# Adding Some Value to the Teaching of ESP

#### Michihiro Hirai

#### Introduction

English for specific purposes (ESP) is not a very new concept: In fact, it has been explored in the English teaching community since at least the late 1970s (JACET ESP Kanto, 2018). Meanwhile, the Institute of Electric and Electronics Engineers (IEEE) established a special interest group focused on professional communication called the IEEE Professional Communication Society (PCS) as early as during the 1950s, which is "dedicated to understanding and promoting effective communication in engineering, scientific, and other technical environments" according to its mission statement (IEEE PCS, 2018). While their focuses are slightly different (language education/learning vs. effective communication in technical workplace), the two fields, ESP and Professional Communication, have a great deal of commonality. As the interest in these fields grew also in Japan, the Japan Association of College English Teachers (JACET) launched a special interest group called JACET ESP [Kanto] in 1996, and the IEEE PCS its Japanese counterpart (PCSJ) in 2007.

In the meantime, within the Japan Association for Language Teaching (JALT), several business English teachers formed a special interest group dedicated to their area of expertise in 2010, which is now called the Business Communication Special Interest Group (BizCom SIG). It goes without saying that business English comes also under the umbrella of ESP. Thus, today, there are at least three major language associations in Japan that promote the research and/or education of this important genre.

#### Author's Involvement in ESP

The author spent the first stage of his professional life, spanning more than 30 years, as a computer engineer (Hirai, 2018). As he was

involved in a long-range export project, he experienced a variety of jobs that demand the use of English in business and technical settings, from presiding over meetings, describing products, explaining stances and situations, to giving presentations, negotiating contractual matters, sending emails, and writing manuals and papers. He took advantage of these challenging opportunities to enhance his practical English skills and compile real-life examples of language usage, paying attention to where typical learners (himself included) are prone to make mistakes. This assignment indeed turned out to be valuable on-the-job training in English over 20+ years, which served as the springboard to the second stage of his career: teaching and translating.

Just a few years before retirement, he was transferred to the company's internal language institution at his request. His intent was to help fellow engineers and researchers improve their English, first inside the company and then eventually, if things went well, reaching out to a much wider audience. Luckily, upon taking retirement, he was offered a non-tenured professorship to teach technical English at a private university, which opened up his teaching and materials writing career.

ESP is, regrettably, a niche market, both inside and outside Japan, and hence has been suffering from a chronic shortage of qualified teachers and experienced materials writers. Several factors are at work. First, people at the forefront of progress in any field may not necessarily be good at teaching or have interest in language, while most language teachers lack education, training and/or experience in actual field jobs, which makes them feel uncomfortable with teaching ESP. Second, the more specialized the field is, the smaller its market and population are, and hence the more difficult it is to find qualified talent. Teaching ESP and creating ESP materials indeed require both advanced-level competence in the language and some expertise in the subject field.

Against this backdrop, the author found some room for his

contribution to ESP, both in teaching and in materials writing. Soon after starting the teaching career at a faculty of science, he conceived the idea of writing teaching materials on practical English on his own and developing and teaching courses based on them. In a sense, this was a natural course of thought because, in his mind, he was targeting not only college students but also engineers in general in industry. During the subsequent 15 years or so, he wrote six self-study books (including one translation) in this genre and developed several courses out of them.

While the variety and number of textbooks and self-study books in technical English are very limited compared with those in general English, there still are quite a few of them on the market, if one looks closely with a mind to successfully compete. Throughout this endeavor of book writing and teaching, he has always aimed to bring some new value to the table, which is the key to success.

## **Bringing In Some Value**

Because of his background as a development engineer in the cut-throat computer industry, the author has an ingrained viewpoint of "product versus market." No matter how "good" a book may be in its author's own evaluation, it will not sell well if it does not appeal to the intended market. Thus, it is imperative to first know the market, or more precisely, to conduct a competitive analysis, and then to design a new book (product) to meet the market's needs. In on technical meetings, writing self-study books technical presentations, and ICT reading comprehension (Hirai and Kurdyla 2004; Hirai, 2007, 2011, 2015a) the author first conducted a competitive analysis, by perusing about a dozen books each that were on the market, and evaluated them for strengths and weaknesses. Then he identified the areas to focus on to bring in something new or valuable (Hirai, 2008, 2015b). Presented below (Table 1) is an example of such competitive analysis, taken from Hirai (2008). "DIF" in this table means "differentiation," i.e., the areas the author identified as the potential strengths of the new book.

# Table 1 ("Table 2" in the original source) <u>Summary of Competitive</u> <u>Analysis (Presentations)</u> (Abridged)

		Evaluation						DI F
Area	F	Y	EC	TO	Κ	Y	Overa	
	Ν	Ν	F3	JC	С	Η	11	
Content								
Guidelines/Rules	IS	E	E	F	F	IS	E/G	
Rhetorical/Logical	Ν	C	Ν	Ν	C	19	F	
pattern	С	U	С	С	U	10	I.	
Caveats, Notes	N C	G	G	N C	N C	N C	IS	*
Practical Tips	Р	G	G	IS	F	F	G	
Breadth of								
engineers'/scientists'	Р	IS	IS	IS	G	G	IS	*
view								
Product lisbility	Ν	Ν	Ν	Ν	Ν	Ν	NC	*
Product hability	С	С	С	С	С	С	INC	
Useful Expressions	G	F	G	F	F	G	G1	*
Limitations:		N	N	N C	N	Ν		*
responsibility,	F	C	C		C	C	IS	
language		C	C		C	C		
Differences between	N	N	N	N	N			
Writing &	C	C	C	C	C	IS	NC	*
Presentation	C	C	C	C	C			
Sample (Model)	IS	IS	IS	IS	G	$\mathbf{G}^2$	IS	*
Presentation	10	15	15	10	U	U	10	
Ease of Use								
(Usefulness,	F	G	F	F	F	IS	F	
Accessibility)								
Organization by Situation	F	F	G	F	G	F	F	*

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Grouping by Grammar/Usage Pattern	N C	N C	N C	N C	N C	N C	IS	*
Quick Reference Table	Ν	Ν	C	Б	TC	Ν	IC	*
(Index to Expressions)	С	С	G	Г	15	С	15	
Readability	IS	IS	G	IS	IS	IS	IS	*
KeadabilityIS IS G IS IS IS ISIS*Legend)EvaluationE: excellentG: goodF: fairIS: insufficientNC: not coveredG1: Good but insufficient in technicalexpressionsG2: Good but too specializedFN: #1 on Appendix AYN: #2 onAppendix AFS: #4 on Appendix AJC: #8 on Appendix AKC: #10 onAppendix AYH: #12 on Appendix ADIF: Possible area ofdifferentiation (for the newbook)								

To turn these potential areas of strength into tangible features of the completed books, particularly to bring in as much practical usefulness as possible, the author resorted to his dual background as an engineer and a language learner-turned-teacher. As summarized in Hirai (2018), he had been compiling Japanese learners' weaknesses as well as model expressions while still working at a company and was able to arrange and present them in condensed, engineer-friendly formats, so-to speak.

# **Developing ESP Courses**

The author developed and taught several ESP courses (mostly technical; some business/technical) during the past 20 years, primarily for Japanese engineers and engineering students. In this article, he would like to introduce one of the presentation courses and one of the writing courses.

First, a two-day presentation course was developed in 2007 in collaboration with a language school for a demanding professional education/training institute, based on the self-study book he had written in the same year. It is taught by two instructors in tandem: general theory and key points by the author, useful expressions (practice) by a native-speaker English teacher from that language school, students' presentations, and critiques by both instructors. The main reason for using this combination of instructors is to enhance the value for course-takers. They benefit from being exposed to native-speaker accents, and furthermore, their presentations are critiqued from two angles: language (checked by both instructors) and content (checked by the author from a practical/technology perspective). For less demanding settings, a few variants of this course have been taught solely by the author (primarily in Japanese).

Second, a two-day technical writing course was developed also in 2007 by the author for the same professional education/training institute. Compared with other genres of ESP, technical writing has been explored and researched more extensively for many decades and hence is more mature. If translation, which borders on technical writing, is to be included, one can find a fair number of books and courses already available on the market, which means a much higher barrier for new entrants. Taking this situation into consideration, the author chose to focus on typical weaknesses on Japanese learners of English in daily technical communication, rather than covering all the aspects of [academic] writing (Note that the great majority of engineers, except researchers, do not write academic papers). Presented below (Table 2) is an example of tables contrasting Japanese vs. Western uses of symbols from the author's course, which seem to be missing in most existing teaching materials and yet are important in actual technical communication. This is one of the instances of "added value."

#	意味/意図	日本語表現例	欧米式表現(代表例)
1	非常に良い	O	excellent
2	正しい、良い	0	$\sqrt{1}$ ; good
			(または X - 少数派)
3	[それを]選ぶ、該当する	0	$\sqrt{Y}$ ; Y; yes
			(または X - 少数派)
4	中間、半分OK、条件付OK	$\bigtriangleup$	(記号を使わず言葉で表現)
5	負(マイナス)の数字	△123, ▲123	(123), -123
6	間違い、悪い、劣る	×	no; poor; N
7	[それを]選ばない、該当しない	×	— ; NA
			(または X - 少数派)
8	対[決]、対談	John x Robert	John vs. Robert
9	注	*	note (または *)
10	注1,注2,	※1, ※2, または	note 1, note 2, または
		*1, *2,	1, 2,
11	列挙、箇条書き	1. aaa	• aaa
	(順序に意味がない場合)	2. bbb	• bbb
		3. ccc	• ccc
12	ないし (範囲を表す)	$(30) \sim (40)$	(30) – (40)
13	同上(同左)	11	same as above (left)
14	同上(同左)	ditto	same as above (left)
15	直径	N mm $^{\phi}$	N mm in diameter
16	角	N mm <sup><math>\Box</math></sup>	N x N mm
17	よくある名前の例(男)	佐藤太郎	John Doe
18	よくある名前の例 (女)	佐藤花子	Jane Doe

Table 2 Japanese vs. Western uses of symbols in diagrams

Over time, this writing course has evolved into several different versions, including one-day seminars, a report writing course, and a business/technical hybrid course to meet a variety of needs. The business/technical hybrid course, for example, incorporates email writing components, since reading and writing email have now become a part of engineers' daily routines.

Other courses developed by the author include a reading comprehension course for information and communications technology (ICT) engineers based on two of his books (Hirai 2011 and 2015a), an overview of which was presented at a recent JACET session (Watanabe & Hirai, 2016), as well as a few translation courses. Furthermore, the language school headed by Francis Kurdyla, the co-author of the self-study book on technical meetings (Hirai & Kurdyla, 2004), developed and has been offering a technical meeting course based on it for one of its corporate clients.

### Conclusion

ESP encompasses not only a variety of genres but also a diversity of fields. Therefore, teaching ESP and writing materials for ESP require both advanced-level competence in the language and some expertise in the subject field. This fact presents a rather substantial challenge, calling for the persistent and tireless efforts of compilation and condensation over a long time, but once you satisfy the requisites, you can reap some benefits by working as an ESP teacher. Further, thanks to the nichness (small size) of the market, you may be able to continue (with luck) to teach in industry after involuntary retirement from universities/colleges, thereby contributing to society, which is also a reward in itself.

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#### **Michihiro Hirai's Biography**

Michihiro Hirai graduated from the Faculty of Engineering, the University of Tokyo in 1965 and received a Master of Science degree from the University of Pennsylvania in1972. He worked as a mainframe computer design engineer for Hitachi, Ltd. for 33 years and as Director, the Hitachi Institute of Foreign Languages for 4 years. He taught technical English at the Faculty of Science, Kanagawa University from 2003 to 2017, the Faculty of Science and Engineering, Waseda University from 2009 to 2012, and the Open University of Japan from 2011 to 2013 and has also been teaching technical English at a Japanese manufacturing company since 2007. In addition, he served as a consultant to the Eiken Foundation of Japan etc. for more than 10 years, while also working as a freelance JE/EJ translator for 43 years on a part-time basis.

He is a certified Professional Engineer in IT and holds a Japanese record of the most (50) top grades in English tests (certified by NIPPON-1.NET at <u>http://www.nippon-1.net/</u>). His publications include 『速く正確に読む IT エンジニアの英語』、『エンジニアのための 英文超克服テキスト』、『エンジニアのための英語プレゼンテーション超克 服テキスト』、and『はじめての STEP BULATS』(translation of *Essential BULATS*). His research interests include materials writing and testing.