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The Suitability of EAP Textbooks to the Learning Needs in Chinese Context—From a Pre-Use Perspective

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Abstract

The selection of an appropriate textbook has always been a great concern of teachers and students. Frameworks for the evaluation of textbook in previous researches are too complex to help a quick decision. This paper firstly gives an account of Chinese students' needs in learning EAP. It then proposes a framework for the suitability of the textbook and applies it to three textbooks for meeting the learning needs in the Chinese context. The result shows that domestically designed textbooks are, to some extent, inexperienced in the arrangement of content and academic skills, and even in the understanding of the nature of EAP learning. It also reveals that the imported classical textbook though quite experienced and shows general good suitability presents some problems in its suitability to a particular culture. Given the limited researches on EAP textbooks, this study sheds light on the selection and construction of EAP textbook in the Chinese context.

Keywords: Textbook Suitability, EAP, Learning Needs, Revised Bloom's Taxonomy

1. Introduction

The rising trend of learning English for academic purposes in China is the result of economic globalization and internationalization of college education. It is essential that universities offer internationally competitive undergraduate and graduate courses taught in English. (Hao Ping, 2009). EGAP (English for general academic purposes), is a branch of EAP and on most of the occasions in China, it is called EAP for short. It is a bridge course that helps students with fundamental English academic skills paves the way for their disciplinary courses taught in English when they enter senior years in college. In a national survey conducted among 530 universities in China, 29.% of the 'key universities' and 11.7% of 'non-key universities' consider the cultivation of academic competence as important (Wang & Wang, 2011). In response to such great need, a large number of universities started the implementation of the EAP course. In 2010, Shanghai issued *A Framework of Reference for EFL Teaching at Tertiary Level in Shanghai*, claiming that EGAP (compulsory) and ESP (compulsory or selective) should comprise 75% of the total English courses in the university. It is even argued that English for general purposes would be replaced by EAP in China as most of the skills and grammar learning for daily communication purposes have already been finished in high school (Cai 2014, Wang et al., 2015).

Despite the increasing demand for learning EAP, the supply of textbooks in the domestic market is far from satisfaction. First, there are few textbooks available in the market (Zhao & Zheng, 2006; Wang, 2011, Cai

2013An & Shu, 2014; Zhang et al. 2017; Liao & Cai, 2017). Second, EAP is a newly started course in China, and there is a little experience for the selection of a suitable textbook. A framework that helps users in making a quick decision on the selection of a textbook at the pre-use stage is of urgent need. This paper, by matching the features (purpose, methodology, content allocation, skill arrangement, etc.) of a book with learners' needs, proposes a framework for the evaluation of an EAP textbook so as to help the users with the selection of a suitable textbook. RBT (revised Bloom's taxonomy) will be applied for the evaluation of micro-skills of the book, as the course EAP is to provide learners with the core skills of disciplines.

2. Learning needs of EAP in the Chinese context

To better the curriculum design and help students develop the academic skills they will use in future study and work, a needs analysis survey was conducted by Cai Jigang (2012) among four universities in China. Students from the first year to the fourth were asked to complete the questionnaire, and 927 valid copies were collected. According to the questionnaire results, 95% of the students have the need to use English as the tool in their academic study: to read articles related to their major (69%), select a course that is taught in English only (56.5%), or attend lectures given by foreign experts (62.9%). As to the difficulties they come across in satisfying the above needs, 85.1% of the students agree that lack of vocabulary, especially the vocabulary of a specific discipline is the biggest obstacle. Over half (68.5%) of the students admit their difficulty in giving a presentation or participating in academic discussions. There is also a large number (67.3%) of students who cannot read authentic articles or textbooks efficiently. The main reason as they (77.6% of the respondents) clarified in the questionnaire result, is insufficient vocabulary. About half (51%) of the students cannot fully understand a lecture or taking effective notes of a lecture given by foreign experts. When asked the tasks (given by teachers of their majors) for writing literature review, abstract, experimental report or term paper, only 9.4% of the students ticked 'now and then,' while 39.2% said 'almost never.' However, 23.6% of students believed they would be assigned such tasks in the future, and 79.3% of them consider the skill to be very important.

Liu (2014) conducted a survey on EAP needs analysis among 210 students (sophomores and juniors) in a university in Beijing and found out that most of the students (97.2%) have the need to search or read English literature, listen to English lectures, etc. Among the needs, what they want badly is methods to write academic articles, understand lectures and skills of taking notes. Writing literature review, report and academic paper are reported as the last item on the need list, mostly because it is something that they will not use until they start their graduation thesis. In another survey conducted by He (2014) in Wuhan, where 143 students were investigated about their EAP learning needs, students admit that they learn the course either for their future disciplines or for the exchange program to study abroad. The skills that they are most interested in are listening and speaking (38.9%), reading (23.9%) and writing (24.1%). and the skills they want (need) to improve the most are speaking (31.6%), writing (32.3%) and reading (18.3%).

From these investigations conducted in different cities, we may conclude that currently, students in China share similar needs in learning EAP: they have clear goals of learning the course (either for future disciplinary learning or for international exchange situations). They need to develop their academic competence in listening, speaking, reading and writing (listed from the most needed). Their top concern and weakest part is vocabulary as it is considered to be the biggest obstacle in learning. Skills such as writing an experimental report or academic paper, though considered to be important and useful may not be as needed as the others, especially in the early period of learning since they are neither required by their major courses nor needed to use in the first several years of college study.

3. Literature review

3.1 Frameworks on the design of textbooks

Textbooks are extensively used in the classroom and are much relied on for the delivery of course content. Researchers argue that the choice of textbooks is highly influential on students' learning achievement (Piret & Jaan 2008; Jukka, Maria & Marie-Anne, 2013; Ann-Katrin & Aiso, 2018). Selecting an appropriate textbook is

a big concern for both teachers and students. Textbook evaluation thereby is essential. It not only provides criteria for choosing suitable teaching material but also helps teachers with a better understanding of the content, structure as well as the pedagogical approaches it proposes. In addition, textbook evaluation brings book designers the realization of weaknesses of the book so as to improve in the next edition (Zhao &Zheng).

Textbook evaluation became a concern of researchers in the 1980s. Seaton (1982) proposed over ten principles for the evaluation of teaching material which turned out to be too detailed to be feasible. Till today, the most influential frameworks for textbook evaluation are Hutchinson &Waters (1987), Cunningsworth (1995), MMcDonough &Shaw (1993), and Breen & candling (1987).

Hutchinson &Waters (1987) advocated a matching work between a list of requirements for a textbook and features of the teaching material that match the requirements. Also, opinions from teachers and students are collected through questionnaires and are taken into account in the matching work. This framework is still adopted by many researchers today for the feasibility of the matching approach and its consideration of the needs of the learners. It is of referential use to the study of the suitability of textbooks for EAP which is a needs-based course.

Cunningsworth (1995) introduced a framework made up of impressionistic overview and in-depth evaluation. An impressionistic overview is a general impression on the whole of the book based on the evaluator's own experience. This approach, though helps potential users to make a quick judgment of a textbook, may not be reliable for its subjectivity. The in-depth evaluation consists of three stages: pre-use evaluation, in-use evaluation, and post-use evaluation, a complete judgment for the whole process of the implementation of a textbook. However, to complete the whole evaluation process is quite time-consuming. For courses like EAP, which has not been widely carried out (in China) for long, to gather large-scale opinions (from users) for the last two stages, especially post-use evaluation, is quite difficult. Furthermore, compared with the last two stages, helping users to make a quick decision on the selection of a suitable textbook is far more important for EAP learning in Chinese context which though still at exploring stage, is expecting increasing number of learners (Cai, 2012; Luo& Chen, 2012; Wang et al 2015; Wang &Wang 2011).

Compared with Cunningsworth's framework, the one suggested by McDonough &Shaw (1993) is more simple and feasible. According to McDonough &Shaw (1993), the evaluation of a textbook consists of two phases— external evaluation that focuses on the cover, introduction and catalogue of the book and internal evaluation that examines the language skills, types of materials and their level of difficulty, exercises, and the suitability of the materials to teachers and learners. Generally, the internal evaluation is a more detailed exploration of the materials to estimate the matching of what the designers promote (in the introduction) and the detailed arrangement of the materials in the specific units. This framework simplifies the evaluation process and helps a quick decision on selecting a textbook since once the users, at the external evaluation stage, find that the design of the book cannot meet their requirement for use, they can immediately stop further examination. However, the evaluation in this framework is mainly conducted from the perspective of teachers and experts without much consideration of students' needs and opinions. Hence, it is not completely suitable for courses like EAP, a course born to satisfy the needs of learners.

To help teachers with the selection of a textbook for different levels of students in various learning environment (Breen & candling, 1987), Breen & candling (1987) proposed a framework evaluating not only the purpose and content of the textbook but also the suitability of the book to the needs, interest, and learning strategies that students prefer. Students, as a major concern, are invited in the evaluation process to present their needs and preferences as evaluation criteria. Generally, the needs of learning a course might be somehow similar, as they are also reflected in the teaching syllabus. But the learning preferences would be quite different as each has his own interest and learning habit. Therefore, it is quite difficult to design a book align with learning preferences of all students. What's more, there are over 40 evaluation questions included in this framework, which is a rather heavy workload for evaluation.

3.2 EAP textbook studies in China

For the increasing number of EAP teachers and students in China, selecting a suitable textbook is the first concern. However, there is little experience accumulated. According to CNKI (China National Knowledge Infrastructure), before 2013, there were less than 5 papers (fewer if it is restricted to CSSCI publication) on EAP textbook annually. The number of publication then gradually increased, with a peak at 24 (fewer if it is restricted to CSSCI publication) in 2016. The limited number of studies mainly focus on the introduction of textbook evaluation theories abroad (Zhao & Zheng, 2006; Wang, 2011, Cai 2013), analysis of the features of some EAP textbooks (An & Shu, 2014; Zhang et al. 2017; Liao & Cai, 2017), and theoretical reflections on EAP textbook designs and suggestions (Gao, 2009; Wang, 2011; Ding, 2016; Liao & Cai, 2017; Li, 2017).

As is summarized in the researches, problems that revealed during this exploring stage on textbook construction are as follows: teaching materials fail to differentiate the writing principles of GE (general English) from those of Subject-based English textbooks; books are not designed on the basis of sound theory or framework, therefore, not systematic; language skills and disciplinary content are not well-aligned; mainly focus on the development of reading and writing competence and ignore listening and speaking, books are not designed to meet the needs of different levels of learners (Gao, 2009; Wang, 2011; Ding, 2016; Liao & Cai, 2017; Li, 2017). As for the insights into the textbook design in the Chinese context, it is suggested that materials for EAP study should, first of all, meet the needs of Chinese learners, and related to specific disciplines. Materials should also be authentic, reflect the real communicative situations and are designed in a multi-modal way (Zhao & Zheng, 2006; Wang, 2011, Cai 2013; Gao, 2009; Wang, 2011; Ding, 2016; Liao & Cai, 2017; Li, 2017).

3.3 RBT for EAP textbook evaluation

Bloom's Taxonomy (BT) serves as the backbone of many teaching philosophies, in particular, those that lean more towards skills rather than content. (Anderson et al., 2001, Krathwohl, 2002). The original BT (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) contained six categories within one dimension: knowledge, comprehension, application, analysis, synthesis, and evaluation, arranged from simple and concrete to complex and abstract. A cumulative hierarchy is assumed, with mastery of each simpler category regarded as a prerequisite to mastery of the next more complex one (Krathwohl, 2002). RBT (revised Bloom's taxonomy) extends the one-dimension framework to a two-dimensional one, consisting of the cognitive process dimension and the knowledge dimension (as is shown in graph 1). It is designed to a classification of student behaviors which represent the intended outcomes of the educational process (Anderson et al., 2001). Behaviors are verbs. Hence, the six categories in the cognitive process were converted to their active verb counterparts. The cognitive process dimension represents a continuum of increasing cognitive complexity—from remember to create. The vertical dimension measures four types of knowledge: Factual (i.e., basic elements that needs to be known), Conceptual (i.e., interrelationships among basic elements), Procedural (i.e., know-how, skills, techniques, and methods), and Meta-cognitive (i.e., knowledge of one's own cognition), from concrete to abstract. The RTB provides a means by which educators can develop a complete understanding of specific objectives and use this understanding to improve assessment, instruction and essential links between them (Anderson, 2005).

The knowledge dimension	The cognitive process dimension					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual knowledge						
Conceptual knowledge						
Procedural knowledge						
Meta-cognitive knowledge						

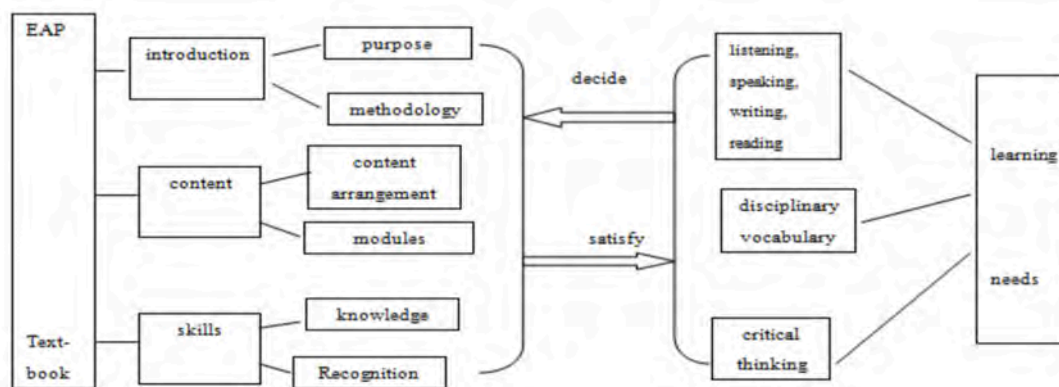
Graph 1: revised Bloom's Taxonomy

Bloom's taxonomy has been used as a basis to measure the efficacy of traditional textbooks (RockinsonSzapkiw, Courduff, Carter, & Bennett, 2013). Previous studies (Wang & Hwang, 2012) suggest that learning in different stages can be more effective with the support of appropriate learning resources. It is suggested by Anderson (2002) that the value that taxonomy table has in examining and improving curriculum alignment is to place all the objectives of a given curriculum unit (or set of units) in the cells and analyze them in terms of knowledge and cognitive level. In this study, we follow the same procedure to examine the suitability of the arrangement of micro skills/learning objectives in EAP textbooks.

4. A framework for the suitability of EAP textbook in the Chinese context

Currently, most of the few domestically designed EAP textbooks only focus on reading and writing. However, as is depicted in the questionnaires, students need textbooks that facilitate their overall (listening, speaking, reading and writing) EAP competence. So, as to the few textbooks that aim to help students' overall development, how do these they suit the students' needs in China? What indications do they bring to future textbook design?

To probe such questions, this study selects three EAP textbooks as the subjects: Oxford EAP, an imported textbook published in 2012 by oxford university press, a publisher that firstly designs EAP textbook and still plays a leading role in EAP textbook construction in the world; English for General Academic Purposes (EGAP), a textbook designed by Chinese teachers and was is published by higher education press in 2017; and Academic Encounters (AE), a textbook adapted from *Academic Encounters: American studies* and was published by Shanghai Foreign Language Education Press in 2017. Both the latter two publishers are the most prestigious in the field of foreign language teaching and learning in China. All of the three textbooks provide materials for listening, speaking, reading and writing. Of all the books in these three series, Oxford EAP B2, EGAP book 1 and AE book1 are used for college students in China and therefore, are selected as research subjects of this study. Based on the results of the questionnaires and RBT (revised Bloom's taxonomy), I propose the following framework to check the suitability of an EAP textbook in the Chinese context.



Graph 2: a framework for EAP textbook suitability in the Chinese context

The design of an EAP textbook should cater to the learning needs (including specific requirements on listening, speaking, reading, writing, vocabulary, critical thinking, etc.). The matching of the textbook with the learning needs can be reflected from the introduction and content arrangement as the former introduces the purpose and methodology of the book while the latter shows the module distribution, unit content, and task design, etc. It also can be examined from the book's skill arrangement as it shows whether the knowledge suits the current level of the students and the arrangement matches the recognition development of them.

5. The suitability EAP textbooks to the learning needs in the Chinese context

5.1 introduction

	methodology	target user	purpose	disciplines involved	teacher's book	skill arrangement
OE	content-based	students who are non-English speakers, with whatever disciplinary and cultural background	provide students of different disciplines with common core skills	biology, science, technology, business, culture, etc	key, purpose of tasks, activity suggestions	micro skills arranged in the modules, from easy to difficult
AE	content-based	Chinese students who have finished high school education	prepare students for their college study	social life	key	develop strategies for listening and writing, critical wiring presentation
EGAP	content-based bloom's taxonomy, ismart platform	Chinese college students	provide Chinese college students of different disciplines with common core skills	education, psychology, biology, technology, business, economy, etc		group the micro skills into modules and arrange them from easy to difficult according to Chinese students' learning situation

Graph 3: comparison of the introduction

The introduction of an EAP textbook informs the users a lot of information, such as methodology, target user, purpose, disciplines involved, teacher's book and skill arrangement, etc. As is shown in the above table, all of the three textbooks adopt a content-based approach, which is commonly accepted for EAP study as it is a course that equips the students with skills for academic study in which skill is the core while disciplinary discourse is the carrier.

EGAP differs from the other two textbooks in its design of 'i-smart' platform. It is a design that combines offline learning with online learning. In addition to the paper book, this course also provides an online learning community for students. It offers mini-lectures, supplementary reading materials, and analysis to vocabulary learning. On this platform, students can do both autonomous learning and interactive learning. As is argued by Ning (2017), "Due to the limited time in EAP classroom learning (80-90 minutes per week) in China, a textbook cannot be fully made use of if the learning is not successfully extended to the outside of the classroom". What's more, Chinese students are competitive learners (Tang 1999) who do not like interactive learning in the classroom but are quite active in the virtual learning environment. The establishment of a virtual learning community extends the use of teaching materials in the classroom and enhances the interactive connection among teachers, learners, and the textbook. Online learning community brings the learners a feeling of being accepted, cared and respected and hence becomes an effective way of enhancing learners' participation by providing a good environment for cooperation and knowledge construction. (Arlan & Sahin-kizil, 2010).

The invention of 'i-smart' learning platform, which is accessible to both the computer and mobile phone users, brings a new way of learning. Beside every task, there is a two-dimension code. Once the users scan it with wechat, the most widely and frequently used communication software in China, they will be connected to the video or audio materials. For example, at the beginning of each section, a mini-lecture is offered as a general introduction. It is a short video that explains the important concepts and can be watched either on the webpage by computer or by smartphone after scanning the code with wechat. These mini-lectures can be watched before class as part of flipped classroom learning and enables teachers and students to have more time exchanging information and ideas in class. What's more, to the Chinese who always carry the smartphone wherever they go, the accessibility to the materials with a phone in hand enables them to make full use of their fragmental time and enhance their learning efficiency.

The target users of both EGAP and AE are Chinese college students, an implication that the books are specially designed to suit the EAP learning needs in the Chinese context. OE defines its users as students from a variety of cultural and educational backgrounds whose first language is not English (Oxford EAP, 2012). It aims to suit the

learning needs of all EAP learners across the world. As is stated in their introduction, OE and EGAP aim to accommodate the users of different disciplines with common core skills. However, the goal of AE is to 'expose students to the types of texts and tasks that they will encounter in their academic coursework and provide them with the skills to be successful when that encounter occurs' (Academic Encounters, 2017). Unlike OE and EGAP that explicitly claim the provision of materials of various disciplines, AE does not mention the importance of learning skills common to different disciplines. This difference is reflected in the latter content arrangement as well.

In terms of disciplines that are involved in the textbook, there are twelve topics in OE series: education, system, communication, order, intelligence, change, culture, interpretation, persuasion, connection, technology, and independence. Similar to OE, EGAP series covers 16 topics: education, system, behavior, psychology, nature, environment, social life, technology, communication, information, economy, energy, health, safety, research, and diversity. On the other hand, AE series does not attach importance to disciplines (as is discussed above), and only focuses on eight topics: belonging to a group, gender in society, media and society, breaking the rules, mind body and health, development through life, nonverbal messages and interpersonal relationship. It seems that the topics in AE are quite like those in General English textbooks, focusing on daily life areas rather than various academic disciplines. Instead of showing one type (sociological) of discourses, OE and EGAP provide users with different subjects and genres of materials so that they will be exposed to various kinds of discourse features, and therefore show better adaptability to students from different disciplines.

The teacher's book in OE not only offers the key to the exercises in the textbook but also explains the purpose of every task and gives activity suggestions to classroom teaching. The clarification of the purpose of tasks helps the teacher to understand the rationale of the design. More importantly, in EGAP learning, the understanding of the purpose of tasks motivates the students before doing the exercises and brings the a sense of achievement after finishing them as they know academic skills are learned through doing these tasks. Different from OE, AE, though it provides a teacher's book, it offers the only key to the exercises, while EGAP offers no teacher's book.

As to the skill arrangement, OE and EGAP are alike in that they design micro skills for every unit and module and arrange them from easy to difficult. EGAP further clarifies that the skills are arranged according to Chinese students' learning situation. In contrast, AE only states that it helps students develop strategies for listening and writing, critical thinking and presentation, without explaining how the skills are arranged.

5.2 Content allocation

content book	uint	Page/task	listening	Speaking	Reading	Writing	vocabula ry	Critical thinking (module)
OE	12	16 pages	4 pages	4 pages	4 pages	4 pages	1 page	
AE (R&W)	4	55 pages			48 pages	5 pages	2 pages	
AE (L&S)	4	40pages, 19-20 tasks	6-7 tasks	13-14 tasks				
EGAP	8	27 pages	3-4 pages		8-9 pages	4-5pages	4-5pages	4-5pages

Graph 4: content allocation
R: reading W: writing L: listening S: speaking

There are twelve units in OE. Each unit lasts sixteen pages, averagely made up of four sections -- listening, speaking, reading and writing, giving equal attention to the development of the four skills. Following the four sections, there is always a one-page vocabulary exercise. AE divides the four skills in two books: one for reading

and writing and one for listening and speaking. The lengthy content (55 pages per unit and 40 pages per unit respectively) brings problem for teachers and students. In most of the universities that offer EAP course in China, an EAP class lasts 80-90 minutes, once a week. Such lengthy design probably puzzles the users as they have trouble integrating the four skills, and selecting the useful content without interrupting the connection between them. In the book of reading and writing, AE gives most of its attention to the development of reading skills, as the content of reading is almost ten times that of writing. In the book of listening and speaking, more attention is given to speaking than listening, as the former is designed twice as much as the latter. Similar to AE, in EGAP, reading is the absolute focus of all skill modules, while listening and speaking are given the least attention. However, vocabulary and critical thinking are given much attention in this book, corresponding well to the requirement of the national syllabus and the learners' need for such skills. Generally, the content allocation of two domestically designed textbooks reflects the typical learning results/habits of the L2 learners in the Chinese context: strong in reading, weak in writing and much weaker in listening and speaking (especially speaking).

5.3 Matching of content and learners' specific needs

As is concluded in the above part, Chinese students need to learn academic skills of taking notes, doing a presentation, attending the discussion, writing report and paper, reading discourses of particular disciplines, expanding disciplinary vocabulary, and enhance their critical thinking ability, etc.

need book	Note taking	presentation & discussion	writing report & paper	reading disciplinary literature	vocabulary
OE	8/12	presentation (7/12), seminar(2/12), tutorial (2/12), informal discussion(1/12)	unit 1,2:summary, unit 4: introduction, thesis statement unit5:conclusion	materials from textbooks published by Oxford press	1 page/u, different forms of exercises (matching, cloze, blank filling...). Some don't suit Chinese students(e.g. unit 4 word class)
AE	every unit	presentation (3/4)	unit 2: summary	materials from textbooks published abroad	1 page/u, always blank filling of sentences
EGAP	6/8	presentation (1/8)	unit 5:summary unit8: report	materials from online journals of open access	4-5pages/u, different forms of exercises (matching, paraphrase, table filling...).

Graph 5: matching of content and learners' specific needs

As is demonstrated in the table, all of the three textbooks attach great attention to the skill of taking notes: out of the 12 units, OE spares 8 in training how to take notes; 3/4 of the units in EGAP introduce note taking skill, and it is shown in every unit in AE. Presentation skills are included in all of the three textbooks. OE differs from the other two books in that instead of introducing the skills of doing a presentation, and it also helps the users to learn how to attend a seminar, tutorial, and informal discussion. It helps its users with consideration of all possible communication occasions they might come across in academic study. All of the three books introduce the skill of writing a summary. OE and AE put the skills in the first units of book whereas EGAP put it in the middle, showing a better consideration of the learners as summarization through a very important academic ability is somehow not easy for the first year student. Skills of writing report or paper are introduced in the early parts of OE, but they are put in the last unit of EGAP. Such arrangement difference is probably because students studying abroad are required to do projects and write reports and term papers since their first year of college study. However, in China, students consider writing report/paper very challenging, and they have rare chances to do such work till their junior year study in college when they are preparing for a graduate thesis. Therefore, at present, putting such skills in the late part of the book suits the Chinese better as otherwise students may feel discouraged and lose the interest in learning the course.

As to reading materials, both OE and AE select excerpts from textbooks published abroad, hence, ensuring the authenticity of the materials. Materials in EGAP are chosen from online journals of open access. On the one

hand, the accuracy and authenticity of the materials cannot be guaranteed as some of the online papers may not be of high quality. On the other hand, users of the book are provided with discourse features of journals which cannot satisfy their needs of discourses of different genres.

Among the tasks, there is always one or two highlighted boxes named 'academic language' summarizing the particular language skill (e.g., sentence structure for giving a definition, using noun phrases to take notes, etc.) that students should pay attention to while learning the content. This language skill summary helps students understand the purpose of the content tasks and recall on the skills they learned.

In OE, after the four skill modules, there is always a one-page section given to training vocabulary competence. However, some of the content and exercises do not suit well the learners' ability and needs in the Chinese context. For example, the vocabulary skill introduced in unit 4 is classification. It explains how words are divided into categories like noun, verb, and adjective, etc. This, though important, is regarded as basic knowledge and is designed in the early period of junior high school textbook (which attaches great importance to grammar learning) in China. Collocation is the vocabulary skill introduced in unit 5. It explains to the learners the involvement of different combinations of nouns, verbs, adjectives, or other grammatical words. As a matter of fact, collocation is regarded as an essential part of vocabulary and grammar learning since junior high school in China and has always been tested in all levels of examinations, such as a mid-term quiz or College Entrance Examination.

In AE, there is a one-page exercise for vocabulary at the back of each unit. However, the tasks are always blank filling sentences, which only train the meaning and word speech of the word knowledge. EGAP allocates about 4-5 pages of vocabulary exercises in every unit. These are diversified forms of tasks, such as matching, paraphrases, table filing, etc., that different train types of word knowledge the Chinese students need to acquire.

5.4 Expression and classification of skills

book skills	OE	AE	EGAP
Critical thinking			Defining a term in an effective way
Reading	Identifying main ideas and supporting evidence	Reading actively Applying what you have read	Identifying a definition Categorizing similarities
Writing	Analyzing topic sentences	Writing about changes The passive voice definitions	Defining a concept by following logical patterns
Listening	Recognizing the language for introducing main ideas and evidence	Listening for specific information	Taking notes of definition as you listen
Speaking	Identifying assumptions in questions	Sharing your opinion Personalizing the topic	Taking notes of classification
vocabulary	Working out the meaning of unknown words Using a monolingual dictionary	Words related to the topic Guessing meaning from context	Using noun phrases in academic contexts
Academic success skills		Answering short-answer questions Making a chart Reviewing a test	

Graph 6: expression and classification of skills

All of the three textbooks begin with a content table that lists the skills to be introduced. The skills are divided into categories of competences, such as listening, reading and writing, etc. And these skills/modules are further classified into micro skills listed in the grids.

As for AE, the skills are categorized into reading skill, writing skill, vocabulary skill, and academic success skills. Viewing these skills as a whole, we may find 'academic success skill' is an ambiguous category as it is not in parallel with the other skills. As a matter of fact, all the other skills can be grouped as 'academic skills.' For example, 'answering short-answer questions' can be grouped as a micro reading skill, and 'making a chart' can be grouped as micro writing skill. The skills listed in OE and EGAP are all clearly explained in gerund forms, such as 'identifying main ideas and supporting evidence' and 'identifying definition.' However, the skills listed in AE are expressed in an ambiguous and incoherent way. Some of them are written in gerund forms, like 'writing about changes' while some are written in nouns, like 'the passive voice' and 'definitions.' In fact, 'definition' is not a skill but a concept only. In OE, it is clearly explained as 'recognizing and writing definitions.'

On top of that, some of the micro-skills listed in AE are confusingly phrased. For example, one of the reading skills listed is 'reading actively.' What are reading actively? Is it the opposite to 'reading passively'? But what is the latter? There are other similar cases, such as 'thinking about the topic,' 'applying what you have read,' 'personalizing the topic,' and 'understanding key terms,' etc. Unlike the other two textbooks that explicitly inform the readers of the specific skills at the sight of the expressions, such phrases leave the users in the dark and may not motivate them to do the tasks as they do not know what skills or knowledge they will acquire in doing such tasks.

In EGAP, the skills in all sections of a unit are centered on the academic focus of that unit. For example, the academic focus in unit 5 is summary and the skills in the sections are 'identifying summaries in a research article', 'identifying topic and main points', 'listening for main ideas and supporting details' 'writing a summary following a five-step guide', and 'using reporting words in a summary'. This arrangement not only reflects a rigid coherence between sections within the unit but also strengthens students' understanding and using of the skills by training them the skill repeatedly from different aspects (thinking, listening, speaking, reading and writing).

There is also an academic focus in every unit of OE, but the skill centering on it is usually trained one or two sections, mostly in the reading section. For example, the academic focus in unit 4 is classification, the skills trained in reading, writing, listening and speaking are 'using classification to make notes as you read', 'writing and evaluating an essay introduction', 'understanding the organization of a lecture', and 'giving a short presentation' respectively. Though not as rigidly coherent as EGAP between sections, OE, to some extent seems to be more efficient as it is able to include many more specific skills for learners.

5.5 Arrangement of micro skills

The following part of the paper will illustrate how the skills in the textbooks (except AE, as the skills in it are not academically phrased and show no difference in different units) are arranged. As is illustrated in the content table, OE aims to facilitate the users' academic skills in listening, speaking, reading, writing and vocabulary. Accordingly, all the units of the book are composed of such five modules, and each develops some micro skills through a sequence of tasks. Similar to OE, EGAP categorizes the skills into critical thinking, listening, speaking, reading, writing and vocabulary and accordingly set six modules for each unit. As is explained in the introduction, the book employs Bloom's taxonomy to divide the EAP learning skills into sixteen micro ones and distributes them into the units. The micro skills are organized from easy to difficult, from low-level capability to high level to accommodate the students' needs and development in the Chinese context.

Skills included in AE are organized in a quite different way. First, many of the skills included in the modules are not clearly phrased. As is discussed above, skills like 'reading actively,' 'thinking about the topic,' 'personalizing the topic,' 'applying what you have read,' etc., fail to inform the users of the specific academic ability they may acquire. Second, these confusingly phrased skills repeatedly appear in almost every unit. It is impossible to analyze the skills in terms of Bloom's taxonomy.

To ensure the right categorizing of the micro skills, three EAP teachers are asked to do the classification twice (the second time classification was done two weeks after the first time to ensure the first time results impose little influence on the second time work). After one month, skills that were classified differently were brought to further discussion until the agreement was reached. For example, "recognizing signposting language" is

considered to be "remember" "factual knowledge," "using noun phrases" is regarded as "apply" "conceptual knowledge," and "evaluating presentation guidelines" is "evaluate" "procedural" knowledge, etc. The following tables are the results of times of work and discussion.

Recognition knowledge		Knowledge					
		Remember	Understand	Apply	Analyze	Evaluate	Create
factual	U2	R2,S2, L4 L6,R9,L9,R 10,R11,W1 1,L11,L12	R1,W1,L1,S1 R2,W2,L2 R6,S7,L8,L9 R11,S11,R12	R1,L2,L4,L5, R7,W7,L7,W 10,W11	R8,W9,L12	W1,W8,S8,S9, L12	W1,R2
conceptual	U2,U3, U4,U7, U8,U10	L2,R6,R7	R1,L1,R3,L3 S3,R4,L4,R5 R7,L7,R10,L1 S10	W2,W3,R4, W4,S4,W5,R 6,L6,R10,R1 2,W12	L3,W4,W5,S 6,R7,W7,R8, W9,W10,	W4,W5,W7	R7,W10 ,W10,W 12,S12
procedural	U5,U6, U9,U12	L6	R6,S8,L9,L11	S2,W3,W3,L S8,L9,W12	W2	S4,W11	S4,W6, S7,W11, S11
metacognition	U11	R11	S5,R8,L8, L11	R3,S5,S6,,S1 0	S10	W3,S5,W7,L9 S11	S10,S12

Graph 7: micro skills in Oxford EAP

U: unit R: reading L: listening W: writing S: speaking

In the above table, U, R, L, W, and S represent a unit, reading, listening, writing, and speaking respectively. The numbers in the table refer to the number of the unit. For example, R2 means reading in unit 2, and L4 refers to listening in unit 4. As is shown in the table, the micro skills in OE occupy every cell, an indication that all types and levels of skills are introduced in this book and therefore cater to the needs of different students.

Generally, the units in OE are sequenced in terms of knowledge complexity, from simple to difficult. For example, the academic focus in unit 2 is "description and definition," which introduces the features and elements of these two concepts, as well as types of definition. Therefore, U2 is a cross-dimension unit, introducing conceptual as well as factual knowledge. Take unit 5 for another example, and the academic focus is "connecting idea," which addresses the techniques (cohesive language, hedging language, etc.) that can be used to link ideas. Therefore, in general, unit 5 is about "procedural" knowledge.

Viewed from the knowledge (vertical) dimension, most of the micro-skills dwell on low-level learning (Anderson, 2005, Kwok, et al. 2018), focusing on factual knowledge and conceptual knowledge. Factual knowledge includes terminology (eg. recognizing definitions in reading in U2, and recognizing signposting language in listening in U4), and details (eg. identifying features of descriptions of visual information in writing in U2 and understanding the main points of a lecture in listening in U5) that students must know to be acquainted with a particular subject matter.

A lot of examples that introduce conceptual knowledge can be found in unit 2, unit 3, and unit 4, etc. for example, the writing section in unit 2 firstly introduces types of the diagram (classification and categories) and then analyzes the features (structure) of a description for a diagram. Before students are required to practice writing descriptions, models are given for references. In unit 3, for example, an important skill is to identify main ideas and supporting evidence. To fulfill such a goal, types of evidence are shown (such as for example and reasons), followed by exercises to distinguish the main idea from a group of sentences chosen from an essay. There are similar exercises in this unit, such as knowing the structure of a paragraph, and identifying topic sentences, etc. In the listening module, languages that introduce evidence (e.g. "Think about...", "Let me clarify..") are listed in terms of their functions (giving an example, and giving an explanation, etc.).

Chinese students are trained to be adapted to examinations in their high school study. They have never been instructed of academic skills in a systematical way. EAP, a bridging course that connects the high school learning with the disciplinary courses in college, undertakes the task of equipping students with such basic academic skills. A very effective way of achieving this is to give them a detailed account of the skills and provide exercises for strengthening the skills. Hence, factual knowledge, which mainly offers the basic information about subjects and conceptual knowledge that introduces the interrelationships among the basic elements within a larger structure will meet the needs of students starting the learning of academic skills.

Other higher levels of skills, like procedural knowledge and metacognitive knowledge are also exercised in this book. Procedure knowledge informs how to make or do things, including methods, techniques, algorithms, and criteria that one uses to decide when to use that knowledge. It helps students to complete a rather complex task efficiently. For example, unit 6 is about process description. Texts in this unit are processes (e.g. sand movement, and production of soybean source, etc.) with exercises to understand and analyze the stages of a process, using signposting languages for describing processes, taking notes of a process and design a well-structured process, etc. As mid-level knowledge (Anderson, 2005, Kwok, et al. 2018), it is moderately trained in OE.

Metacognitive knowledge is knowledge of cognition in general as well as knowledge of one's own cognition (Anderson, 2005). Unit 11 in OE focuses on knowledge of evaluation. Micro skills in this unit range from the introduction of evaluation language, evaluation stages to the practice of evaluating a presentation. Students learning this unit are offered many opportunities for making reasonable judgments and reflecting on their own work.

Viewed from the cognitive process dimension, OE focuses more on skills of understanding and applying. Understanding knowledge is low-level thinking skill, including interpreting, exemplifying, classifying, summarizing, inferring, comparing and explaining skills. This type of skill is sufficiently trained in OE, for example, "understanding and extracting factual information in a text" in the reading module in unit 2 and "interpreting written feedback" in speaking in unit 5. Applying, the mid-level cognitive skill is also fully trained in the book. In every unit, students are asked to use the learnt knowledge to fulfill a task, for example, "using adverbs to express stance" in the reading module in unit 3, and "using noun phrases in note-taking" in listening in unit 2. There are more tasks designed for applying than for understanding, especially in terms of procedural and metacognition knowledge. This design embodies the belief of the writers of the book that ability to put skills into real situation practice is more important than only knowing them. For Chinese students who just start learning EAP skills, this design helps a quick round of internalization. Abilities to analyze, evaluating and creating are also sufficiently trained in the book. But as the difficulty of the skills increases, the training decreases, a design that goes along well with human cognitive development.

Recognition knowledge		Cognitive Process Dimension					Create
		Remember	Understand	Apply	Analyze	Evaluate	
factual	U1, U2, U7	L2	R1, L1, C5, R3, C7	R1, L1, W1	R7	C1, C2, C5, C7	
conceptual	U3, U4, U5	R3, L3	R2, L2, R3, L3, C4, R4, L4, W4, R5, L5, W5, L7, R5, L8, C8	L2, R3, W5, W7, L8, W8	W2, C3, R3, L3, W3, L4, W7	C3, C4, C5, W5, W3,	W3,
procedural	U6, U8		W6,	W6, W2, W8	L4	C6	W2, W8, W8
metacognition	U7			R7			

Graph 8: micro skills in EGAP

Compared with OE, EGAP include much less micro skills in the book. Some of the knowledge and skills, such as create factually, remember procedural and understand metacognition, etc., are not included, with metacognition to be the least trained skill.

Generally, the way that skills are distributed in EGAP is similar to that in OE. First, the units are generally sequenced in terms of knowledge difficulty. The academic focuses start from a definition that mainly introduces factual knowledge to the literature review that includes knowledge of summary and evaluating other's work.

Similar to OE, most of the micro skills in EGAP focus on factual and conceptual knowledge, for example, "identifying a definition as you read" in reading module in unit 1 that asks students to understand what makes a definition and find it out in a text, and "evaluating assumptions" in critical thinking module in unit 5 that asks students to make judgment on the information other people stated. Conceptual knowledge that is the most trained knowledge in the book, an indication that the writers of the book want students to pay more attention to the structures and relations between concepts. For example "identifying, understanding and noting a classification" in the reading module in unit requires the students to figure out the inner structure of a passage by finding out the relations between sentences and paragraphs. One thing to be noted is that metacognition is the least trained knowledge in the book with only two micro skills listed in unit 7. If we further examine the "critical thinking" module in the book, we will find that most the micro skills listed are about factual or conceptual knowledge (e.g. defining a term, understanding contextualization and understanding the features of the report). Instead of providing chances for thinking of self or other's work, this module functions more like a preparing part for the following modules.

In terms of cognitive skills, EGAP is the same with OE in that it also offers more chances on skills of understanding and applying. For example, "categorizing similarities and differences" in the reading module, unit 3, requires students to put information into groups based on their understanding of the features of these two groups. There are many micro skills starting with the verb "using," training students' competence in using theoretical knowledge to accomplish tasks in real situations. However, as is shown in the table, it offers very few opportunities for students to reflect on their own work, as metacognitive knowledge is rarely trained in this book.

Generally, EGAP trains mostly low-level skills/knowledge, little on mid-level skills/knowledge and offers no training on high-level competence that requires metacognitive knowledge and skill of evaluating or creating. It reveals a truth that through critical thinking and creativity are emphasized repeatedly by all levels of English teaching syllabus in China, EAP, in particular (as the ability is essential for writing report and paper), it seems that the textbooks may not be designed in alignment with it. Hence, EGAP shows poor suitability with students' needs and poor alignment with the curriculum in terms of these two important abilities.

6. More explanation on the design of AE

AE (either the book for listening and speaking or the book for reading and writing) consists of only four units, eight chapters, and dwelling on four topics only, all are about social life. Either in terms of topic or the way it is designed, it looks more like a textbook for General English than for academic purposes.

The learning content in AE starts with 'previewing the unit,' made up of four discussion activities, two for the first chapter and two for the second. Compared with the lengthy discussions, 'warm-up' exercise in OE and EGAP are brief and skill-based. For example, in unit 3, OE, the warm-up exercise is to discuss the reading skills (skimming and scanning) learners would use to read the passage. In EGAP, the warm-up task usually is a mini-lecture that introduces the important concepts or skills involved in the unit. Discussion activities in AE are topic-based. For example, in unit 1, 'write down five to ten things that are considered to be good behavior for children from your own point of view. Then discuss the following question with your classmates: how do people generally teach these behaviors?' Such warm-up discussions look more like GE (English for General purpose) design.

In contrast with OE and EGAP, in which every task is designed to train a certain academic skill, the skills exercised in AE are designed in a way that is most frequently used in General English learning. 'Thinking about the topic' is a skill/task trained in every unit of the book. Instead of training a specific academic skill, it mainly asks questions related to the topic of the reading passages. For example 'Is this common in your community? How common do you think this is in the United States?' in unit 1. Similarly designed skills are 'Applying what you have read' and 'Personalizing the topic,' etc. All the questions in these skills are topic-based. For example, in unit 2, one of the questions for 'Applying what you have read' is 'Who generally did/ does better in your school? Boys or girls?' and in unit 3, one of the questions for 'Personalizing the topic' is 'Think about your own use of new media. Do you ever use two forms of media at once?' Answers to such questions only require learner's recall of personal experience or knowledge related to the topic rather than the use of academic skills (required by EAP).

7. Conclusion

According to several large-scale investigations conducted in universities located in different cities of China, currently, Chinese students are in urgent need of a systematic introduction of English academic skills that connects their high school study to disciplinary study in college. Despite the fact that the number of universities offering EAP course keeps increasing in recent years, EAP textbook construction in China is still underdeveloped. By analyzing three textbooks (imported, adapted and domestically designed) popular in the domestic market, this study attempts to examine the suitability of these textbooks to the EAP learning needs in the Chinese context. The result reveals successful experience as well as problems in textbook writing either abroad or at home with regard to their suitability in the Chinese context.

OE, an imported textbook designed by experienced writers abroad, demonstrates general good suitability in its clear purpose, instruction, division of skills and objectives, and logical arrangement of materials. It keeps a good balance between the four types of skills (listening, speaking reading and writing). On top of that, it gives thoughtful consideration to the training of all possible occasions that students may come across to communicate in their study-seminar, presentation, formal and informal discussion. In terms of skill arrangement, OE covers every cell in RBT, able to meet different levels of needs. And the units and micro skills are generally in line with the development of the recognition process. Nonetheless, the results also find some parts that may not well suit the needs and situation of Chinese students: it puts the skills of writing paper in the early units of the book which may discourage the learning interest and motivation as Chinese students consider it to be boring and difficult and rarely need to use them in the first two years of college study. Still, due to the lack of knowledge of Chinese students, OE shows weak suitability in vocabulary training as some of the techniques have already been repeatedly trained by Chinese students in their high school.

The study reveals some problems with EAP textbook writing in China. First, there are few domestically designed EAP textbooks, among which fewer, integrate the four types of skills students need. Some textbooks like AE separate the four skills into two books, putting a huge challenge ahead of the teachers as it is very hard to integrate the lengthy content in a time-limited classroom setting without cutting the connection among the skills. Further, in this pioneering stage of EAP learning in China, some EAP textbook writers do not have a sound understanding of the course and makes little difference in the design of EAP textbook and General English textbook. This is reflected in their work: unclearly stated purpose, content not covering different disciplines, not giving clear division and expressions to the micro skills and their arrangement, hence unable to match well with the students' learning needs.

On the other hand, textbook such as EGAP demonstrates some successful experiences for future textbook writers. First, it is one of the very few textbooks that integrate the four types of skills in one book and all modules of a unit center around the same academic focus, and they are interconnected so that each can be a pre-learning part section for the next. In addition to the four types of skills, it sets two more modules for each unit-critical thinking and vocabulary, both are considered of urgent need by Chinese learners. The vocabulary tasks and exercises designed in the textbook are diversified and meet the different needs of the learners. I-smart platform is another successful design of this book. It well combines offline with online learning and offers

opportunities for learners to communicate in the virtual community by the adoption of the most popular communicative software-wechat. As a bridging course, EGAP suits students' needs in that it mostly helps them understanding and using basic academic skills. However, there are problems in design as well. The distribution for modules, for example, are not reasonably balanced. It allows much more attention to the reading section than writing and even less to listening and speaking. Moreover, the critical thinking module mostly functions in preparing the basic introduction of knowledge for other modules rather than motivates students' reflective thinking. Also should be noted is that high-level skills/ knowledge, like metacognitive knowledge and skills to evaluate and create are not adequately trained in the book.

To sum up, for EAP textbooks either designed by oversea experienced writers or by writers at home, there is still room for improvement so as to suit the needs of the learners in the Chinese context. This paper also sheds light on the selection of a suitable textbook—as is suggested in the framework, that an examination of the introduction, content arrangement and skill distribution of the book may help a quick decision.

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