question. Fill in the left-hand box if your answer choice is the “a” answer, in the middle box if your answer choice is the “b” answer, and in the right-hand box if you choose the “c” answer.

**(Example):**

1. I have the instructions for this test clearly in mind.  
 a. yes,            b. uncertain,            c. no.
2. I am ready to answer each question as truthfully as possible.  
 a. yes,            b. uncertain,            c. no.
3. I would rather have a house:  
 a. in a sociable suburb,            b. in between,            c. alone in the deep woods.
4. I can find enough energy to face my difficulties.  
 a. always,            b. generally,            c. seldom.
5. I feel a bit nervous of wild animals even when they are in strong cages.  
 a. yes (true),            b. uncertain,            c. no (false).

6. I hold back from criticizing people and their ideas.  
a. yes,      b. sometimes,      c. no.
7. I make smart, sarcastic remarks to people if k thinks they deserve it.  
a. generally,      b. sometimes,      c. never.
8. I prefer semi-classical music to popular tunes.  
a. true,      b. uncertain,      c. false.
9. If I saw two neighbors' children fighting, I would:  
a. leave them to settle it,      b. uncertain,      c. reason with them.
10. On social occasions I:  
a. readily come forward,      b. in between,      c. reason with them.
11. It would be more interesting to be:  
a. a construction engineer,      b. uncertain,      c. a writer of plays.
12. I would rather stop in the street to watch an artist painting than listen to some people having a quarrel.  
a. true,      b. uncertain,      c. false.
13. I can generally put up with conceited people, even though they brag or show they think too well of themselves.  
a. yes,      b. in between,      c. no.
14. You can almost always notice on a man's face when he is dishonest.  
a. yes,      b. in between,      c. no.
15. It would be good for everyone if vacations (holidays) were longer and everyone had to take them.  
a. agree,      b. uncertain,      c. disagree.

16. I would rather take the gamble of a hob with possibly large but uneven earnings,  
than one with a steady, small salary.

- a. yes,      b. uncertain,      c. no.

17. I talk about my feelings:

- a. only if necessary,      b. in between,      c. readily, whenever I have a chance.

18. Once in a while I have a sense of vague danger or sudden dread for reasons that I do  
not understand.

- a. yes,      b. in between,      c. no.

19. When criticized wrongly for something I did not do, I:

- a. have no feeling of guilt,      b. in between,      c. still feel a bit guilty.

20. Money can buy almost everything.

- a. yes,      b. uncertain,      c. no.

21. My decisions are governed more by my:

- a. heart,      b. feelings and reason equally,      c. head.

22. Most people would be happier if they lived more with their fellows and did the  
same things as others.

- a. yes,      b. in between,      c. no.

23. I occasionally get puzzled, when looking in a mirror, as to which is my right and left.

- a. true,      b. uncertain,      c. false.

24. When talking, I like:

- a. to say things, just as they occur to me,  
b. in between,  
c. to get my thoughts well organized first.

25. When something really makes me furious, I find I calm down again quite quickly.

- a. yes,            b. in between,            c. no.

26. With the same hours and pay, it would be more interesting to be:

- a. a carpenter or cook,            b. uncertain,            c. a waiter in a good restaurant.

27. I have been elected to:

- a. only a few offices,            b. several,            c. many offices.

28. “Spade” is to “dig” as “knife” is to:

- a. sharp,            b. cut,            c. point.

29. I sometimes can't get to sleep because an idea keeps running through my mind.

- a. true,            b. uncertain,            c. false.

30. In my personal life I reach the goals I set, almost all the time.

- a. true,            b. uncertain,            c. false.

31. An out-dated law should be changed:

- a. only after considerable discussion,            b. in between,            c. promptly.

32. I am uncomfortable when I work on a project requiring quick action affecting others.

- a. true,            b. in between,            c. false.

33. Most of the people I know would rate me as an amusing talker.

- a. yes,            b. uncertain,            c. no.

34. When I see “sloppy,” untidy people, I:

- a. just accept it,            b. in between,            c. get disgusted and annoyed.

35. I get slightly embarrassed if I suddenly become the focus of attention in a social group.

- a. yes,            b. in between,            c. no.

36. I am always glad to join a large gathering, for example, a party, dance, or public meeting.

a. yes,                      b. in between,                      c. no.

37. In school I preferred (or refer):

a. music,                      b. uncertain,                      c. handwork and crafts.

38. When I have been put in charge of something, I insist that my instructions are followed or else I resign.

a. yes,                      b. sometimes,                      c. no.

39. For parents, it is more important to:

a. help their children develop their affections,  
b. in between,  
c. teach their children how to control emotions.

40. In a group task I would rather:

a. try to improve arrangements,  
b. in between,  
c. keep the records and see that rules are followed.

etc.....



CURRICULUM VITAE

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**Research Grant:**

## An Executive Summary

**Title:** AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF EFFECTIVE TEACHING INSTRUCTORS AT ASSUPTION UNIVERSITY OF THAILAND

### Part I: Thesis Problem

Thesis Problem			
Situation	Research Objective	Research Question	Significance of the Study
<p>Quality outcomes are becoming the most important part of the educational reform. To implement this vision need to bring out the effective teaching teachers and identified as an indicator to the future teacher recruitment.</p> <p>And the problem is many teachers who are working at international schools and international programs in higher education in Thailand can not fit in the present environment and situation. It tends to deprive them of achieving good working performance and impede the</p>	<ol style="list-style-type: none"><li>1. To identify the effective teaching instructors at Assumption University</li><li>2. To find out the personality characteristics of effective teaching instructors as identify by Cattell's 16 PF.</li><li>3. To compare the personality characteristics of effective teaching instructors at Assumption University as classified by age, gender, and nationality.</li><li>4. To find out the</li></ol>	<ol style="list-style-type: none"><li>1. How many instructors can be identified as effective teaching instructors?</li><li>2. What are the personality characteristics of the effective teaching instructors at Assumption University?</li><li>3. Are there significant differences of personality characteristics of effective teaching instructors according to age, gender and nationality?</li><li>4. What are the relationships between effective teaching</li></ol>	<p>The result of this study could provide useful information for the school administrators of the international schools and international programs through out of Thailand, for use in the human resource program to recruit qualified teachers.</p> <p>It also useful in preparing for training program , establishing a delighted working atmosphere, retain for present teachers, helping to increase the achievement outcomes of the students, enhance the quality of education, and will not waste the budget in order</p>

<p>quality outcomes of the students, or they may have to quit the job. The problem seriously affects the quality of education and causes budget wastage on teacher recruiting. This seriously disrupts the smooth function of school administration.</p>	<p>relationships between effective teaching factors and personality characteristics of Cattell's 16 PF.</p>	<p>factors and personality characteristics?</p>	<p>to hire the teacher from abroad.</p>
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## An Executive Summary (continued)

**Title:** AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF EFFECTIVE TEACHING INSTRUCTORS AT ASSUPTION UNIVERSITY OF THAILAND

### Part II: Research Design

Research Design						
Theoretical Framework	Conceptual Framework	Independent variable	Dependent Variable	Data Needed	Data Collection	Statistical Techniques
<p><b>1. Effective teaching factor theory</b></p> <p>Borich Bray D. (1992) conclusion about five key behaviors in effective teaching: lesson clarity, instructional variety, task orientation, engagement in learning process, and student success.</p> <p><b>2. Cattell's Sixteen-Dimensionsl trait theory</b></p> <p>Cattell Raymond B (1954) The 16 PF theory has been praised for providing scientific rigor to the study of personality and</p>	<p>1. To find out the significant differences of personality characteristics between effective teaching instructors according age, gender, and nationality.</p> <p>2. To find out the relationship between effective teaching factors and personality characteristics factors of</p>	<p><b>Effective Teaching Factors</b></p> <ul style="list-style-type: none"> <li>• Lesson clarity</li> <li>• Instructional variety</li> <li>• Task orientation</li> <li>• Engagement in learning process</li> <li>• Student success</li> </ul> <p><b>Demographic Data</b></p> <ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Nationality</li> </ul>	<p><b>16PF Personality Factors:</b></p> <p>A. Warm - Cool, Reserved.  B. Abstract- thinking - Concrete-thing.  C. Emotionally Stable - Affected by feeling  E. Dominant - Submissive.  F. Enthusiastic - Sober.  G. Conscientious conforming - Expedient.  H. Bold - Shy.  I. Tender-minded - Tough-minded.  L. Suspicious - Trusting.  M. Imaginative - Practical.  N. Shrewd - Forthright.  O. Apprehensive - Self-assured.  Q1 Experimenting - Conservative.  Q2 Self-sufficient - Group oriented.  Q3 Following self-image - Undisciplined self-conflict.  Q4 Tense - Relaxed.</p>	Nominal	<p><b>Population</b></p> <p>381 full time instructors</p> <p><b>Sample</b></p> <p>180 full time instructors</p> <p><b>Treatment</b></p> <p>First semester of 2001 school year.</p>	<p>1. T-tests</p> <p>2. Chi-square</p> <p>3. Correlation coefficient</p>

<p>area that typically lacks such rigor, and providing tools that can be used in a large number of applied areas. Cattell's goal was to discover the fundamental building blocks of personality, the 16 PF is an objectively scrabble test devised by basic research in psychology to give the most complete coverage of personality possible in a brief time.</p> <p>Personality characteristics might be in some way associated with teaching effectiveness. In addition to this, effective teaching to effectiveness might be influenced by demographic factors, that, the way or another, in turns might be related to personality characteristics.</p>	<p>effective teaching instructors.</p>				<p><b>Sampling method</b></p> <p>Simple random sampling method.</p>	
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## An Executive Summary (continued)

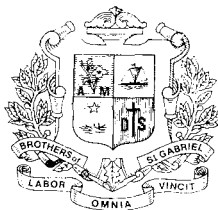
**Title:** AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF EFFECTIVE TEACHING INSTRUCTORS AT  
ASSUPTION UNIVERSITY OF THAILAND

### Part III: Results

Results		
Finding	Conclusion	Recommendations
1. There was no significant difference between personality characteristics and age of teaching instructors.	1. The personal data of age could not be used to determine the degree of effective teaching of the instructors. Regardless of age, any lecturers if they got certain types of personality characteristics that the young instructors also could be trained to teach effectively.	1. The advisability of the perception of the instructors regarding effective teaching.
2. There were significant differences between personalities <b>Factor A</b> , <b>Factor I</b> , and <b>Factor L</b> with personal data of gender.	2. The female instructors tended more cools and reserved than male instructors, female instructors tended more though-mined than male instructors, female instructors tended more trusting than male instructors.	2. Future research should focus on those instructors who tended to be cool and reserved in personality Factor A, as this characteristic affects Instructional variety and Engagement in learning process.
3. There were significant differences between personalities <b>Factor C</b> and <b>Factor F</b> with personal data of nationality.	3. The American instructors tended more emotional stable than European instructors, and American instructors tended more enthusiastic than Asian	3. University and colleges should be concerned with the effective teaching perspective.  4. Select teachers with appropriate characteristics required being effective teaching teacher. Also, the school should provide initiate training programs that will build upon their



<p>4. There were significant correlations between 5 personality characteristic factors of the effective teaching instructors with effective teaching factors. These factors were <b>Factor A, Factor B, Factor C, Factor L, and Factor Q4.</b></p>	<p>instructors.</p> <p>4. The personality characteristic <b>Factor A</b> (cool and reserved), had positive correlation with effective teaching factor “Instructional variety”, “Engagement in learning process”, “and sum score of effectiveness. <b>Factor B</b> (concrete thinking) had negative correlation with the sum score of effectiveness. <b>Factor C</b> (emotional stable) had positive correlation with “Lesson clarity”. <b>Factor L</b> (trusting) had positive correlation with “Student success”. <b>Factor Q4</b> (tense) had negative correlation with “Lesson clarity”.</p>	<p>innate characteristics.</p> <p>5. Schools should explore the relationship between personality characteristics and the organizational climate of the school.</p> <p>6. Research concerning the area of personality characteristics of administrators in Thailand related to organizational effectiveness should be conducted.</p> <p>7. Develop a precise instrument for the purpose of screening for effective teaching teachers in the recruitment process or in advanced training.</p>
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## Faculty of Education

### English Language and Format Approval

This is to certify that this thesis is approved for

**Ms. Chen, Lai Tsun-Pin**

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regarding

**an English Language Review**

Signature ..... *P. V. Bharadwaj* .....

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Reviewer

Date..... *4/11/03* .....

and

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Checker

Date..... *12/11/03* .....

