

# บทคัดย่อ การวิจัยเพื่อพัฒนาใช้ไมโครคอมพิวเตอร์เป็นสื่อในการเรียนการสอนทักษะการอ่านภาษาอังกฤษแบบเอกัตภาพ

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การวิจัยนี้มีจุดมุ่งหมาย เพื่อศึกษาความเป็นไปได้และประสิทธิภาพของการนำไมโครคอมพิวเตอร์มาเป็นสื่อในการเรียนการสอนทักษะการอ่านภาษาอังกฤษแบบเอกัตภาพ โดยใช้โปรแกรมที่สร้างขึ้นด้วยภาษา BASIC

ขอบเขตของการศึกษา คือ การทดลองเปรียบเทียบการเรียนการสอนทักษะการอ่านภาษาอังกฤษกับกลุ่มตัวอย่าง ซึ่งเป็นนิสิตระดับปริญญาโทของบัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ในสาขาวิชาต่าง ๆ คือ วิศวกรรมศาสตร์ วิทยาศาสตร์ พาณิชยศาสตร์การบัญชี และรัฐศาสตร์ จำนวน 24 คน โดยกลุ่มตัวอย่างทั้งหมดผ่านการทดสอบก่อนการทดลอง เพื่อแบ่งเป็นกลุ่มผู้เรียนที่มีความสามารถทางการอ่านภาษาอังกฤษทัดเทียมกัน 2 กลุ่ม คือ กลุ่มควบคุมเรียนกับอาจารย์ผู้สอนแบบปกติในชั้นเรียน และกลุ่มทดลองเรียนกับผู้วิจัยและใช้ไมโครคอมพิวเตอร์เป็นสื่อบทเรียนที่สร้างขึ้น เป็นบทอ่านของหลักสูตรภาษาอังกฤษแบบเข้มของสถาบันภาษา จุฬาลงกรณ์มหาวิทยาลัย และได้รับการดัดแปลงเพื่อใช้กับโปรแกรมที่สร้างขึ้น เพื่อให้ผู้เรียนในกลุ่มทดลองใช้เรียนกับไมโครคอมพิวเตอร์ บนพื้นฐานของการเรียนการสอนแบบเอกัตภาพและเสมือนมีผู้สอนพิเศษเป็นรายบุคคล นั่นคือ ผู้เรียนสามารถเรียกข้อมูลจากแผ่นแม่เหล็กที่เตรียมไว้มาเรียนได้ตามความต้องการ โปรแกรมบทเรียนจะสามารถโต้ตอบกับผู้เรียนได้ โดยให้บทอ่าน ตั้งคำถาม ตรวจสอบคำตอบแสดงผลเป็นการชมเชย หรือตำหนิในทันทีที่ผู้เรียนตอบ แล้วเก็บคะแนนรวมทั้งแสดงผลการเรียนเมื่อเริ่มเรียนบทต่อไปได้

ผลการทดลอง ปรากฏว่า สัมฤทธิ์ผลจากการเรียนของผู้เรียนกลุ่มทดลองและกลุ่มควบคุม แตกต่างกันอย่างมีนัยสำคัญที่ระดับ 0.05 หรืออีกนัยหนึ่งผู้เรียนที่เรียนโดยใช้โปรแกรมที่สร้างขึ้นกับไมโครคอมพิวเตอร์เป็นสื่อ มีสัมฤทธิ์ผลทางการเรียนสูงกว่ากลุ่มควบคุม และแตกต่างกันอย่างเป็นที่พอใจ นั่นคือกล่าวโดยสรุปแล้ว การนำไมโครคอมพิวเตอร์มาใช้ในการเรียนการสอนทักษะการอ่านภาษาอังกฤษจะช่วยครูผู้สอนได้เป็นอย่างมาก

## ภาคผนวก A

### ตัวอย่างบทเรียนที่ใช้คอมพิวเตอร์เป็นสื่อ

#### BUSINESS FUNCTIONS SEC1

#### SECTION 1:

#### WHAT IS BUSINESS?

Within a capitalist society, (economic system which is based on competition, profit, supply and demand) the prime (most important) objective of a business is to make a profit by selling a product or a service, whether tangible (able to be clearly defined) or intangible. This product or service could be a can (tin) of beans, systems analysis training, a train trip or a motor car. In every case the business organisation, from the small shop to the international company, aims to make this profit by satisfying the needs of a group of consumers.

These needs or demands can usually be satisfied in one or more of the following ways.

- a. Obtaining (at some cost), processing, and selling a product, as in mining, agriculture or fishing
- b. Purchasing, processing and selling a refined (purified) or changed product. This could be an extension (continuation) of 1, above. For example iron ore (raw material used to make iron) may be made into steel by

- firm (company) A, but then sold to firm B, which makes steel sheets and finally used by firm C, which makes car bodies.
- c. Purchasing and distributing, as in retailing.
  - d. Offering a service such as car repairing, sub-contract (doing part of another contract machining, or computer services.
  - e. Offering expertise, (special knowledge or skill) as in consultancy, (a company or person who provides advice) insurance, banking or education.
  - f. Offering facilities, (amenities) such as houses or hotels.

The list above divides business into 6 groups, numbered 1-6. Look at the businesses below and write the number of the group it belongs to after each one.

1 A logging company  
(i.e. a company that cuts down trees)

YOUR ANSWER IS  
EVEN THE BEST CAN BE WRONG  
THE RIGHT ANSWER IS a

2 A liquor store  
(i.e. a shop that sells wines and spirits)

YOUR ANSWER IS B  
YOU GOOFED SANGRAWEE

THE RIGHT ANSWER IS c

3 A sports club

YOUR ANSWER IS a

BE CAREFUL, SANGRAWEE

THE RIGHT ANSWER IS f

4 A market research company

(i.e. a company that examines current trends in the business world, e.g., would it be profitable for company A to manufacture a new product B.)

YOUR ANSWER IS b

NO NO NO

THE RIGHT ANSWER IS e

5 A shoe repair shop

YOUR ANSWER IS g

NO WAY, SANGRAWEE

THE RIGHT ANSWER IS d

6 A petrol refinery

YOUR ANSWER IS a

THINK REAL HARD

THE RIGHT ANSWER IS b

Two important factors must be recognized. First, a barter economy will not satisfy all our needs. (A barter economy is one in which needs can only be satisfied by exchanging one's own products for different ones made by someone else.) This means finding someone else who has what you want and who also wants what you have. The use of money payments simplifies this by

providing a medium of exchange,  
(something of an agreed value which  
can be used in payments) and by  
allowing goods to be exchanged  
which are of different values.  
Second, a profit can be made if  
the consumer is willing to pay  
more for the goods and services  
than it costs to provide them.

7 "factors" means

- a. aspects
- b. divisions

YOUR ANSWER IS

EVEN THE BEST CAN BE WRONG

THE RIGHT ANSWER IS a

YOUR TOTAL SCORE IS 0 OUT OF 7

OR 0 %

## ภาคผนวก B

ตัวอย่างบทเรียนที่ใช้ครูสอน

### MANAGEMENT

This unit is about management (running a business), which is one of the most important concepts in Commerce and Accountancy.

According to one famous classification, management consists of the following activities: (1) planning, (2) organization, (3) command, (4) co-ordination, and (5) control.

Now write the number of the activity above after the explanation of it below :

- (a) making sure everything goes according to plan
- (b) making sure everyone works together for a common purpose
- (c) achieving a division of labor (work) which will lead to an effecton execution (carrying out) of plans
- (d) telling people what they are required to do, and making sure they do it
- (e) deciding how the business will continue in the future

**SECTION 1:** This section deals with the history of management and the idea of leadership. In the first paragraph, the word 'group' is used three times. What type of group is mentioned first? **Answer:** a group with a c.....p.....

## THE HISTORY OF MANAGEMENT

MANAGEMENT has, of course, been practised since the dawn of human history. Men have always collaborated with one another in hunting and building and agriculture and many other activities. Such collaboration for a common purpose means that arrangements have to be made for a division of labor, which in turn necessitates the existence of a leader—someone whose task it is both to make the arrangements and to see that the remainder of the group carries them out. Where the group is a very simple one, there may be no formal (official) appointment of a leader. Everyone knows what his job is and how it fits in with the other man's job, he regards it as natural and inevitable that he should play his part in the group.

1. "collaborated" means 
  - a. worked together
  - b. practised management
2. "carries them out" means 
  - a. does the work
  - b. takes them away
3. "regards" means 
  - a. considers
  - b. thanks

The next paragraph talks about 'originals'.

1. In which sentence are we told what 'originals' means?  
sentence :
2. The writer uses other words or phrases to refer to these 'originals'.

What does he use in the second and third sentences?

In 2 :

In 3 :

and

But even among primitive group there were originals, people who did not want to work or who wanted to work in ways different from those laid down (specified) by tradition. If there had not been such people there could have been no progress in man's knowledge and mastery over his environment. They were, however, regarded as a nuisance; they wanted to disturb the habit patterns of the rest of the group, the comfortable working arrangements which everyone understood and to which they were accustomed. There were also quarrelsome (argumentative) people and men who wanted other mens' wives, or ornaments or other possessions; they, too upset the orderly social life of the group.

- 1. "nuisance" means 
  - a. troublemakers
  - b. leaders
- 2. "ornament" means 
  - a. decorative objects
  - b. useful tools
- 3. "upset" means 
  - a. disturbed
  - b. helped

1. In this paragraph the writer gives three examples of people who disturbed the social life of the group. They were :

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

2. What is the writer's attitude to the 'originals' ?  
 (a) critical  
 (b) favourable

ANSWER :

3. Which sentence tells us the answer to question 2 ?

sentence :



4. Originals have helped man to make progress. T : F ?

Out of these necessities man evolved (i.e. developed) institution of leadership. Individuals, because of their age, or knowledge of the customs of the group, or superior strength or cunning which made others afraid of them, acquired authority. They became the leaders of their groups. People did what such men told them to do. Where this authority was supported by the general feeling of the group it was much more powerful than when it rested solely on fear. But whatever its foundation (basis), it served to hold the group together, to enable men and women to collaborate in tasks of various kinds without disturbance of the social patterns they had evolved.

5. "cunning" means

- a. cleverness
- b. leadership

6. "solely" means

- a. only
- b. mainly

1. "acquiring authority" is similar to "becoming a leader".

T : F ?

2. Give two examples of how people acquired authority (a) .....  
..... (b) .....

3. This authority depended on one of two things ; either on fear or on .....

4. If it depended on fear, it was less .....

The function of this primitive form of leadership was essentially conservative. (i.e. wanting to prevent change) The leader was there to protect the working group against interference, to prevent the outsider, the ignorant or the

inept from disturbing its routines and the customary methods of working together. If change became necessary, the leader had an instinctive idea as to how much change the members of the group would accept at any time, how it should be introduced, and in what directions. Undoubtedly, the discipline (control) exercised by this kind of leadership was often drastic (having a very strong effect) and tyrannical. (obtaining obedience by force) But the worst penalties were reserved for the innovator (person who makes changes) and the heterodox. (person who holds beliefs different from those that are generally accepted)

1. "inept" means
- a. someone who wants to change things
  - b. someone who always says the wrong thing

The function of the leader was to encourage change. T : F?

Although changes were not readily accepted in early society, new ideas were of course adopted (accepted) from time to time. Some of these were of small consequence, but at rare intervals there came changes of far-reaching importance. The change with which we are concerned is the change from an economy based primarily on handicrafts and natural sources of power—wind, water, gravity and so on—to an economy based on power-driven machinery.

1. "at rare intervals" means
- a. strangely
  - b. very occasionally
2. "far-reaching" means
- a. having a wide range of applications
  - b. having a long-term effect

1. The change referred to in the last sentence was of small consequence. T : F ?
2. Wind, water, etc. are examples of .....
3. What is the main idea of the first sentence above ?
  - (a) changes were not readily accepted
  - (b) new ideas were adopted

Answer :

4. what do you expect to read about next? .....

The origin of this change was the scientific curiosity (desire to investigate) released by the Renaissance. (period of revival of literature and art in the 14th-16th centuries) The resources which were released by the early use of power-driven machinery acted as a powerful stimulant to further investigations, particularly in the physical sciences. For the last two centuries there has been a great acceleration in man's knowledge and power to control his material environment-first steam, then electricity, then nuclear fission and atomic energy.

3. "stimulant" means 
  - a. incentive
  - b. force
4. "acceleration" means 
  - a. speeding up
  - b. increase

Steam, electricity, nuclear fission and atomic energy all help man to c ..... his e.... ..

Paralleled with (i.e. at the same time as) these discoveries in the sources of power there was a similar increase in knowledge about the

materials used in manufacture, and there was a progressive refinement of the machines themselves. From a power-driven tool designed to carry out a single process previously performed by a single craftsman (someone who works with his hands), many modern machines have become a closely integrated (working together) complex of mechanical tools carrying out series of processes automatically, so that in many instances it is possible to feed in raw material at one end and to take out an end-product ready packed at the other.

1. Underline the word "refinement" in the above paragraph. You know what "fine" means—can you guess the meaning of "refinement"? ....  
.....  
.....