PERCEPTIONS OF PROSPECTIVE SPECIALISTS AND NON-SPECIALISTS TOWARDS TECHNICAL TERMS IN MARKETING

Authors

Yusof ISMAIL
Senior Lecturer,
Business, KENMS,
International Islamic University Malaysia
P.O.Box 10, 50728 Kuala Lumpur, MALAYSIA
E-mail: yusof_iiu@yahoo.com
Tel: 603-6196-4747 Fax: 603-6196-4644

and

Mohamed Ismail Ahamad SHAH
Associate Professor
International Islamic University Malaysia
E-mail: ismailiium@yahoo.com
Tel: +603-6196 6028 Fax: +603-6196 6028

Corresponding author:

Mohamed Ismail Ahamad Shah
Department of English Language and Literature
Kulliyyah of Islamic Revealed Knowledge and Human Sciences
International Islamic University Malaysia
P.O. Box 10, 50728 Kuala Lumpur
Malaysia

E-mail: ismailiium@yahoo.com
Telephone: +603-6196 6028
Fax: +603-6196 6028

Abstract

Technical terms are an integral part of a discipline. They enrich and help distinguish among disciplines. The irony is that even among specialists some technical terms are incomprehensible; the terms impede, instead of expedite, the communication process. Some technical terms fail to satisfy the basic needs of communication such as message clarity. The present study aims to identify and verify a select list of twenty two technical terms which may be considered fundamental or basic in the discipline of Marketing. The study creates an instrument to help collect input from prospective specialists and non-specialists of Marketing towards their perception of, and decision on, the need to have common understanding of technical Marketing terms. A questionnaire was administered on 82 non-specialists and 26 specialist undergraduate students of a public university whose medium of instruction is English. Results show that the respondents moderately agree that they will lose if they lack knowledge of the marketing technical terms. They also believed that using correct terms expedites the communication process. A statistical analysis called Cronbach alpa (.863) confirms the significantly high degree of inter-relatedness among the twenty two Marketing terms tested in the study. Another statistical technique called an exploratory factor analysis procedure was used to statistically group the specified list of technical terms. The procedure produced five categories of technical terms that were labelled as providers of products, distributors, sales, pricing, and product. The last four categories represent the universally recognized four P's of marketing: place, promotion, pricing, and product. The study confirmed at least twenty two technical terms that help producers, marketers and consumers communicate effectively.

Keywords: Consumer, English for specific purposes, Marketing, Specialist, Technical terms

INTRODUCTION

Every discipline has jargons, terms and terminologies, and these are words that are specific to that discipline. These words have been generally categorized as 'technical vocabulary'. Researchers have used a variety of labels to refer to what they consider as technical vocabulary. Technical vocabulary has been variously referred to as 'terminological words', 'specialised lexis' (Baker,1988), 'technical terms' (Yang, 1986), 'specialist vocabulary' (Kennedy and Bolitho,1984), and 'technical words' (Farrell, 1990).

Technical vocabulary plays an important role in a discipline. However, research has shown that the importance of technical vocabulary has been very much underestimated (Sutarsyah, Nation and Kennedy, 1994; Chung, 2003; and Chung and Nation, 2003). These research have also shown that information is lacking on how technical vocabulary relates to other types of vocabulary.

Vocabulary has been divided according to different categories by researchers. One of the well-known divisions is provided by Nation (2001). He divides vocabulary into four levels, according to the frequency of occurrence of the words: high frequency words; academic vocabulary; technical vocabulary; and low frequency words. West (1953) describes

the high frequency words, which are the most frequent 2,000 words of English, as general service vocabulary as they are used for all language purposes.

According to Nation (2001), the third level of vocabulary, i.e., technical words, made up 5% of the running words in specialized texts, and these words consisted of words which were of frequent occurrence in a specialized text or subject area, but did not occur or occurred with very low frequency in other fields (Nation, 2001). Technical vocabulary would be of particular interest and would be useful to people working in a specialized field.

In spite of the evidence on the nature and coverage of high frequency and academic words, there has not been much investigation on the nature and coverage of technical vocabulary and low frequency words. One reason for this is the lack of agreement on the definition of technical vocabulary and the reliability of its calculation.

Chung and Nation (2003) describe a study of the technical vocabulary of an anatomy and applied linguistics texts. They sought initial answers to the following questions:

- How big is a technical vocabulary?
- What kinds of words make up a technical vocabulary?
- How important is technical vocabulary in specialised texts?
- How can learners be helped to cope with technical vocabulary?

They classified words as being technical or non-technical by rating them on a four-point scale designed to measure the strength of the relationship of a word to a particular specialized field. They classified items into four steps. Step 1 consisted of words such as function words that have a meaning that has no particular relationship with the field of anatomy. These are words independent of the subject matter. Examples in this category are words such as *the, is, between, it, by, common,* and *especially.* Step 2 consisted of words that have a meaning that is minimally related to the field of anatomy in that they describe the positions, movements, or features of the body. Examples in this category are: *superior, part, forms, pairs, structures and protects.* Step 3 consisted of words that have a meaning that is closely related to the field of anatomy. Examples in this category are *chest, trunk, neck, abdomen, cavity, shoulder, abdominal and heart.* Though these words are technical terms in anatomy, they may occur with the same meaning in other fields and may be technical terms in those fields. Step 4 contained words that have a meaning specific to the field of anatomy and these words are not likely to be found in general language. The words in this category refer to structures and functions of the body. These words are clearly restricted in their usage depending on the subject field. Examples in this category are: *thorax, sternum, costal, vertebrae and pedicle*.

How does one recognise technical words? Technical words can be recognised through their Greek or Latin base forms and when these do not occur outside of the specialised area. Examples from the field of applied linguistics would be words such as *interlingual* and *connotative* while from anatomy would be words such as *pereichondrium and viscera*. Some examples from Marketing would be brand, distribution, intermediary, and market segment. In a study of an anatomy text by Chung and Nation (2003), the researchers found that for more than half of the words in the text, the writers gave clues as to the ways in which the words were special. For example, the writers defined the word, wrote the word in bold or italics and used it as a label in a diagram.

Understanding technical vocabulary is of major concern for learners who are learning language for special purposes and also for students in various fields of specialization. However, not much is known about such vocabulary as the learner does not have the knowledge to determine words that are technical and words which are not. The difficulty arises as the extent to which a word is considered technical is dependent on the function it is put to use and this particular function of the word must be considered in deciding whether a word is technical or not.

According to Chung and Nation (2003), 'technical vocabulary is subject-related, occurs in a specialist domain, and is part of a system of subject knowledge'(p. 252). These features provide guidance in identifying the terms. Technical vocabulary is an integral part of the knowledge of the subject. Thus to identify a technical word one could refer to specialists in the subject area. One way this can be done is by referring to a technical dictionary written by specialists (Nation, 2001; Oh *et el*., 2000) and another way is by looking at clues considered important provided by the writer of the text (Bramki and Williams, 1984; Flowerdew, 1992; Williams, 1981.)

Technical vocabulary differs from one subject area to another. Research has shown that for any particular subject it consists of probably 1,000 words or less and it could provide coverage of up to 5% of the running words in a text (Coxhead and Nation, 2001).
What is the usefulness of distinguishing technical vocabulary from other vocabulary? This will be very useful for learners who would want to use language for specific purposes such as for reading academic texts in a particular discipline, writing technical reports or participating in subject specific conferences.

A technical word, essentially, is a word that is specific to a particular topic, field or discipline (Coxhead and Chung, 2001). The extent to which a word is technical depends on how restricted a word is to a particular area. They have shown the extent to which a word is technical by classifying technical vocabulary into four categories. The examples they give in law and computing are given below.

Category 1

Law – jactitation, per curiam,
Computing- sysiwyg, rom, pixel, modem

Category 2

Law – cite (to appear), caution (v.)
Computing – execute, scroll, paste

Category 3

Law – accused (n.), offer, reconstruction (of a crime)
Computing – memory, drag, window
Category 4

Law – judge, mortgage, trespass
Computing – print, programme, icon

According to them, the word form in category 1 appears rarely, if at all, outside this field. The word form in category 2 is used both inside and outside this particular field but not with the same meaning. Though the word form in category 3 is used both inside and outside this particular field, most of its uses with a particular meaning are in the field. One can access the specialized meaning of a word in this field through its meaning outside the field. A word in category 4 is more common in this field than elsewhere. The word in this category has little or no specialization of meaning. However, a more precise meaning would be evident to someone who has knowledge of the field.

RESEARCH METHOD

In this study, a questionnaire was designed to capture the respondent's perception of the importance of technical terms in comunnication. A total of four items were created to assess this aspect. Next, the authors created a list of twenty two (22) terms which appear as common words in Marketing texts, and therefore fundamental in the field of Marketing. Third category of items consists of open-ended questions aimed to test respondent perceptions towards two selected critical terms, i.e. "place" and "market segment". Next items comprise open-ended questions on two selected terms, i.e. "place" and "market segment". The authors postulated that the first term "place" shares the same meaning both as technical term and common word for non-specialists. The term "market segment", on the other hand, contains both elements of common (i.e. "market") and technical (i.e., "segment"). The last section of the instrument collects five background information: gender, whether the respondent has studied a course in Marketing, degree program, year of study, and the course through which they received the questionnaire.

The questionnaires were distributed to three different classes through their respective instructors. The completed questionnaires were collected by next class meeting. Students of two English and one Business classes participated in the study. Responses to two open-ended questions were extracted by three independent raters, but the category labels on the extracts (or elements) were assigned by the first co-author to ensure consistency in labeling. The next section of the paper reports the findings.

FINDINGS

Responses to this study were contributed by 19.4% male and 80.6% female undergraduates of a public university in Malaysia (See Table 1). Approximately a quarter of the sample had studied Marketing. Non-business related majors (Bachelor of English Language and Literature and Bachelof of Teaching English as a Second Language) constituted more than 75.0% of the sample; they comprised Bachelor of English Language and Literature students from the Faculty of Human Sciences and Bachelor of Teaching Englilsh as a Second Language. Students in the sample were attending EDL1201 (Linguistics for English Language Teaching) and ENGL2030 (Psycholinguistics) (both are English courses) and MGT 4660 (Small Business Management).

Table 1 Demographics of respondents

Gender	Frequency	Percent
Male	21	19.4
Female	87	80.6

Total	108	100.0
Studied a course in Marketing		
Yes	26	24.3
No	81	75.7
Total	107	100.0
Degree		
Bacc	17	15.7
BBA	7	6.5
Becon	2	1.9
Benglish	75	69.4
BHS	7	6.5
Total	108	100.0
Course		
EDL 1201	42	38.9
ENGL2030	41	38.0
MGT 4660	25	23.1
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Results in Table 2 indicate that the technical terms are perceived to be important to potential (Mean=4.39 out of 5.00) as well as current consumers (Mean=4.13). The same statistics

imply that since current consumers are already familiar with the technical terms they are therefore not expected to learn the meaning as much as that may be expected from the potential consumers. When contrasting between producers and wholesalers, the former are expected to be more knowledgeable (Mean=3.89) about the terms compared to the latter (i.e. wholesalers) (Mean=3.81).

Table 2: Importance of technical terms to relevant stakeholders

	Usefulness of Marketing terms to present consumers	Usefulness of Marketing terms to potential consumers	Usefulness to producers	Usefulness to wholesalers
N	107	107	107	107
Mean	4.13	4.39	3.89	3.81
Std. Deviation	.870	.762	.974	.837

Scale: *Not important* 1 2 3 4 5 *Important*

The respondents moderately agree (Mean=3.89) that they will lose if they lack knowledge of the Marketing technnical terms. Although they thought that Marketing terms share common meaning with ordinary words (Mean=3.37), they nevertheless believe that using the technical terms do expedite the communication process (Mean=4.13).

The relationships between these factors are attested by statistically significant results in Pearson's correlation coefficients (See Table 3). A person might feel 'insecure' or be "at a loss [if he] lacks ... knowledge of Marketing", as, after all, learning about the meaning of Marketing technical terms does not require tremendous efforts; some of the "Marketing and ordinary terms [share] same meaning" (α = .257) and help "...expedite communication" (α = .333) (See Table 3).

Table 3: Correlation on knowledge of technical terms

		A loss lack of knowledge of Marketing	Marketing and ordinary terms same meaning	Technical terms expedite communication
A loss lack of knowledge of Marketing	Pearson Correlation	1	.257(**)	.333(**)
	Sig. (2-tailed)		.008	.000
	N	107	106	106
Marketing and ordinary terms same meaning	Pearson Correlation	.257(**)	1	.244(*)
	Sig. (2-tailed)	.008		.011
	N	106	107	107
Technical terms expedite communication	Pearson Correlation	.333(**)	.244(*)	1
	Sig. (2-tailed)	.000	.011	
	N	106	107	107

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

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

Logically producers and wholesalers also need to know the technical terms (α = .298) because they are mutually dependent. Table 4 shows the degree of dependence between these two market participants in terms of significant correlations.

Table 4: Correlation on knowledge of technical terms between producers and wholesalers

		Usefulness to producers	Usefulness to wholesalers
Usefulness to producers	Pearson Correlation	1	.298(**)
	Sig. (2-tailed)		.002
	N	107	107
Usefulness to wholesalers	Pearson Correlation	.298(**)	1
	Sig. (2-tailed)	.002	
	N	107	107

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

It is important to determine the amount of knowledge of Marketing technical terms ordinary people need to know. Reliability analysis results (Cronbach alpha .862) confirm that 22 terms tested in the study may be considered as a set of minimum Marketing vocabulary everyone needs to know. The 22 items were subject to exploratory factor analysis procedure that generated five (5) broad components of Marketing terms (See Table 5). The components explain 63.6% of total variance in the data. The five components have been labelled as providers of products, distributors, sales, pricing, and product. The components produced generally encompass the Marketing mix; four P's of Marketing (product, place, pricing, and promotion).

Table 5: Marketing technical terms: Rotated Component Matrix

	Component				
	1	2	3	4	5
Providers of products					
Product	**.780**	-.035	.134	.168	.055
Client	**.774**	.023	.103	-.120	.036
Customer	**.743**	-.037	.253	-.015	-.036
Service	**.696**	.017	.139	.408	.121
Consumer	**.688**	.165	.285	-.201	.155
Producer	**.658**	.151	.113	.299	.119
Promotion	**.611**	-.087	.031	.368	.169
Brand	**.609**	.030	-.019	.049	-.251
Retailer	**.569**	.304	-.157	.085	.446
Discount	**.499**	.022	.302	.201	-.478
Distributors					
Wholesaler	.474	**.365**	.086	.260	.141
Intermediary	.158	**.873**	.037	.025	.057

Market segment	-.053	**.734**	.156	.150	.281
Fad	-.207	**.705**	.035	.081	-.305
Distribution	.249	**.611**	.179	-.018	.315
Sales					
Cash sales	.099	.120	**.865**	.142	.030
Credit sales	.203	.232	**.776**	.008	-.008
Product design	.370	-.097	**.578**	.204	.343
Pricing					
Place	-.031	.224	.072	**.793**	.000
Pricing	.302	-.022	.120	**.765**	.083
Product					
Product development	.103	.235	.348	.441	**.570**
Marketing communication	.072	.403	.350	.164	**.537**

Scale: Not familiar 1 2 3 4 5 *Familiar*

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 7 iterations.

There were no statistically significant differences among respondents concerning the technical terms tested in the study except for "market segment" (T-value =2.341, df=106, p=.021). Female respondents (M=2.66) said they were less familiar with the term compared to their male counterpart (M=3.52). See Table 6.

Table 6: T-test results on market segment

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Market segment	Male	21	3.52	1.537	.335
	Female	87	2.66	1.524	.163

Scale: Not familiar 1 2 3 4 5 *Familiar*

Analysis of responses for two open-ended questions reveal some patterns. The two related questions are reproduced below:

27. Explain, in a short sentence, the meaning of the word "**place**" listed above.

28. Explain, in a short sentence, the meaning of the word "**market segment**" listed above.

The study employed three independent raters to extract the core elements from answers for each of the two open-ended questions. Next, the first co-author assigned category labels to the extracted elements. Single judge method was adopted in order to ensure consistency for the categories applied on the extracted elements.

For Question no. 27 ("place"), the label "distribution" was assigned when the extracts contained the words "distribute" or "distribution." The label "location" was assigned to other extracts. Examples of elements under "distribution" include: distribute, distribution, product go[es] to market. Examples of elements for "location" include: where the products are produced, where the products are going to be sold, and place of Marketing. The labeling

process attributed many of the responses for “Location”, and this was followed by “Distribution.” Only two respondents wrote “No Idea” in response to the question. The remaining four respondents left blank spaces for the question. See Table 7.

Table 7: Meaning attributed to “place”

	Frequency	Percent
Distribution	12	11.54
Location	90	86.54
No idea	2	1.92
Total	104	100.00

For Question no. 28 (“market segment”), the same procedure was repeated. Two main category labels have been identified. Examples of “target market” are specific geographic area, target group and target market. Examples of “Part of market” include different area in Marketing strategy, division of market, and part of market. Unlike Question no. 27, respondents provided additional elements which were labeled appropriately as “Incorrect” and “No idea.” Examples of “Incorrect” category include Marketing strategy, promotion, and the promotion. Examples of “No Idea” – I don’t know, I don't know, sorry, and not sure. See Table 8.

Table 8: Meaning attributed to “market segment”

	Frequency	Percent
Part of market	36	45.57
Target market	21	26.58
Incorrect	13	16.46
No idea	9	11.39
Total	79	100.00

By referring to the total number of responses in Tables 7 and 8, one can conclude that “market segment” (captured in “Target market” in Table 8) is an example of technical term that requires explanation, unlike the term “place” (see Table 7) which carried common meaning to specialists and non-specialists of Marketing.

DISCUSSION, LIMITATIONS AND FUTURE RESEARCH

The respondents generally concur that knowledge of technical terms is necessary for both present and potential consumers, and producers and wholesalers. The main purpose of using technical terms is to expedite the communication process between the marketer and the prospective customer. While words might be common but when they are adopted by a discipline such as Marketing they embody specific meanings and this should not be underestimated (Sutarsyah, Nation and Kennedy, 1994; Chung, 2003; and Chung and Nation, 2003).

This study did not investigate the frequency of certain technical words that Nation (2001) estimated, i.e. they contain 5% of the running words in specialized texts, but did, however, provide a list of 22 words and five resulting categories that may be considered basic in Marketing. The list contains both specific and common words, mixing both the so-called

technical and non-technical, and not necessarily as restricted as expected by Coxhead and Chung (2001).

Findings of this exploratory study suggest some teaching implications. English for special purposes, such as that for business studies, might find the vocabulary tested in this study instructive. Factor analysis components reflect the four P's of Marketing, i.e. providers of products, distributors (related to 'place'), sales (related to 'promotion'), pricing (related to 'pricing'), and product (related to 'product') (see Table 5). As suggested by Chung and Nation (2003), teachers could draw the attention of the students to a technical use whenever they relate to other uses of the word. For laymen or consumers outside formal class setting, they have to do self-learning or learn basic terminologies from technical people, Marketing specialists or practitioners.

While use of a single judge to categorize the elements extracted from respondent's responses may be questioned, it is not considered critical. However, the results of the classification could be enhanced by using at least another independent judge. The present research may be extended to include Marketing practitioners as well as non-practitioners. It will be insightful to compare results from proposed administration with the present study. Perhaps, future research should attempt to identify and test a set of technical Marketing terms that have been agreed upon by respectable authorities, such as Marketing academics as well as practitioners. By validating such a set, research will be addressing more pertinent terminology, and consequent results may be generalized.

IMPLICATIONS FOR LANGUAGE TEACHING AND LEARNING

Vocabulary teaching is now widely accepted as an important part of teaching English for Specific Purposes (ESP) (Swales, 1983). How can language teachers help learners cope with technical vocabulary? What should be the role of the English teacher when it comes to technical vocabulary? Cowan (1974) and Higgins (1966) consider that it is not the responsibility of the English teacher to teach technical vocabulary. These words will be automatically learned as a result of studying the discipline in which these words occur (Cowan, 1974). The English teacher may be able to help the learner with technical vocabulary as the general service words and academic words are used as technical words (Coxhead and Chung, 2001).

Godman and Payne (1981, p.37) argue that a technical term 'is dependent for a full appreciation of its meaning on the meaning of the other terms in the cluster of which it is a member'. In other words, knowledge of a technical word is dependent on the body of knowledge it is connected to. Therefore, in view of the substantial numbers of technical words that are found in specialized texts, it becomes imperative for language teachers to help learners in understanding them.

The study by Chung and Nation (2003) distinguished two kinds of technical words. One kind may occur in general, non-specialized usage, and those that are largely unique to a particular specialized field. Learners would encounter different kinds of problems in dealing with these two kinds of words. One problem has to do with recognition while another is with respect to technical words.

There are several ways in which a teacher can help language learners with the learning of technical words (Chung and Nation, 2003). Whenever a teacher encounters a word, and if

this particular word has never been used in this way, the teacher could draw the attention of the learners to this particular use and how it relates to other uses of the word. If a technical term is an extension of a word in general use, learners can also see how this use is related to the core meaning of the word. A teacher can do this by having the learners look at all the different meanings of the word in a dictionary and see the core meaning all the meanings have in common. Chung and Nation (2003) give an example of an entry for the word *girdle* found in the Collins English Dictionary (Hanks, 1984) which provides the following senses:

- A woman's elastic corset
- Anything that surrounds or encircles
- A belt or sash
- The outer edge of a gem
- Any encircling structure or part (*Anatomy*)
- The mark left on a tree after the removal of a ring of bark
- To surround or encircle

The second item in the above example contains the core meaning and this sense can be found in all the other senses listed.

As suggested by Chung and Nation (2003), learners can learn technical vocabulary productively by learning common collocations and grammatical patterns. They also mention two major problems teachers face when helping learners. The first problem is that the teacher usually does not possess the knowledge of the learners' technical areas. The second problem is that teachers have to deal with the technical vocabulary while they themselves are in the process of understanding the specialized field. In spite of these limitations, teachers can still help learners by teaching them the skills of recognizing technical vocabulary, interpreting definitions, linking senses to core meaning, and learning word parts. This would mean that teachers need not teach the technical area but could focus on developing vocabulary strategies.

CONCLUSIONS

The respondents emphasize the significance of using technical terms among consumers as well as producers. The main rationale for using the technical terms is facilitating communication. The study proposed 22 technical terms to anyone who wants to communicate or help facilitate people to communicate about Marketing. In fact, the basic technical terms contain vocabulary related to the universally accepted definition of Marketing mix, i.e. product, place (distributors), promotion (sales), and pricing. Findings of this pilot study may be applied instantly by English teachers, laymen and Marketing specialist in facilitating communication about Marketing in their daily lives.

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