



# A WordPress-based Instructional Model for Developing Semantically-driven Academic Writing Lessons for Thai EFL University Students

Atikhom Thienthong  
Suranaree University of Technology, Thailand  
huriken77@hotmail.com

Suksan Suppasetsee  
Suranaree University of Technology, Thailand  
suksan@sut.ac.th

## Abstract

Writing is a meaning-making process in which a writer deploys lexico-grammar as an interpersonal resource to manage an interplay between self-representation and social dimensions for a credible and persuasive argument. As the first part of an ongoing study, this article proposes a WordPress-based Academic Writing (WAW) instructional model that serves as a guiding conceptual framework for developing online meaning-driven lessons (thereafter WAW lessons) to advance undergraduate students' academic writing skills. The WAW instructional model aims to implement a semantically-focused approach, web-based technology as a content management tool, and constructivism as a theoretical underpinning. Guided by three instructional systems design (ISD) models: ADDIE, KEMP, and SREO, it consists of six necessary phases: Analyze, Design, Develop, Assess, Implement, and Evaluate. The prototype model was evaluated for its applicability by three experts and the WAW lessons were trialed with the target students. The findings showed that the WAW instructional model was evaluated as 'very appropriate' and that the WAW lessons were efficient. These findings suggest that the WAW instructional model can be implemented as a viable conceptual framework for the present study.

**Keywords:** academic writing, semantically-driven approach, instructional models, web-based lessons

## 1. Introduction

Tertiary students' success often depends on their ability to write a variety of academic texts, such as academic essays, course papers, project proposals, and independent studies, as they move from experience-based writing for their own benefits to more academic writing for distributing disciplinary knowledge to a wider context or audience. However, despite the fact that academic writing has received increasing attention from most Thai composition classes, pedagogy and research tend to emphasize textual and technical aspects of academic skills (e.g., Kaewcha, 2013; Suthiwartnarueput & Wasanasomsithi, 2012; Watcharapunyawong & Usaha, 2013). For example, students are trained to approach source materials by a common means of quotation, paragraphing, and summarizing, but these writing activities are usually treated as isolated practice to assess reading ability and writing accuracy (e.g., Injai, 2013; McDonough, Crawford, & De Vleeschauwer, 2014). This emphasis can probably make students not understand when, why, and how to present those source



ideas in a new discourse that reflects their point of view, which is a salient rhetorical feature in academic argument. This problem also has been observed at Ubon Ratchathani University (UBU), where this research project is being conducted. Therefore, this paper argues that a semantically-driven approach that accentuates interpersonal semantics and rhetorical effects can be adopted as a viable alternative to academic writing to extend the strands of pedagogy and research.

This semantic orientation is worthwhile because it focuses on meaning-making in context which can be enabled through pedagogical intervention (Derewianka, 2003; Hyland, 2004a; Johns, 2008). The idea for a functional approach to academic writing is grounded in systemic functional linguistics (SFL) (Halliday, 1994; Halliday & Hasan, 1989; Knapp & Watkins, 2005; Martin & Rothery, 1993). This SFL notion views writing as goal-oriented, semantically driven, and socially situated (Johns, 2003; Knapp & Watkins, 2005; Martin, 1989). One central tenet of SFL lies in a rhetorical functionality of language through writing. In this view, writing is an interpersonal process in which authorial voice and social perspectives are negotiated for a credible and persuasive argument. That is, writers can control their personal views, authoritativeness, and presence in their text (Ivanič & Camps, 2001). Concomitantly, they manipulate linguistic features to frame their argument by anticipating and responding to the potential negation of audience (Hyland, 2004b). When they have a better understanding of these rhetorical aspects, they can make more critical decisions and gain control over their writing (Tang & John, 1999; Hyland, 2002, 2004b). This intersubjective emphasis can cultivate a good sense of authorship and readership which are dominant issues in academic writing.

Despite sparse studies on SFL in writing in a Thai context (e.g., Chuenchaichon, 2014; Lerdpreedakorn, 2009), substantial research has shown that SFL is applied in various aspects of academic writing in EFL contexts, with a focus on three strands of meaning: ideational meaning, interpersonal meaning, and textual meaning. For instance, Arunsitrot (2013) analyzed the textual metafunction (textual meaning) of 114 essays composed by Thai students and discovered that they still had a problem in connecting information between sentences in a cohesive way, which could in turn affect readers' understanding. Yasuda (2014) adopted a SFL-informed approach to teaching summary that raised Japanese students' awareness of content (ideational meaning), writer-author-reader relationship (interpersonal meaning), and structure (textual meaning). These tripartite meanings motivated and constrained students' lexico-grammatical choices for re-expressing a source text as a summary genre to fulfill its rhetorical demands. Two years later, Liardét (2016) studied Chinese students' use of nominalization as a strategy of enhancing cohesion, foregrounding meanings in nominal groups, and backgrounding subjectivity. These studies indicate that writing is a meaning-making act that demands writers' critical thinking and awareness of a context of writing (e.g., writer, reader, purpose, genre).

Given that writing is a thoughtful and time-consuming process involving felicitous lexico-grammatical options, it may not be sufficient for students to write and learn to write in the classroom. In fact, when they produce a synthesis academic text, they need considerable time in reading, planning, writing, and reviewing. These activities are seen as a recursive cognitive process that operates internally in a person's mind, rather than linear practical stages of completing a written product (Flower & Hayes, 1981). This notion suggests that each individual student tends to learn and write in their preferred way which can be accommodated through the adoption of technology. WordPress, a learning management system (LMS), is applied as a web-based delivery

system to present online lessons and practices and online learning platforms (e.g., Scott, 2012). When students work online on their own, they can use relevant resources available them to build up knowledge, generate ideas, and review their drafts. This process of learning happens to be congruent with constructivism that views learning as an internal act of self-construction of knowledge and co-construction of knowledge as learners encounter a multiplicity of perspectives and seek assistance from more advanced people (Driscoll, 2005; Kamii, 1984; Lantolf & Thorne, 2007). It can be seen that modern technology can be an excellent tool for fostering autonomous and collaborative learning.

However, just because we are challenged by emerging technologies to contemporize a curriculum and students are familiar with them, we can implement them perfunctorily in teaching and learning. Indeed, scholars note that technology use for education needs to address "pedagogical and instructional design aspects of instruction and learning" (Lim & Zhang, 2004, p.653). This means that effective online learning is not determined by technology, but a principled and thoughtful design (Samson, 2010; Warschauer, 2010), an important task that tends to be overlooked by many web-based courses (Njenga, 2005). Therefore, this study addresses this drawback by constructing an instructional model that integrates a semantically-driven approach as a language model, WordPress as an online support tool, and constructivism as a theoretical framework. The integration of these components offers a coherent instructional model as a conceptual framework for developing online academic writing lessons to support students' academic writing inside and outside the classroom. The present study aims to answer this question:

What are the elements and logical steps of developing a WordPress-based Academic Writing (WAW) instructional model?

## 2. Literature Review

### 2.1 Systemic functional linguistics

Systemic functional linguistics (SFL) advanced by Halliday (1994) foregrounds meaning in context and regards lexico-grammar (or grammar in short) as a resource for making meaning (Derewianka, 1990; Martin, 1993; Martin & Rothery, 1993). This meaning is determined by a context of situation that is made up of three parameters: field (What a text is about), tenor (Who is involved—relationship between writer and reader), and mode (How a text is organized). These contextual variables are integral to three kinds of meaning: ideational meaning as a need to represent experience, interpersonal meaning as a need to enact interaction with readers, and textual meaning as a need to organize content (Halliday & Matthiessen, 2004). In SFL, Fontaine (2012) and Halliday (1994) point out that these three meanings are simultaneously constructed. Let's consider these examples:

- (1) Facebook distracts students from their lessons.
- (2) Facebook may distract students from their lessons.
- (3) I think that Facebook may distract students from their lessons.
- (4) Students are distracted from their lessons by Facebook.



It can be seen that these four clauses express the same ideational meaning, except that the writer explicitly projects himself/herself through the author pronoun 'I' in (3), which is deemed to be overtly subjective and evaluative. In fact, they are different from each other with respect to interpersonal meaning and textual meaning. In terms of interpersonal meaning, (1) presents ideational meaning as a factual statement, thus closing off potential responses from readers (Hyland, 2008), whereas (2) includes a modal verb 'may' to hedge a statement, thereby opening up a space for alternative views and engaging readers (Martin & White, 2005). In terms of textual meaning, (1) and (2) foreground 'Facebook' while (3) emphasizes 'I'. In (4), 'students' is fronted through a passive structure. Despite the fact that ideational meaning is similarly expressed, it can be presented in different ways, depending largely on a social context (e.g., writer, reader, purpose, genre).

In academic writing, however, more emphasis tends to be placed largely on how writers choose to present and evaluate their self, readers, and text when it comes to producing a credible and persuasive argument. In this way, not only do they convey their neutral content (ideational meaning) and structure their content (textual meaning), but they also need to learn how to present that content (interpersonal meaning) (Charles, 2006a; Hyland, 2000). That is, writers can select linguistic options from a diverse range of linguistic resources to rhetorically present their argument and themselves and involve readers by influencing their attitudes and expectations.

## 2.2 Constructivism

Constructivism is separated into two orientations based on their emphasis: cognitive constructivism by Jean Piaget (1896-1980) and social constructivism by Lev Vygotsky (1896-1934) (Lantolf & Thorne, 2007). There is some slight emphasis between the two schools of thought in terms of how an individual develops knowledge. Piaget argues that knowledge is internally constructed through experience and interaction with his/her environment (Smith & Ragan, 2005). In this notion, learners have a mindful and active role in a process of knowledge construction by making sense of their surroundings and create their personal understanding drawing on their existing knowledge (Driscoll, 2005). However, Vygotsky places more emphasis on the influences of social interaction on cognitive development. In this view, "knowledge is a social product, and learning is a social process" (Pritchard & Woollard, 2010, p.9), and they are mutually constructed (Santrock, 2001). Since there is no single theory that can fully explain how we learn, these two orientations can be realized in a complementary way.

It is suggested that the development of online learning environments should enable students' personal construction of knowledge. To facilitate this process, online resources should be sufficient and useful for students as active learners to explore, understand, and resolve their problems or given tasks autonomously (Hannafin & Hill, 2007). Meanwhile, if students cannot solve some problems on their own, they can seek assistance from their instructor who can serve as a scaffolder and more advanced peers as a collaborator (Jonassen, 1999). Taking up these roles, they can provide feedback and exchange ideas and resources to assist less capable students. In line with this concept of scaffolding, Phadvibulya and Luksaneeyanawin (2008) assigned students to work in a group of five with varying levels of proficiency, and they found that students made a good progress in language development; less proficient students benefited from more proficient counterparts.

### 2.3 WordPress

WordPress can be adopted to design a website and weblog to develop online learning resources and platforms to accommodate students' independent and collaborative styles of learning as articulated by cognitive and social constructivist principles (Driscoll, 2005; Santrock, 2001). In this sense, it can serve as a mediating tool to facilitate interactions between learners and content, learners and learners, and instructor and learners. For cognitive constructivism, students can learn through their self-discovery and construction of knowledge as they are exposed to lesson content and different ideas (Phillips, 1995; Pritchard & Woollard, 2010). In writing, it is particularly useful when students compose and review their products, so providing online useful and sufficient resources and reinforcement practices can increase their understanding of and support their solution of given problems or writing tasks in a more independent way.

WordPress can also be deployed to create a virtual learning community informed by social constructivism that focuses more on social aspects (DeVries, 2000). This social learning platform allows students to interact and collaborate meaningfully with other peers, especially when they seek feedback and exchange ideas for solving problems beyond their capability (Berger & Trexler, 2010). To support these online learning activities, WordPress offers a variety of functional tools that can be harnessed to create both group and class forums to manage online dialogic discussions both inside and outside classrooms (Scott, 2012). For example, Noytim (2010) examined Thai undergraduate students' perceptions and attitudes towards using a weblog as a platform for writing and found that weblogs could create social interaction and good writer-reader relationships and support a learning community.

### 2.4 Instructional systems design

Instructional designs system (ISD) has played a pivotal role in educational technology, especially when a web-based course is introduced to a new context. This situation tends to be so complex and multifaceted that course designers (i.e., teachers) can draw on ISD principles to capture its complexity and create a sense of understanding (Crawford, 2004). Smith and Ragan (2005, p.4) define ISD as “[a] systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation”. This definition stresses a principled process of activities starting from applying theories of learning and teaching to inform a construction of learning materials and conditions.

This process is conceptualized through a model which is defined as “a representation of reality presented with a degree of structure..., and models are typically idealized and simplified views of reality” (Richey, Klein, & Tracey, 2011, p.8). It is obvious that a model can enhance an understanding of multifaceted situations by specifying workable phases and steps. Several studies have demonstrated that the application of instructional models in technology-mediated instruction contributes to effective and successful teaching and learning in different language skills, such as integrated skills (e.g., Meksophawannakul, 2009; Suppasetsee, 2005), listening skill (e.g., Tian & Suppasetsee, 2013), speaking skill (e.g., Sahatsathatsana, 2010), and writing skill (e.g., Surakhai & Pinyonattagarn, 2014). These studies suggest that the principles of ISD have received a somewhat greater attention in pedagogy and research that exploit the potentials of technology.



In summary, SFL is realized to underpin the design of meaning-driven academic writing lessons while constructivism is applied to construct activities and conditions that facilitate students' learning of such lessons. This constructivist learning environment needs to be augmented by WordPress, a delivery system of online contents and an online learning venue, to foster both independent and collaborative styles. In order to integrate these proposed components in a more systematic way, the principles of ISD are implemented through an instructional model.

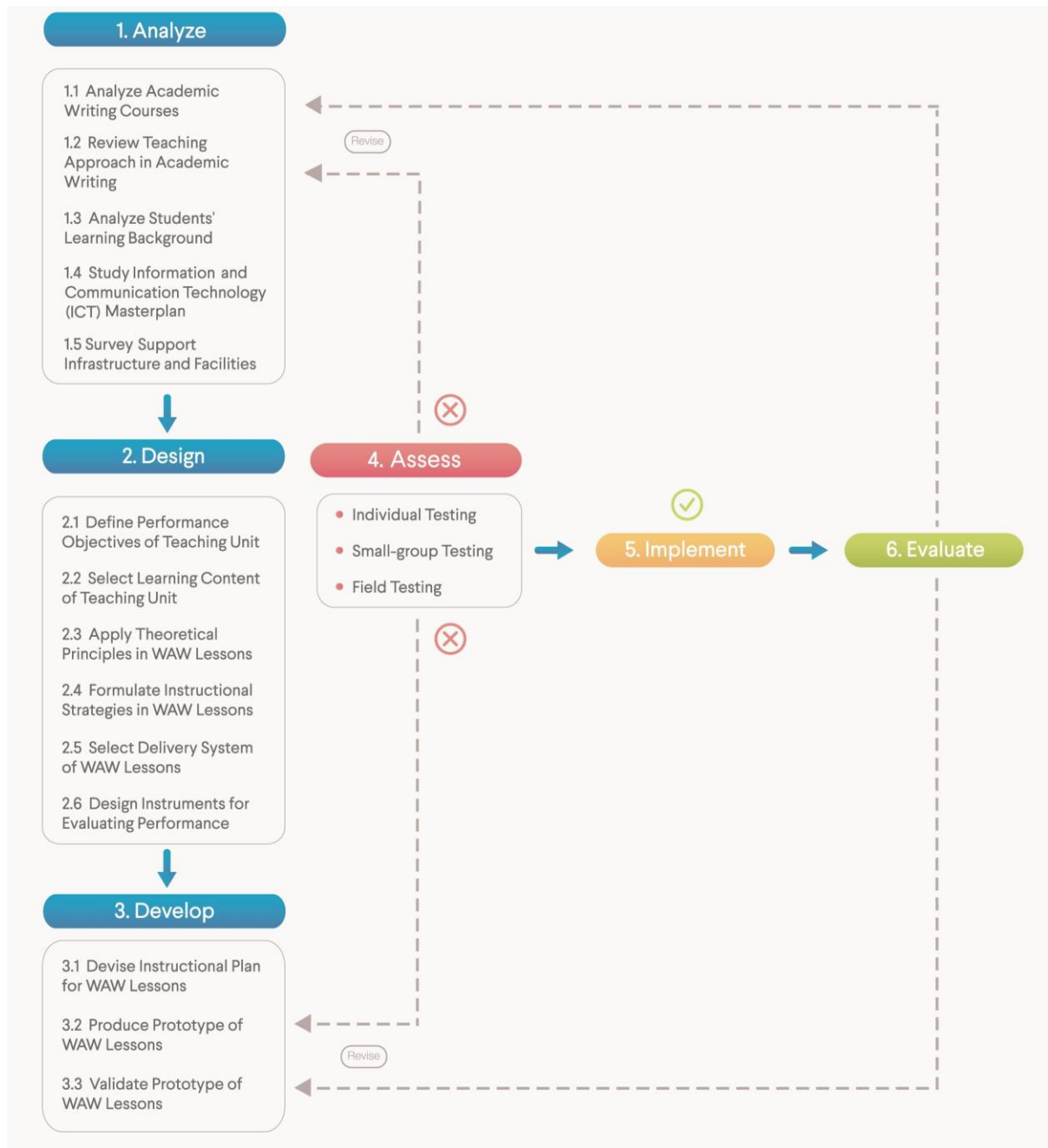
### 3. Methodology

#### 3.1 Development procedures

The WAW instructional model is constructed as a conceptual framework for designing and developing online academic writing lessons (refer to as WAW lessons) to serve Academic Writing at Ubon Ratchathani University (UBU), Thailand. The main purpose is to improve students' academic writing and prepare them to write more effectively in academic and professional contexts. The development is based on the coherent synthesis of some elements and features of three ISD models: ADDIE (Gustafson & Branch, 2007), KEMP (Morrison et al., 2011), and SREO (Suppasetsree, 2005).

The salient features of these models are highlighted in this study. Firstly, the ADDIE Model is a generic model that has fundamental components inherent in most instructional models (Branch & Merrill, 2012; Gustafson & Branch, 2007). These components are major phases present in the WAW instructional model. Secondly, the KEMP Model emphasizes learner perspectives, e.g. learning backgrounds and special learning needs. These input data are utilized as a guideline for selecting learning content and developing lessons suitable for learners. Finally, the SREO Model is a web-based instructional model. This online model provides a useful set of practice guidelines for developing a new web-based instructional system, especially elaborated steps for integrating online learning resources and support tools.

As the first phase of a larger study, this article aims to present the WAW instructional model that implements a semantically-driven approach, web-based technology, and constructivist principles. Guided by the elements and features of the foregoing described models, it consists of 6 phases and 14 steps as illustrated in Figure 1. The numbers from 1.0-6.0 indicate the development process from analysis to evaluation while the dotted lines represent the routes of evaluation and feedback for enhancing the efficiency of process (exercises) and product (post-lesson tests).



**Figure 1:** Phases and steps of the WAW instructional model

## 1. Analyze

This initial phase sets out to analyze related aspects, including current curriculum, teaching approach, learner background, ICT masterplan, and infrastructure and support facilities. The analysis of these aspects leads to insights in the present context in terms of instructional problems and needs, so that instruction can be designed specifically to address these problems and needs.

### 1.1 Analyze Academic Writing Courses

This step intends to look at the course descriptions of Academic Writing as well as its pre-requisite (e.g., Paragraph Writing, Essay Writing) and post-requisite courses



(e.g., Research Skills, Independent Study). These courses require students to write various academic texts. The researcher analyzed these course descriptions to identify writing skills and knowledge required in each course, focusing more on Academic Writing that was added to the recently revised curriculum in 2012. The analysis revealed that Academic Writing emphasizes reading and writing for academic purposes and clearer target audience and prepares students to write in more advanced and authentic situations, especially in Research Skills and Independent Study.

### 1.2 Review Teaching Approach in Academic Writing

This step intends to review previous teaching practices in Academic Writing and its pre-requisite courses (e.g., Paragraph Writing, Essay Writing) through lesson plans and interviews. This study has drawn on the review of writing courses conducted by Kongpetch and her colleagues at UBU in 2014. They interviewed instructors of academic writing and courses and found that instruction was based on a product-oriented approach that focused on textual features (e.g., grammar, organization) while non-textual features (e.g., authorial voice/stance, audience, rhetorical functions) were underrepresented.

### 1.3 Analyze Students' Learning Background

The analysis of learners leads to an understanding of their backgrounds in various aspects, such as level of study, writing experiences, writing problems and needs of writing aspects (e.g., grammar, structure, argument). The review by Kongpetch and her colleagues at UBU in 2014 showed that students were usually trained to produce writing focusing on textual features, with much attention to discrete grammatical items and error-free sentences and good organization. Given this textual emphasis, they were not prepared well enough to deal with rhetorical functions that consider a context of writing for a credible and persuasive argument.

### 1.4 Study Information and Communication Technology (ICT) Masterplan

This step aims at studying UBU's ICT masterplan. The analysis of this document showed that UBU has highlighted the importance of applying digital technology into pedagogical practices by promoting educational software, digital content, and online learning modes. Instructors are encouraged to incorporate technology elements into their courses to enrich teaching and learning practices.

### 1.5 Survey Infrastructure and Support Facilities

This step looks at the adequacy and readiness of infrastructure and support facilities, including equipment, services, and rooms. At UBU, there are seven computer-equipped rooms with Internet access that accommodate 20-50 students in each room. They are provided to support web-based trainings and instruction. In addition, students can have access to wireless networks with a variety of personal mobile devices throughout campus. The provision of these facilities supports a growing need for anywhere, anytime learning.



## 2. Design

Responding to the data in the analysis phase, the design phase includes definition of learning goals and objectives, selection of learning content, application of theoretical principles, formulation of instructional strategies, selection of delivery system, and evaluation of performance.

### 2.1 Define Performance Objectives of Teaching Unit

Performance objectives are written in correspondence with the course description of Academic Writing. The WAW lessons are intended to develop students' academic writing through a discussion essay in which they learn to discuss both sides of a topical issue and incorporate other authors' ideas into their own argument. Therefore, the performance objectives are defined as follows:

- to develop a discussion essay with logical organization.
- to make effective language choices for rhetorical functions.
- to construct credible and persuasive academic arguments.
- to integrate source materials in a credible and persuasive way.
- to use discipline-specific conventions effectively (e.g. referencing, citations).
- to adopt appropriate stances toward academic arguments.

### 2.2 Select Learning Content of Teaching Unit

The selection of learning content is restricted by the learning objectives in Step 2.1 which in turn limit the scope and focus of learning. The WAW lessons consist of four lessons: Structure of Discussion, Language Choices, Academic Argument, and Use of Source Texts. Most materials in these lessons are developed drawing on the findings from corpus studies and discourse analysis (e.g., Bloch, 2010; Caplan, 2012; Charles, 2006a, 2006b; Coffin, 2004; Hawes, 2015; Hawes & Thomas, 1997; Hewings & Hewings, 2002; Hyland, 2000, 2002, 2004b; Liardét, 2016; Tang & John, 1999; Swales, 2001; Swales & Feak, 2012). The corpus-based lesson development is useful in that students can examine the authentic and natural use of the target linguistic features. Through the expanded context, students can observe how those grammatical features perform rhetorical functions.

Through these lessons, students learn to develop an academic argument through a discussion essay by integrating ideas from source texts for justification. A discussion essay is used as a medium for learning academic arguments and language features as it provides a broader context with a clear purpose that gives rise to lexicogrammatical choices for constructing meaning in context and producing rhetorical effects. Therefore, these four lessons are designed to facilitate and enrich students' construction of meaning valued in academic writing as shown in Table 1.

**Table 1**

*Relationship of different types of meaning, linguistic realizations, and rhetorical functions*

<b>Types of meaning</b>	<b>Linguistic realizations</b>	<b>Rhetorical functions</b>
Ideational meaning - a need to build field knowledge (i.e., content, ideas) (experiential meaning) and relationship between ideas (logical meaning).	Transitivity, lexical choice, verb type, reporting verbs, verb form or tense, human agency, reference, projection (attribution to sources), expansion	Enacting interaction with readers, acknowledging possible views, revealing/masking personal voice, reducing criticism/skepticism, defending a position against criticism,
Interpersonal meaning - a need to create involvement or enact interaction with readers (i.e., shared values, beliefs, power, solidarity)	Modality (hedging/boosting), qualification, evaluation, self-reference (author pronouns), human agency, passive structures, nominalization, inanimate subjects, human/non-human general subjects, anticipatory 'it', reporting verbs, citation forms	expressing/removing personal stance, emphasizing/obscuring responsibility, increasing argument credibility, enhancing readers' understanding
Textual meaning - a need to organize a cohesive and coherent text; that is, configuring ideational and interpersonal meanings in discourse	Theme/rheme, reference, cohesive device or connective, lexical choice, active/passive structure, nominalization, summary words (retrospective labels)	

The design of these lessons is theoretically underpinned by SFL (Halliday 1994; Knapp & Watkins, 2005; Martin & Rothery, 1993) because it foregrounds three kinds of meaning in context: ideational meaning, interpersonal meaning, and textual meaning. These meanings are simultaneously made by a writer's need to perform rhetorical functions which are realized through a broad range of lexico-grammatical features and patterns. Some patterns serve several rhetorical functions. For instance, a passive structure can be rhetorically deployed to background authorial agency and subjective voice and to establish textual cohesion, rather than syntactically as a moral strategy of paraphrasing to avoid plagiarism.

### 2.3 Apply Theoretical Principles in WAW Lessons

The theoretical principles of cognitive and social constructivism are translated into instructional applications to facilitate students' diverse needs of learning. Cognitive constructivism posits that learning takes place due to self-construction of knowledge and exposure to a multiplicity of perspectives (Driscoll, 2005; Kamii, 1984). However, social constructivism holds that learning occurs as a result of meaningful collaboration among students; less skilled students are assisted to learn by more capable peers (Lantolf & Thorne, 2007; Liu & Matthews, 2005). These two orientations to knowledge are implemented in a reciprocal way.

### 2.4 Formulate Instructional Strategies in WAW Lessons

Instructional strategies are implemented to facilitate students' two styles of learning as informed by cognitive and social constructivism. In a cognitive

constructivist principle, the WAW lessons consist of online practice, exercises, self-tests and resources for students to study on their own out of class. By working online, they can make their own choices of materials and study as many times as they need regardless of time and place. In a social constructivist principle, students are assigned to work on collaborative activities in groups where they discuss and exchange ideas.

### 2.5 Select Delivery System of WAW Lessons

WordPress is selected as a delivery system to present the WAW lessons. It offers a variety of functional tools and add-on plugins that support resource management, composing process, and learning activities. The design of online learning environments on WordPress is underpinned by the principles of cognitive and social constructivism. For example, discussion tools (e.g., BuddyPress, bbPress) are used to create both group and class forums. These forums serve as venues for students to have online discussions and communicate with their learning peers when they need assistance to solve language problems. Meanwhile, quiz tools (e.g., Wp-Pro-Quiz) are adopted to develop exercises and self-tests where students can practice independently out of class.

### 2.6 Design Instruments for Evaluating Performance

Evaluation instruments are designed in parallel with the performance objectives for judging performance in two phases: formative and summative evaluations. They are designed to assess students' learning process and achievements. In a formative evaluation, students have to perform exercises, assignments, and quizzes while they are required to complete one writing task as pre-test and post-test in a summative evaluation.

## 3. Develop

The information obtained from Phases 1.0 and 2.0 serves as a guiding set of data for devising an instructional plan on teaching and learning activities as well as instructional materials as online lessons to support such teaching and learning activities in the present project.

### 3.1 Devise Instructional Plan for WAW Lessons

This instructional plan (or lesson plan) serves as a guide for organizing teaching and learning activities for the WAW lessons. Specifically, it identifies what students learn, in what ways lessons are delivered, how learning activities are organized, how much time is required for each activity, and how students' performance is assessed. In this lesson plan, the teaching and learning activities are organized in a way that incorporates the concepts of cognitive and social constructivism as explained in the design phase.

### 3.2 Produce the Prototype of WAW Lessons

This step aims at developing learning resources for students to practice and improve their academic writing skills. The WAW lessons involve two related sets of activities: inside the classroom and outside the classroom. In-class activities include discussions of concepts, collaborative & individual work, and feedback conferencing. In contrast, out-of-class activities consist of online exercises, post-lesson tests, collaborative & individual work, and other useful resources. They are presented via WordPress where students can study and practice autonomously both in groups and on their own. In addition, WordPress are installed with necessary tools (e.g.,



BuddyPress, Live Chat) that can facilitate writing process, teacher & peer review, and discussions.

### 3.3 Validate the Prototype of WAW Lessons

Two content experts are invited to validate the prototype of the WAW lessons as a means of selecting pre-use materials. These experts are experienced instructors at UBU who have taught academic writing for more than 10 years. One of them conducted a PhD thesis on the concepts of SFL. In validation, they checked if the WAW lessons are corresponding to teaching goals, reflective of authentic academic writing, and useful for students in academic writing. The validated WAW lessons are delivered on WordPress and formatively assessed during the process of developmental testing.

## 4. Assess

This phase serves as a formative evaluation. The WAW lessons were initially trialed 20 hours with 31 English-major students to determine the efficiency of process (E1) and product (E2), with the proposed 80/80 criterion, developed by Brahmawong (2013) (see Appendix B). These 31 students were then divided into three groups according to three phases of developmental testing: individual testing ( $n = 3$ ), small-group testing ( $n = 6$ ), and field testing ( $n = 22$ ). The first two phases recruited equal numbers of participants in each different level of proficiency (high, mid, low). However, it was impractical to reach equal numbers of participants in each level of proficiency in the field testing. This technique was performed to ensure that the WAW lessons could benefit different numbers of learners at the same time and serve learners with varying levels of proficiency. The efficiency results are presented in Table 2.

**Table 2**

*Students' E1/E2 scores of three-phase testing ( $n = 31$ )*

Lesson	Efficiency (%)					
	Individual ( $n = 3$ )		Small-group ( $n = 6$ )		Field ( $n = 22$ )	
	E1	E2	E1	E2	E1	E2
1 - Discussion genre	75.17	72.22	78.13	75.00	81.82	80.30
2 - Language choices	69.44	68.89	73.61	71.11	81.21	80.30
3 - Academic argument	78.33	76.67	79.17	78.33	82.05	81.82
4 - Use of source texts	67.78	66.67	72.22	70.00	81.82	80.91
<b>Total</b>	<b>72.68</b>	<b>71.11</b>	<b>75.78</b>	<b>73.61</b>	<b>81.73</b>	<b>80.83</b>

E1= scores in percentage from exercises; E2 = scores in percentage from post-lesson tests

As shown in Table 2, in the individual testing, the E1/E2 scores for every lesson were relatively lower than the 80/80 criterion. Based on each student's performance and comments, revisions were considerably undertaken on lesson content, support system (WordPress), and exercises and post-lesson tests. After the first revision, the students performed slightly better in the small-group testing. Despite the increase, the E1/E2 scores for each lesson were still below the 80/80 criterion. This result suggested another round of revision. Based on their feedback, they required more examples and definitions of technical terms. They also reported some ambiguous questions and suggested reducing five choices to four ones in some exercises. After the second revision, the students' E1/E2 scores achieved the 80/80 criterion in the

field testing. These findings suggested that the WAW lessons could be fully implemented in the main study.

## 5. Implement

The WAW lessons were fully implemented 20 hours to ascertain the efficiency, with 33 English-major students who enrolled in Academic Writing. The students were required to study the WAW lessons and perform various learning activities, such as online exercises, post-lesson tests, and collaborative & individual work. The efficiency results of the WAW lessons are presented in Table 3.

**Table 3**

*Students' E1/E2 scores of the WAW lessons (n = 33)*

Lesson	Efficiency (%)	
	E1	E2
1 - Discussion genre	82.01	81.13
2 - Language choices	82.22	81.01
3 - Academic argument	82.58	82.12
4 - Use of source texts	82.02	81.01
<b>Total</b>	<b>82.21</b>	<b>81.32</b>

E1= scores in percentage from exercises; E2 = scores in percentage from post-lesson tests

Table 3 shows that the cumulative E1/E2 scores met the proposed 80/80 standard, with 82.21 for E1 and 81.32 for E2. Likewise, the E1/E2 scores for each individual lesson were slightly higher than 80 percent. It can be seen that the E1 scores were slightly higher than the E2 scores for every lesson, meaning that the students performed better on the exercises than the post-lesson tests. The results suggested that the WAW lessons were efficient for actual implementation.

## 6. Evaluate

This phase is a summative evaluation. Its purpose is to determine the effectiveness of the WAW lessons on students' academic writing. To measure this evidence, students have to perform one writing task as pre-test and post-test. The results from these two writing tests are compared to judge their writing performance. However, they are not reported here since this article focuses on the development phase.

### 3.2 Data collection and analysis

The WAW instructional model was reviewed and evaluated for its appropriateness or applicability by three experts. These experts are all applied linguistic teachers with 10 years' experience in web-based instruction and ISD research studies that incorporate the concepts of constructivism into teaching and learning activities. Using an evaluation form designed by the researcher, they were required to select a degree of agreement on five closed-ended questions with a five-point rating scale ( 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree) (see Appendix A). The completed evaluation forms were then quantitatively analyzed to calculate descriptive statistics, e.g. arithmetic mean and standard deviation (S.D.). The mean scores obtained from each question item were then interpreted to determine the degree of appropriateness on a three-level scale adopted from Suppatsere (2005, p.88).

**Table 4***Interpretation of mean scores for appropriateness*

Means	Level of Appropriateness
3.68-5.00	Very appropriate
2.34-3.67	Appropriate
1.00-2.33	Not appropriate

#### 4. Results and Discussion

**Table 5***Evaluation results of the WAW instructional model*

Statements	Mean	S.D.
1. Non-linear and recursive design process	4.33	0.58
2. Major elements (phases)		
2.1 Analyze	4.67	0.58
2.2 Design	4.67	0.58
2.3 Develop	4.67	0.58
2.4 Assess	4.67	0.58
2.5 Implement	4.67	0.58
2.6 Evaluate	4.67	0.58
3. Logical phases and steps	4.33	0.58
4. Fulfilling the purpose of the study	4.33	0.58
5. Serving as a guiding model for other writing lessons	4.33	0.58
<b>Total</b>	<b>4.53</b>	<b>0.58</b>

Table 5 shows that on average the WAW instructional model was evaluated as a 'very appropriate' conceptual framework (mean = 4.53, S.D. = 0.58). This positive outcome may be explained that its development was underpinned by ISD principles that concentrate on systematic procedures in which phases and steps are elaborated to enhance a sense of understanding complex situations (Crawford, 2004). These ISD principles informed the incorporation of three essential aspects of a semantically-focused approach, constructivist principles, and a web-based system of lesson delivery. In fact, each proposed aspect was coherently realized in clear phases and steps in a systematic and logical manner, thus facilitating pedagogical applications. This practice was carried out in response to the premise that effective web-based instruction does not simply take place as a result of adopting technology, but it requires a principled and systematic design that serves students' specific learning needs as a locus (e.g., Lim & Zhang, 2004).

The six major elements were evaluated as 'very appropriate' (mean = 4.67, S.D. = 0.58), with the equal and highest means. This result may be due to a clear process of operationalization that encompasses ISD activities (Gustafson & Branch, 2007). In this study, these core phases were intended to operationalize three focused standpoints: a semantically-focused approach, constructivist principles, and technology. They were implemented to improve students' academic writing and learning to write academically by focusing on meaning-making in context and learning online both individually and collaboratively. To serve this purpose, these proposed aspects were systematically represented in logical phases where activities were clearly identified, e.g. analysis, designing, development, implementation, and

evaluation. These activities are important for monitoring if any implemented approach is effective for students' learning (Gustafson & Branch, 2002). If not, this systematic execution allows clearer revisions for some problematic phases.

The WAW instructional model served the purpose of the study, which was evaluated as 'very appropriate' (mean = 4.33, S.D. = 0.58). This finding suggests the compatibility and usefulness of the three aspects proposed in the study. That is, academic writing is viewed as involving critical decisions and felicitous choices of lexico-grammatical features; thus, it is essential that students need to learn to write both inside and outside the classroom. To achieve this purpose, one excellent way is to harness the affordance of technology as a content management tool (e.g., WordPress) for delivering lessons online to empower students to take control of their own learning, whether they learn independently and collaboratively. These approaches to learning are theoretically underpinned by constructivism (e.g., Barr & Tagg, 1995; Driscoll, 2005; Kamii, 1984). This theory maintains that students learn best on their own when they have power to access and deal with knowledge (Lantolf & Thorne, 2007; Lian, 2011) and when they are oriented to a variety of content presentations and perspectives. For example, less capable students are assisted to learn by more advanced peers (Kamii, 1984; Liu & Matthews, 2005). That's why, this coherent synthesis was perceived by three experts as corresponding to the purpose of the study.

The positive evaluation results of the non-linear and recursive process of development (mean = 4.33, S.D. = 0.58) indicate that the WAW instructional model underlines its flexibility and learner perspective. It is flexible in that the process can start at numerous points and does not need to proceed in sequence; designers can even work on single elements independently or more than one element concurrently. Due to this flexible process, students are treated as development team. In this study, the prototype lessons were trialed with three groups of students in three testing phases: individual testing, small-group testing, and field testing. In each phase, students were required to study the lessons online and performed exercises and post-lesson tests. The performance results and feedback from students were utilized as input data for revising and improving the lessons. The revised lessons were re-implemented in the subsequent phases until they achieved the designated criterion and there were no comments from the students. This learner-oriented design is integral to the development of web-based courses (e.g., Morrison et al., 2011; Richey et al., 2011; Willis, 2009), conceived of as one plausible way of accommodating students who are considered to have different levels of proficiency despite the same level of education.

## 5. Conclusion and Implications

This article reports on how an instructional model can be constructed to operationalize three proposed aspects of a functional approach, constructivist principles, and web-based technology. This instructional model which was evaluated as 'very appropriate' has served as a conceptual framework for developing online academic writing lessons drawing on a semantically-focused approach. The focus on interpersonal semantics can enhance students' understanding and awareness of lexico-grammatical choices available to them as writers, so that they can decide how best to project a level of authorial identity and engage readers in their text. Ivanič and Camps (2001, p.31) consider that "...issues of identity [are] so fundamental to writing that failure to address them from the outset can only hinder learning and, conversely, that setting these issues at the center of learning is likely to promote it". To assist students



in learning these interpersonal features, WordPress, a web-based lesson delivery tool, is applied to enrich and facilitate students' construction of knowledge as they are exposed to various ways of content presentation. They can take charge of their learning and self-regulate their process of writing and learning to write beyond the classroom.

To implement the proposed concepts above, this article argues for ISD theory to underlie the development of multifaceted courses as many web-based courses have often adopted technology in a perfunctory way that seems not to deliberately engage students and sufficiently consider the design aspects of teaching and learning (Lim & Zhang, 2004; Samson, 2010). The concepts of ISD in technology use are valuable in that learning and teaching principles are translated into optimal actions and working plans. Specifically, instructors as designers can identify necessary activities, e.g. formulating learning goals, constructing learning conditions, devising instructional plans, and developing support materials. These activities are performed in a systematic fashion that students can stay focused on various learning aspects during their process of learning, such as learning needs, performance outcomes, and support resources. Importantly, students can become team members of development as they provide constructive feedback on lesson-related issues in response to their specific requirements.

### About the Authors

**Atikhom Thienthong** is currently a Ph.D. candidate in English Language Studies at the School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology. He is also a lecturer at the Department of Western Languages and Literature, Faculty of Liberal Arts, Ubon Ratchathani University, where he teaches a wide range of courses, e.g. foundation English courses, academic writing courses, and ESP courses. His research interests include rhetorical/functional grammar, academic writing, and technology in teaching and learning.

**Suksan Suppasetsee, Ph.D.** is currently an English lecturer at the School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology (SUT), Nakhon Ratchasima, Thailand. He is the Unit Supervisor of Foreign Languages Resource Unit (FLRU), the self-access language learning center, at SUT where he teaches a wide range of courses, e.g. foundation English courses, English for Science and Technology, Online Second Language Learning and TOEIC preparation. He is also the Coordinator of Korean, Vietnamese and Indonesian courses taught at SUT. His research interests are in the areas of Instructional Systems Design, Technology-enhanced Language Learning, Autonomous Learning and Flipped Classroom.

### 6. References

- Arunsirot, S. (2013). An analysis of textual metafunction in Thai EFL students' writing. *Novitas-ROYAL (Research on Youth and Language)*, 7(2), 160-174. Retrieved from [http://www.novitasroyal.org/Vol\\_7\\_2/arunsirot.pdf](http://www.novitasroyal.org/Vol_7_2/arunsirot.pdf)
- Barr, R. B., & Tagg, J. (1995). From teaching to learning - A new paradigm for undergraduate education. *Change: The Magazine of Higher Learning*, 27(6), 12-26. doi:10.1080/00091383.1995.10544672



- Berger, P., & Trexler, S. (2010). *Choosing web 2.0 tools for learning and teaching in a digital world*. Santa Barbara, CA: Libraries Unlimited.
- Bloch, J. (2010). A concordance-based study of the use of reporting verbs as rhetorical devices in academic papers. *Journal of Writing Research*, 2(2), 219-244. doi:10.17239/jowr-2010.02.02.7
- Brahmawong, C. (2013). การทดสอบประสิทธิภาพสื่อหรือชุดการสอน [Developmental Testing of Media and Multi-Media Instructional Packages]. *Silpakorn Educational Research Journal*, 5(1), 7-20.
- Branch, R. M., & Merrill, M. D. (2012). Characteristics of instructional design models. In R. A. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (pp. 8-16). Boston, MA: Pearson.
- Caplan, N. A. (2012). *Grammar choices for graduate and professional writers*. Ann Arbor: University of Michigan Press.
- Charles, M. (2006a). The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics*, 27(3), 492-518. doi:10.1093/applin/aml021
- Charles, M. (2006b). Phraseological patterns in reporting clauses used in citation: A corpus-based study of theses in two disciplines. *English for Specific Purposes*, 25(3), 310-331.
- Chuenchaichon, Y. (2014). A review of EFL writing research studies in Thailand in the past 10 years. *Journal of Humanities*, 11(1), 13-30.
- Coffin, C. (2004). Arguing about how the world is or how the world should be: The role of argument in IELTS Test. *Journal of English for Academic Purposes*, 3(3), 229-246.
- Crawford, C. (2004). Non-linear instructional design model: eternal, synergistic design and development. *British Journal of Educational Technology*, 35(4), 393-511. doi:10.1111/j.0007-1013.2004.00400.x
- Derewianka, B. (1990). *Exploring how texts work*. Sydney: Primary English Teaching Association.
- Derewianka, B. (2003). Trends and issues in genre-based approaches. *RELC Journal*, 34(2), 133-154.
- DeVries, R. (2000). Vygotsky, Piaget, and education: a reciprocal assimilation of theories and educational practices. *New Ideas in Psychology*, 18, 187-213.
- Driscoll, M. P. (2005). *Psychology of learning for assessment*. Boston: Allyn and Bacon.
- Flower, L., & Hayes, R. J. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387. doi:10.2307/356600
- Fontaine, L. (2012). *Analyzing English grammar: A systemic functional introduction*. Cambridge: Cambridge University Press.
- Gustafson, K. L., & Branch, R. M. (2002). *Survey of instructional development models* (4th Ed.). Retrieved from <https://eric.ed.gov/?id=ED477517>
- Gustafson, K. L., & Branch, R. M. (2007). What is instructional design? In R. A. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (2nd Ed.) (pp.10-16). Upper Saddle River, NJ: Pearson Education.
- Halliday, M. A. K. (1994). *Introducing functional grammar* (2nd Ed.). London: Arnold.
- Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social semiotic perspective*. Oxford, UK: Oxford University Press.
- Halliday, M. A. K., & Matthiessen, M. I. M. (2004). *An introduction to functional grammar* (3rd Ed.). London: Arnold.



- Hannafin, M. J., & Hill, J. R. (2007). Epistemology and the design of learning environments. In R. Reiser & J. Dempsey (Eds.), *Trends and issues in instructional design and technology* (2nd Ed.) (pp.53-61). Upper Saddle River, NJ: Merrill/Prentice-Hall
- Hawes, T. (2015). Thematic progression in the writing of students and professionals. *Ampersand*, 3, 93-100. Retrieved from <http://dx.doi.org/10.1016/j.amper.2015.06.002>
- Hawes, T., & Thomas, S. (1997). Tense choices in citations. *Research in the Teaching of English*, 31(3), 393-414. Retrieved from <http://www.jstor.org/stable/40171561>
- Hewings, M., & Hewings, A. (2002). 'It is interesting to note that...': a comparative study of anticipatory 'it' in student and published writing. *English for Specific Purposes*, 21(4), 367-383.
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. London: Longman.
- Hyland, K. (2002). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, 34, 1091-1112. doi:10.1016/S0378-2166(02)00035-8
- Hyland, K. (2004a). *Genre and second language writing*. Ann Arbor: University of Michigan Press.
- Hyland, K. (2004b). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13, 133-151. doi:10.1016/j.jslw.2004.02.001
- Hyland, K. (2008). Persuasion, interaction, and the construction of knowledge: Representing self and others in research writing. *International Journal of English Studies*, 8(2), 1-23.
- Injai, R. (2013). An analysis of paraphrasing strategies use in expository writing by 3rd year students at Burapha University. *Proceedings of 1st International Conference on Language, Literature, and Cultural Studies*, 211-220. Retrieved from <http://www.buu.ac.th/images/news/icllcs2013.pdf>
- Ivanič, R., & Camps, D. (2001). I am how I sound: Voice as self-representation in L2 writing. *Journal of Second Language Writing*, 10(1-2), 3-33. doi:10.1016/S1060-3743(01)00034-0
- Johns, A. M. (2003). Genre and ESL/EFL composition instruction. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp.195-217). Cambridge, UK: Cambridge University Press.
- Johns, A. M. (2008). Genre awareness for the novice academic student: An ongoing quest. *Language Teaching*, 41(2), 237-252.
- Jonassen, D. (1999). Designing constructivist learning environments. In C. M. Reigeluth (Ed.), *Instructional theories and models* (2nd Ed.) (pp.215-239). Mahwah, NJ: Lawrence Erlbaum.
- Kaewcha, N. (2013). Problems with coherence in writing in the Thai context. *MANUTSAT PARITAT: Journal of Humanities*, 31(2), 29-40.
- Kamii, C. (1984). Autonomy: The aim of education envisioned by Piaget. *Phi Delta Kappan*, 65(6), 410-415. Retrieved from <http://www.jstor.org/stable/20387059>
- Knapp, P., & Watkins, M. (2005). *Genre, text, grammar: Technologies for teaching and assessing writing*. Sydney: UNSW Press.
- Kongpetch, S., Anupan, J., Charoenbutra, P., & Findlater, M. (2014). *Summary of essay writing review*. Western Languages and Literature, Ubon Ratchathani University, Thailand.

- Lantolf, J. O., & Thorne, S. L. (2007). *Sociocultural theory and the genesis of second language development*. Oxford, UK: Oxford University Press.
- Lerdpreedakorn, N. (2009). Genre-based approach to teaching academic writing. In A. M. Stoke (Ed.), *JALT2008 Conference Proceedings*. Tokyo: JALT. Retrieved from <http://jalt-publications.org/recentpdf/proceedings/2008/E014.pdf>
- Lian, A-P. (2011). Reflections on language-learning in the 21st century: The rhizome at work. *Rangsit Journal of Arts and Sciences*, 1, 5-17.
- Liardét, C. L. (2016). Nominalization and grammatical metaphor: Elaborating the theory. *English for Specific Purposes*, 44, 16–29. Retrieved from <http://dx.doi.org/10.1016/j.esp.2016.04.004>
- Lim, G., & Zhang, L. (2004). An integrated design framework for technology-based blended learning environments. *International Conference on Computers in Education 2004*, 653-662. Retrieved from [http://plum.yuntech.edu.tw/icce2004/Theme3/079\\_Lim.pdf](http://plum.yuntech.edu.tw/icce2004/Theme3/079_Lim.pdf)
- Liu, C. H., & Matthews, R. (2005). Vygotsky's philosophy: Constructivism and its criticisms examined. *International Education Journal*, 6(3), 386-399. Retrieved from <http://iej.cjb.net>
- Martin, J. R. (1989). *Factual writing: Exploring and challenging social reality*. Geelong: Deakin University Press.
- Martin, J. R. (1993). Genre and literacy--Modeling context in educational linguistics. *Annual Review of Applied Linguistics*, 13, 141-172.
- Martin, J. R., & Rothery, J. (1993). Grammar: Making meaning in writing. In B. Cope & M. Kalantzis (Eds.), *The powers of literacy: A genre approach to teaching writing* (pp.137-153). London: The Falmer Press.
- Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. London: Palgrave.
- McDonough, K., Crawford, W., & De Vleeschauwer, J. (2014). Summary writing in a Thai EFL university context. *Journal of Second Language Writing*, 24, 20-32.
- Meksophawannakul, M. (2009). *The development of an online case-based collaborative learning module for Business English Communication Course* (Unpublished doctoral dissertation). Graduate School, Chulalongkorn University, Thailand.
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2011). *Designing effective instruction* (6th Ed.). Hoboken, NJ: John Wiley & Sons.
- Njenga, J. K. (2005). *Instructional design process in a web-based learning management system: Design, implementation and evaluation issues* (Unpublished doctoral dissertation). University of the Western Cape, Republic of South Africa. Retrieved from [http://etd.uwc.ac.za/usrfiles/modules/etd/docs/etd\\_init\\_6813\\_1173965430.pdf](http://etd.uwc.ac.za/usrfiles/modules/etd/docs/etd_init_6813_1173965430.pdf)
- Noytim, U. (2010). Weblogs enhancing EFL students' English language learning. *Procedia Social and Behavioral Sciences*, 2, 1127–1132. doi:10.1016/j.sbspro.2010.03.159
- Phadvibulya, T., & Luksaneeyanawin, S. (2008). HybridNTELL model: An alternative formula to foster 21st century autonomous EFL learners. *MANUSYA: Journal of Humanities*, 11(2), 56-88.
- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5-12.
- Pritchard, A., & Woollard, J. (2010). *Psychology for the classroom: Constructivism and social learning*. New York: Routledge.



- Richey, R. C., Klein, J. D., & Tracey, M. W. (2011). *The instructional design knowledge base: Theory, research and practice*. New York: Routledge.
- Sahatsathatsana, S. (2010). *The development of an English conversation syllabus based on the theory of multiple intelligences* (Unpublished doctoral dissertation). School of Foreign Languages, Suranaree University of Technology, Thailand.
- Samson, P. J. (2010). Deliberate engagement of laptops in large lecture classes to improve attentiveness and engagement. *Computers in Education*, 20(2), 22-37. Retrieved from [http://samson.engin.umich.edu/samson/Site/papers/Deliberate\\_Engagement.pdf](http://samson.engin.umich.edu/samson/Site/papers/Deliberate_Engagement.pdf)
- Santrock, J. W. (2001). *Educational psychology*. Boston, MA: McGraw-Hill.
- Scott, A. D. (2012). *WordPress for education*. Birmingham - Mumbai: Packt Publishing.
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd Ed.). Hoboken, NJ: Wiley.
- Suppasetsee, S. (2005). *The development of an internet-based instructional system for teaching remedial English to first-year university students* (Unpublished doctoral dissertation). School of Foreign Languages, Suranaree University of Technology, Thailand.
- Surakhai, L., & Pinyonathagarn, D. (2014). The development of a weblog-based English writing instructional model for university students. *Silpakorn Educational Research Journal*, 6(1), 220-232.
- Suthiwartnarueput, T., & Wasanasomsithi, P. (2012). Effects of using Facebook as a medium for discussion of English grammar and writing of low-intermediate EFL students. *Electronic Journal of Foreign Language Teaching*, 9(2), 194-214.
- Swales, J. M. (2001). *Genre analysis: English in academic and research settings* (8th Ed.). Cambridge: Cambridge University Press.
- Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: Essential tasks and skills* (3rd Ed.) Ann Arbor: University of Michigan Press.
- Tang, R., & John, S. (1999). The 'I' in identity: Exploring writer identity in student academic writing through the first person pronoun. *English for Specific Purposes*, 18, S23-S39.
- Tian, X., & Suppasetsee, S. (2013). Development of an instructional model for online task-based interactive listening for EFL learners. *English Language Teaching*, 6(3), 30-41. doi:10.5539/elt.v6n3p30
- Warschauer, M. (2010). Invited commentary: New tools for teaching writing. *Language Learning & Technology*, 14(1), 3-8. Retrieved from <http://llt.msu.edu/vol14num1/commentary.pdf>
- Watcharapunyawong, S., & Usaha, S. (2013). Thai EFL students' writing errors in different text types: The interference of the first language. *English Language Teaching*, 6(1), 67-78.
- Willis, J. (2009). Basic principles of a recursive, reflective instructional design model: R2D2. In J. Willis (Ed.), *Constructivist instructional design (C-ID): foundations, models, and examples* (pp.283-312). Charlotte, NC: Information Age.
- Yasuda, S. (2014). Exploring changes in FL writers' meaning-making choices in summary writing: A systemic functional approach. *Journal of Second Language Writing*, 27, 105-121. Retrieved from <http://dx.doi.org/10.1016/j.jslw.2014.09.008>

## Appendix A

### Evaluation Form

This evaluation form is developed for ISD experts to evaluate the appropriateness of the WAW instructional model.

**Instruction:** Please read each statement and then put a check mark ( / ) in the box which best describes your opinion.

5 = Strongly agree

4 = Agree

3 = Neutral

2 = Disagree

1 = Strongly disagree

Statement	Level of Agreement				
	5	4	3	2	1
1. The development process of the WAW instructional model is non-linear and recursive.					
2. The WAW instructional model has 6 elements (phases). Please give comments on each individual element. 2.1 Analyze 2.2 Design 2.3 Develop 2.4 Assess 2.5 Implement 2.6 Evaluate					
3. The phases and steps of the WAW instructional model have clear relationship.					
4. The WAW instructional model corresponds to the purpose of the present study.					
5. The WAW instructional model can serve as a guiding model for developing other writing lessons.					

Other comments and suggestions:

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Thank you for your assistance.



## Appendix B

### E1/E2 Formula

The formula for  $E_1$  is as follows:

$$E_1 = \left( \frac{\sum x}{N} \right) \times \frac{100}{A}$$

Here,  $E_1$  = The efficiency index for the process in terms of the percentage score (%) from the exercises, assignments, and quizzes.

$\sum x$  = Summation of students' scores obtained from exercises.

$A$  = The full score of exercises

$N$  = The number of students in the sample

The formula for  $E_2$  is as follows:

$$E_2 = \left( \frac{\sum f}{N} \right) \times \frac{100}{B}$$

Whereas,  $E_2$  = The efficiency index for the product in terms of the percentage score (%) from the post-lesson tests.

$\sum f$  = Summation of students' scores obtained from the post-lesson tests.

$B$  = The full score of the post-lesson tests.

$N$  = The number of students in the sample