

# TEACHERS' USE AND KNOWLEDGE OF ELECTRONIC DICTIONARIES

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## บทคัดย่อ

งานวิจัยที่ผ่านมาชี้ให้เห็นว่าพจนานุกรมอิเล็กทรอนิกส์กำลังเป็นที่นิยมในประเทศแถบเอเชียใต้ และเอเชียตะวันออกเฉียงใต้ ความก้าวหน้าทางเทคโนโลยีทำให้พจนานุกรมอิเล็กทรอนิกส์หาได้ง่าย ในประเทศไทย นักศึกษาใช้พจนานุกรมอิเล็กทรอนิกส์แบบต่างๆ มากขึ้นเช่น พจนานุกรมอิเล็กทรอนิกส์แบบพกพา (Pocket electronic dictionaries) พจนานุกรมอิเล็กทรอนิกส์แบบแผ่นซีดี (Dictionaries on CD-ROM) พจนานุกรมอิเล็กทรอนิกส์แบบออนไลน์ (Online dictionaries) เป็นที่เข้าใจกันว่าอาจารย์สอนภาษาอังกฤษไม่คุ้นเคยกับพจนานุกรมอิเล็กทรอนิกส์ที่นักศึกษาใช้ ความรู้และทัศนคติของอาจารย์เกี่ยวกับการใช้พจนานุกรมอิเล็กทรอนิกส์ถือเป็นปัจจัยสำคัญในการสอนภาษาอังกฤษเป็นภาษาต่างประเทศและความสำเร็จหรือความล้มเหลวในการเรียนภาษาของนักศึกษางานวิจัยนี้นำเสนอผลการสำรวจการใช้และความรู้เกี่ยวกับพจนานุกรมอิเล็กทรอนิกส์ของอาจารย์จำนวน 78 คนที่สอนวิชาภาษาอังกฤษจากมหาวิทยาลัย 8 แห่งในประเทศไทย โดยมีการถามคำถามเกี่ยวกับประสบการณ์และทัศนคติที่มีต่อพจนานุกรมอิเล็กทรอนิกส์ ผลการสำรวจชี้ให้เห็นว่าในสถานการณ์ปัจจุบันในประเทศไทยอาจารย์ส่วนใหญ่ไม่ใช้พจนานุกรมอิเล็กทรอนิกส์ และอาจารย์ยังขาดความรู้เกี่ยวกับรูปแบบการทำงานและเนื้อหาของพจนานุกรมแบบต่างๆ ผลการสำรวจอาจช่วยให้อาจารย์มีความรู้เกี่ยวกับพจนานุกรมอิเล็กทรอนิกส์เพิ่มขึ้นเพื่อจะได้สามารถให้คำแนะนำนักศึกษาเกี่ยวกับการเลือกซื้อและการใช้พจนานุกรมอิเล็กทรอนิกส์ได้อย่างมีประสิทธิภาพให้คำแนะนำนักศึกษาเกี่ยวกับการใช้ และวิธีการเลือกซื้อ พจนานุกรมอิเล็กทรอนิกส์ได้อย่างมีประสิทธิภาพ

## Abstract

Research shows that electronic dictionaries have become popular in many South and East Asian countries. Advances in technology have helped electronic dictionaries become easily available. In Thailand, a growing number of Thai students are using various modes of electronic dictionaries i.e. pocket electronic dictionaries, dictionaries on CD-ROM, or online dictionaries. It is assumed that teachers are not familiar with the electronic dictionaries their students are using. The knowledge of and attitudes toward electronic dictionaries among teachers are an important factor in the process of EFL learning and teaching, and the learners' success or failure with

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the language. This study, therefore, presents a survey on teachers' own use and knowledge of electronic dictionaries. Seventy-eight teachers of English from eight universities in Thailand were asked about their experience of, and attitudes toward electronic dictionaries. The results of the questionnaire show a current situation of dictionary use in Thailand that most teachers did not use electronic dictionaries, were uninformed about them, and had little idea about the lexicographical content of electronic dictionaries. They were not aware of many technological features that were contained in electronic dictionaries. The results may help teachers be better informed about electronic dictionaries so that they can be in a better position to provide authoritative advice to students on how to buy and use electronic dictionaries effectively.

## INTRODUCTION

Dictionaries are essential tools for language learners; however, as the technology is changing rapidly, the trend for using electronic dictionaries among students is also increasing. Electronic dictionaries, especially pocket electronic dictionaries (PEDs) are common in South East Asian classrooms and their use is greatest in 'countries where PEDs are more cheaply and easily available... and cultures in which microelectronic devices are extremely popular and fashionable (Midlane 2005). In Thailand, a growing number of students reported using electronic dictionaries in classrooms and at home (Boonmoh 2003, 2009, Mongpeth 2007).

Electronic dictionaries are common in Thai context, but tend to be ignored by language teachers. Dictionary use is not a skill that is included in the Thai national curriculum. However, an attempt to improve students' dictionary skills has been made in some contexts. At King Mongkut's University of Technology Thonburi (KMUTT), for example, a dictionary skills' training course is provided to all first-year under-

graduate students, but the skill training had been aimed to help students to be familiar with learner's dictionaries in book format. Users of electronic dictionaries, however, would require different skills than those users of dictionaries in book format (Koren 1997, Winkler 2001, Nesi 2000). This extra skill may place language teachers at something of a disadvantage because the teachers may know little about electronic dictionary contents and capabilities, and they may not be sure about which paper-based dictionary skills apply.

Teachers' attitudes are an important aspect in developing students' ability to use electronic dictionaries. It may not be practical for teachers to teach electronic dictionary skills if they are still unsure about what is contained in them. This study, therefore, explores teachers' use of dictionaries and their knowledge of the electronic dictionary. It is expected that the findings may help highlight the current situation and may raise teachers' awareness of the importance of and the growing trend towards the use of electronic dictionaries. It is also expected that teachers would be better informed about electronic dictionaries so that they can be in

a position to provide effective dictionary training to their students.

## BACKGROUND

### Types and Modes of Dictionaries

Dictionaries can be classified by many criteria. One way of categorizing dictionaries is by the number of languages contained in a dictionary. Nation (2001: 288-290) put dictionaries into three classes: monolingual, bilingual, and bilingualised (although trilingual and multilingual dictionaries exist as well). Monolingual dictionaries are written in only one language (e.g. English-English learner's dictionary) while bilingual dictionaries are written in two languages (e.g. English-Thai and Thai-English dictionaries). Bilingualised dictionaries contain monolingual L2 definitions immediately followed by an L1 translation or a L1 gloss (Pujol et al, 2006). This description applies when looking up words in L2. When looking up words in L1, however, bilingualised dictionaries just provide the translation, plus production information.

Dictionaries (monolingual, bilingual, bilingualised) can take many modes of presentation. Nesi (1998) classifies dictionaries into two modes of presentation: paper-based dictionaries and computer-based dictionaries (also known as electronic dictionaries). There are three types of electronic dictionaries: hand-held electronic dictionaries (also known as pocket electronic dictionaries or PEDs), dictionaries on CD-ROM, and dictionaries on the Internet. The main difference between electronic dictionaries and paper-based dictionaries is not

their information content but their retrieval system (Nesi, 2000). The way a paper-based dictionary organizes information is primarily linear, which is appropriate for the listing of a succession of separate entries, while an electronic dictionary organizes information so that users can group or regroup words according to their semantic and pragmatic similarities, their valency and collocational patterning, or their letter combinations. It should be noted that Nesi refers to dictionaries on CD-ROM. Many PEDs and dictionaries on the Internet, however, cannot yet function in this way. Most dictionaries on CD-ROM and some PEDs do not only offer entries, but also audio and visual elements, exercises and games. The huge amount of information that is thus available makes such a dictionary a novel reference tool. If an electronic dictionary were to be fully developed, it would serve not only as a reference but also as a language learning tool, and this to a much greater extent than dictionaries in paper-based form would ever be able to do. The types of dictionaries and the modes that are relevant to this study are shown in Figure 1.

Figure 1 explains the focus of this study. A dictionary, which is a kind of reference work, can be monolingual, bilingual, bilingualised, or multilingual, and can be in either printed or electronic form. A dictionary on the Internet, a dictionary on CD-ROM, and a pocket electronic dictionary (PED) are the focus of this study.

### Electronic Dictionaries in Thailand

#### 1. PEDs

A Thai PED normally contains the contents of at least three paper-based dictionaries: two bilingual English-Thai and Thai-

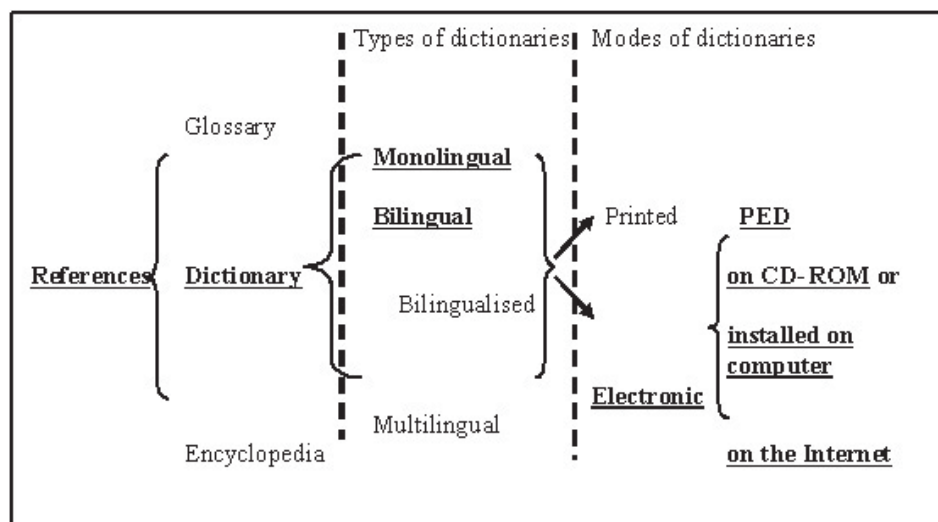


Figure 1: Lexicography and its branches

Table 1: Comparison of two PED models

Dictionary	Super Smart	CyberDict 3 Advance
Thai - English	by lecturers from the Chalmprakiat Center of Translation and Interpretation (undated)	Thiengburanathum, W. (2002) <i>Thai-English Dictionary (Library Edition)</i> , Bangkok: รวมสาสน์.
English - Thai	by lecturers from the Chalmprakiat Center of Translation and Interpretation (undated)	Thiengburanathum, W. (1998) SE-ED's <i>Modern English-Thai Dictionary (Complete &amp; Updated)</i> , Desk Reference Edition, Bangkok: SE-Education.
English - Thai	-	Mallikamas, P., Chakrabongse N., Piammaattawat P., (2004) <i>Oxford River Books English-Thai Dictionary</i> , Bangkok: River Books
English - English	The Concise American Heritage Dictionary (1983, Houghton Mifflin)	Hornby, A. S. (2000) <i>Oxford Advanced Learner's Dictionary (6<sup>th</sup> Edition)</i> , Oxford: Oxford University Press.

English, and one English monolingual. There are at least four companies that publish PEDs in Thailand, but *TalkingDict* (Group Sense Ltd.) and *CyberDict* (Besta) are the leading brands. Over the past two decades, *TalkingDict* has published more than 20 models and *CyberDict*, which was established a few years later, has published more than 16 models. An investigation of two PED models by Boonmoh (2009), the *Super Smart* by *TalkingDict* and the *CyberDict 3 Advance* by *CyberDict*, found the main difference to be lexicographical features.

It is seen from Table 1 that *CyberDict 3 Advance* contains material from newer and more up-to-date paper-based dictionaries than *Super Smart*. More recent PED models by *TalkingDict* replaced the paper-based English-English *Concise American Heritage Dictionary* with the *Concise Oxford English Dictionary* (11<sup>th</sup> edition, 2006). It should be noted that the *Concise Oxford English Dictionary* is not intended for learners of English but for native speakers of English. Some newer *TalkingDict* models claim to contain the *Oxford River Books English-Thai Dictionary* and the *Cambridge Advanced Learner's Dictionary* (unstated edition). The contents of the English-Thai and Thai-English dictionaries of these two PED brands, however, remain the same.

Both PED brands offer spoken pronunciation of headwords and wildcard functions (*a wildcard is a symbol that takes the place of an unknown character or set of characters*), but certain technical features are specific to the *CyberDict 3 Advance*. If a headword is not listed in the dictionary that the user selects from the PED menu, a

cross search function enables an automatic search across the remaining dictionaries in the PED *CyberDict 3 Advance* also helps users with commonly misspelled words by providing a list of possible alternatives. For example, if users type the headword 'rinkle', a pop-up box offers the following three options: *spelling check* (which offers a choice between 'rankle', 'wrinkle', 'rinse', and 'wrinkly'), *nearest word* (which shows the word that is nearest in form, i.e. rink), and *add new word* (which allows users to create an entry for 'rinkle' and provide their own definition). All *CyberDict* models have the ability to display the most appropriate root form, e.g. when typing SUPPORTS or SUPPORTED, the dictionary displays SUPPORT. This ability, however, is not present in all *TalkingDict* models. At the time of writing, none of the PED brands included learners' dictionaries below advance level.

The price of Thai PEDs ranges from 3000 Baht (95 US dollars) to 15,000 Baht (480 US dollars). The price of the Thai PEDs, however, seems to depend on the non-lexicographical features the PEDs contain. For example, *CyberDict 12*, one of the most recent models, includes learning materials (TOEFL Exam Exercises, useful words, 'travel dialogues' and the like), a personal information/diary component, and calendar, clock, calculator functions, memory card, color touch screen, and MP4 players.

## 2. Dictionaries on CD-ROMs or installed on computers

A PC-based dictionary called So Sethaputra is normally bundled with many computers sold in Thailand. This dictionary

contains both English-Thai and Thai-English dictionaries. Newer versions often replace older versions, and the date of publication and the edition are not stated. This dictionary does not include the wildcard search facility.

On the other hand, learner's dictionaries on CD-ROMs are normally bundled with the printed copy of learners' dictionaries. All major learners' dictionaries, (elementary, intermediate, and advanced levels) are available for sale in Thailand. The use of learners' dictionaries on CD-ROMs, however, is little. Based on the study by Boonmoh and Nesi (2007), out of 1,211 students, 938 (82%) reported having learner's dictionaries in book form (probably the *Longman Active Study Dictionary, LASD*), and only 334 (28%) students reported having dictionaries in CD form. Since the dictionaries in CD form would have been attached to their dictionaries in book form, it might have been that some of the students were unaware that a CD was also included with their copy of the LASD. Surprisingly, of those who reported having dictionaries in CD form, only about 15 (5%) students reported using them.

Learners' dictionaries on CD-ROMs are one of the latest developments in the field of lexicography. They contain much more information than the printed versions on which they are based. They also contain extra features that are not available in the printed copies, for example, corpus example, audio material, interactive exercises, and picture gallery. They can perform complex searches and offer search facilities including wildcards and Boolean operators (a term used to combine search terms, or items, in order to broaden or narrow the

results of a search. Typical Boolean operators are AND, OR, and NOT).

### 3. Dictionaries on the Internet

The increasing use of Internet dictionaries is partially due to advances in technology and high speed broadband technology. According to Nesi 2008, dictionaries on the Internet can be classified into three categories: those available by subscription, those in the public domain, and collaborative projects in the process of construction by contributing users.

At the time of writing, there are no bilingual English-Thai and Thai-English dictionaries available by subscription. Many learners' dictionaries are available online without additional features that are offered on dictionaries on CD-ROMs. Users must subscribe in order to gain full access (Nesi, 2008). For example, Cambridge Dictionaries only offers a 'no frills' service which aims to encourage users to upgrade to the *Cambridge International Dictionary of English* on CD-ROM. Only paying subscribers can gain extra services such as audio files, usage notes, and more search facilities. Since no subscription is required, the online public domain bilingual Thai-English and Thai-English dictionaries become the most popular and widely used by students. Carr (1997) claims that none of the public domain dictionaries available on the Internet contain full definitions of a full range of headwords. One main problem with Internet dictionaries raised by many (e.g. Koren 1997, Campoy 2004: 48) is the problem of quality. Some electronic dictionaries do not indicate author(s). Some of them are based on outdated paper dictionaries and most users may not be aware of differences be-

tween dictionary editions.

### Studies into Dictionary use

A number of previous studies into dictionary use (e.g. Midlane 2005, Ryu 2006, Kobayashi 2006, Chatzidimou 2007, Tang 1997, Nesi 2002, and Boonmoh 2003) have focused on the area of dictionary ownership and students' attitudes towards dictionary use. Most of the findings suggested increasing trends towards electronic dictionaries. A few studies (e.g. Taylor and Chan 1997, Sobkowiak 2002, Stirling 2005), however, reported on teachers' use and their perception toward dictionary use.

Taylor and Chan (1994) conducted a survey to see how PEDs were used by students in Hong Kong. The findings showed that 18% (out of 475 students) used PEDs. Twelve teachers were interviewed in this study. Only four reported that they used PEDs themselves, but many of them were doubtful about the use of PEDs and preferred their students to use printed dictionaries. Some were concerned that the ease of access may lead students to rely too much on them rather than to develop skills in tackling unknown words.

Several teachers in the Stirling survey (2005) complained quite negatively about the PEDs their students used. They thought PEDs were inaccurate, noisy, and distracting. Stirling investigated eleven PEDs that students used and noticed that four of them contained an English-English learner's dictionary. She tested the effectiveness of these PEDs by asking all eleven PED owners to look up three words in context and found that the four students with English-English dictionaries performed better than those

without the English-English feature. All four PEDs with English explanations provided fuller accounts of the looked up word, including part of speech, phonetic transcription, prepositions, and example sentences. The same features can be found in any good learner's dictionary in book form. This may suggest that teachers in the Stirling study might not have been aware of the dictionary contents and capabilities contained in the PEDs, and it might not be justified for the teachers to complain about the PEDs their students were using without knowing them well enough.

Sobkowiak (2002) conducted a questionnaire survey to investigate language teachers' own experiences with electronic dictionaries. The teachers seemed to display a lack of familiarity with the features of their electronic dictionaries. Thirteen teachers were in doubt, and nine teachers reported that computer dictionaries cannot show phonetic transcription on screen. 50% were uncertain about whether it was easier to use a computer dictionary than a traditional one.

Most teachers teaching in South and East Asian countries (excluding Thailand) in the Midlane questionnaire survey (2005) noticed their students brought PEDs to class. When asked, "*If you were responsible for designing a PED, what features would they include?*", many respondents' answers showed they were not familiar with PEDs. For example, one of the features that they thought would be useful in PEDs was pronunciation examples of headwords. To my knowledge, the pronunciation example exists with every PED model. Some teachers answered that they wanted to have "*the ability to silence it*" or to have "*a button you can press to stop them beeping every time students look up a word*

*in class*". Some other desirable features to be included were phonetic transcription, monolingual functioning, collocation, parts of speech, and sample sentences. Many of these features do exist in many PED models (as noted in Stirling 2005). This suggests that the teachers lacked knowledge about the devices their students brought into the classroom.

The above surveys (Taylor and Chan 1994, Stirling 2005, Sobkowiak 2001, and Midlane 2005) shed some light on an area worth further exploration because if the teachers themselves were unconvinced about or unaware of the features offered by electronic dictionaries, it is unlikely that the students would discover these by themselves. Sobkowiak (2001) concludes that *"If teachers themselves continue to have little knowledge, bad stereotypes and fears of educational technology... no amount of computing machinery lavished upon schools will help... teacher trainers should think about it very seriously: the main challenge of electronic learner' dictionaries is in the head of the teacher"*.

## THE STUDY

Since there is a growing trend for electronic dictionaries, it may not be practical for teachers to continue teaching only the paper dictionary skills. One approach would be for these teachers to teach electronic dictionary skills and to provide advice on advantages and disadvantages of electronic dictionary use. Hartmann (2001) and many others (e.g. Taylor and Chan 1994, Fan 2000, Liou 2000, Sobkowiak 2002, Wingate 2004, and Midlane 2005) point out that in order to help students reap

the benefits of good dictionaries, the students need to be explicitly taught how to use them.

It is essential to explore teachers' own use and knowledge of electronic dictionaries since, as already mentioned, they are likely to be the people who can provide advice to their students. Therefore, the research questions of this study are:

- 1) What dictionaries do Thai language teachers own and use?
- 2) To what extent do Thai language teachers know about electronic dictionaries?

## Participants

The participants of this study were seventy eight (78) Thai lecturers of English from eight (public and private) universities in Thailand. These included Kasembundit University, Kasetsart University (Sakon Nakorn Campus), King Mongkut's University of Technology Thonburi, Prince of Songkla University, Rajabhat Chandrakasem University, Rajamanala University of Technology Krungthep, Rajamangala University of Technology Phra Nakhon, and Sakon Nakorn Rajabhat University. The two criteria for selecting participants were convenience and accessibility. The researcher chose to collect data from those universities because he had personal contact with staff members, and they were willing to distribute and collect questionnaires on his behalf.

## Procedures

The questionnaire (See Appendix A) which consisted of three parts – general use of dictionaries, use of electronic dictionaries, and knowledge of electronic dictionary



ies – was completed by language teachers during April and May 2009. Two hundred copies of the questionnaire were sent to the researcher’s colleagues (25 copies for each institution) who then distributed the questionnaire on his behalf. Seventy-eight copies were returned (39% return rate). The questionnaire was then analyzed by counting frequencies and calculating percentages.

## RESULTS

As can be seen from Table 2, all 78 respondents were experienced teachers. They were classified according to their numbers of years of teaching experience: 31 had between 1 to 10 years’ experience, 19 had more than 10 years’ experience, 23 had

more than 20 years’ experience, and of these 5 had more than 30 years’ experience. It is important to note that 15 out of 23 lecturers from the third group (those with 21 to 30 years of teaching experience) and all 5 lecturers from the fourth group (those with than 30 years of teaching experience) left the final part of the questionnaire (16 items) blank. They either reported orally to the researcher’s colleague or wrote on the questionnaire that they did not know about electronic dictionaries, and thus were unable to supply the information. This already suggests that the lecturers had little idea about the lexicographical content of electronic dictionaries.

Table 3 shows that all 78 lecturers owned at least one dictionary. This may be taken to imply that dictionaries play an im-

**Table 2: Teachers' years of teaching experience**

Years of teaching experience	Group 1	Group 2	Group 3	Group 4
	1 - 10	11 - 20	21 - 30	More than 30
Number of teachers	31	19	23	5

**Table 3: Lecturers' ownership of dictionaries, dictionary types used by them for writing, reading and lesson planning, and their preference for future dictionary purchase**

	Dictionary ownership	Number who used this type when			Future purchase
		Writing	Reading	Lesson planning	
PED	15	6	7	5	8
Online bilingual dictionary	28	7	7	8	3
Online monolingual dictionary	30	12	10	12	2
Bilingual dictionary in book form	60	23	25	12	11
Bilingual dictionary on CD-ROM or installed on computer	17	5	5	6	7
Monolingual dictionary in book form	65	40	30	37	39
Monolingual dictionary on CD-ROM or installed on computer	36	9	8	8	9

portant role in English teaching for all the lecturers regardless of the number of years of teaching experience. The types of dictionaries the lecturers owned or accessed are listed, from the most to the least, below.

1. Monolingual dictionaries in book form (65 lecturers),
2. Bilingual dictionaries in book form (60 lecturers),
3. Monolingual dictionaries on CD-ROM or installed on computers (36 lecturers),
4. Online monolingual dictionaries on the Internet (30 lecturers),
5. Online bilingual dictionaries on the Internet (28 lecturers),
6. Bilingual dictionaries on CD-ROM or installed on computers (17 lecturers), and
7. Pocket electronic dictionaries (15 lecturers).

It can be seen that monolingual dictionaries regardless of their mode of presentation (in book form or CD-ROM form, and on the Internet) were among the top four dictionaries that the lecturers owned or had access to. Dictionaries in book form were the top format that the lecturers owned. PEDs, on the other hand, were owned the least by the lecturers. All lecturers who owned PEDs were from only the first group. A few of the lecturers from the third group and none from the fourth group reported owning monolingual dictionaries on CD-ROM. This also applied to dictionaries on the Internet. The teachers in the third and fourth groups might be more familiar with using monolingual dictionaries in a more traditional form (book form) and, at the same time, they might not be familiar with computers.

When asked what types of dictionaries the lecturers preferred to use when writing,

reading, and lesson planning, most lecturers reported they preferred both monolingual and bilingual dictionaries in book form. One interpretation could be that the lecturers were more familiar with the traditional way of using a dictionary in book form. Another interpretation could be because of the nature of the working style. More lecturers might prefer to work on paper more often than to work on a computer. Taking the mode of presentation into consideration, it can be seen that the number of lecturers who reported owning or having access to dictionaries in electronic format (PEDs, CD-ROMs, and on the Internet) do not correspond with the numbers of lecturers who reported using them. For example, less than 50% of those who owned PEDs reported using PEDs for writing (6), reading (7) and lesson planning (5). Interestingly, only about 20% of those owning a monolingual dictionary on CD-ROM reported using them for writing (9), reading (8), and lesson planning (8).

Predictably, it can be seen that lecturers were in favour of monolingual dictionaries in book form. Half of them (39 lecturers) stated that they would like to buy monolingual dictionaries in book form in the future, while almost all other types of dictionary are much less popular, i.e., only about 12% would like to buy or have access to electronic dictionaries (online, on CD-ROMs, or PEDs). Some of those who would like to buy monolingual dictionaries in book form stated that they liked the ease of use and their usefulness. They found the book format familiar, but some teachers stated that they lacked computer literacy:

- *I am used to using this type of dictionary. It's easy and very convenient.*

**Table 4: Use of electronic dictionaries**

Do you use	learners' dictionaries on CD-ROMs?		PEDs?		learners' dictionaries online?	
	Yes	No	Yes	No	Yes	No
If no, why?	<b>38</b>	<b>40</b>	<b>15</b>	<b>63</b>	<b>32</b>	<b>46</b>
No computer	-	5	-	-	-	5
No computer skill	-	10	-	1	-	10
Not familiar	-	25	-	36	-	22
Not necessary	-	23	-	20	-	22
Too complicated	-	5	-	1	-	6
Too expensive	-	2	-	25	-	0
Don't have one	-	5	-	32	-	0

- *It's good and reliable.*
- *Using monolingual dictionary is easier. I don't use computer often and I am not familiar with computer.*
- *It is complete. It provides all information I need.*

As can be seen from Table 4, most lecturers do not use electronic dictionaries. This also confirms that the lecturers are probably more familiar with the learner's dictionary in book form. The main reasons that the lecturers did not use electronic dictionaries are that they were not familiar with electronic dictionaries and the electronic dictionaries were not necessary. It should be noted that half of the lecturers from the third group (12 lecturers) and all lecturers from the fourth group (5 lecturers) reported not being familiar using these three types of electronic dictionaries. Moreover, five lecturers from the third group and all from the fourth group reported not using electronic dictionaries because they had no computer skills. No computer, and too complicated, are the next two reasons the lecturers did not use electronic dictionaries. However,

the two main reasons that lecturers reported for not using PEDs are because they simply did not possess PEDs, and PEDs are too expensive to buy.

Table 5 shows the findings regarding lecturers' knowledge of electronic dictionaries. In this part, the lecturers were asked to supply sixteen items. The first nine items included features in electronic dictionaries. Some features existed in all dictionary types (CD-ROM, PED, and online). Some features existed only in some particular dictionary types. The remaining items (10-16) asked the lecturers what dictionary type they believed could function in the way described in the statements. It was expected that the information the lecturers supplied would reflect their knowledge and their belief about electronic dictionaries. As mentioned earlier, 20 lecturers left this part of the questionnaire blank as they reported that they did not know about electronic dictionaries and were not able to answer about them. The researcher, therefore, decided to mark all 16 items in these lecturers' questionnaires as '?'.

**Table 5: Knowledge of electronic dictionaries**

<b>This dictionary format</b>	<b>CD-ROM</b>	<b>PED</b>	<b>On-line</b>	<b>Don't Know</b>
1 contains the contents of at least three hard copy dictionaries.	22	15	6	35
2 is usually bundled with a book dictionary.	33	5	0	40
3 usually contains pictures.	26	10	23	30
4 has a special function (e.g. QUICKfind, pop-up dictionary) that helps you look up words quickly and easily while you are reading.	28	12	20	36
5 has word-wheel facility (ability to display an alphabetical list of all the search options available in a dictionary).	29	11	5	32
6 has a wildcard* search function.	17	9	17	39
7 has the ability to display the most appropriate root form - e.g. when typing SUPPORTS or SUPPORTED, the dictionary displays SUPPORT.	28	8	22	32
8 has an automatic cross referral search function. (This dictionary format will automatically search for the same word form from different dictionaries).	25	10	14	31
9 has the ability to add a new word as well as its meaning.	26	15	20	34
<b>Now, please answer the following additional statements:</b>	<b>CD-ROM</b>	<b>PED</b>	<b>On-line</b>	<b>?</b>
10 You can record your pronunciation, play it back, and compare it with the recording provided with this dictionary format.	24	20	8	36
11 The keyboard of this format is different from a computer's keyboard.	20	30	9	32
12 You need a computer to use this dictionary format.	54	3	53	25
13 Screen space is the limitation for this dictionary format.	26	10	11	30
14 You have limited access to this dictionary format unless you subscribe to it.	28	16	19	30
15 Some software programmes (e.g. games, books) can be downloaded to this dictionary format.	27	17	20	34
16 Learner's dictionary below advance level is not yet available with this dictionary format.	24	18	22	38

The findings show expected results. Almost half of the lecturers (N > 29) supplied their answers from items 1 to 16 (except item 12) as 'I don't know'. The '?' option also received the highest frequencies. This might be taken to simply say that these lecturers did not know most of the prominent functions or features in electronic dictionaries.

The findings suggest that the lecturers overestimate the abilities and capabilities of dictionaries on CD-ROMs. Many lecturers

might have believed that learner's dictionaries on CD-ROMs were more 'superior' or contained more 'advance technology' than the remaining two types, as can be seen by the frequencies for each item. However, this is not always the case. For example, the researcher is not aware of any type of learner's dictionaries on CD-ROMs on sale in Thailand that contain the contents of at least three book format dictionaries (item 1). All PEDs sold in Thailand, on the other hand, contained at least 3 three book

format dictionaries. *TalkingDict*, for example, claims to include at least 53 book format dictionaries in *Super Smart* model and 71 book format dictionaries in *Super 99* model. Another point is the automatic cross referral search function (item 8). Since a dictionary on CD-ROM is bundled with a book dictionary and is sold separately from other publishers, the cross referral search function does not exist. However, this function exists in PEDs to help users easily find words since there are a number of book format dictionaries in the PEDs.

The findings also suggest that some lecturers underestimated the capabilities of PEDs, as can be seen in items 5, 6, 8, 9 and 10. Like dictionaries on CD-ROMs, the most recent PEDs contain the above-mentioned functions. All PEDs in Thailand have word-wheel facility (item 5), a wildcard search (item 6), and the automatic cross referral search function (item 8). Most PEDs have the ability to annotate for new words (item 9), and to record and play back pronunciation (item 10). Moreover, it is found that the ability to install some non-dictionary software programmes (item 15) is a prominent feature in PEDs that other types of dictionaries cannot provide to the same extent. PED users can install new dictionaries, games, e-books, and media converters (to convert audio CD file to MP3 format) in their PEDs. As discussed earlier, English-English book format dictionaries in the PEDs are either advanced learner's dictionaries or English-English dictionaries for native speakers of English (item 16). The researcher is not aware of any PEDs that contain a learner's dictionary below the advance level.

For online learners' dictionaries, it is

found that some lecturers knew little about them. Many lecturers thought that online dictionaries usually contained pictures. Browsing through online learner's dictionaries, the researcher found that, out of four online dictionaries (*Cambridge dictionary online*, *Longman English dictionary online*, *Macmillan free English dictionary online*, and *Cobuild dictionary online*), only *Longman English dictionary online* provides pictures (item 3). Note that Oxford does not provide an online learner's dictionary service. Twenty lecturers thought that online dictionaries provide a function that help users look up words quickly and easily while they are reading (item 4), but this function seems to exist only in dictionaries on CD-ROMs. Finally, learners' dictionaries normally provides free online service, but require a paid subscription for extended content (item 14). Only 19 lecturers, however, thought that online dictionary users have limited access unless they subscribe to it. Other lecturers even thought that users must subscribe in order to use dictionaries on CD-ROMs (28 lecturers) and PEDs (16 lecturers).

## DISCUSSION AND CONCLUSION

This survey revealed insights into what dictionary types the lecturers used and how much they knew about electronic dictionaries. It is clear that most lecturers used, preferred to use, and would like to buy learners' dictionaries in book form. Most of these lecturers did not use electronic dictionaries because the lecturers were not familiar with them and they did not think it was necessary to use them. This, as a re-

sult, may be the reason why the lecturers were not aware of the information contained in electronic dictionaries. Most lecturers also did not know the capabilities of the electronic dictionaries. This may have caused them to be unwilling to train their students to use electronic dictionaries.

The survey findings accord with the findings from previous studies (e.g. Taylor and Chan 1997, Sobkowiak 2002, Stirling 2005, and Midlane 2005) that teachers were not well informed about electronic dictionaries. The researcher's findings indicated the reasons why the lecturers did not use electronic dictionaries and also suggested that age might play a role. It is seen that the more experienced teachers used and preferred to use traditional format dictionaries than did younger and less experienced teachers.

It is possible to say that electronic dictionaries are becoming a fact of life in Thailand and other countries. The electronic dictionary phenomenon will continue; as Stirling (2005: 64) suggested, "*they seem to be here to stay, just as calculators, once welcomed by students and rejected by teachers, have stayed*". Since more and more electronic dictionaries will be available for sale, "*teachers need to be inquisitive about the world in which they and their students live - a world that includes technology - and make connections between this world and their teaching*" (Murison-Bowie, 1993: 6). The decision whether to ignore them or to help the students is up to the lecturers. Nesi (2003), however, suggests that

*"We (teachers) should learn more about our students' dictionary-using habits and preferences, and more about the*

*contents of the dictionaries they use. We should be sufficiently well-informed to advise on e-dictionary purchase, warn of the pitfalls of such sources... and demonstrate ways to store and annotate words in electronic formats"*.

Many studies suggest that learners need to become familiar with electronic dictionaries (Sánchez Ramos, 2005), and that learners need to be taught explicitly how to use them (Hartmann, 1991) because "without some training... any user will find it difficult to exploit all the information, the facilities and features such an electronic dictionary could offer" (Winkler, 2001b).

The result of this survey may raise the lecturers' awareness of the importance of electronic dictionaries and may help the lecturers to learn more about electronic dictionaries so that they can be in a better position to provide authoritative advice to students on how to buy electronic dictionaries and train the students to use them effectively.

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### **Survey on Electronic Dictionary Use**

The aim of the following questionnaire is to collect some data on your use, your knowledge of electronic dictionaries. The questionnaire is completely anonymous, and the results will be used for research purposes only. I am of interested in receiving many completed forms with truthful answers, but if you do not feel like doing this questionnaire, please return it empty rather than filling it quickly and randomly. I thank you for your time and effort.

Atipat BOONMOH, lecturer at School of Liberal Arts, King Mongkut's University of Technology Thonburi (KMUTT)



Please answer the following questions by (/) ticking the appropriate spaces provided or answering in the spaces given.

**Part I: Your personal information**

Teaching experience: \_\_\_\_\_ year(s)

If you are **NOT** a native speaker of Thai, what is your native language?  
\_\_\_\_\_

**Part II: Your use of “dictionaries”**

1. Do you use or own a dictionary?  
 Yes (**please continue**)  
 No (**please answer Part III**)
2. Which of these dictionaries do you own or have access to? **You may tick more than one of the following.**
  - a)  a **pocket electronic** dictionary (e.g. TalkingDict, CyberDict, VTech)
  - b)  an **online bilingual** dictionary on the internet
  - c)  an **online monolingual** dictionary on the internet
  - d)  a **bilingual** dictionary in book form
  - e)  a **bilingual** dictionary on **CD-ROM** or **installed on computer**
  - f)  a **monolingual** dictionary in **book form**
  - g)  a **monolingual** dictionary on **CD ROM** or **installed on computer**
3. When you use dictionary for **writing**, which dictionary do you prefer to use and why do you prefer to use it? Refer to the type of dictionary in question 2.  
 Type of dictionary (please circle):  
**a) b) c) d) e) f) g)**

4. When you use dictionary for **reading**, which dictionary do you prefer to use and why do you prefer to use it? Refer to the type of dictionary in question 2.

Type of dictionary (please circle):

- a) b) c) d) e) f) g)**

5. When you use dictionary for **lesson planning**, which dictionary do you prefer to use and why you prefer to use it? Refer to the type of dictionary in question 2.

Type of dictionary (please circle):

- a) b) c) d) e) f) g)**

6. If you plan to buy a new dictionary, what type of dictionary would you like to buy? Refer to types of dictionaries in question 2.

Type of dictionary (please circle):

- a) b) c) d) e) f) g)**

Why?

.....  
.....  
.....

**Part III: Your use of “learners’ electronic dictionaries”**

**Learners’ dictionaries on CD-ROM or installed on computer**

7. Do you use a dictionary on CD-ROM?

**yes**, please give the details of your dictionary (dictionaries). .....

**no**, if you have never used a dictionary on CD-ROM, why? You may tick more than one item.

- no computer at home
- no computer skills
- not familiar with it
- not necessary
- too complicated

- too expensive
- I don't have one
- other(s) please specify \_\_\_\_\_

**Pocket electronic dictionaries (PEDs)**

8. Do you use a PED?
- yes, please give the details of your PED. ....
  - no, if you have never used a PED, why? You may tick more than one item.
    - no computer skills
    - not familiar with it
    - not necessary
    - too complicated
    - too expensive
    - I don't have one
    - other(s) please specify \_\_\_\_\_

Please answer the following statement by (/) ticking in an appropriate box. Tick '**CD-ROM**' if you think that the statement is correct for most learner's dictionaries on CD-ROM or installed on computer, '**PED**' if you think that the statement is correct for most learner's dictionaries in pocket electronic dictionaries, '**Online**' if you think that the statement is correct for most online learner's dictionaries, and '**?**' if you don't know or you are not sure. You may tick more than type of electronic dictionary.

**Learners' dictionaries online**

9. Do you use (or have access to) a dictionary online?
- yes**, please give the name of the dictionary you normally use. ....
  - no**, if you have never used a dictionary online, why? You may tick more than one item.
    - no Internet access
    - no computer skills
    - not familiar with it
    - not necessary
    - too complicated
    - too expensive
    - other(s) please specify \_\_\_\_\_

<b>This dictionary format</b>	<b>CD-ROM</b>	<b>PED</b>	<b>On-line</b>	<b>?</b>
1 contains the contents of at least three hard copy dictionaries.	22	15	6	35
2 is usually bundled with a book dictionary.	33	5	0	40
3 usually contains pictures.	26	10	23	30
4 has a special function (e.g. QUICKfind, pop-up dictionary) that helps you look up words quickly and easily while you are reading.	28	12	20	36
5 has word-wheel facility (ability to display an alphabetical list of all the search options available in a dictionary).	29	11	5	32
6 has a wildcard* search function.	17	9	17	39
7 has the ability to display the most appropriate root form - e.g. when typing SUPPORTS or SUPPORTED, the dictionary displays SUPPORT.	28	8	22	32
8 has an automatic cross referral search function. (This dictionary format will automatically search for the same word form from different dictionaries).	25	10	14	31
9 has the ability to add a new word as well as its meaning.	26 15	20 34		
<b>Now, please answer the following additional statements:</b>	<b>CD-ROM</b>	<b>PED</b>	<b>On-line</b>	<b>?</b>
10 You can record your pronunciation, play it back, and compare it with the recording provided with this dictionary format.	24	20	8	36
11 The keyboard of this format is different from a computer's keyboard.	20	30	9	32
12 You need a computer to use this dictionary format.	54	3	53	25
13 Screen space is the limitation for this dictionary format.	26	10	11	30
14 You have limited access to this dictionary format unless you subscribe to it.	28	16	19	30
15 Some software programmes (e.g. games, books) can be downloaded to this dictionary format.	27	17	20	34
16 Learner's dictionary below advance level is not yet available with this dictionary format.	24	18	22	38

A wildcard is a symbol that takes the place of an unknown character or set of characters. Commonly used wildcards are the asterisk (\*) and the question mark (?). Depending on the software or the search engine you are using, other wildcard characters may be defined. <http://kb.iu.edu/data/ahsf.html>.