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เป็นวารสารวิชาการด้านการเรียนการสอนและภาษาศาสตร์ภาษาอังกฤษ

ของสถาบันภาษา จุฬาลงกรณ์มหาวิทยาลัย

มีวัตถุประสงค์เพื่อ

1. เผยแพร่ความรู้ภาษาอังกฤษ ตลอดจนความก้าวหน้าทางวิชาการเกี่ยวกับการเรียนการสอนภาษาอังกฤษและภาษาศาสตร์ภาษาอังกฤษ
2. เผยแพร่ความเคลื่อนไหวภายในแวดวงการเรียนการสอนภาษาอังกฤษและภาษาศาสตร์ภาษาอังกฤษ ตลอดจนเป็นสื่อกลางในการแลกเปลี่ยนความรู้ และประสบการณ์ในการเรียนการสอนภาษาอังกฤษระหว่างครู อาจารย์ นักวิจัยภาษาอังกฤษในสถาบันต่างๆ
3. ส่งเสริมให้อาจารย์และผู้ทรงคุณวุฒิเสนอผลงานทางวิชาการ และมีส่วนร่วมในด้านการเผยแพร่วิชาการ และให้บริการแก่สังคม กำหนดออกปีละ 1 ฉบับ

ส่งบทความเพื่อพิจารณาลงตีพิมพ์ หรือ ติดตามอ่านบทความที่เคยลงตีพิมพ์ในวารสารภาษาปริทัศน์ได้ที่

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- บทความทุกเรื่องที่ตีพิมพ์ในวารสารผ่านการพิจารณาจากคณะกรรมการผู้ทรงคุณวุฒิ
- ทศนะและข้อคิดเห็นใด ๆ ในวารสารภาษาปริทัศน์เป็นทัศนะของผู้เขียน กองบรรณาธิการไม่จำเป็นต้องเห็นด้วยกับทัศนะเหล่านั้นและไม่ถือเป็นความรับผิดชอบของกองบรรณาธิการ
- ลิขสิทธิ์บทความของผู้เขียนและสถาบันภาษา จุฬาลงกรณ์มหาวิทยาลัยได้รับการสงวนสิทธิ์ตามกฎหมาย การตีพิมพ์ซ้ำต้องได้รับอนุญาตโดยตรงจากผู้เขียนและสถาบันภาษา จุฬาลงกรณ์มหาวิทยาลัยเป็นลายลักษณ์อักษร

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บรรณาธิการแถลง

เรียนท่านผู้อ่านที่เคารพ

วารสารภาษาปริทัศน์ฉบับที่ 32 ปี 2560 ประกอบไปด้วยบทความวิจัยและวิชาการด้านการเรียนการสอนภาษาอังกฤษ การวัดและประเมินผล และภาษาศาสตร์ภาษาอังกฤษที่น่าสนใจรวม 7 บทความ

ในส่วนของบทความด้านการเรียนการสอนภาษาอังกฤษ มีทั้งบทความวิจัยที่ศึกษาทักษะการพูด การอ่าน แบบ Extensive Reading กับผู้เรียนภาษาอังกฤษระดับปริญญาตรี และการใช้เครื่องมือออนไลน์ เพื่อส่งเสริมการอ่านภาษาอังกฤษของผู้เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ ส่วนด้านทักษะการเรียนรู้ คำศัพท์เป็นการศึกษากลยุทธ์การเรียนรู้คำศัพท์ของนักศึกษาอาชีวศึกษา

ด้านทักษะการเขียนนั้นประกอบไปด้วยบทความวิชาการที่ศึกษาอัตภาคและการเรียงตัวของอัตภาคในบทความภาษาอังกฤษของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลอง

ท่านผู้อ่านที่สนใจงานด้านการประเมินผลการเรียนการสอนภาษาอังกฤษ สามารถอ่านบทความวิชาการเกี่ยวกับการนำ Integration of Dynamic Assessment มาใช้ในห้องเรียนภาษาอังกฤษเป็นภาษาที่สอง นอกจากนี้ยังมีบทความเกี่ยวกับการศึกษาความต้องการของผู้เรียนภาษาอังกฤษในหลักสูตรภาษาอังกฤษแบบเข้ม และบทสัมภาษณ์พิเศษเกี่ยวกับ Action Research และบทวิจารณ์หนังสือเรื่อง *Introducing Needs Analysis and English for Specific Purposes*

กองบรรณาธิการวารสารภาษาปริทัศน์ หวังเป็นอย่างยิ่งว่า บทความที่ได้รวบรวมไว้ในฉบับนี้จะเป็นประโยชน์ต่อนิสิต นักศึกษา ครู อาจารย์ และนักวิจัยด้านการเรียนการสอนภาษาอังกฤษและภาษาศาสตร์ภาษาอังกฤษ และศาสตร์อื่นๆที่เกี่ยวข้อง และกองบรรณาธิการวารสารมีความตั้งใจที่จะทำให้วารสารภาษาปริทัศน์มีคุณภาพดียิ่งขึ้นในฉบับต่อไป

ในนามของบรรณาธิการขอขอบพระคุณคณาจารย์ทุกท่านในกองบรรณาธิการ ผู้ทรงคุณวุฒิ ผู้เขียน และทีมงานทุกท่าน มา ณ ที่นี้

จรรยา เกณี
บรรณาธิการ

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การศึกษาการเรียงลำดับของอรรถภาคและการใช้ภาษาในบทคัดย่อ ของบทความปริทัศน์ในสาขาวิชาสัตวทดลอง

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บทคัดย่อ

งานวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการเรียงลำดับของอรรถภาค (move sequence) ในบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตวทดลองและการใช้ภาษาของอรรถภาคที่พบมากที่สุด ในหัวข้อกาล (tenses) คำกริยา (verb) วาจก (voice) และ ประเภทของประโยค (types of sentence) โดยศึกษาจากบทคัดย่อของบทความปริทัศน์จำนวน 50 ฉบับ ที่ได้มาโดยการสุ่มตัวอย่างแบบแบ่งชั้นและแบบอย่างง่าย จากวารสารสถาบันการวิจัยด้านสัตวทดลอง (Institute for Laboratory Animal Research Journal: ILAR) ระหว่างปี ค.ศ. 2012-2014 ทำการวิเคราะห์ตามหลักเกณฑ์ของ Taddio และคณะ (1994) ซึ่งประกอบไปด้วย 8 อรรถภาค ได้แก่ วัตถุประสงค์ การออกแบบการวิจัย บริบท ตัวอย่าง การทดลอง การวัดผล ผลการวิจัย และข้อสรุปผลการวิจัย ผลการวิจัยพบว่า : (1) การเรียงลำดับของอรรถภาคในบทคัดย่อของบทความปริทัศน์สาขาวิชาสัตวทดลอง มีทั้งหมด 10 รูปแบบ โดยบทคัดย่อส่วนใหญ่ มีการเรียงลำดับของอรรถภาคหลัก 2 อรรถภาค ประกอบด้วย อรรถภาค ข้อมูลภูมิหลัง (background) และอรรถภาควัตถุประสงค์ (purpose) ซึ่งการเรียงลำดับแบบนี้พบมากที่สุด (ร้อยละ 54) (2) อรรถภาคข้อมูลภูมิหลัง แตกต่างจากผลการวิจัยของ Taddio และคณะ (1994) ที่ไม่พบอรรถภาคข้อมูลภูมิหลัง และ (3) การใช้ภาษาของอรรถภาคข้อมูลภูมิหลังที่พบมากที่สุด ได้แก่ ปัจจุบันกาล (present tense) (ร้อยละ 97.22) กริยาแท้ (finite verb) (ร้อยละ 92.59) ในรูปของการตรวจวาก (active voice) (ร้อยละ 79.63) และประเภทเอกรรณประโยค (simple sentence) (ร้อยละ 63.89)

คำสำคัญ : อรรถภาควิเคราะห์ บทความปริทัศน์ บทคัดย่อ สัตวทดลอง

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A Study of Move Sequencing and Language Use of Review Article Abstracts in the Laboratory Animal Field

Abstract

The objectives of this study were: (1) to explore move sequencing in abstracts of laboratory animal review articles and (2) to investigate frequency of use in accomplishing the moves in terms of tense, verb choice, voice, and types of sentence. The laboratory animal corpus consisted of 50 review abstracts published between 2012 and 2014 by the Institute for Laboratory Animal Research Journal (ILAR), selected by stratified random sampling and simple random sampling. The framework of Taddio et al. (1994), which consists of eight moves—purpose, research design, setting, subjects, intervention, measurement, results, and conclusion—was used to analyze the data. The results reveal that: (1) there were ten patterns of move sequencing in the abstracts of laboratory animal review articles, and most abstracts mostly included the moves of background and purpose (54%). (2) The background move was not included in Taddio et al. (1994)'s study. (3) The most frequently used language forms were: the present tense (97.22%), finite verbs (92.59%), the active voice (79.63%), and simple sentences (63.89%).

Keywords: move analysis, review article, abstract, laboratory animal

บทนำ

บทความทางวิชาการทางด้านวิทยาศาสตร์ที่เขียนเป็นภาษาอังกฤษมีความสำคัญในการเผยแพร่ แลกเปลี่ยน และติดตามความรู้ระหว่างนักวิทยาศาสตร์ทั่วโลก (Paltridge & Starfield, 2014) นอกจากนี้ บทความวิชาการมีหลายประเภท เช่น บทความวิจัย และ บทความปริทัศน์ ซึ่งบทความทั้งสองประเภทมีความแตกต่างกัน กล่าวคือ บทความวิจัย เป็นรูปแบบของความเรียงชนิดหนึ่งที่นำเอาองค์ความรู้ที่ได้จากการวิจัย มาเขียนในประเด็นที่ผู้เขียนต้องการนำเสนอ โดยผู้เขียนบทความวิจัยพบประเด็นที่น่าสนใจจากงานวิจัย แล้วนำประเด็นที่สนใจนั้นมาเขียนเป็นบทความวิจัยให้คนอ่าน เพื่อเผยแพร่องค์ความรู้ให้แก่แพร่หลายออกไป (Lester & Lester, 2007) ส่วนบทความปริทัศน์ คือ บทความที่มีการบรรยายความรู้ ในลักษณะของการเขียนที่ ลึก กว้าง ทันสมัย บ่งชี้ถึงความสามารถของผู้เขียนปริทัศน์ในการทบทวนข้อเขียนทางวิชาการที่ตีพิมพ์มาแล้ว นำมาเรียบเรียงให้เป็นข้อเขียนที่มีความลึกซึ้งทางวิชาการ (Rethlefsen, 2014) โดยทั่วไปบทความวิจัยประกอบไปด้วย 4 ภาคหลัก ได้แก่ ภาคบทนำ (introduction) ภาควิธีวิจัย (methods) ภาคผลวิจัย (results) และภาคอภิปรายผลวิจัย (discussion) หรือ IMRD แต่นักวิชาการบางท่านกล่าวว่าบทคัดย่อ (abstract) ถือเป็นภาคส่วนหนึ่งเช่นเดียวกับภาคส่วนอื่น ๆ ของบทความวิชาการ (Swales & Feak, 2009; McMillan, 2011) บทคัดย่อรวมเนื้อหาสาระที่เป็นแก่นสารของงานวิจัยไว้โดยย่อโดยทั่วไปมีจำนวน 100-250 คำ (Cross & Oppenheim, 2006; Swales & Feak, 2009)

บทคัดย่อถือเป็นส่วนหนึ่งของบทความวิชาการที่ผู้เขียนต้องให้ความสำคัญเนื่องจากผู้อ่านจะอ่านบทคัดย่อก่อนที่จะตัดสินใจว่า จะอ่านบทความทั้งหมดต่อหรือไม่ (Lester & Lester, 2007) สำหรับวงการวิทยาศาสตร์ นักวิชาการและนักวิจัยได้ใช้ประโยชน์จากบทคัดย่อเพื่อตามติดความก้าวหน้าในการค้นพบทางวิทยาศาสตร์ในปัจจุบัน รวมถึงการแบ่งปันและการเผยแพร่ผลงานใหม่ๆ (Taddio et al., 1994; Hartley, 2002) นอกจากนี้ การประชุมวิชาการทั้งระดับชาติและระดับนานาชาติใช้บทคัดย่อเป็นชิ้นงานเบื้องต้นในการพิจารณาจากผู้ทรงคุณวุฒิว่าจะให้การตอบรับหรือปฏิเสธในการเข้าร่วมนำเสนออีกด้วย (Huckin, 2001; Lorés, 2004) ดังนั้น ผู้เขียนงานวิจัยและผู้เขียนที่ไม่ได้ใช้ภาษาอังกฤษเป็นภาษาแม่หรือขาดประสบการณ์ด้านการเขียนภาษาอังกฤษต้องศึกษาหลักการใช้ภาษาอังกฤษ ลักษณะหรือรูปแบบ และการเรียงลำดับข้อมูลในการเขียนของบทคัดย่อแต่ละประเภทก่อนลงมือเขียน (ทรงศรี สรณสถาพร, 2556)

หลักการใช้ภาษาที่สำคัญในการเขียนบทคัดย่อ ทรงศรี สรณสถาพร (2556) กล่าวว่า บทคัดย่อนิยมเขียนอยู่ในรูปอดีตกาล (past tense) ในส่วนของวัตถุประสงค์ของการวิจัย ระเบียบวิธีการวิจัย และผลของการวิจัย นอกจากนี้ผลของการวิจัยของบทคัดย่อสามารถเขียนในรูปของปัจจุบันกาล (present tense) และเป็นที่ยอมรับเนื่องจากผลของการวิจัยเป็นเหตุการณ์หรือเรื่องราวที่เป็นความจริงในทางวิทยาศาสตร์ อาทิ การสร้างสมการเชิงพหุคูณ นอกจากนี้ จากการศึกษาของ

Swales และ Feak (1994) พบว่า ปัจจุบันกาล (present tense) พบมากในส่วนของบทนำและการอภิปรายผล ในขณะที่อดีตกาล (past tense) พบมากในส่วนของการระเบียบวิธีการวิจัยและผลของการวิจัย อีกทั้ง ประโยคกรรมวาจก (passive voice) ใช้ในส่วนของการระเบียบวิธีการวิจัยแต่พบการใช้ประโยคกรรมวาจก (passive voice) น้อยในส่วนของบทนำ แต่ในทางภาษาศาสตร์ประโยคกรรมวาจก (active voice) ถือเป็นประโยคพื้นฐานของการเขียนภาษาอังกฤษ เนื่องจากเน้นตัวประธานเป็นผู้กระทำ (Tallerman, 2005) ในส่วนของคำกริยาแบ่งออกเป็น 2 ประเภทหลัก คือ คำกริยาแท้ (finite verb) และคำกริยาช่วย (auxiliary verb) คำกริยาแท้ คือคำที่แสดงอาการ สภาพ หรือการกระทำของคำนาม และคำสรรพนามของประโยค โดยมีหน้าที่เป็นกริยาสำคัญของประโยค และขยายคำนามให้เข้าใจเด่นชัดขึ้น ส่วนคำกริยาช่วย (modal verb) เป็นตัวบ่งบอกของความเป็นไปได้ (possibility) ของประธานในประโยค (Tallerman, 2005)

นอกจากนี้ การเขียนประโยคในบทความภาษาอังกฤษสามารถเขียนได้ 4 รูปแบบ ได้แก่ เอกรรณประโยค (simple sentence) อเนกรรณประโยค (compound sentence) สังกรรณประโยค (complex sentence) และ อเนกรรณสังกรรณประโยค (compound-complex sentence) (ทรงศรีสรณสถาพร, 2556; Celce-Murcia & Larsen-Freeman, 1983; Swales & Feak, 2012) โดยประโยคแต่ละแบบมีลักษณะแตกต่างกัน กล่าวคือ

1. เอกรรณประโยค (simple sentence) คือประโยคที่ประกอบด้วยประโยคหลัก 1 ประโยค (one independent clause) ดูตัวอย่างประโยค 1

¹ “*The mouse (*Mus musculus*) is currently the most popular laboratory animal in biomedical research.*”

(Gargiulo et al., 2012)

2. อเนกรรณประโยค (compound sentence) คือประโยคที่ประกอบด้วยประโยคหลัก 2 ประโยค (two independent clauses) ซึ่งมีน้ำหนักเท่ากันและเชื่อมประโยคด้วยคำสันธานประสาน (coordinating conjunction) ได้แก่ for, and, nor, but, or, yet, และ so (FANBOYS) โดยมีเครื่องหมายจุลภาค หรือ comma (,) วางท้ายประโยคแรก (ดูตัวอย่างประโยค 2) หรือ เชื่อมประโยคหลัก 2 ประโยคด้วยเครื่องหมายอัฒภาค หรือ semicolon (;) (ดูตัวอย่างประโยค 3)

² “*The commonsense ethical constraints on laboratory animal research known as the three Rs are widely accepted, but no constraints tailored to research on animals in the wild are available.*”

(Curzer, Wallace, Perry, Muhlberger & Perry, 2013)

³“*Allocentric navigation involves the hippocampus, entorhinal cortex, and surrounding structures; in humans this system encodes allocentric, semantic, and episodic memory.*”

(Vorhees & Williams, 2014)

3. สังกรประโยค (complex sentence) คือประโยคที่ประกอบด้วยประโยคหลัก 1 ประโยค (one independent clause) ประโยครอง 1 ประโยค (one dependent clause) และเชื่อมประโยคด้วยคำอนุสันธาน (subordinating conjunction) หรือคำสัมพันธสรรพนาม (relative pronoun) ดังตารางที่ 1

ตารางที่ 1 คำสันธานและคำสัมพันธสรรพนาม

คำอนุสันธาน (Subordinating Conjunction)				คำสัมพันธสรรพนาม (Relative Pronoun)
บอกเวลา	ให้เหตุผล	บอกสถานที่	แสดงความขัดแย้ง	
after, as, as soon as, before, since, until, when, whenever, while	because, since, as	where, wherever	although, even though, though, while, whereas	who, whom, which, that, when,

(Oshima, Hogue, & Oshima, 2007)

ดูตัวอย่างประโยค 4 และ 5

⁴“*Clinical studies are complicated because both HIV and antiretroviral treatment cause damage to the peripheral nervous system.*”

(Mangus et al., 2014)

⁵“*Major histocompatibility complex (MHC) gene products control the repertoire of T cell responses that an individual may create against pathogens and foreign tissues.*”

(Wiseman et al., 2013)

4. อเนกตรรกสังกรประโยค (compound-complex sentence) คือประโยคที่ประกอบไปด้วยประโยคหลัก 2 ประโยค (two independent clauses) ประโยครอง 1 ประโยค (one dependent clause) ขึ้นไป ดูตัวอย่างประโยค 6

⁶“Mice imaging procedures are increasingly used in preclinical research because they allow in vivo monitoring, and they are readily available for longitudinal and noninvasive studies as well as investigations into the evolution of diseases and the effects of new therapies.”

(Gargiulo et al., 2012)

เมื่อผู้เขียนจะเขียนบทความวิจัยภาษาอังกฤษและได้ศึกษาหลักการใช้ภาษาอังกฤษแล้ว ผู้เขียนควรศึกษาลักษณะหรือรูปแบบ และ การเรียงลำดับข้อมูลในการเขียนของบทคัดย่อแต่ละประเภทก่อนลงมือเขียนด้วย นักภาษาศาสตร์ได้ทำการศึกษาลักษณะหรือรูปแบบและการเรียงลำดับข้อมูลในการเขียนของบทคัดย่อเพื่อช่วยให้ผู้เขียนงานวิจัยได้เรียนรู้และเขียนบทคัดย่อภาษาอังกฤษได้ง่ายขึ้น ซึ่งในทางภาษาศาสตร์เรียกการศึกษานี้ว่า อรรถภาควิเคราะห์ (move analysis)

การศึกษาอรรถภาควิเคราะห์ (move analysis) ได้แนวคิดมาจาก การวิเคราะห์สัมพันธ์สาร (discourse analysis) โดย John Swales (1990) เป็นผู้บุกเบิก และได้ให้คำจำกัดความของ “อรรถภาค” (move) ว่าเป็นส่วนหนึ่งของถ้อยคำหรือตัวบทที่แสดงจุดมุ่งหมายในการสื่อสาร (Swales, 1990, 2004) ต่อจากนั้น ได้มีนักวิจัยทำการศึกษาเกี่ยวกับ อรรถภาควิเคราะห์ (move analysis) ในภาคต่าง ๆ ของบทความวิจัย อาทิ ภาคบทนำ (Anthony, 1999; Lewin, Fine, & Young, 2001) ภาควิธีการวิจัย (Bloor, 1999) ภาคผลการวิจัย (Brett, 1994; Williams, 1999) และ ภาคอภิปรายผลวิจัย (Hopkins & Dudley-Evans, 1988)

นอกจากนี้ นักวิจัยได้ศึกษาอรรถภาควิเคราะห์ในภาคบทคัดย่อของบทความวิจัยในสาขาต่างๆ เช่น Bhatia (1993) ศึกษาบทคัดย่อของบทความวิจัยในสาขาทั่วไป ในขณะที่ Taddio และคณะ (1994) ศึกษาบทคัดย่อของบทความวิจัยในสาขาการแพทย์ และ Santos (1996) ศึกษาบทคัดย่อของบทความวิจัยในสาขาภาษาศาสตร์ ผลการศึกษาอรรถภาคของบทคัดย่อและการเรียงลำดับของอรรถภาคมีความแตกต่างกันออกไป ดังในตารางที่ 2

ตารางที่ 2 รูปแบบอัตถภาคของบทคัดย่อ Bhatia (1993) Taddio และคณะ (1994) และ Santos (1996)

อัตถภาค	Bhatia (1993)	Taddio และคณะ (1994)	Santos (1996)
1	การแนะนำวัตถุประสงค์ (introducing purpose)	วัตถุประสงค์ (purpose)	การกำหนดขอบเขตงานวิจัย (situating research)
2	การอธิบายวิธีการวิจัย (describing methodology)	การออกแบบการวิจัย (research design)	การนำเสนองานวิจัย (presenting research)
3	การสรุปผลวิจัย (summarizing results)	บริบท (settings)	การอธิบายวิธีการวิจัย (describing methodology)
4	การนำเสนอข้อสรุป (presenting conclusions)	ตัวอย่าง (subject)	การสรุปผลวิจัย (summarizing results)
5		การทดลอง (intervention)	การอภิปรายผลการวิจัย (discussing research)
6		การวัดผล (measurement)	
7		ผลวิจัย (results)	
8		ข้อสรุป (conclusion)	

จะเห็นว่ารูปแบบอัตถภาคบทคัดย่อแต่ละประเภทมีความแตกต่างกัน งานวิจัยครั้งนี้เลือกใช้รูปแบบอัตถภาคของ Taddio และคณะเป็นต้นแบบในการวิเคราะห์ข้อมูล เนื่องจากเป็นการศึกษาบทคัดย่อด้านการแพทย์ ซึ่งเป็นสาขาวิทยาศาสตร์ และมีรายละเอียดของอัตถภาคมากกว่า Bhatia (1993) และ Santos (1996)

ต่อมา มีการศึกษาอัตถภาควิเคราะห์ภาคบทคัดย่อในสาขาต่างๆเพิ่มขึ้น อาทิ สาขาชีววิทยา การอนุรักษ์และพฤติกรรมสัตว์ป่า (Samraj, 2005) สาขาวิทยาศาสตร์เซลล์เดียว (Cross & Oppenheim, 2006) สาขาภาษาศาสตร์และเทคโนโลยีการศึกษา (Pho, 2008) สาขาวิทยาศาสตร์ (จิราภรณ์ อ้วน

พลี และทรงศรี สรรณสถาพร, 2551) สาขาสังคมศาสตร์ (Kafes, 2012) และ สาขาวิศวกรรมโยธา (Kanoksilapatham, 2013) สรุปข้อมูลการศึกษาดังกล่าวในตารางที่ 3

ตารางที่ 3 การศึกษาบทคัดย่อของบทความวิจัยในสาขาวิชาต่างๆ

ผู้เขียน (ปี ค.ศ.)	จำนวน บทคัดย่อ	สาขาวิชา	ทฤษฎี	ผลการวิจัย
Samraj (2005)	12	Conservation Biology and Wildlife Behavior	Bhatia (1993)	Purpose, Methods, Results, & Conclusion
Cross and Oppenhiem (2006)	12	Protozoology (Science)	General agreement of abstract guideline	Move 1: situates the research within the scientific community Move 2: introduces the research by either describing the main features of the research or presenting its purpose Move 3: describes the methodology; Move 4: states the results Move 5: draws conclusions or suggests practical applications
Pho (2008)	30	Linguistics and Education Technology	Santos (1996)	Linguistics M1 <i>Situating the research</i> , M2 <i>Presenting the research</i> , M3 <i>Describing the methodology</i> , M4 <i>Summarizing the results</i> , and M5 <i>Discussion the research</i> ,

Education Technology M2 ‘Presenting the research’, M3 ‘Describing the methodology’, M4 ‘Summarizing the results’,				
จิราภรณ์ อ้วนพลี และทรงศรี สรณสถาพร (2551)	100	Science	Santos (1996)	Background information, Purpose, Method, Results, & Conclusion
Kafes (2012)	138	Social Science	Swales approach (1990, 2004)	Introduction, Purpose, Methods, Results, & Conclusion
Kanoksilapatham (2013)	60	Civil Engineering	Swales approach (1990, 2004)	Background, Purposes, Methodology, Results, & Discussion

จากการวิเคราะห์การศึกษาค้นคว้าของบทความวิจัยในสาขาวิชาต่างๆ ที่แสดงในตารางที่ 3 พบว่า บทความแต่ละประเภทมีองค์ประกอบของอรรถกถาส่วนมากเหมือนกัน คือ **Background, Purpose, Methodology, Results, Discussion** และ **Conclusion** แต่มีการเรียงลำดับต่างกัน ผู้วิจัยได้ทำการสืบค้นข้อมูลผ่านฐานข้อมูลมหาวิทยาลัยมหิดล (e-database) วันที่ 1 พฤษภาคม 2558 โดยการค้นหาผ่านคำสำคัญ (key words) 3 คำ คือ “move analysis” “review abstract” และ “laboratory animal” พบว่า ยังไม่มีงานวิจัยศึกษาอรรถกถาวิเคราะห์ด้านการเรียงลำดับอรรถกถาในบทความของบทความปริทัศน์ในสาขาวิชาสัตวทดลอง จึงทำให้ไม่ทราบว่าจะองค์ประกอบของการเรียงลำดับของอรรถกถาในบทความสาขาสัตวทดลองจะมีลักษณะอย่างไร และมีองค์ประกอบใดบ้าง อีกทั้ง ผู้วิจัยได้สัมภาษณ์ผู้อำนวยการศูนย์วิจัยสัตวทดลองแห่งชาติ มหาวิทยาลัยมหิดล ในวันที่ 20 มีนาคม 2558 ผลการสัมภาษณ์สรุปได้ว่า นักวิจัยทางด้านวิทยาศาสตร์สาขาสัตวทดลองยังขาดความรู้ และทักษะทางด้านภาษาอังกฤษโดยเฉพาะอย่างยิ่งการเขียนบทความวิชาการเป็นภาษาอังกฤษ อีกทั้ง ปัจจุบันไม่มีหลักสูตรการเรียนการสอนภาษาอังกฤษเฉพาะทางด้านสัตวทดลอง ทำให้ความรู้ทางด้านภาษาอังกฤษเฉพาะด้านสัตวทดลองเป็นสิ่งที่ต้องการของผู้เรียนและนักวิจัย ด้วยเหตุผลที่ได้กล่าวมาแล้ว

ผู้วิจัยจึงทำการศึกษาวิจัยงานครั้งนี้เพื่อเติมความรู้ให้แก่วงวิชาการสาขาภาษาศาสตร์ประยุกต์และสาขาวิชาสัตว์ทดลอง

วัตถุประสงค์

การศึกษาค้นคว้าครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการเรียงลำดับของอรรถาภิธานคำย่อของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลองและการใช้ภาษาในส่วนของอรรถาภิธานคำที่พบบ่อยที่สุดในหัวข้อกาล (tenses) คำกริยา (verb) วาก (voice) และ ประเภทของประโยค (types of sentence)

ระเบียบวิธีวิจัย

ระเบียบวิธีการวิจัยในการศึกษาค้นคว้าครั้งนี้ประกอบด้วย แหล่งของคลังข้อมูลภาษา การวิเคราะห์ข้อมูล และสถิติที่ใช้ในการวิเคราะห์ข้อมูล ซึ่งมีรายละเอียดดังต่อไปนี้

1. แหล่งของคลังข้อมูลภาษา

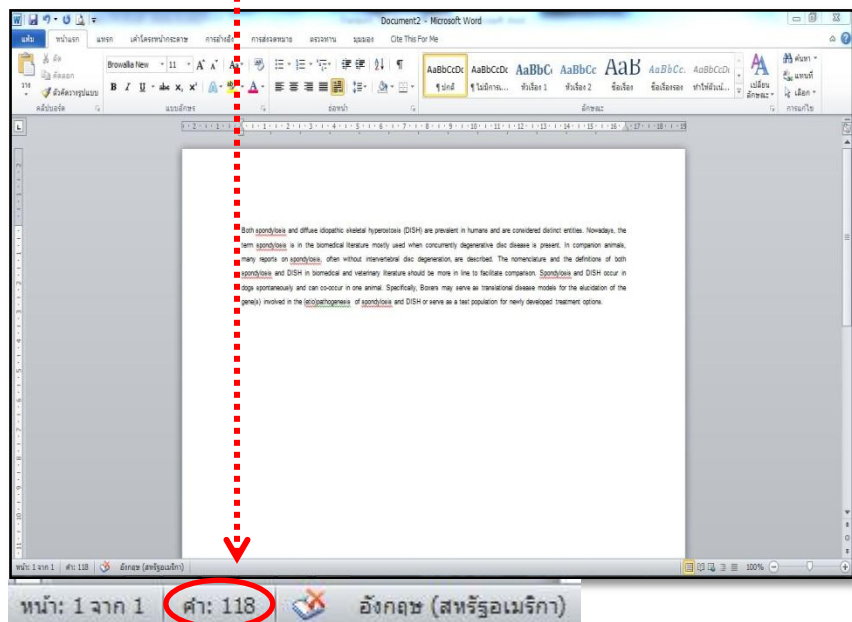
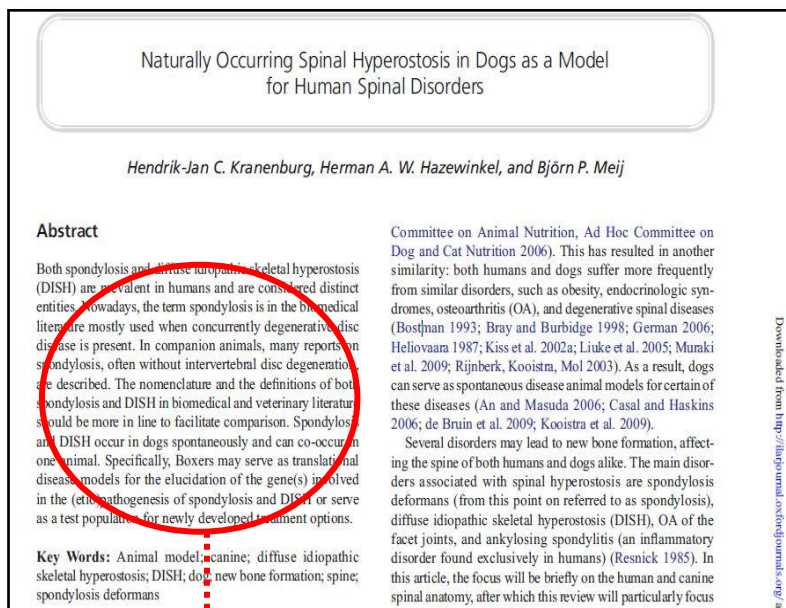
การศึกษาค้นคว้าครั้งนี้ใช้บทความปริทัศน์ด้านสัตว์ทดลองจากวารสาร Institute of Laboratory Animal Research Articles journal (ILAR) เป็นแหล่งของคลังข้อมูลภาษา วารสาร ILAR ได้รับการจัดระดับจาก Journal Citation Reports (JCR) ให้อยู่ในระดับควอไทล์ (Q1) (Reuters, 2014) ในสาขาวิชาสัตวแพทยศาสตร์ มีค่าดัชนีผลกระทบการอ้างอิง (impact factor) อยู่ที่ 2.393 ซึ่งถือได้ว่าวารสารเป็นที่ยอมรับและได้มาตรฐาน ทั้งนี้ บทความที่ตีพิมพ์ในวารสาร ILAR ต้องได้รับการตรวจสอบโดยผู้ทรงคุณวุฒิ (peer review) ก่อนการตีพิมพ์ ดังนั้น วารสารฉบับนี้จึงมีความน่าเชื่อถือเพียงพอ ผู้วิจัยได้รวบรวมบทความ 50 ฉบับจากบทความทั้งหมด 98 ฉบับระหว่างปี ค.ศ. 2012-2014 โดยการสุ่มตัวอย่างแบบแบ่งชั้น (Stratified random sampling) และแบบอย่างง่าย (Simple random sampling) คลังข้อมูลภาษาในการศึกษานี้มีจำนวนประโยคทั้งหมด 334 ประโยค และจำนวนคำทั้งหมด 8,460 คำ รายละเอียดคลังข้อมูล ดังตารางที่ 4

ตารางที่ 4 รายละเอียดคลังข้อมูล

ตีพิมพ์ ปี	จำนวนทั้งหมด		
	บทความ	ประโยค	คำ
ค.ศ.			
2012	20	109	2,830
2013	10	69	1,801
2014	20	156	3,829
รวม	50	334	8,460

2. เครื่องมือ

1) โปรแกรม Microsoft Word ใช้ในจัดเรียงประโยค โดยการคัดลอกเนื้อหาบทคัดย่อจากไฟล์ PDF ซึ่งดาวน์โหลดจาก <http://ilarjournal.oxfordjournals.org/> แล้ววางเนื้อหาบทคัดย่อลงบนไฟล์ Word เพื่อจัดเรียงประโยคให้สมบูรณ์ รวมทั้งใช้ในการนับจำนวนคำทั้งหมดของบทคัดยอรายละเอียดดังแผนภาพที่ 1



แผนภาพที่ 1 การใช้โปรแกรม Microsoft Word

2) โปรแกรม Microsoft Excel ใช้ในการรวบรวมข้อมูล โดยการสร้างตารางวิเคราะห์อัตราภาคแต่ละประโยคของบทความ และสร้างแบบบันทึกความถี่ของแต่ละอัตราภาคและแบบบันทึกความถี่รูปแบบของการเรียงลำดับอัตราภาค รวมทั้งใช้ในการนับจำนวนประโยค รายละเอียดดังแผนภาพที่ 2

No.	Sentence of abstract	Move
1	Animal experiments are necessary for a better understanding of diseases and for developing new therapeutic strategies.	MB background
2	The mouse (Mus musculus) is currently the most popular laboratory animal in biomedical research.	MB background
3	Mice imaging procedures are increasingly used in preclinical research because they allow in vivo monitoring and they are readily available for longitudinal and noninvasive studies as well as investigations into the evolution of diseases and the effects of new therapies.	MB background
4	New imaging techniques and sophisticated laboratory animal imaging tools are currently producing a large body of evidence about the possible interference of anesthesia with different imaging methods that have the potential to compromise the results of in vivo studies.	MB background
5	The purpose of this article is to review the existing literature on molecular imaging studies in mice, to describe the effects of different anesthetic protocols on their outcome, and to report our own experience with such studies.	M1S2

1. ตารางการวิเคราะห์ข้อมูล รวมทั้งการนับจำนวนประโยค

	A	B	C	D	E
1					
2		Frequency of Moves Found in Research Abstracts (ILAR)			
3		Move	Coding	Frequency of occurrences	Percentage
4		1. Background	(MB)	47	94
5		2. Purpose	(M1)	41	82
6		3. Conclusion	(M8)	27	54
7		4. Results	(M7)	9	18
8		5. Intervention	(M5)	8	16
9		6. Subjects	(M4)	5	10
10		7. Research design	(M2)	3	6
11		8. Measurement	(M6)	2	4
12		9. Setting	(M3)	2	4
13		Total		144	100
14					

2. แบบบันทึกความถี่ของอัตราภาค

	A	B	C
1			
2			
3		Sequence of moves (ILAR)	
4		Pattern of move sequence	frequency (n = 50)
5		Pattern 1	%
6		NM-M1	27
7		NM-M1-M8	12
8		NM-M1-M7-M8	3
9		NM-M1-8	2
10		NM-M1-NM	1
11		NM-M1-M5	1
12		NM-M1/2-M8	1
13		NM-M1-M8-M1	1
14		NM-M1-NM-M8	1
15		NM-M1-NM-M7-M8	1
16		NM-M1/2-M6-M7-M8	1
17		NM-M1-NM-M7-M8	1
18		NM-M1-M5-M7-M1-M8	1

3. แบบบันทึกความถี่รูปแบบการเรียงลำดับของอัตราภาค

แผนภาพที่ 2 การใช้โปรแกรม Microsoft Excel

3. การวิเคราะห์ข้อมูล

1) ผู้วิจัยทำการวิเคราะห์อรรถภาคโดยการศึกษาอรรถภาคที่ประกอบขึ้นแต่ละส่วนของบทคัดย่อ แล้วกำหนดสถานภาพของแต่ละอรรถภาคด้วยการวิเคราะห์ทีละประโยค โดยพิจารณาจากการเกิดของแต่ละอรรถภาคในคลังข้อมูลตามรูปแบบอรรถภาคบทคัดย่อของ Taddio และคณะ โดยทำการศึกษาต่อจากงานของ Bhoomanee และ Soranastaporn (2015) ที่ได้ศึกษาเฉพาะความถี่ของอรรถภาคของบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลองในการศึกษาอรรถภาควิเคราะห์ ผู้วิจัยทำการวิเคราะห์ระดับประโยคในบริบทของบทคัดย่อทีละประโยค เพื่อพิจารณาหน้าที่ทางภาษาของประโยคแต่ละประโยค และพิจารณาการเกี่ยวเนื่องเชื่อมโยงของประโยคด้วย จึงจำเป็นต้องใช้วิธีการวิเคราะห์ด้วยมือ (manual analysis) ซึ่งใช้วิธีการเดียวกันกับงานวิจัยในอดีต (Samraj, 2005; Cross & Oppenheim, 2006; Pho, 2008; จิราภรณ์ อ้วนพลี และทรงศรี สรณสถาพร, 2551; Kafes, 2012; Kanoksilapatham, 2013) แต่มีนักวิจัยทางภาษาศาสตร์ที่ทำการศึกษาลังข้อมูลขนาดใหญ่ด้วยโปรแกรมคอมพิวเตอร์ประเภท concordances เช่น AntConc (Anthony, 2014) เพื่อศึกษาความถี่ของคำ (frequency) หรือคำที่ปรากฏข้างเคียง (collocation) เท่านั้น ซึ่งโปรแกรมคอมพิวเตอร์ประเภทนี้ไม่สามารถใช้โปรแกรมวิเคราะห์หน้าที่ของภาษาได้ เมื่อได้ผลการวิเคราะห์ความถี่ของคำและคำที่ปรากฏข้างเคียงแล้ว ผู้วิจัยจะเลือกคำเหล่านี้มาศึกษาระดับประโยคตามวัตถุประสงค์ในการวิจัยต่อไป โดยผู้วิจัยจะต้องใช้ความรู้ ทักษะ และประสบการณ์ทางด้านภาษาศาสตร์ประยุกต์ในการวิเคราะห์หน้าที่ทางภาษาของประโยคแต่ละประโยค ซึ่งในการศึกษารั้งนี้คลังข้อมูลมีขนาดเล็ก ผู้วิจัยมุ่งศึกษาหน้าที่ทางภาษาของประโยคแต่ละประโยค การเรียงลำดับของประโยค และ การใช้ภาษา ผู้วิจัยจึงไม่ได้ใช้โปรแกรมประเภท concordances ทำการวิเคราะห์

2) เมื่อผู้วิจัยได้ทำการวิเคราะห์อรรถภาคในภาคบทคัดย่อแล้วพบว่า อรรถภาคแรกของบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลองคืออรรถภาคข้อมูลภูมิหลัง (background) มีจำนวนมากที่สุด คือ 47 ครั้ง (ร้อยละ 94) จากบทคัดย่อทั้งหมด 50 ชิ้น (Bhoomanee & Soranastaporn, 2015) ซึ่งอรรถภาคข้อมูลภูมิหลังนี้ไม่ปรากฏในรูปแบบอรรถภาคบทคัดย่อของ Taddio และคณะ ผู้วิจัยจึงศึกษาเกณฑ์ในการกำหนดอรรถภาคข้อมูลภูมิหลังจาก Santos (1996) จิราภรณ์ อ้วนพลี และทรงศรี สรณสถาพร (2551) Kafes (2012) และ Kanoksilapatham (2013) เพื่อนำเกณฑ์มาใช้ในการวิเคราะห์ประโยคข้อมูลภูมิหลัง ซึ่งมีเกณฑ์ดังนี้ หากผู้เขียนกล่าวถึงความสำคัญของการศึกษา ที่มาของการศึกษาขอบเขตของการศึกษา รวมทั้งความรู้และข้อปฏิบัติในด้านสัตว์ทดลอง แสดงให้เห็นว่าประโยคนั้นจัดเป็นอรรถภาคข้อมูลภูมิหลัง

3) เพื่อสร้างความเที่ยงตรง (reliability) ในการวิเคราะห์อรรถภาค ผู้วิจัยได้ตรวจสอบความเที่ยงตรงโดยวิธี inter-rater reliability ประกอบด้วยผู้ตรวจสอบด้านอรรถภาควิเคราะห์ ซึ่งสำเร็จ

การศึกษาระดับปริญญาโท สาขาภาษาศาสตร์ประยุกต์และมีประสบการณ์การวิเคราะห์อรรถภาค 2 ท่าน และ เจ้าของภาษาที่เป็นนักวิทยาศาสตร์และผู้ช่วยวิจัย สำเร็จการศึกษาเกียรตินิยมปริญญาตรีจากมหาวิทยาลัยชิตนีย์ และกำลังทำวิทยาระดับปริญญาโท จำนวน 1 ท่าน โดยผู้วิจัยได้อธิบายชี้แจงเกณฑ์วิธีการวิเคราะห์อรรถภาคแก่ผู้ตรวจสอบ และให้ผู้ตรวจสอบฝึกทำการวิเคราะห์ข้อมูล จากนั้นร่วมกันอภิปรายผล เมื่อผู้ตรวจสอบเข้าใจถูกต้องแล้ว ผู้วิจัยมอบคลังข้อมูลให้แก่ผู้ตรวจสอบทำการวิเคราะห์คลังข้อมูลทางภาษาด้วยตนเอง หลังจากนั้นผู้วิจัยนำผลการวิเคราะห์ทั้งหมดจากผู้ตรวจสอบมาเปรียบเทียบเพื่อตรวจสอบความสอดคล้องระหว่างผู้วิจัยและผู้ตรวจสอบ รวมทั้งหาค่าสถิติ Fleiss's kappa เพื่อวัดความสอดคล้องซึ่งมีค่า $k = 0.8034$ ตามเกณฑ์ของ McHugh (2012) ค่าความสอดคล้องงานวิจัยนี้อยู่ในระดับความสอดคล้องมาก นอกจากนี้ เมื่อพบว่า ผลการวิเคราะห์ข้อใดไม่ตรงกัน ผู้วิจัย ผู้ตรวจสอบ อาจารย์สอนภาษาอังกฤษซึ่งเป็นเจ้าของภาษาอังกฤษ และ อาจารย์ที่ปรึกษา ได้ประชุมกันเพื่อหาข้อสรุปที่ตรงกันเป็นหนึ่งเดียว

4) ผู้วิจัยนำผลการวิเคราะห์อรรถภาคมาตรวจสอบการเรียงลำดับของอรรถภาคบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลอง จากนั้นทำการแบ่งกลุ่มการเรียงลำดับของอรรถภาคออกเป็นแต่ละรูปแบบ โดยยึดอรรถภาคที่พบในลำดับที่ 1, 2 และ ลำดับสุดท้ายเป็นหลัก ส่วน อรรถภาคที่พบในระหว่างอรรถภาคที่พบในลำดับที่ 1, 2 และ ลำดับสุดท้ายนั้น เรียกรวมว่าอรรถภาคอื่นๆ เช่น รูปแบบที่ 1 MB-M1 อรรถภาคอื่น ๆ และ M8 หมายถึง รูปแบบที่ 1 ประกอบด้วย อรรถภาคแสดงถึงข้อมูลภูมิหลัง (MB) อรรถภาควัตถุประสงค์ (M1) อรรถภาคอื่น ๆ และอรรถภาคข้อสรุปผลการวิจัย (M8) ดูตารางที่ 5 และ ตารางที่ 6 จากนั้นทำการนับจำนวนรูปแบบแต่ละกลุ่ม แล้วลงบันทึกในแบบบันทึกความถี่ของรูปแบบการเรียงลำดับของอรรถภาค

5) ผู้วิจัยใช้สถิติ ความถี่ (frequency) และร้อยละ (percentage) ในการวิเคราะห์ข้อมูลผลการวิจัย

จากการวิเคราะห์ข้อมูลพบว่าการเรียงลำดับของอรรถภาคบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตว์ทดลองมีทั้งหมด 10 รูปแบบ ซึ่งประกอบด้วย 9 อรรถภาค คือ อรรถภาคแสดงถึงข้อมูลภูมิหลัง (MB) ซึ่งแสดงข้อมูลพื้นฐานของงานวิจัย อรรถภาควัตถุประสงค์ (M1) อรรถภาคการออกแบบการวิจัย (M2) อรรถภาคบริบท (M3) อรรถภาคตัวอย่าง (M4) อรรถภาคการทดลอง (M5) อรรถภาคการวัดผล (M6) อรรถภาคผลการวิจัย (M7) และอรรถภาคข้อสรุปผลการวิจัย (M8) ซึ่งมีรูปแบบการเรียงของอรรถภาค ดังตารางที่ 5

ตารางที่ 5 การเรียงลำดับของอัตถภาคของบทคัดย่อในบทความปริทัศน์จากวารสาร ILAR

รูปแบบการเรียงลำดับของอัตถภาค	ความถี่ (n) 50)	ร้อยละ	ตารางที่ 5 แสดงให้เห็นลักษณะเด่นการเรียงลำดับของอัตถภาคบทคัดย่อของบทความปริทัศน์ในวารสาร ILAR คือ ในรูปแบบที่ 1 ถึงรูปแบบที่ 7 เริ่มต้นด้วยอัตถภาคข้อมูลภูมิหลัง (Bhoomanee & Soranastaporn, 2015) และ มีจำนวน 8 รูปแบบที่มีอัตถภาคข้อสรุปผลการวิจัย (M8) ร่วมด้วย ผลการวิเคราะห์แสดงให้เห็นว่า รูปแบบที่ 1 (รูปแบบที่ 1 MB-M1 อัตถภาคอื่น ๆ และ M8) พบมากที่สุด
รูปแบบที่ 1 MB-M1 อัตถภาคอื่น ๆ และ M8	27	54	
รูปแบบที่ 2 MB-M8 อัตถภาคอื่น ๆ และ M8	7	14	
รูปแบบที่ 3 MB-M5 อัตถภาคอื่น ๆ และ M8	4	8	
รูปแบบที่ 4 MB-M4 อัตถภาคอื่น ๆ และ M1	3	6	
รูปแบบที่ 5 MB-M3 อัตถภาคอื่น ๆ และ M1	2	4	
รูปแบบที่ 6 MB-M2 อัตถภาคอื่น ๆ และ M8	2	4	
รูปแบบที่ 7 MB-M7 อัตถภาคอื่น ๆ และ M8	1	2	
รูปแบบที่ 8 M1-M8	2	4	
รูปแบบที่ 9 M1-MB-M8	1	2	
รูปแบบที่ 10 M1-M4-M8	1	2	
รวม	50	100	

ผู้วิจัยจึงทำการวิเคราะห์รูปแบบที่ 1 เพิ่มเติม โดยทำการวิเคราะห์การเรียงลำดับของอัตถภาคบทคัดย่อเฉพาะรูปแบบที่ 1 จำนวน 27 บทคัดย่อ พบว่ามีลักษณะการเรียงลำดับของอัตถภาค ดังตารางที่ 6

ตารางที่ 6 การเรียงลำดับของอัตถภาคของบทคัดย่อในรูปแบบที่ 1

รูปแบบย่อ	ลักษณะการเรียงลำดับของอัตถภาคบทคัดย่อ	จำนวน	ร้อยละ	ผลการวิเคราะห์เพิ่มเติมการเรียงลำดับของอัตถภาคบทคัดย่อ
1	MB-M1	12	24	รูปแบบที่ 1 จำนวน 27
2	MB-M1-M8	3	6	บทคัดย่อ พบว่า การเรียงลำดับของอัตถภาคเริ่มต้นด้วยอัตถภาคข้อมูลภูมิหลัง (MB) และ อัตถภาควัตถุประสงค์ (M1) ทุก
3	MB-M1-M7-M8	2	4	บทคัดย่อ ตามด้วยอัตถภาคอื่น ๆ และ ปิดท้ายด้วยอัตถภาคข้อสรุป
4	MB-M1/8	1	2	ผลการวิจัย (M8) จำนวน 9
5	MB-M1-MB	1	2	รูปแบบ
6	MB-M1-M5	1	2	
7	MB-M1/2-M8	1	2	
8	MB-M1-M8-M1	1	2	
9	MB-M1-MB-M8	1	2	
10	MB-M1-MB-M7-M1-M8	1	2	
11	MB-M1/2-M6-M7-M8	1	2	
12	MB-M1-MB-M7-M8	1	2	
13	MB-M1-M5-M7-M1-M8	1	2	
รวม		27	54	

ผู้วิจัยทำการวิเคราะห์ต่อในด้านจำนวนคำและจำนวนประโยคในบทคัดย่อและจำนวนคำและจำนวนประโยคในส่วนของอัตถภาคข้อมูลภูมิหลังที่ปรากฏในรูปแบบที่ 1 โดยมีวัตถุประสงค์ 2 ประการ คือ (1) เพื่อเปรียบเทียบปริมาณของจำนวนคำและจำนวนประโยคในบทคัดย่อและในอัตถภาคข้อมูลภูมิหลัง ได้ผลการวิจัยดังตารางที่ 7 และ (2) เปรียบเทียบปริมาณของจำนวนคำและจำนวนประโยคในอัตถภาคข้อมูลภูมิหลังและอัตถภาคอื่นๆ ได้ผลการวิจัยดังตารางที่ 8

ตารางที่ 7 เปรียบเทียบจำนวน และ ค่าเฉลี่ยของจำนวนคำและประโยคของบทคัดย่อและอัตถภาคข้อมูลภูมิหลังที่ปรากฏในรูปแบบที่ 1

	บทคัดย่อ		อัตถภาคข้อมูลภูมิหลัง		ตารางที่ 7 แสดงให้เห็นว่าโดยเฉลี่ยบทคัดย่อประกอบด้วยประโยค 7-8 ประโยค ส่วนอัตถภาคข้อมูลภูมิหลังประกอบด้วยประโยค 4 ประโยค
	จำนวน	ค่าเฉลี่ย	จำนวน	ค่าเฉลี่ย	
คำ	4363	161.6	2481	91.9	
ประโยค	169	6.3	108	4	

ตารางที่ 8 เปรียบเทียบจำนวนและร้อยละของจำนวนคำและประโยคของอัตถภาคข้อมูลภูมิหลังและอัตถภาคอื่นๆ ที่ปรากฏในบทคัดย่อบุคคลที่ 1

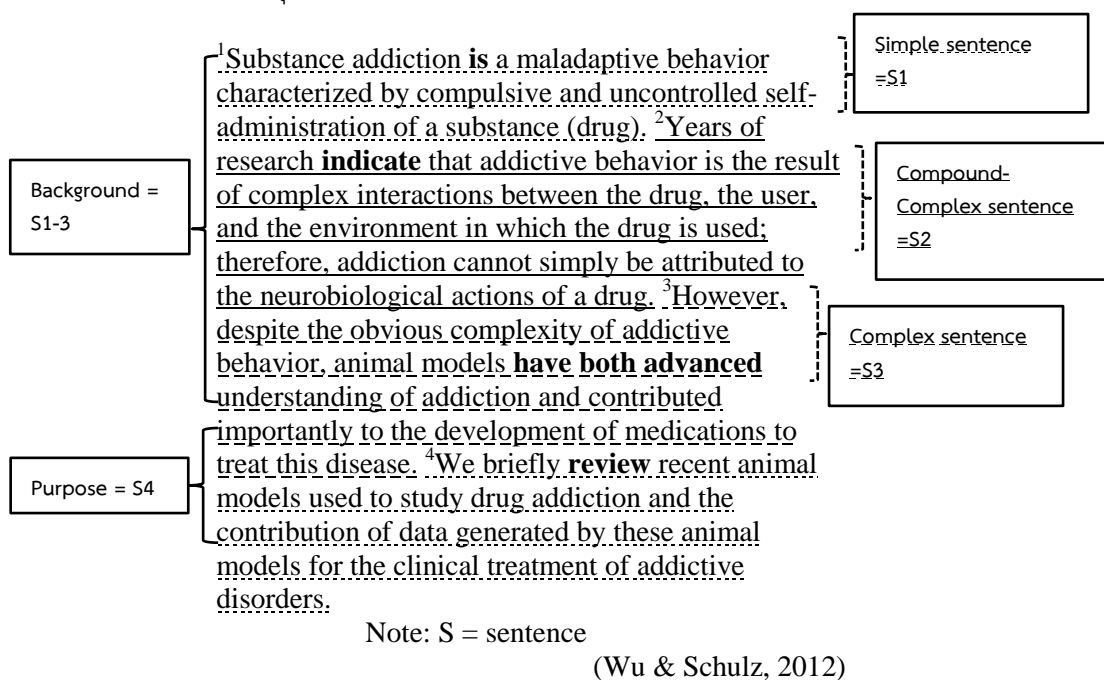
	อัตถภาคข้อมูลภูมิหลัง		อัตถภาคอื่นๆ		ตารางที่ 8 แสดงให้เห็นว่าจำนวนคำ (2,481 คำ) และจำนวนประโยค (108 ประโยค) ในส่วนของอัตถภาคข้อมูลภูมิหลัง มีมากกว่าจำนวนคำ (1,882 คำ) และจำนวนประโยค (61 ประโยค) ในส่วนของอัตถภาคอื่นๆ
	จำนวน	ร้อยละ	จำนวน	ร้อยละ	
คำ	2481	56.86	1882	43.13	
ประโยค	108	63.90	61	36.10	

ตารางที่ 9 จำนวนและร้อยละของการใช้ภาษาของอัตถภาคข้อมูลภูมิหลัง

การใช้ภาษา	จำนวน	ร้อยละ	ผู้วิจัยทำการวิเคราะห์เพิ่มเติมในด้านการใช้ภาษาของอัตถภาคข้อมูลภูมิหลังในหัวข้อกาล (tenses) คำกริยา (verb) วาก (voice) และ ประเภทของประโยค (types of sentence) พบว่า ผู้เขียนใช้ present simple tense และ present perfect tense อีกทั้ง ใช้คำกริยาแท้ (finite verb) ในการเขียนประโยค ประโยคส่วนใหญ่อยู่ในรูปของ กรรตุวาก (active voice) และเป็นประโยคประเภท เอกรทรประโยค (simple sentence) ดังตารางที่ 9
Tenses			
-Past	3	2.78	
-Present	105	97.22	
-Future	0	0	
Verb			
-Finite	100	92.59	
-Modal	8	7.41	
Voice			
-Active	86	79.63	
-Passive	22	20.37	
Types of sentence			
-Simple	69	63.89	
-Compound	10	9.26	
-Complex	25	23.15	
-Compound-Complex	4	3.70	

ตัวอย่างการเรียงลำดับอัตถภาคและการใช้ภาษาของบทคัดย่อของบทความปริทัศน์สาขาวิชาสัตวศาสตร์ (รูปแบบที่ 1)

ตัวอย่างบทคัดย่อ บทคัดย่อมีการเรียงลำดับของอัตถภาคเริ่มต้นด้วย อัตถภาคข้อมูลภูมิหลัง และตามด้วยอัตถภาควัตถุประสงค์



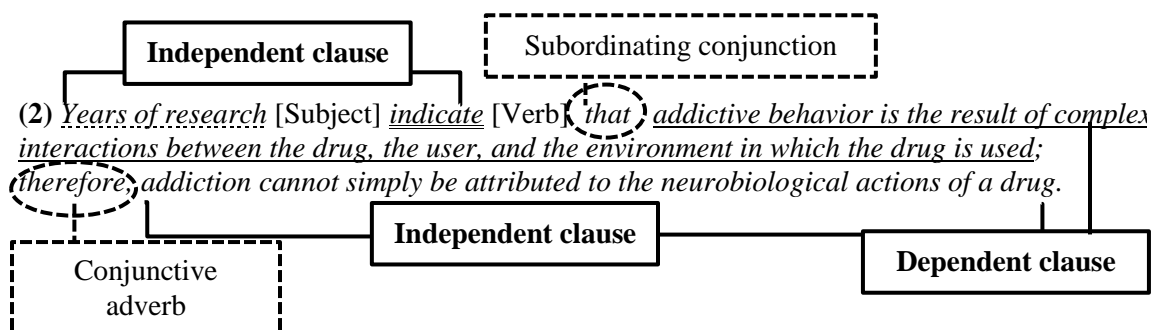
จากตัวอย่างบทคัดย่อ จะเห็นว่า ลักษณะการเรียงลำดับของอัตถภาคของบทคัดย่อ เริ่มต้นด้วยอัตถภาคข้อมูลภูมิหลัง ซึ่งมีจำนวน 3 ประโยค 86 คำ จากจำนวนทั้งหมด 4 ประโยคและจำนวน

ทั้งหมด 114 คำ เมื่อคำนวณค่าเป็นร้อยละ แสดงให้เห็นว่าร้อยละ 75 ของเนื้อหาบทคัดย่อฉบับนี้ คือ อรรถภาคข้อมูลภูมิหลัง ซึ่งมีการใช้ present tense และใช้คำกริยาแท้(finite verb) ในการเขียน ประโยค อยู่ในรูปกรรตุวาท (active voice) และเป็นประโยคประเภทเอกรรตประโยค (simple sentence) และ เอนกรรตสังกรประโยค (compound-complex sentence) ดังประโยคต่อไปนี้ ตัวอย่างประโยค

Simple sentence

(1) *Substance addiction* [Subject] *is* [Verb] *a maladaptive behavior characterized by compulsive and uncontrolled self-administration of a substance (drug).*

ประโยค (1) เป็นประโยคแสดงข้อมูลภูมิหลังของการวิจัย ผู้เขียนใช้ present simple tense ใช้ verb to be [is] เป็นกริยาแท้ อยู่ในรูปกรรตุวาท (กรรตุวาท) และเป็นประโยคแบบเอกรรตประโยค (simple sentence) เนื่องจากประโยค ประกอบด้วย ประธาน + กริยา (subject + verb)



ประโยค (2) เป็นประโยคแสดงข้อมูลภูมิหลังของการวิจัย ผู้เขียนใช้ present simple tense ใช้ indicate เป็นกริยาแท้ อยู่ในรูปกรรตุวาท (active voice) และเป็นประโยคแบบเอนกรรตสังกรประโยค (compound-complex sentence) เนื่องจากประโยคประกอบด้วยประโยคหลัก 2 ประโยค (two independent clauses) และประโยครอง 1 ประโยค (one dependent clause)

อภิปรายผลการวิจัย

จากผลการศึกษา การเรียงลำดับของอรรถภาคบทคัดย่อของบทความปริทัศน์มีทั้งหมด 10 รูปแบบ โดยรูปแบบที่ 1 ถึง รูปแบบที่ 7 มีการเรียงลำดับของอรรถภาคบทคัดย่อซึ่งเริ่มด้วยอรรถภาคข้อมูลภูมิหลัง (background) ยกเว้นรูปแบบที่ 8 ถึง 10 เท่านั้นที่เริ่มด้วยอรรถภาควัตถุประสงค์ (purpose) นอกจากนั้นการเรียงลำดับของอรรถภาคบทคัดย่อตามรูปแบบที่ 1 เกิดขึ้นมากที่สุด (ร้อยละ 54) ซึ่งประกอบไปด้วยอรรถภาคข้อมูลภูมิหลัง (background) อรรถภาควัตถุประสงค์ (purpose) และอรรถภาคอื่น ๆ ซึ่งการอภิปรายผลจะถูกแบ่งออกเป็น 3 ประเด็น คือ

1. การเรียงลำดับของอัตถภาคบทคัดย่อของบทความปริทัศน์วารสาร ILAR

จากผลการศึกษา การเรียงลำดับของอัตถภาคบทคัดย่อรูปแบบที่ 1 ถึง รูปแบบที่ 7 สอดคล้องกับผลการวิจัยบทคัดย่อ สาขาภาษาศาสตร์ (Santos, 1996) สาขาวิทยาศาสตร์เซลล์เดียว (Cross & Oppenheim, 2006) สาขาภาษาศาสตร์และเทคโนโลยีการศึกษา (Pho, 2008) สาขาวิทยาศาสตร์ (จิราภรณ์ อ้วนพลี และทรงศรี สรณสถาพร, 2551) สาขาสังคมศาสตร์ (Kafes, 2012) และ สาขาวิศวกรรมโยธา (Kanoksilapatham, 2013) กล่าวคือ พบอัตถภาคที่แสดงถึงอัตถภาคข้อมูลภูมิหลัง (background) ปรากฏเป็นอัตถภาคแรกของบทคัดย่อ ซึ่งเป็นการกล่าวถึง ข้อมูลพื้นฐานของงานวิจัย รวมทั้งขอบเขตและความสำคัญของงานวิจัย

อย่างไรก็ตาม รูปแบบส่วนใหญ่ของการเรียงลำดับของอัตถภาคบทคัดย่อของบทความปริทัศน์ยังมีความแตกต่างจากผลการวิจัยของ Bhatia (1993) Taddio และคณะ (1994) และ Samraj (2005) ซึ่งได้กล่าวว่า อัตถภาควัตถุประสงค์เป็นอัตถภาคลำดับแรก นอกจากนี้ การเรียงลำดับของอัตถภาคบทคัดย่อของบทความปริทัศน์ทั้ง 10 รูปแบบมีความแตกต่างกัน กล่าวคือตำแหน่งของแต่ละอัตถภาคมีความหลายหลายในแต่ละบทคัดย่อ เช่น รูปแบบที่ 1 มีการเรียงลำดับของอัตถภาคดังนี้ MB-M1-M5, MB-M1-M7, และ MB-M1-M8 เป็นต้น สอดคล้องกับงานวิจัยในอดีตที่พบว่าการเรียงลำดับของอัตถภาคบทคัดย่อสามารถเปลี่ยนแปลงได้ตลอดเวลา (Kanoksilapatham, 2013)

2. อัตถภาคข้อมูลภูมิหลัง

อัตถภาคข้อมูลภูมิหลัง (background) คืออัตถภาคที่จะช่วยให้ผู้อ่านเข้าใจแนวคิดหรือหลักการขั้นพื้นฐานของงานวิจัยนั้น ๆ (Bhoomanee & Soranastaporn, 2015) อัตถภาคข้อมูลภูมิหลังเป็นอัตถภาคที่ปรากฏการเรียงลำดับเป็นตำแหน่งแรกใน 7 รูปแบบจากรูปแบบทั้งหมด 10 รูปแบบ คิดเป็นร้อยละ 70 การเรียงลำดับดังกล่าวแตกต่างจากการศึกษาของ Taddio และคณะ (1994) ซึ่งพบว่าอัตถภาควัตถุประสงค์เรียงลำดับเป็นอัตถภาคแรกของอัตถภาคทั้งหมด เพราะฉะนั้น การเรียงลำดับของอัตถภาคบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตวทดลองแตกต่างจากอัตถภาคบทคัดย่อของบทความวิจัยสาขาวิชาการแพทย์ (Taddio และคณะ, 1994) ทั้งนี้อาจเป็นเพราะบทคัดย่อทางด้านการแพทย์มุ่งเน้นไปทางด้านการศึกษาโดยมีวัตถุประสงค์ในการนำผลการวิจัยมาประยุกต์ใช้ในการรักษาผู้ป่วยหรือการป้องกันโรค จึงมีการกล่าววัตถุประสงค์เป็นอันดับแรกเพื่อให้ผู้อ่านรู้เป้าหมายของการศึกษา ในขณะที่บทคัดย่อด้านสัตวทดลองเป็นบทคัดย่อของบทความปริทัศน์ จึงมีการกล่าวข้อมูลพื้นฐานไว้อันดับแรกเพื่อให้ผู้อ่านได้ทราบข้อมูลภูมิหลังหรือประวัติความเป็นมาของบทความก่อนที่จะอ่านข้อมูลเพิ่มเติมในบทคัดย่อหรือบทความทั้งฉบับ ข้อมูลภูมิหลังหรือประวัติความเป็นมาของบทความนี้จะช่วยทำให้ผู้อ่านเข้าใจงานปริทัศน์ได้ง่ายขึ้น เพราะงานปริทัศน์เป็นการ

ทบทวน รวบรวมความรู้ ผลการวิจัยในอดีตมาทำการวิเคราะห์ วิจัย ผู้อ่านจำเป็นต้องมีความรู้หรือทราบข้อมูลภูมิหลังก่อน

นอกจากนี้ ยังพบว่าอัตถภาคข้อมูลภูมิหลัง (background) มีปริมาณเนื้อหามากที่สุดจากเนื้อหาทั้งหมดของบทคัดย่อของบทความปริทัศน์สาขาสัตวทดลอง จึงอาจกล่าวได้ว่านักวิจัยสาขาสัตวทดลองให้ความสำคัญกับอัตถภาคข้อมูลภูมิหลัง ซึ่งหากนักวิจัยไทยต้องการตีพิมพ์บทความปริทัศน์สาขาสัตวทดลองในวารสาร ILAR นักวิจัยต้องให้ความสำคัญแก่ข้อมูลภูมิหลังหรือประวัติความเป็นมาในบทคัดย่อของบทความปริทัศน์สาขาสัตวทดลอง อีกทั้งข้อมูลภูมิหลังหรือประวัติความเป็นมายังเป็นข้อมูลสำคัญสำหรับผู้อ่าน ซึ่งอาจจะไม่ใช่ นักศึกษา หรือ นักวิจัยในสาขาสัตวทดลอง ก็สามารถอ่านได้และเข้าใจได้ เนื่องจากผู้เขียนบทคัดย่อ ได้อธิบายความเป็นมา ความสำคัญ รวมทั้งข้อมูลพื้นฐานของงานวิจัย หรือเรียงอัตถภาคข้อมูลภูมิหลังไว้เป็นลำดับขั้นแรกของบทคัดย่อ

3. การใช้ภาษาในอัตถภาคข้อมูลภูมิหลังของบทความปริทัศน์สาขาสัตวทดลอง

การใช้ภาษาในอัตถภาคข้อมูลภูมิหลัง ผู้เขียนส่วนใหญ่ใช้ ปัจจุบันกาล (present tense) ในการเขียนประโยค อีกทั้งอยู่ในรูปของกรรมวาจก (active voice) และเป็นประโยคประเภทเอกรรณประโยค (simple sentence) ผลการวิจัยครั้งนี้มีความคล้ายกับงานวิจัยของ Swales และ Peak (1994) กล่าวคือ ใช้รูปแบบปัจจุบันกาล (Present tense) ในการเขียนภาคบทนำมากกว่าส่วนอื่นๆ อีกทั้ง พบการใช้ประโยคแบบกรรมวาจก (passive voice) น้อยในภาคของบทนำ แต่ผลการวิจัยชิ้นนี้มีความต่างจากทรงศรี สรณสพร (2556) กล่าวว่า บทคัดย่อนิยมเขียนในรูปของอดีตกาล (past tense) ทั้งนี้อาจเป็นเพราะ (1) บทคัดย่อของงานวิจัยนี้เป็นบทคัดย่อของบทความปริทัศน์ จึงมีความแตกต่างจากบทคัดย่อของบทความวิจัยในเรื่องของการใช้ภาษา กล่าวคือ ผู้เขียนต้องการเสนอข้อเท็จจริงของข้อมูลและแนวคิดใหม่ ๆ จากการทบทวนวรรณกรรม รวมทั้งเป็นการวิเคราะห์ วิจัย งานวิจัยในอดีต ผู้เขียนจึงเขียนประโยคโดยใช้ปัจจุบันกาล (present tense) (2) ผู้เขียนใช้ กริยาแท้ (finite verb) เพื่อบ่งบอกความชัดเจนและความแน่นอน ของเหตุการณ์ที่เป็นจริงในการเขียนข้อมูลสำคัญ แทนการใช้ กริยาช่วย (modal verb) ซึ่งแสดงถึงความเป็นไปได้ (possibility) (3) ผู้เขียนใช้ประโยคในรูปของกรรมวาจก (active voice) เพื่อเน้นประธานเป็นผู้กระทำ หรือต้องการให้ความสำคัญต่อประธานของประโยคนั้น ๆ (4) ผู้เขียนต้องการเสนอข้อมูลที่ชัดเจน ประเด็นเดียวเพื่อให้ผู้อ่านเห็นความหนักแน่นของข้อมูลและสามารถเข้าใจได้โดยง่าย ผู้เขียนจึงเขียนเป็นประโยคแบบเอกรรณประโยค (simple sentence)

สรุป อัตถภาคข้อมูลภูมิหลังมีความสำคัญในการเขียนบทคัดย่อของบทความปริทัศน์ในสาขาวิชาสัตวทดลอง มีลักษณะสำคัญในการใช้ภาษา คือ การใช้ปัจจุบันกาล (present tenses) ส่วน

การเขียนประโยคอยู่ในรูปของกรรตุวาจก (active voice) และเป็นประโยคประเภทเอกรรณประโยค (simple sentence)

ประโยชน์ที่ได้จากการวิจัยครั้งนี้

การเรียงลำดับอรรถาภิธานของบทความปริทัศน์สาขาสัตวศาสตร์ทดลองเป็นประโยชน์ต่อนักศึกษาและนักวิจัยๆ สามารถนำผลการวิจัยครั้งนี้ไปประยุกต์ใช้ในการเขียนบทคัดย่อบทความปริทัศน์ ในการตีพิมพ์เป็นภาษาอังกฤษ ทั้งในด้านการเรียงลำดับอรรถาภิธานและการใช้ภาษาดังจะช่วยให้ นักศึกษาและนักวิจัยเขียนบทคัดย่อของบทความปริทัศน์สาขาวิชาสัตวศาสตร์ทดลองได้สะดวกและรวดเร็วขึ้น

สรุปผลการศึกษา

จากการทบทวนวรรณกรรมพบว่าไม่มีการศึกษาการเรียงลำดับอรรถาภิธานของบทคัดย่อของบทความปริทัศน์สาขาวิชาสัตวศาสตร์ทดลอง งานวิจัยชิ้นนี้จึงศึกษาการเรียงลำดับอรรถาภิธานของบทความปริทัศน์ในสาขาวิชาสัตวศาสตร์ทดลอง ผลการศึกษาพบว่า การเรียงลำดับของอรรถาภิธานของบทความปริทัศน์ในสาขาวิชาสัตวศาสตร์ทดลองมีความต่างจากรูปแบบของอรรถาภิธานที่ Taddio และคณะได้เสนอไว้ คือ บทคัดย่อส่วนใหญ่มีการเรียงลำดับอรรถาภิธาน เริ่มต้นด้วยอรรถาภิธานข้อมูลภูมิหลัง (background) ตามด้วยอรรถาภิธานวัตถุประสงค์ (purpose) และมักปิดท้ายด้วยอรรถาภิธานข้อสรุปผลการวิจัย (conclusion) ซึ่งผลการวิจัยครั้งนี้จะเป็นประโยชน์แก่นักวิจัยและนักศึกษาที่ต้องการศึกษาด้านอรรถาภิธานวิเคราะห์ รวมทั้งการนำข้อมูลไปประยุกต์ใช้ในการเขียนบทคัดย่อของบทความปริทัศน์เป็นภาษาอังกฤษ

ข้อเสนอแนะในการศึกษาครั้งต่อไป

1. ในด้านการศึกษาอรรถาภิธานวิเคราะห์ ควรศึกษาอรรถาภิธานของบทความปริทัศน์สาขาวิชาสัตวศาสตร์ทดลองทั้งฉบับเพื่อจะได้ทราบข้อมูลที่สมบูรณ์ รวมทั้งลักษณะการเขียนของบทความปริทัศน์ และอาจศึกษาเปรียบเทียบโครงสร้างการเรียงลำดับของอรรถาภิธานของบทความปริทัศน์ในสาขาอื่น เช่น สาขาวิชาสัตวศาสตร์ทดลองกับสาขาวิชาชีววิทยาหรือสาขาอื่น ๆ
2. ในด้านการศึกษาการใช้ภาษา ควรศึกษาการใช้ภาษาในประเด็นอื่นๆ เช่น การศึกษาโครงสร้างประโยค การศึกษาการใช้กลุ่มคำเชื่อม ในบทความปริทัศน์สาขาวิชาสัตวศาสตร์ทดลองทั้งฉบับเพื่อจะได้ทราบข้อมูลที่สมบูรณ์
3. ในด้านการศึกษาระดับคำ ควรสร้างคลังข้อมูลขนาดใหญ่ของบทความปริทัศน์สาขาวิชาสัตวศาสตร์ทดลองทั้งฉบับ หรือ แต่ละอรรถาภิธาน แล้วทำการศึกษาโดยใช้โปรแกรมประเภท concordances เพื่อศึกษาคำศัพท์ในประเด็นความถี่ของคำ (frequency) หรือคำที่ปรากฏข้างเคียง (collocation)

กิตติกรรมประกาศ

ผู้วิจัยขอขอบคุณผู้ตรวจประเมินบทความที่ได้ให้คำแนะนำและข้อคิดเห็นที่เป็นประโยชน์ต่อการวิจัยในครั้งนี้

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ภาคผนวก

ตัวอย่างประโยคแต่ละประเภท

เอกกรรลประโยค (simple sentence)

¹ Animal experiments are necessary for a better understanding of diseases and for developing new therapeutic strategies.

(Gargiulo et al., 2012)

² Animal and human studies reveal sexually dimorphic patterns in behavioral responses to cocaine in all phases of the cocaine addiction process from initiation to maintenance and relapse.

(Quinones-Jenab & Jenab, 2012)

³ Furthermore, in animal models, females require lower doses of cocaine to develop faster conditioned place preference and cocaine-induced psychomotor behaviors and sensitization.

(Quinones-Jenab & Jenab, 2012)

⁴ The use of the zebrafish, *Danio (Brachydanio) rerio* in research laboratories, teaching curricula, and home aquariums has exploded over the past two decades.

(Smith, 2012)

⁵ Two histone marks, H3K27me3 and H3K9me3, are well known for their repressive roles in the genic and nongenic regions of metazoan genomes.

(Kim & Kim, 2012)

อเนกรรลประโยค (compound sentence)

⁶ This form of memory is assessed in laboratory animals in many ways, but the dominant form of assessment is the Morris water maze (MWM).

(Vorhees & Williams, 2014)

⁷ There are several possible sources of bias, and many animal studies are replicates of studies conducted previously.

(Hooijmans, IntHout, Ritskes-Hoitinga, & Rovers, 2014)

⁸ Cocaine abuse is on the rise among women, and drug addiction studies consistently show greater responses among females than males in various cocaine-related outcomes.

(Quinones-Jenab & Jenab, 2012)

สังกรประโยค (complex sentence)

⁹ The interactions of the many factors that affect sex differences appear to be complex.

(Quinones-Jenab & Jenab, 2012)

¹⁰ Cancer is a disease that results from the successive accumulation of genetic and epigenetic alterations.

(Virani, Colacino, Kim, & Rozek, 2012)

¹¹ These roles establish different baselines for animal use that require substantially different ethical considerations.

(Sikes & Paul, 2013)

¹² Cell-mediated or antibody-mediated immune attack on the PNS results in distinct clinical syndromes, which are classified based on the tempo of illness, PNS component(s) involved, and the culprit antigen(s) identified.

(Soliven, 2014)

¹³ Although in dogs this approach has currently only been applied to lymphoma, other tumor types are under investigation.

(O'Connor & Wilson-Robles, 2014)

อเนกรรดสังกรประโยค (compound-complex sentence)

¹³ Years of research indicate that addictive behavior is the result of complex interactions between the drug, the user, and the environment in which the drug is used; therefore, addiction cannot simply be attributed to the neurobiological actions of a drug.

(Wu & Schulz, 2012)

¹⁴ Numerous commercial system vendors now offer increasingly sophisticated housing systems based on design principles that maximize the number of animals that can be housed in a given space footprint, and they are thus able to support large and diverse research programs.

(Lawrence & Mason, 2012)

¹⁵ After all, if animal experiments are not appropriately designed, conducted, and analyzed, the results produced are unlikely to be reliable, and the animals have in effect been wasted.

(de Vries et al., 2014)

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Effects of Extensive Reading on Thai University Students

Patareeya Wisaijorn

Abstract

This study investigated the effects of extensive reading (ER) on the proficiency in and attitudes toward reading English of Thai university students. Fifty-one final year students at a Thai regional university completed a 15-week project in which they engaged in ER, completed a pre- and post-test of reading ability and a pre- and post-questionnaire about attitudes, and maintained journals recording their completed readings and mid- and post-project evaluations. Results of the pre- and post-test of reading ability in English showed little change in the performances of the more able students but students who performed at a lower level in the pre-test improved considerably. Results of the pre- and post-questionnaire and evaluations showed an overall positive development of attitudes to reading in English. The study shows that Thai students' proficiency in reading English, especially those whose proficiency is not highly developed, and the attitudes to reading English can be improved by engaging in ER.

Keywords: Extensive reading, Thai university students, English reading ability, attitudes to reading English

บทคัดย่อ

การวิจัยนี้ศึกษาผลของความสามารถการใช้ภาษา และทัศนคติต่อการใช้ Extensive Reading (ER) ในการอ่านภาษาอังกฤษในกลุ่มนักศึกษามหาวิทยาลัย นักศึกษาชั้นปีสุดท้ายในมหาวิทยาลัยภูมิภาคในประเทศไทยจำนวน 51 คน เข้าร่วมโครงการเป็นเวลา 15 สัปดาห์ นักศึกษาฝึกอ่านภาษาอังกฤษโดยการใช้ Extensive Reading ทำการสอบความสามารถในการอ่านก่อนและหลังการอ่าน และทำแบบสอบถามเกี่ยวกับทัศนคติต่อการอ่านโดยการใช้ Extensive Reading และทำบันทึกเกี่ยวกับการอ่านของตนเอง รวมทั้งการประเมินในระหว่าง และหลังการอ่าน ผลจากการสอบเกี่ยวกับความสามารถในการอ่านก่อนและหลังการอ่านพบว่าการเปลี่ยนแปลงน้อยในกลุ่มนักศึกษาที่มีความสามารถทางด้านภาษาสูง แต่ในกลุ่มนักศึกษาที่มีความสามารถทางภาษาดำพบว่ามีการพัฒนาอย่างมาก ผลจากแบบสอบถามความคิดเห็น และการประเมินพบว่า มีการพัฒนาในด้านดีเกี่ยวกับการอ่านโดยทั่วไป การศึกษานี้แสดงให้เห็นว่า ความสามารถในการอ่านภาษาอังกฤษของนักศึกษาไทย โดยเฉพาะในกลุ่มที่มีความสามารถในการใช้ภาษาที่ยังไม่ได้รับการพัฒนามากนัก รวมทั้งทัศนคติต่อการอ่านภาษาอังกฤษ สามารถพัฒนาได้โดยการใช้ ER

คำสำคัญ: Extensive reading, นักศึกษาระดับมหาวิทยาลัย, ความสามารถในการอ่านภาษาอังกฤษ, ทัศนคติต่อการอ่านภาษาอังกฤษ

Introduction

English is generally recognized as an international language and is used as the official means of communication in the ASEAN Economic Community (AEC). Of the four language skills, reading is considered by many researchers to be an important source for language learning in an English as a foreign language (EFL) context (Grabe, 2009). Nuttall (1996, p. 128) expressed a similar view, stating that “The best way to improve one’s knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it.” Others who have addressed the key role that reading in a foreign language plays in foreign language learning include Grabe and Stoller (2002), Hedgecock and Ferris (2009), Hudson (2007), Koda (2005), Russell and Spada (2006), Shin (2013), Swaffar and Arens (2006), and Yang (2010).

EFL learners are exposed to a foreign language more through reading than any other mode; therefore, it is not surprising that the development of students’ ability to read in English is one of the main goals of university EFL programs in Thailand. Throughout the Thai educational system, students experience considerable difficulties with English on entering university education. At university, students must read extensively to succeed, and they need to be able to read effectively in English since many course books and reference materials are in English. The development of effective reading in English adds to the contribution that young Thais can make to their country’s role in the AEC and the world generally.

The aim of the study was to investigate the effects of the introduction of extensive reading (ER) on English reading proficiency and attitude to reading in English of a group of Thai university students.

The study posed two research questions:

1. What progress was made by the students in their reading ability in English due to exposure to ER?
2. What were the changes in the students’ attitudes to reading in English due to exposure to ER?

Literature Review

Extensive Reading (ER)

ER is an approach designed to improve students' reading proficiency in a foreign language by encouraging them to read large quantities of easy and interesting texts that they select. It contrasts with the *intensive reading* approach in which the stress is on the foreign language via word-by-word and line-by-line analysis and translation of short, difficult texts (Renandya, Rajan & Jacobs, 1999).

The most careful description of ER was done by Day and Bamford (2002) who posited ten key principles of an ER approach. They advocated a successful ER program is characterized by:

1. easy reading material – students are able to understand the grammar and vocabulary of the texts without using their dictionaries or asking their teachers for help
2. varied reading material – students are able to find books and other reading materials on a wide variety of topics that encourage them to read for different reasons and in different ways
3. student selection – students choose what they want to read
4. a great deal of reading – students are encouraged to read, read, and read some more, both in and out of class
5. reading for pleasure, information and general understanding – students read according to their personal interests
6. reading for its own reward – there are few or no follow-up exercises
7. reading quickly – reading speed is fast as students are reading texts that are relatively easy and interesting
8. individual and silent reading – students work on their own and determine the time and location of reading
9. teacher guidance – teachers play an active role in advising, helping, and checking students
10. teacher reading – teachers are a powerful role model for their students, showing them by example their interest and ability in reading.

ER has been used in English as a foreign language and English as a second language contexts and other languages (Bell, 2001; Camiciottoli, 2001; Elley & Mangubhai, 1983; Mason & Krashen, 1997; Nash & Yuan, 1992; Renandya, Rajan, & Jacobs, 1999; Tsang, 1996; Tse, 1996; Walker, 1997) and in a Spanish language class (Rodrigo, 1995) and a Japanese language class (Leung, 2002).

Numerous studies showing the benefits of extensive reading suggest the impact on language learning. Many of the research findings suggest positive effects on reading comprehension, reading speed, vocabulary, grammar, writing, and L2 proficiency (Day & Bamford, 1998). Iwahori (2008) reported the effectiveness of ER in developing reading fluency, as well as reading comprehension skills. In their investigation, Beglar, Hunt, and Kite (2012) found that all of the three groups of Japanese university students who engaged in ER for an academic year statistically significantly improved their reading rate, while an intensive reading group did not. In a case study conducted by Nishino (2007), two Japanese junior high school students who engaged in ER for 2.5 years increased their reading rate from 72 to 137 words per minute (wpm) and from 58 to 111 wpm respectively. Imamura (2012) reported that a group of high school students who did ER as homework increased their reading rates. Huffman (2014) studied the reading rate of first-year Japanese nursing college who took a one-semester ER course, with students in an intensive reading (IR) course serving as the comparison group. The ER group achieved significantly higher reading rate gains than the IR group. He also found that there was no decrease in the comprehension of the students in the ER group. Tanaka and Stapleton (2007), in a study of Japanese high school students, found that the ER group scored significantly higher in reading rate and comprehension than the control group that did no extensive reading.

Positive influence on gains in vocabulary has also been suggested, considering the exposure to language the learners get through reading a large amount of books (Horst, 2005; Pigada & Schmitt, 2006). Similarly, a study by Poulshock (2010) not only supported that learners can enjoy and be motivated, but can also increase vocabulary. Kweon and Kim (2008) investigated the incidental acquisition of vocabulary with 12 Korean university students. They

were tested on their knowledge of vocabulary before engaging in ER, immediately after the program, and one month later. The results showed a significant word gain between the first and the second tests, and the final test.

One of the first studies that clearly mentioned the relationship between reading and speaking was conducted by Cho and Krashen (1994). Four adult ESL learners made clear gains in vocabulary through fanatically engaging in reading the Sweet Valley series. Interestingly, participants reported in their interview that reading seemed to be helping their oral language proficiency. Cho and Krashen speculate that the specific type of book the participants read contained useful colloquial language, which language learners often miss in formal language learning instructions. Although this may be true, the study lacked theoretical framework concerned with the connection between reading and listening and speaking. Moreover, the small number of participants can also be considered as their limitations.

Nakanishi and Ueda (2011) investigated the effects of shadowing activities on extensive reading, specifically on the comprehension of text. Shadowing is the task of listening in which the learner tracks the target speech and repeats it immediately as exactly as possible. In their study, students performed the shadowing activity with the text in front of them. The study included two groups of students: one group engaged solely in extensive reading, whereas the other group combined shadowing with ER. The results of the study showed that the group of students engaging in ER with shadowing read more words, and had substantial improvement in comprehension scores on their post-test. Nakanishi and Ueda concluded that when extensive reading is combined with shadowing, it improves the learners' reading comprehension, listening, and speaking. Therefore, it may be as effective as conventional teaching methods in classrooms. In addition, they implied that students would be able to familiarize themselves with the English phonological system, and it helped them feel a sense of achievement by being able to produce the right sounds.

The effect of ER on writing has also been studied. Mermelstein (2015) investigated the impact of an ER program on third-year university students in Taiwan on their writing skills. His results showed a significant increase on four areas of writing: vocabulary, language use, spelling, and fluency. Park (2016)

used ER in three sections of an intermediate-level writing course designed for international students at a university in the United States. The primary goal of the writing course was to help ESL students improve their general and academic writing ability in order to support their smooth transition to an academic environment. Her results showed the students' significant development in different areas of writing: content, organization, and language use.

The affective dimension of foreign language learning and ER has also been investigated. Takase and Otsuki (2012) found positive effects of ER on learners in EFL contexts. An interesting and significant point about this study is that the participants were “remedial students”, who had failed their English classes in university and ended up registering for a repeater class. They were unmotivated and reluctant to study English because of their negative experiences. Takase and Otsuki's study involved 81 non-English major EFL university students who had failed their previous English courses. They participated in extensive reading for approximately three months, during which students were also involved in Sustained Silent Reading in class. Over the course, many of the participants read over 100 books, which led them to gain self-confidence and the feeling of self-efficacy. The post-questionnaires showed participants building a positive attitude towards extensive reading and motivation to learn English. Takase and Otsuki suggested that students experienced implicit learning by reading an abundance of easy books with complete storylines, rather than excerpt-like passages that are frequently used in school textbooks. The Edinburgh Project on Extensive Reading Placement/Progress was administered as a pre-test and post-test to examine participants' English ability, and the results showed improvements in the participants' English ability after three months. Thus we can see that ER is not only effective for developing English proficiency, but also fostering the joy and pleasure to read in the target language.

An example of Extensive Reading in a second language context – a Japanese course using Extensive Reading at the University of Hawaii

Hitosugi and Day (2004) outlined a program in a Japanese course dealing with Japanese speaking, listening, reading, and writing for students with some background in the language at the University of Hawaii using ER. The classes in

the course, each containing about 15 students, met five times per week over 16 weeks. ER was used with one class containing 14 students instructed by Hitosugi over a period of 10 weeks only, due to a shortage of texts. As all classes covered the same content, no part of it could be eliminated to accommodate ER, so the ER part was completed as an extra component by Hitosugi's class.

A total of 266 books written for children learning Japanese as their first language were collected and these were graded and color-coded from level 1 (easiest) to level 6 (hardest). As an incentive to complete the reading, 30% of the total mark was at the teacher's discretion. For Hitosugi's class, 10% was for the ER component. The following scale was used for the award of marks: 19 books - 2.5%; 20-29 5%; 30-39 7.5%; 40 10%; > 40 1% extra for every 4 books. The reading was completed as homework and 30 minutes per week of classroom time was devoted to activities based on the reading, such as telling others about their favorite books and using new vocabulary from the readings. The students' reading ability was assessed by the use of a three-part assessment that included: a) Part A – summarize in English a short memo written in Japanese; b) Part B – answer in English some short questions about a travel ad written in Japanese; c) Part C – state in English some details about a letter written in Japanese. The students' motivation to learn Japanese was assessed by the use of a 22-item questionnaire.

These assessments were administered to the ER class and to a regular *Japanese 102* class before the commencement and at the conclusion of the program to be able to measure the effects within each class and between the class exposed to ER and the regular *Japanese 102* class not exposed to ER.

The researchers acknowledged the small sample size but highlighted a) the high amount of reading – one student read 53 books; a total of 443 books were read; the average was 32 books per student; b) the ER class improved greatly in part C, a reading comprehension assessment, while the regular class had lower scores; c) that the ER class had much higher to read than the regular students.

Methodology

Participants

The study involved Thai university students, who use Thai as their first language. These students must take English in their General Education Program as compulsory courses. Fifty-one fourth (final) year Tourism major students in a regular compulsory course (*English in Business*) in the Bachelor of Arts program being presented by the researcher at the time of the study. The study was conducted over a 16-week period in the final semester of the students' degree program. ER was included as part of the regular course; therefore, all students in the course participated.

Procedure

The students were introduced to ER. I explained the benefits and went over the major aspects (e.g., self-selection, easy books, reading for overall understanding). Most of the reading was done outside of class. I gave them about ten minutes of in-class reading time. There were no tests. The students were offered the following incentives to read a number of books during the 16 weeks that constituted the period for the course *English in Business* in which the ER project was presented:

Complete 15+ books 5%; Complete 12-14 books 4%; Complete 9-11 books 3%;

Complete 5-8 books 2%; Complete 1-4 books 1%; Complete 0 books 0%

Materials The study involved a collection of approximately 300 graded readers of different difficulty levels from the Oxford, Cambridge, and Heinemann publishers. This collection was available at the Self-Access Center in the Faculty of Liberal Arts at Ubon Ratchathani University. The study was introduced as part of the *English in Business* course over 16 weeks and procedures were organized to be of minimal disruption to the regular course for students and the lecturer.

Instruments A number of quantitative and qualitative instruments were used:

- **a pre- and post-test** – in Weeks 1 and 15, students completed a pre- and post-test developed by the researcher, respectively (see Appendix 1).
- **a pre- and post-questionnaire** – in Weeks 1 and 16, students completed a pre- and post-questionnaire, adapted from Hitosuki and Day (2004) with permission, respectively (see Appendix 2).
- **journals** – students were asked to keep a journal of their reading that included a record of the title, publisher, level, start and finish dates, number of pages, reading time in minutes, comments on appropriateness of levels (too easy, good, too difficult), ratings of the materials (good, fair, poor), total reading in minutes, and total reading pages. Students were informed of the following award of marks in the *English in Business* course for satisfactory completion of journals:

Completed 15+ books 5%; 12-14 books 4%; 9-11 books 3%; 5-8 books 2%; 1-4 books 1%; 0 books 0%

Journals were collected for checking in Week 8 and marks were awarded for submission of completed journals in Week 15.

- **students' comments** – in Week 16, students were invited to write comments about ER in any language (see Appendix 3).

ER activities Nine ER activities were designed and conducted in the first 10 minutes of course lectures (see appendices 4, 5, 6, 7, 8, 9, and 10). These activities were short, easy, involved no preparation by the students, and no marking by the researcher. They were also intended to act as motivators for students to read and as checks on the completion of their reading. One of these ER activities was titled **WHAT DO YOU THINK?** and was used in the measurement of students' attitudes.

RESULTS

Pre- and post-test Fifty-one students completed both pre- and post-test parts of the study. Their pre- and post-test results and the changes between their performances in these two tests are shown in Appendix 11. There was an increase

in the average score out of 50 (pre-test 34.78; post-test 35.39). However, this increase was not of statistical significance.

The 51 students were placed in one of two groups, higher ability and lower ability, based on the scores in the pre-test. The scores ranged from 45/50 to 22/50, the mid-point being 33/34. Those in the 34-45 bracket were placed in the higher ability group, and those in the 22-33 bracket were placed in the lower ability group.

As a result of this placement, the former group contained 30 students and the latter 21 students.

Higher ability group

The average pre-test score for this group was 38.89/50 and the average post-test score was 37.73/50. This represented a decrease in performance of 2.91%. This decrease was not statistically significant. Eighteen students recorded lower scores (average loss 3.3) in the post-test compared to the pre-test, nine improved their scores (average gain 3), and three remained the same (see Appendices 11 and 12).

Lower ability group

The average pre-test score in this group was 28.95/50 and the average post-test score was 32.04/50. This represented an improvement in performance of 10.69%. This improvement was statistically significant. Seven students recorded lower scores (average loss 2.4) in the post-test compared to the pre-test, 14 improved their scores (average gain 5.9), and none remained the same (see Appendices 11 and 12).

Pre- and post-questionnaire (The same questionnaire was used in the pre- and post- situations.) Forty-nine students completed the pre-questionnaire and fifty-eight completed the post-questionnaire. These questionnaires consisted of 20 statements related to reading and learning English, and the students were asked to complete them by selecting *strongly agree*, *agree*, *disagree*, and *strongly disagree*. The statements sought to investigate any changes in the students' attitudes to their use of English before and after the course. The results of the pre-/post-questionnaire are displayed in Appendix 13.

Responses to WHAT DO YOU THINK? One of the ER activities completed by students in Week 8 of the project involved a class activity in which students responded to a series of statements about ER. These statements aimed to briefly reveal the students' feelings about ER and reading in English. Their responses are shown in Appendix 14.

Students' comments about ER Fifty-seven students made comments about ER, 34 in Thai, 22 in English, and 1 in Thai and English.

The main comments were – improved vocabulary (21 mentions); improved grammar (3); difficult (4); interesting (11); improved reading skills (8); improved English skills (7).

Some interesting comments were – books not linked to course (1); no time to read (2); need better ways to make sure that students actually read the books (1); changed from not liking reading to liking reading (1); proud to finish reading a book (1); liked being able to choose for oneself (1).

Also, the following were comments as written by students:

**One of my hobbies is to read. Especially the books about children, travelling or others culture. The books that I read from SAC are interesting and fun. I will keep reading to implove my reading skill, my English and open my mind to get any idea from books.*

**I think it is really that I can practice my English with Extensive Reading. It made me love reading, it gave me a lot of knowledges.*

(The above comments were written by the students in English themselves. They contain some grammatical mistakes. Both comments were not edited by the researcher.)

DISCUSSION

Pre- and post-test The results of the post-test compared to the pre-test were generally disappointing. Even though there was an increase in the average score out of 50 (pre-test 34.78; post-test 35.39), this increase was not statistically significant.

The results of the post-test compared to the pre-test based on groupings into higher ability and lower ability students were revealing. The average post-test score for the higher ability group was lower than that for the pre-test (pre- 38.89/50; post- 37.73/50; decrease of 2.91%). This decrease was not statistically significant. The average post-test score compared to the average pre-test score for the lower ability group was statistically significantly different (pre- 28.95; post- 32.04; increase of 10.69%).

An explanation of the differences in performances between the students with higher ability and those with lower ability may be due to the motivation related to assessment provided to the students to complete the readings (see above).

The students' journals were collected for checking in week 8. A number of students had already at this stage completed the recordings for the maximum number of readings for the award of the allocated 5% and were awarded the marks. When the journals were again collected in week 15 for a final check, it was noticed that many of these students had not read any more books – they had achieved their maximum mark in the first half of the semester and realized that they could not improve their mark by reading any more! If the students who completed all their readings early were the better ones, this may partly explain the poor performances of the better students in the post-test. They may have completed the pre-test to the best of their ability, done their readings in the first 8 weeks, achieved the maximum marks available, gone on to concentrate on other academic tasks to the best of their ability, and completed the post-test for the ER project as quickly as possible in week 15, having had nothing to do with the project since week 8.

The *English in Business* course was the only course in which it was possible to implement the ER project at the time. The appropriateness of *English in Business* for the project may be questioned. The course was not a reading course – it involved activities oriented to writing applications for employment, completing interviews, and fulfilling tasks associated with roles in the work situation. It was a compulsory course for Tourism majors and was offered only in the final semester of their final year. This meant that it was a stressful time for the

students who were completing assessments in a number of areas and many were seeking opportunities for employment and/or further study.

Pre- and post-questionnaire Comparison of the students' responses to the pre-questionnaire (n=49) and post-questionnaire (n=58) revealed an encouraging development of attitudes to reading English. In cases where the item was positive, there tended to be an increase in numbers of strongly agrees and agrees and a corresponding decrease in strongly disagrees and disagrees. For example, item 6, a positive statement, showed an increase in students who chose "Strongly agree" from 0 in the pre-questionnaire to 6 in the post-questionnaire. There was a decline from 5 to 1 of students who selected "Strongly disagree" for the same item (see Table 1):

Table 1 Comparison of pre- and post-questionnaire responses to a positive item (pre- n=49; post- n=58)

No	Item	Strongly agree A (pre-/post-)	Agree B (pre-/post-)	Disagree C (pre-/post-)	Strongly disagree D (pre-/post-)
6	I have confidence in my ability to read English.	0/6	17/35	27/16	5/1

In cases where the item was negatively phrased, the movement of numbers was in the opposite direction. Item 20, a negative statement, showed a reduction from 2 to 0 in students who chose "Strongly agree" and an increase from 3 to 14 in the number who chose "Strongly disagree" (see Table 2):

Table 2 Comparison of pre- and post-questionnaire responses to a negative item (pre n=49; post n=58)

No	Item	Strongly agree A (pre-/post-)	Agree B (pre-/post-)	Disagree C (pre-/post-)	Strongly disagree D (pre-/post-)
20	I feel uneasy when I see English.	2/0	15/13	29/31	3/14

The responses to the pre- and post-questionnaire suggested that there was a general development of confidence in reading and/or using English on the part of the students involved in the ER project.

Responses to WHAT DO YOU THINK? As part of the ER project, students were asked to indicate their agreement or otherwise with a number of statements. These were general statements of a mixed nature. The most interesting response was to the statement *ER has been useful to my English*. Fifty-one students agreed with this and only 2 disagreed. This is an extremely encouraging response about the value of reading generally and ER specifically from a group of students who were involved in a course that was not focusing on reading.

Students' comments about ER The students' comments about ER were also positive overall. They indicated a positive attitude to reading as a means of improving English skills and developing interests in a wide range of topics.

Limitations In the consideration and discussion of the results of this study, it is important to take into account some limitations that may have had an influence on the outcomes.

The participants in the study were fourth (final)-year Tourism major students in the Bachelor of Arts program. The fact that they were final year students may have tested their feelings of the relevance of such a project at such a late stage of their undergraduate careers when they may be less focused on academic skills of reading and more concerned about their career skills and prospects.

These same feelings may also have been reinforced by the professional-oriented nature of their major – Tourism – and the practical skills-based approach of the course in which the project occurred – *Business in English*.

The implementation of the project at a late stage in their study program and the professional nature of the students' major and the course may have been limitations on the outcomes of the study. Such limitations may be overcome by the implementation of the ER project in the first year of study at university and in a basic academic course taken by all students, such as *Foundation English*.

Recommendations

1. ER is justified in any English context and/or course as reading is an integral part of the language situation in which all skills are interrelated. It, however, may have more relevance in reading-oriented courses in which the students are able to recognize its relevance in such courses.
2. It may be more appropriate to use ER in an earlier situation than the final semester of the final year of students' programs. If so, it needs to be introduced early in the program so that students develop their reading skills to allow use in other areas of study.
3. It is recommended that the project be repeated with students from different disciplines and different years of study to enable comparison of the effectiveness of ER across academic areas and stage of study.
4. The graded readers that were used in the ER project provided a number of texts that suited the range of students' abilities. It is recommended that these readers be used again.
5. The texts were stored in the Self-Access Center in the Faculty of Liberal Arts and students accessed them using this institution's procedures. This relieved any loaning burden on the researcher and made the texts readily available to the students. This system needs to be retained.

CONCLUSION

The focus of this research was on the effects of ER on the proficiency in and attitudes toward reading English of Thai university students. The results of the study obtained from the pre- and post-test showed that students of lower ability who participated in the ER project improved their general English reading ability. However, the data suggested little improvement in the general English reading ability of the students of higher ability. But data collected by other methods (the pre- and post-questionnaire, agree/disagree responses, and anonymous written comments) indicated that most students responded favorably to ER. The affective dimension of ER increases when Thai university students studying EFL read easy and interesting books that they select. They are motivated to reading in English and they enjoy reading in English.

These findings are important for EFL instructors in Thailand for they demonstrate that ER can help Thai EFL students who struggle with reading. It is highly recommended that ER be implemented at the beginning of students' first year at university. This is especially important, given the finding that students generally enjoy ER. ER can be used in any course where listening, speaking, writing and reading are taught.

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APPENDICES

Appendix 1 (The same test was used for the pre- and post-test.)

PRE-/POST-TEST

Student's I.D.

You have 30 minutes to complete the passage below.

FILL IN EACH GAP WITH ONE APPROPRIATE WORD:

My name is Huckleberry Finn. My friends call (1)_____ Huck. I am fourteen years old.

Have (2)_____ heard about me? Have you heard about me (3)_____ my friend, Tom Sawyer? Mr Twain wrote (4)_____ book about us. The book was about both (5)_____ us, but Mr Twain called it *The Adventures* (6)_____ *Tom Sawyer*. The stories in that book are (7)_____. But Mr Twain didn't tell you everything about (8)_____. He didn't know everything about us. He (9)_____ a writer, not a boy. Writers don't (10)_____ everything about boys!

Now *I'm* going to tell (11)_____ some more of my story. But first, (12)_____ going to remind you about myself.

I was (13)_____ in St Petersburg in Missouri. St Petersburg is (14)_____ the western shore of the Mississippi River. My (15)_____ died a long time ago. After that, (16)_____ father left town and I lived alone.

Tom's (17)_____ were dead too. But Tom lived with his (18)_____ Polly. I didn't have any aunts. I (19)_____ alone for many years. In the summer, (20)_____ slept in barns on farms near town. I (21)_____ go to school and I didn't learn lessons. (22)_____ didn't go to church on Sundays and I didn't (23)_____ prayers. I didn't wash my face and I (24)_____ comb my hair. My life was good!

_____ didn't have any aunts. I didn't have any (25)_____ or sisters. But I had many friends.

(26)____ of the boys in town were my friends. (27)____ their mothers and fathers weren't my friends! Their (28)____ and fathers didn't want me to come to their (29)____. They didn't want me to talk to their (30)____. Why? Because their children didn't like going (31)____ school. And their children didn't like going to (32)____. All my friends wanted to be me. (33)____ parents didn't like that.

So, what about (34)____ father? I didn't see him very often. (35)____ he came to St Petersburg. But he was (36)____ bad man. He was always drunk. He (37)____ hit me and he stole things from me. (38)____ was afraid of him.

.....

Two years ago, (39)____ 1844, Tom and I had an adventure. (40)____ were two bad men in our town. They (41)____ stolen some money and they had hidden it. (42)____ wanted to attack a widow, Mrs Douglas. (43)____ of the men hated this widow. Her husband (44)____ dead. He had been a judge. Some (45)____ before, Mrs Douglas' husband had sent this man (46)____ prison. The man and his friend wanted to (47)____ Mrs Douglas. They wanted to get into her (48)____ and attack her.

Tom and I found out (49)____ the men's plan. And Tom and I told (50)____ Thatcher about it.....

Total /50

Appendix 2

PRE-QUESTIONNAIRE (adapted from Hitosugi & Day, 2004, with permission)

Select A, B, C or D for the following statements (10 minutes).

No	Item	Strongly agree A	Agree B	Disagree C	Strongly disagree D
1	I don't know many English words.				
2	It is easy for me to read English.				
3	I read English books, comics, newspapers, etc., outside of class.				
4	I find English difficult.				
5	I would like to do well in this English course.				
6	I have confidence in my ability to read English.				
7	When I read English, I need to look up many words in the dictionary.				
8	When I read English, I am very interested in what I read.				
9	I find studying English boring.				
10	After reading English, I am very interested in what I read.				
11	I would like to read more English.				
12	I look forward to coming to this English class.				
13	I do not enjoy reading English.				
14	Considering how I study English, I can honestly say that I do just enough to pass.				
15	I am a slow reader when I read English.				
16	When I read English, I understand relatively little.				
17	I like to watch English television programs.				
18	I try to speak English outside of class at every chance I get.				
19	It is hard for me to read English words.				
20	I feel uneasy when I see English.				

Appendix 3

When you have finished the post-questionnaire, please write your comments IN ANY LANGUAGE below on what you think about Extensive Reading. Thanks.

Appendix 4

ER 1 and ER 2

Discussion questions – discuss with a partner in any language:

1. What are your first memories of reading?
2. Did anyone read to you? No – why not? Yes – who, where and what?
3. What reading material did you enjoy the most?
4. Do you still enjoy the same material or has your reading changed? How?
5. What role does reading now play in your life as a student, a young Thai.....?

Extensive Reading

1. Read, read, read, read, read, read, read, and then read some more
2. Read easy
3. Read interesting
4. Re-read interesting
5. Read for general understanding
6. Ignore unknown or difficult words – just keep reading
7. Avoid dictionaries – just keep reading
8. Expand your reading comfort zone
9. Set reading goals and keep a reading log
10. Enjoy your reading

Appendix 5

ER 3

Most books have a “blurb.” This is a short description of the book and is usually found on the back cover of the book. To make your choice of a book quicker, you need to be able to read the blurb and decide if the book is appropriate to you.

Read the 9 blurbs below and write the titles of books on display that you think they describe. Record also why you made these decisions.

Blurb 1 – England – 1828 to 1840. Maggie Tulliver is beautiful and intelligent. But she is lonely and unhappy.

Philip Wakem loves her. But she cannot meet him. The Tullivers and the Wakems are enemies.

Then Maggie meets Stephen Guest. They fall in love. But Stephen is going to married to Maggie’s cousin.

Title.....

Why?.....

Blurb 2 – Ikuko goes to England to study, promising to return to Japan to get married. But in Birmingham, Ikuko not only discovers another way of life but also a great deal about herself.

This is a powerful story about love that is carried across 3 continents and even time itself...

Title.....

Why?

Blurb 3 – “Mr Scrooge,” said the gentleman. “I have come to ask for your help because it is Christmas. I want money to help the poor people who have no money and no homes.”

“Aren’t there any prisons?” asked Scrooge. “Put these poor people in prison.”

“But prisons are not very pleasant places. I’m sure you want people to have a merry Christmas.”

“I don’t have a merry Christmas,” said Scrooge. “Christmas is nonsense. I don’t believe in Christmas. I’m not giving anyone money so they can have a merry Christmas.”

Title.....

Why?

Blurb 4 – This is a love story you won’t forget. Oliver meets Jenny. He plays sports, she plays music. He’s rich, and she’s poor. They argue, and they fight, and they fall in love.

They get married and make a home together. They work hard, they enjoy life and they plan for the future. Then they learn that they don’t have much time left.

Title.....

Why?

Blurb 5 – In the mountains of Transylvania, there stands a castle. It is the home of the Count – a dark, lonely place, with wolves howling at night.

In 1875, Jon Harker comes to do business with the Count. But Jon does not like the castle. Strange things happen at night, and very soon, he begins to feel afraid...

Title.....

Why?.....

Blurb 6 – These enjoyable stories offer 8 slices of life in England today. The themes include food, the media, immigration, student life, football and leisure. These stories provide a fascinating picture of the country at the start of a new century.

Title.....

Why?.....

Blurb 7 – Liz teaches archaeology in Athens. She works hard and needs a holiday, so she goes to the beautiful and peaceful island of Sifnos. But the peace does not last long when a mysterious yacht arrives. Liz becomes involved with some dangerous people.

Title.....

Why?.....

Blurb 8 – “I sleep with my eyes open. My ears hear the smallest sound and I wake. You may see something moving the corner of your eye. If you turn to look, there will be nothing there. But I am following in the darkness behind you. I am your worst dream.”

Title.....

Why?.....

Blurb 9 – Frank Wormald is a writer. He doesn't have much money and his wife is unhappy. To help him finish one of his stories he starts to use a computer. But the computer gives him more than he wants. Then he really needs help!

Title.....

Why?.....

Appendix 6

ER4 – FIND YOUR LEVEL – WRITE ON **THIS** PAPER – DO **NOT** WRITE ON THE TEXTS.

1. CHOOSE 1 OF THE TEXTS (THEY ARE THE FIRST PAGES OF SOME OF THE CAMBRIDGE GRADED READER BOOKS.)
2. RECORD THE CODE (LETTER AND NUMBER, E.G. B2 – THE NUMBER TELLS YOU THE LEVEL OF THE BOOK)
3. QUICKLY READ THE TEXT AND RECORD BELOW ANY WORDS OR PHRASES YOU DON'T UNDERSTAND – DON'T WRITE ON THE TEXT.
4. IF YOU FEEL COMFORTABLE WITH THE TEXT....
5. IF YOU RECORD MORE THAN 5 WORDS OR PHRASES....

	CODE (LETTER AND NUMBER)	WORDS OR PHRASES YOU DON'T UNDERSTAND	IS IT YOUR LEVEL?
FIRST TEXT			
SECOND TEXT			
THIRD TEXT			

Appendix 7

ER 5 – NEW VOCABULARY

Complete the table for **5 new words** that you have discovered in your Extensive Reading.

New word	Part of speech, e.g. noun etc.	Meaning	Synonym(s)	Antonym(s)	Other forms of word, e.g. adjective
1					
2					
3					
4					
5					

Appendix 8

ER 6 – SHARED NEW VOCABULARY

Complete the table for new words from **others'** Extensive Reading.

New word	Part of speech, e.g. noun etc.	Meaning	Synonym(s)	Antonym(s)	Thank you
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Appendix 9

ER7 WHAT DO YOU THINK?

	I agree	I disagree
Reading in my first language is fun.		
ER has been useful to my English.		
Reading in English is difficult.		
I feel comfortable reading the ER texts.		
I look up new English words in the dictionary.		
If I read quickly in English, I don't understand the text.		
I enjoy reading out loud in English.		
The ER texts are too easy.		

Appendix 10

ER 8 – RE-ORIENTATION

(Going in the right direction; keeping on track)

Your aim is to read and record in your journal at least 15 books to achieve the 5% allocated for Extensive Reading.

- You started in week 1 at zero.
- This is week 12 – you should have read and recorded at least 12 books.
- How many have you read and recorded? _____. Are you on track? _____.
- Check the 10 points about Extensive Reading that you were given in ER 1.
- You have to hand in your journals on 9.2.07 (week 15).

ER 9 – MY FAVOURITE PASSAGE/BOOK

With a partner, tell each other what your favourite passage/book that you have read in ER is. Tell each other:

1. title, author, type of book (love, history, adventure...)
2. brief description of the passage/book
3. reasons for liking the passage/book

Appendix 11

Pre- and post-test results and changes between pre- and post-test (n=51)

Student number	Pre-test score /50 h – higher ability l – lower ability	Post-test score /50	Change between pre- and post-test
1	45 h	41	-4
2	37 h	38	+1
3	25 l	30	+5
4	24 l	28	+4
5	26 l	35	+9
6	32 l	29	-3
7	40 h	39	-1
8	32 l	29	-3
9	40 h	33	-7
10	43 h	47	+4
11	33 l	39	+6
12	40 h	39	-1
13	42 h	38	-4
14	34 h	25	-9
15	26 l	32	+6
16	34 h	31	-3
17	37 h	35	-2
18	37 h	32	-5
19	39 h	36	-3
20	39 h	42	+3
21	28 l	37	+9
22	43 h	46	+3
23	31 l	32	+1
24	39 h	38	-1
25	35 h	35	0
26	33 l	40	+7
27	42 h	40	-2
28	30 l	38	+8
29	44 h	44	0
30	31 l	30	-1
31	39 h	41	+3
32	41 h	39	-2
33	31 l	38	+7
34	27 l	26	-1
35	43 h	37	-6
36	37 h	38	+1
37	37 h	34	-3
38	36 h	40	+4

39	22 l	26	+4
40	37 h	36	-1
41	35 h	34	-1
42	29 l	34	+5
43	28 l	31	+3
44	38 h	38	0
45	33 l	41	+8
46	29 l	28	-1
47	25 l	24	-1
48	34 h	40	+6
49	33 l	26	-7
50	39 h	34	-5
51	40 h	42	+2

Appendix 12

Higher and lower ability groups' pre- and post-test averages and % differences in performances

Ability level	Pre-test average/50	Post-test average/50	% difference
higher	38.89	37.73	-2.91
lower	28.95	32.04	+10.69

Appendix 13

Results of pre-/post-questionnaire titled Responses to statements about ER

No	Item	Strongly agree pre-/post	Agree pre-/post	Disagree pre-/post	Strongly disagree pre-/post
1	I don't know many English words.	2/1	32/25	13/28	2/4
2	It is easy for me to read English.	1/5	18/41	28/12	2/0
3	I read English books, comics, newspapers, etc., outside of class.	1/6	20/43	22/8	6/1
4	I find English difficult.	2/1	25/24	21/32	1/1
5	I would like to do well in this English course.	28/32	18/24	3/2	0/0
6	I have confidence in my ability to read English.	0/6	17/35	27/16	5/1
7	When I read English, I must look up many words in the dictionary.	9/6	28/21	12/31	0/0
8	When I read English, I am very interested in what I read.	5/11	39/45	5/2	0/0
9	I find studying English boring.	0/1	5/4	33/31	11/21
10	After reading English, I am very interested in what I read.	5/13	37/43	7/2	0/0
11	I would like to read more English.	19/20	20/34	10/4	0/0
12	I look forward to coming to this English class.	11/12	29/35	9/10	0/1
13	I do not enjoy reading English.	0/0	10/4	33/36	6/17
14	Considering how I study English, I can honestly say that I do just enough to pass.	0/4	22/34	23/12	4/8
15	I am a slow reader when I read English.	9/5	29/25	10/28	1/0
16	When I read English, I understand relatively little.	3/0	35/29	11/29	0/0
17	I like to watch English television programs.	16/21	19/29	9/8	5/0
18	I try to speak English outside of class at every chance I get.	10/8	25/26	10/12	4/2
19	It is hard for me to read English words.	3/2	16/10	28/35	2/11
20	I feel uneasy when I see English.	2/0	15/13	29/31	3/14

(pre- n=49/post- n=58)

Appendix 14

Results of class activity WHAT DO YOU THINK? (n=54)

	I agree	I disagree
Reading in my first language is fun.	53	1
ER has been useful to my English.	51	2
Reading in English is difficult.	22	31
I feel comfortable reading the ER texts.	40	13
I look up new English words in the dictionary.	52	0
If I read quickly in English, I don't understand the text.	26	27
I enjoy reading out loud in English.	31	22
The ER texts are too easy.	13	40

Biodata

Patareeya Wisaijorn was an assistant professor at Ubon Ratchathani University, Thailand. She graduated with first class honors from the Faculty of Arts, Chulalongkorn University, majoring in English. She received a Fulbright scholarship to further her study of MA (TEFL) at the University of Kansas and later a Fulbright grant as a senior researcher to conduct her research work at the University of Hawaii (Manoa). She received her PhD in the same area of study from the University of Canberra. She is presently a guest lecturer at the Language Institute, Chulalongkorn University. Her research interests are in the area of reading and learner autonomy.

An Investigation of Thai Learners' Needs of English Language Use for Intensive English Course Development

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Abstract

Needs analysis plays an important role in course and curriculum development. Not only is it a necessary step for mandatory courses offered at schools and universities, but it is also crucial for language schools and institutes that offer intensive courses to learners. Assessing the purposes and needs as well as the activities for which the language is needed for the learners can help direct the curriculum as well as lead to successful teaching and learning. The objectives of the study were to study the needs of the learners and the English skills needed by the learners who enrolled in intensive English courses at Chulalongkorn University Language Institute (CULI), and also to investigate the content, teaching methods and length of the courses appropriate for them. The participants were 321 learners who voluntarily took part in the study. The learners were divided into 3 groups based on their occupations and CULI's course management as follows: students, government officials and employees of private organizations. The data were collected from a needs analysis questionnaire and interviews with selected participants. Both quantitative and qualitative methods were used to analyze the data. The results showed that the learners were interested in improving their English in all four language skills. They needed basic language skills such as reading for the main idea, giving information and general conversational skills in order to communicate effectively in everyday life. There were also demands for English for Specific Purposes courses targeting skills related to their occupations. In addition, interesting information useful for course and curriculum development and management was also identified.

Keywords: needs analysis, needs assessment, learners' needs

บทคัดย่อ

การวิเคราะห์ความต้องการ (Needs Analysis) เป็นส่วนสำคัญในการพัฒนารายวิชาและหลักสูตรภาษาอังกฤษ การสำรวจจุดประสงค์ ความต้องการและกิจกรรมที่ใช้ในรายวิชาหรือหลักสูตรหนึ่งๆ จะนำไปสู่ความสำเร็จในการเรียนการสอนได้ ทั้งนี้ การสำรวจความต้องการเพื่อนำไปพัฒนารายวิชานั้นไม่ได้จำกัดอยู่แต่เพียงวิชาบังคับในหลักสูตรของโรงเรียนหรือมหาวิทยาลัยเท่านั้น แต่ยังมี ความสำคัญในการจัดการเรียนการสอนในหลักสูตรภาษาอังกฤษแบบเร่งรัดอีกด้วย งานวิจัยนี้มีจุดประสงค์เพื่อศึกษาความต้องการการเรียนรู้ภาษาอังกฤษของผู้เรียน ทักษะภาษาอังกฤษที่ผู้เรียนจำเป็นต้องใช้และข้อมูลอื่นๆที่เป็นประโยชน์กับการจัดการเรียนการสอน เช่น เนื้อหา วิธีการสอน ความยาวของหลักสูตรที่เหมาะสมสำหรับผู้เรียน กลุ่มผู้เข้าร่วมงานวิจัยได้แก่ ผู้ที่สมัครเรียนวิชาภาษาอังกฤษที่สถาบันภาษา จุฬาลงกรณ์มหาวิทยาลัยเปิดสอนให้กับบุคคลภายนอก โดยมีผู้เรียนสมัครใจให้ข้อมูลจำนวน 321 คน แบ่งผู้เรียนออกเป็น 3 กลุ่มได้แก่ กลุ่มนักเรียนนิสิตนักศึกษา กลุ่มข้าราชการ และกลุ่มพนักงานจากบริษัทเอกชน ซึ่งเป็นการแบ่งตามกลุ่มอาชีพ และตามวิธีการบริหารการเรียนการสอนของสถาบันภาษา ผู้วิจัยใช้แบบสอบถามและการสัมภาษณ์ในการเก็บข้อมูล ผู้วิจัยวิเคราะห์ข้อมูลโดยใช้สถิติและการวิเคราะห์แบบเชิงคุณภาพ ผลการวิจัยแสดงให้เห็นว่าผู้เรียนมีความสนใจที่จะพัฒนาภาษาอังกฤษในทุกๆ ทักษะ และผู้เรียนต้องการทักษะภาษาอังกฤษที่เป็นพื้นฐานที่สามารถนำไปใช้ได้ในชีวิตประจำวัน เช่น การอ่านจับใจความ การให้ข้อมูล และทักษะการสนทนาทั่วไป นอกจากนี้ผู้เรียนยังสนใจที่จะเพิ่มพูนความรู้ภาษาอังกฤษที่เกี่ยวข้องกับวิชาชีพของตน งานวิจัยยังพบข้อมูลที่น่าสนใจ ซึ่งสามารถเป็นประโยชน์ในการจัดการเรียนการสอนอีกด้วย

Keywords: การวิเคราะห์ความต้องการ, การประเมินความต้องการจำเป็น, ความต้องการของผู้เรียน

Background

Up to and following the recent establishment of the ASEAN Economic Community (AEC), Thailand, especially the Thai government, has been attempting to make the transition as smooth as possible. One key aspect is the improvement of the country's English teaching and learning system with the hope of increasing the English proficiency of Thai citizens. English will play an increasingly important role than in the past since it will be used as a medium of communication for ASEAN country members. However, according to the Ministry of Education's report on its strategic plans during 2006-2010, its goals concerning English language development have not yet been met. Its plans to restructure Thailand's English education system includes making English the Thai student's first foreign language, implementing English courses early in year 1, encouraging schools to open more English Programs as well as supporting the establishment of international schools, funding English teacher development, and, in 2006, adopting the communicative teaching approach. Despite the different types of measures that have been taken, the average scores of grade 6 and grade 9 students' English remained the lowest, compared to those of the other core subjects. Regarding grade 12 students, the average English score on the national test is also not satisfactory (NIETS, 2016). This partially leads to students seeking extra English courses. Like young learners, adults also need greater English training to better equip themselves in a more competitive world. This has contributed to the expansion of private tutoring businesses around the world. They are prevalent especially in North America, Europe and Asia-Pacific (Schlenker, 2012). Examples are clearly evident in Asian countries. In 2012, South Korea accounted for 15% of the global market in the business, which was worth approximately US \$13.9 billion (ICEF, 2012). Thailand is also following this trend with the private tutoring businesses growing at 5.4% each year, and, for high school students alone, the business is worth more than 8 billion baht in value (MGR online, 2013).

With the huge profits generated by the tutoring business has come greater competition. Chulalongkorn University Language Institute (CULI), with its mission to provide English language education not only to university students, but also to the public, therefore, has to actively engage and compete within this

sphere. CULI has been offering intensive English courses to the public for many years. Course and teacher evaluations are always carried out at the end of each course with the purpose of enhancing both teaching and learning. In some classes, teachers also explore students' needs at the beginning of the class. However, in order to ensure that students' needs are met, a systematic method like a needs analysis is required. Knowing what learners need does not only help prepare CULI for competing in the business, but, more importantly, it also leads to achieving its ultimate objectives of providing quality teaching and learning.

Needs analysis

Firstly, how can we know that the courses and the course content meet learners' expectations? Munby (1978) suggested that needs analysis or needs assessment is an initial requirement. This is very important for course development as it facilitates the course design process that will be beneficial to all parties: students, teachers and the institutions and organizations involved.

Needs analysis has long been viewed as an initial and important step for curriculum development. Rahman (2015) emphasized that needs analysis is crucial as it is necessary to assess the purposes and needs as well as the activities for which the language is needed. In the early years, needs analysis was predominant in English for Occupational Purposes (EOP); however, the focus later shifted to English for Academic Purposes (EAP). Needs analysis for general English is also included (West, 1994). Dudley-Evans and St. John (2007) defined 'needs analysis' as a process of finding what and how a course should be, and an 'evaluation' as a process of finding if it is effective.

Needs analysis in education is important as it provides useful information for teachers and educators in the following areas (McCawley, 2009, p.3):

- Impact – From needs assessment, we are able to create a positive impact on the students. This helps us know what they need.
- Approaches – We are able to select the most effective teaching approaches which best suit our students.
- Awareness – We are able to see the gaps between the programs we offer, and what we should offer to bridge the gap, which leads to more effective teaching and learning.

- Outcomes – We are able to use the current situation to document outcomes.
- Demand – We are able to know what the potential demand is for our future programs. This is very important especially for those in competitive markets.
- Credibility – We are able to guarantee if the programs serve the target group of learners well, and to show the funding authorities that the programs are effective.

What are needs? Needs are defined in many ways. McCawley (2009) defined a needs analysis as an assessment to ascertain the gap between what the learners possess (i.e., what they know, what skills they have, what they are interested in, what they prefer and what their learning habits are like) and what they need. Dudley-Evans and St. John (1998, p.125) proposed a theoretical framework of needs analysis, which consists of (1) learners' professional information, (2) learners' personal information, (3) learners' language information about the target situations, (4) learners' lacks, (5) learners' needs from the course, (6) language learning needs, (7) communication information in the target situation, and (8) environmental information. In 2007, Dudley-Evans and St. John provided a precise descriptive summary of needs analysis – as influenced by Brindley (1989: 63-65) and Berwick (1989: 55) – as *objective and subjective, perceived and felt, target situation/ goal-oriented and learning* as well as *process-oriented and product-oriented*. *Objective and perceived* needs are derived from outsiders. These needs can be verified and are based on facts. In contrast, *subjective and felt* needs are derived from insiders and are related to cognitive and affective factors. How learners feel, for example, is considered as falling under the *subjective and felt needs* category. Dudley-Evans and St. John proposed three types of analyses: 1) *target situation analysis*, which includes product-oriented and goal-oriented needs, 2) *learning situation analysis*, which is based on process-oriented needs, and 3) *present situation analysis*, which can be described as lacks.

Munby (1978) proposed the model “Communication Needs Processor” (CNP) in which information about participants is analyzed to get their profiles of needs. His model emphasized the importance of needs analysis and has been

widely adopted. From the 1970s until now, the role of needs analysis remains influential. Macalister and Nation's (2011) model of the curriculum design process shows that needs analysis is one of the essential parts in the curriculum development process. Based on the model, there are three types of needs, namely, necessities, lacks and wants. According to Hutchinson and Waters (2006) these needs are categorized under the bigger term of "target needs". *Necessities* refers to the knowledge learners need to know in order to be able to communicate effectively in a target situation. These needs are based on the demands of the target situation where learners have to use the language. *Lacks* are referred to as a gap between learners' existing knowledge and the target proficiency that they are required to have in order to perform in each particular situation. *Wants* are based on learners' viewpoints. In Nation and Macalister (2010), they are referred to as learners' "subjective needs" since for the same target situation, the necessities of skills one must possess can be objectively explained; however, what learners want in the same target situation may vary from one to another. For example, for two learners who are from the same company and with the same job responsibilities, one might want to learn more about how to write business correspondences, while the other might desire to practice more speaking skills.

Hutchinson and Waters (2006, p.59) proposed a target situation analysis framework that includes the following main areas: the reasons why the language is needed, the way of using the language, the content area of the course, the interlocutor with whom learners will use the language, the situation where the language will be used, and the time when the language will be used. Another framework suggested by Hutchinson and Waters (2006, p. 60) is a learning needs analysis framework, which refers to what learners need to know in order to be able to perform or meet the target situation needs. The questions asked are as follows: the reasons why the learners take the language course, the resources that are available, who the learners are, and where the course will take place.

However, Syssoyev (2014) suggested that to study only the needs of the students might not be enough to develop a successful course or program. A *student analysis* is needed to see what students' interests are. In a student analysis, teachers will be able to see both what their students are like, in terms of their proficiency levels, their motivation, their background, etc. as well as to learn

what their needs are, or what they want to achieve. The student analysis can be conducted after a needs analysis, which serves as a basis for course development, since teachers might not be able to meet the potential students before class.

In addition to needs analysis and student analysis, *means analysis* is also suggested as an additional tool for course development. Means analysis, a method widely used in English for Specific Purposes (ESP), is a means to study the local setting or the environment where the language course will take place. This is to study, for example, the teachers, the students, the teaching methods and the facilities in order to make the course suit each teaching and learning environment (Dudley-Evans and St. John, 2007).

West (1994) suggested three periods in a course when needs analysis should be carried out. Needs analysis can be done in advance of a course so that teachers will have plenty of time to prepare for their syllabus and materials. This is called an offline analysis, and it may need to be reviewed when the teachers meet the learners. The second period to conduct needs analysis is on the first day of the class. This is advantageous because teachers are able to see their students, and also meet and talk to them. They will subsequently acquire a truer picture of their students' needs. However, it is disadvantageous in that the teachers do not have time to prepare for the course in advance. The third is ongoing needs re-analysis. This is to help teachers identify their students' new or short-term needs. West recommended that needs analysis be repeated during the course since students' needs can change. This is supported by Gómez García (2010) suggesting that needs analysis be conducted throughout the course, not only as a pre-stage, but also during a course design period.

Approaches to Needs Analysis

Needs analysis is a complicated process, involving interpretations of a large amount of data. McCawley (2009, p.4) proposed six steps in conducting a needs assessment for an effective educational program development as follows:

- 1) writing the objectives of the needs assessment
- 2) selecting the target informants
- 3) sampling the informants who represent the needs of the whole population
- 4) choosing instruments to collect data

- 5) analyzing the data
- 6) making a decision or assessing needs based on the collected data

To ensure the reliability and validity of a needs analysis study, Cowling (2007) and Long (2005) recommended triangulating different sources. According to Long, triangulated sources should be done “to increase the credibility of the interpretation of the data...” (p.28).

Different data collection procedures include those such as logs, interviews, observations, questionnaires and testing (Long, 2005 and Nation and Macalister, 2010). Gómez García (2010) also recommended needs analysis through various types of methods. Hutchinson and Waters (2006, p.58) and Palacios Martínez (1994, p.143), quoted in Gómez García, suggested different methods through which information about learners’ needs can be gathered. These are surveys, questionnaires, interviews, attitude scales, job analyses, content analyses, statistical analyses, observations, data collection, and formal consultation with sponsors, learners and other relevant parties. Jordan (1997) recommended the same methods for needs analysis, namely observations, surveys or questionnaires, and structured interviews. Other methods he suggested include diagnostic tests, learner diaries, case studies or a thorough investigation of the needs and difficulties the students have, evaluation and feedback, and previous research, which can serve as a valuable source of information for the teachers or course developers. In research by Brown (2002), surveys, questionnaires, interviews and observations are also suggested. Other methods are those such as tests, personal reviews and performance appraisals.

To gain substantial information, not only should methods of data collection be considered, but the sources of information are also important. According to Dudley-Evans and St. John (2007), the main sources of information can be both the people involved and the documents. They can be learners, people who work or study in the field, students who used to take part in the course, relevant documents, clients, employers, colleagues, and relevant research studies. Kaewpet (2009) suggested inviting multiple perspectives from all stakeholders. If the whole population cannot be included, it is necessary to carefully select the

informants. This is to ensure that they truly represent the whole population (McCawley, 2009).

Studies on Needs Analysis

A number of research studies have used needs analysis as a tool for curriculum development, improvement and evaluation, especially in ESP. For example, Gómez García (2010) explored the needs of different European enterprises for an online language course and material development. Kaewpet (2009) studied and proposed a framework for investigating the ESP needs of engineering students in an EFL context, and Srisueb (2009) studied the needs and attitudes of students from a private Islamic school in Narathiwat province. In this context, English is taught as a third language.

Numerous studies have also addressed students' needs in English training. They strongly prove that students consider English an important tool of communication. Some studies found the oral and aural skills the most important and, therefore, needed. For example, Wiriyaichitra (2003, cited in Somdee and Suppasetseree, 2013), found that English listening and speaking in the workplace are more essential than reading and writing skills as they are used more. Panpreuk and Mahapontong (2007) investigated the needs and interests of studying English of post-graduate students at King Mongkut's Institute of Technology North Bangkok. The study revealed that the students highly value the importance of English. Their needs regarding English training are for listening, speaking, writing and reading respectively. According to the study, the students have problems in giving presentations and answering questions related to their presentations. They also lack everyday conversational skills. Similarly, Dueraman (2013) revealed that Thai adult learners of English see the importance of English in various aspects such as education, everyday communication and in their careers. They reported that speaking skills are needed the most. These subjects said that with the advent of the AEC, these skills are highly important for communication especially for the tourism industry. Also, these are the skills in which Thai people lack confidence; therefore, speaking skills, alongside listening skills, need to be enhanced.

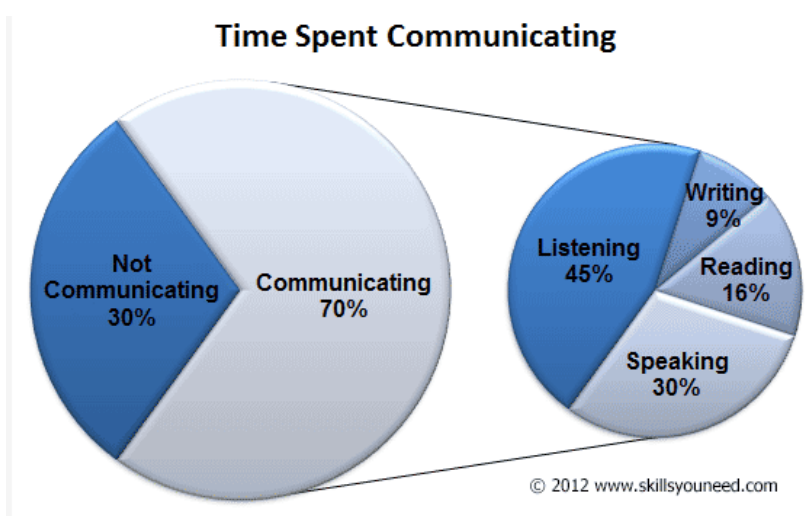
In the study conducted by Unkaew (2010), the needs and problems of employees at a company were explored. The employees revealed that they have problems with speaking skills the most, followed by listening, writing and reading, respectively. Their needs for English training courses reflected what they found the most difficult. Unkaew (2010) concluded that the employees' needs for training courses are parallel to the skills they lack. She also suggested that the four skills be taught altogether to enhance the effectiveness of teaching.

Another study conducted with non-Thai students also supported the students' view of English as valuable, and the oral and aural skills as being of paramount importance. Litticharoenporn (2014) studied the oral and aural English language needs of students at an international school in Bangkok as perceived by teachers, parents and students. During the first phase of her study, the target group was Japanese students only. According to the findings, general listening comprehension skills (besides formal lectures), effective participation in class or group discussion, project or study group, and communication with teachers in and out of class were ranked as the top three most important skills – although not in the same order – by the three groups. The ability to give presentations, take notes and to follow the pronunciation/intonation/stress patterns of American English were considered important, but not to the same degree.

In the same way, Kittidhaworn's (2001) research study showed that listening skills, particularly listening to classroom lectures, are necessary for Thai undergraduate students. The study explored the needs of 182 Thai undergraduate engineering students' English language learning in language structures, rhetorical categories, language functions and language skills (i.e. listening, speaking, reading and writing). It revealed that despite their demographic variables, there was no significant difference in their needs. It also showed that grammatical structures, especially those related to their target language use (TLU) such as structures used in scientific discourse, are needed. Moreover, she revealed that all language skills are perceived as important for the students with "listening to classroom lectures", "reading scientific/engineering texts for comprehension", "reading for particular purposes (e.g. main ideas, skimming, etc.)", "asking and answering questions during the group or class discussion", and stating opinions

or ideas about different topics during classroom discussion” on the top ten list. Regarding the skills that they perceive as being the least proficient in, speaking skills were ranked first, followed by listening. The students reported themselves as being most proficient in reading skills.

It is definitely unsurprising to learn that listening and speaking skills are in need the most. As can be seen in the following chart (skillsyouneed.com, 2012, citing Adler et al., 2004), people spend 70% of their time on communication, and such communication is mainly oral communication (listening 45% and speaking 30%).



Despite the fact that listening and speaking skills are used the most in everyday life, students have little opportunity to practice them in English. Biyaem (1997, cited in Noom-Ura, 2013), revealed that there have been many obstacles for Thai students to master English speaking. One of the obstacles is their lack of opportunity to use the language in everyday life.

Regarding the other two skills, i.e. reading and writing, there have also been studies supporting the significance of their roles, and underlining the need for training in these skills. Although some studies revealed that Thai students perceive their reading skills as being their strongest of all the four language skills, other studies have highlighted the problems they encounter in reading. Chawwang (2008) studied the English reading problems of Thai grade 12

students and found that they have problems in sentence structure, vocabulary, and reading comprehension. Also, when the two majors of science and arts were compared, the results showed no significant difference in the reading problems of the two groups. Phakiti and Li (2011) explored the reading and writing difficulties of post graduate students in TESOL. They reported that the students have difficulties in the academic vocabulary related to TESOL and that they also find synthesizing information difficult. As for writing skills, academic writing skills are specifically what they need. In Pawapatcharandom (2007), it was found that Mahidol University students viewed writing skills as the most problematic for them. Their concern is that of writing an essay within a time limit. Therefore, courses on writing are necessary for them. Naphon (2008) investigated the needs and problems of auditors at the Big Four in using English at work. The results showed that, for audit work, they need English writing skills the most, followed by reading skills. The speaking and listening skills are used less at work. However, the most difficult skill for them is speaking, with the difficulty lying in the selection of appropriate words to speak. Moreover, the study also revealed the auditors' preference for foreign teachers, who they perceive as more fun and relaxed. They also think integrated skills should be taught through a wide selection of teaching materials, the context of which should be business-related. The appropriate length of a course should be 3 months with 2-hour-classes offered once a week on a weekend morning.

It can be concluded from the previous studies that students view it as important to learn English. However, the skills they need the most vary according to the contexts or the situations in which they use the language. Morrison et al (2011) emphasized the importance of context analysis. They posited that context is highly influential on learning experience. Bracaj (2014) also supported this view, reporting that there have been an increasing number of ESP courses, which is a result of the attempts to meet learners' future career needs. The incorporation of the contexts for English teaching provides real world examples and scenarios for students. This is why needs analysis is an important part of curriculum development, especially in ESP. As Rahman (2015) pointed out for ESP courses, language teaching should reflect real world needs. Students will benefit more if the curriculum serves learners' needs, as found by Souriyavongsa et al (2013) and

their findings that Lao students perceive their low proficiency of English as resulting from the curriculum. They think it is ineffective and unable to help them improve their English proficiency. Douglas (2000) also stressed the importance of target language use (TLU) analysis in ESP, and pointed out that the four skills of listening, speaking, reading and writing should not be viewed as separate components; however, they should be considered as the ability that one needs to possess to be effectively engaged in a TLU situation.

In addition to curriculum development, some studies also looked at how information obtained can be used for curriculum review and evaluation. Balint (2005) investigated students' perceived English language needs so that the information would be used for his curriculum review. He also validated the perceived English language needs that the students initially reported by comparing them to students' later selection of courses. In another study, Vasavakul (2006) surveyed learners' needs to develop oral business English communication courses and to assess if the existing courses were effective. A study conducted by Bosher and Smalkoski (2002) aimed at evaluating why ESL students who enrolled in the Associate of Science degree nursing program did not successfully achieve their academic goals. The sources of information were derived from primary interviews, observations and questionnaires. A mixed method of target situation analysis and present situation analysis was used.

Research Methodology

Context

Chulalongkorn University Language Institute's (CULI) Academic Services Department consists of three centers: CULI's State Personnel Development Center, Academic Services Center, and Test Development Center. The first two centers are in charge of course management for the public and serve different groups of learners. Learners who are government officials have to enroll in courses offered by the State Personnel Development Center while students and those who work in private organizations have to enroll in courses run by the Academic Services Center. The courses are taught in the evenings on weekdays and throughout the day on weekends. They target various skills ranging from

general language skills such as effective communication and grammar to specific skills for particular contexts such as writing in the workplace and academic writing. Needs analysis, in this situation, is important even though some courses are for general English. It is believed that needs analysis is not only limited to English for specific purposes, but should also be conducted in general English courses (Seedhouse, 1995).

Research Objectives

The purpose of this study is to investigate the needs of learners who take intensive English courses at CULI as there have been problems in making decisions concerning what courses should be offered and how they should be managed. The aim is that the findings will suggest whether the courses offered need improvement or adjustment in response to the needs of potential clients or learners. Since the key problem is to serve the needs of a heterogeneous group of learners, this research aims to explore the initial needs in English of these learners, as suggested by Levy (2008) who states that pre-assessment on what the students know, what they want to know and what they have learned is necessary for a class with students of different abilities, experiences, and backgrounds. However, to minimize the diversity of learners' backgrounds, and to maximize the benefits for CULI from the findings, the learners were grouped based on their occupations: students, government officials and employees of private organizations, in accordance with the institute's course administration as explained above.

The objectives of the study are as follows:

1. To study the needs of the English language use of students, government officials and employees of private organizations
2. To study the English skills that students, government officials and employees of private organizations are required to master
3. To investigate the content, teaching methods and length of English training suitable for setting up intensive English courses for students, government officials and employees of private organizations

Population

The population comprised learners enrolling in the intensive English courses run by the State Personnel Development Center and the Academic Development and Services Center at CULI from the second to the last quarter of 2014. The estimated total number was 700. According to Yamane's formula of sample size (1967), an acceptable number for a population of 700, with a confidence level of 95%, is 255. In this study, 321 participants voluntarily provided information and returned the questionnaire.

The participants were divided into 3 main groups: 1) students (i.e. high school, undergraduate and graduate students) ($n = 132$), 2) government officials ($n = 138$), and 3) employees working in private organizations ($n = 51$). They were grouped according to their occupations and CULI's administration of the intensive courses as mentioned. From each sample group, participants were interviewed on a voluntary basis to give more in-depth information. In total, 46 participants volunteered to give more information via the interviews. Of this number, 20, 14, and 12 participants represented students, government officials and employees in private organizations, respectively.

As shown in Table 1, the majority of the participants in the study were women. They accounted for 69.78 % ($n = 224$) of the total number of participants. The age of the majority ($n = 137$ or 42.68%) ranged from 15-25 years old. Most of the participants ($n = 176$ or 54.83 %) held a bachelor's degree.

Table 1

		Occupation						Total	
		Student		Public		Private			
		N	%	N	%	N	%	N	%
Gender	male	58	18.10	22	6.90	17	5.30	97	30.22
	female	74	23.10	116	36.10	34	10.60	224	69.78
Age	Under 15 yrs	0	0.00	1	0.50	0	0.00	1	0.30
	15-25yrs	122	38.00	6	3.20	9	4.80	137	42.68
	26-35yrs	10	3.10	55	29.10	31	16.40	96	29.91
	36-50yrs	0	0.00	62	32.80	9	4.80	71	22.12
	Over 51yrs	0	0.00	14	7.40	2	1.10	16	4.98
Education	Secondary	35	10.90	1	0.31	0	0.00	36	11.21
	Bachelor’s	76	23.68	65	20.25	35	10.90	176	54.83
	Master’s	17	5.30	65	20.25	14	4.36	96	29.91
	Doctorate	3	0.93	4	1.25	2	0.62	9	2.83
	Others	1	0.31	3	0.93	0	0.00	4	1.25

Research Instruments

1. Needs analysis questionnaire – The questionnaire was created based on needs analysis frameworks and theories, related previous studies, and English needs surveys from other institutions and organizations. The questions were adopted from the needs analysis questionnaire used by SEAMEO Regional Language Center, Singapore as SEMEO RELC and CULI share some similarities in terms of the courses they offer. The two institutes teach both regular and customized English courses, including those targeting general language skills, test preparation skills and English for Specific Purposes courses. The skills included in the study were basic language skills and were related to the content of the courses. Experts were consulted to ensure the content validity and revisions were made before a trial with a comparable group of 78 participants. The questionnaire consisted of 2 parts: 1) Informants' background information and their needs concerning the time, the length, the method of

teaching and the teacher they prefer, and 2) their needs for each language skill. As for the teaching methods, three types of course management namely e-learning, blended learning and teacher presence in class were the focus as CULI would like to explore learners' opinions towards classroom management to see if the use of technology would attract them to take courses at CULI, and because the institute has developed several e-learning courses, investigating learners' views would be of great benefit. A Cronbach's alpha value of 0.9671 confirmed the reliability of the questionnaire.

2. Interviews – Interviews were given to learners. The interview was given to 46 participants who volunteered to give more information. There were 20, 14, and 12 participants representing the students, the government officials and the employees in private organizations, respectively.

Data Collection

1. To obtain the information regarding the participants' needs and English language use, the questionnaire was distributed to the participants in class. The interview was conducted with participants from each focus group who expressed interest in taking part.
2. Information about the skills required to master was investigated from participants' responses in the questionnaire and the interview.
3. Information concerning the content of the course, the teaching methods and the length of the course that the learners found appropriate was obtained from the questionnaire and the interviews provided to the learners.

Data Analyses

1. Descriptive statistics was used to analyze the data gained from the questionnaire concerning the needs regarding English use of the three groups of participants.
2. Regarding the specific English skills that they are required to master, descriptive statistics was also used to analyze the data obtained from the questionnaire. The information from the interviews with the students was analyzed qualitatively.

3. To investigate the content, the teaching methods and the length of English training appropriate for the learners, the data from the questionnaire and the interviews were analyzed qualitatively.

Results of the Study

To identify the learners' needs, the results are discussed based on the research objectives as follows.

1. To study the needs of the English language use of students, government officials and employees of private organizations

The needs of English skills in this study were divided into three main categories: conversational skills (listening and speaking), reading skills, and writing skills. They were subdivided into three types according to different language domains, i.e. for general usage, for work and for studies.

Based on the data shown in Tables 2-4, the participants expressed the need for all skills as can be seen from the high mean scores in each category. Regarding the student group, the results showed that their need for general conversational skills was at the highest level (mean = 4.48). As the need for reading and writing skills, they ranked reading for higher studies and writing for higher studies as their top priority (mean = 4.50 and 4.59, respectively).

As for the government officials, the participants viewed conversation skills, reading skills and writing skills for work as the most important, compared to those for other contexts. The averages were 4.45, 4.43 and 4.50, respectively.

The results gained from the learners who worked for private organizations followed the same direction as the government officials. They reported that they needed all of the language skills for the working context the most (mean = 4.48, 4.55 and 4.45, respectively).

Table 2: Students' needs for specific skills

Needs	Mean	S.D.
1. Need for Conversational Skills (Listening and Speaking)		
1.1 Conversation for general usage	4.48	0.82
1.2 Conversation for work	4.45	0.73
1.3 Conversation for studies	4.40	0.75
2. Need for Reading Skills		
2.1 Reading for general usage	4.39	0.79
2.2 Reading for work	4.47	0.73
2.3 Reading for higher studies	4.50	0.78
3. Need for Writing Skills		
3.1 Writing for general usage	4.54	0.67
3.2 Writing for work	4.47	0.72
3.3 Writing for higher studies	4.59	0.66

Table 3: Government officials' needs for specific skills

Needs	Mean	S.D.
1. Need for Conversational Skills (Listening and Speaking)		
1.1 Conversation for general usage	4.47	0.82
1.2 Conversation for work	4.45	0.73
1.3 Conversation for studies	4.07	0.93
2. Need for Reading Skills		
2.1 Reading for general usage	4.33	0.78
2.2 Reading for work	4.43	0.75
2.3 Reading for higher studies	4.20	0.96
3. Need for Writing Skills		
3.1 Writing for general usage	4.33	0.81
3.2 Writing for work	4.50	0.68
3.3 Writing for higher studies	4.20	0.96

Table 4: Employees of private organizations' needs for specific skills

Needs	Mean	S.D.
1. Need for Conversational Skills (Listening and Speaking)		
1.1 Conversation for general usage	4.33	0.87
1.2 Conversation for work	4.48	0.71
1.3 Conversation for studies	4.14	0.93
2. Need for Reading Skills		
2.1 Reading for general usage	4.26	0.79
2.2 Reading for work	4.55	0.68
2.3 Reading for higher studies	4.29	0.84
3. Need for Writing Skills		
3.1 Writing for general usage	4.31	0.75
3.2 Writing for work	4.45	0.80
3.3 Writing for higher studies	4.22	0.94

2. To study the English skills that students, government officials and employees from private organizations are required to master

Tables 5-8 show the purposes for the needs for each specific skill. The student group ranked listening for the main idea/summarizing and listening for conversational purposes as the top two (mean = 4.60 and 4.50 respectively). Regarding speaking skills, the students needed the skills that they could use to give information (mean = 4.58) and carry on conversation (mean = 4.57) the most. For reading skills, they needed the skills of capturing the main idea (mean = 4.52) and understanding a topic (mean= 4.50). As for writing skills, giving reasons/explanations was the most required skill (mean = 4.58), followed by descriptive writing (mean = 4.55) and writing to give information (mean = 4.55)

The public sector group gave similar responses concerning the listening skills to those of the student group. They viewed listening for the main idea/summarizing and for conversational purposes as the most needed listening skills (mean = 4.59 and 4.58 respectively). The speaking skills that they needed were

giving information (mean = 4.56) and conversation skills (mean = 4.51). Regarding reading skills, they needed skills that could help them to identify the main idea and summarize a text (mean = 4.59) and to understand a topic (mean = 4.49). The writing skills that were necessary for their work were skills that could be used for giving information (mean = 4.50), writing reports (mean = 4.36) and giving reasons/explanations (mean = 4.36).

The listening skills that the private sector group considered the most important and that they have to master were listening for the main idea/summarizing (mean = 4.66) and for conversational purposes (mean = 4.66). Speaking skills for conversational usage were what they sought the most (mean = 4.57). Giving information and giving opinions were also two of the most important skills for them (mean = 4.41). Concerning reading skills, similar to the first two groups, they said that they required reading skills that could help them capture the main idea/ summarize the most (mean = 4.60), followed by reading and understanding a topic (mean = 4.47). As for writing skills, the top two skills needed were giving information (mean = 4.4) and giving reasons/ explanations (mean = 4.4). Giving opinions through writing was also viewed as most needed (mean = 4.33).

Table 5: Needs for listening skills

1. Purposes for the Needs of Specific Listening Skills	Occupation					
	Student		Public		Private	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
1.1 Understanding a topic	4.45	0.68	4.36	0.77	4.48	0.63
1.2 Capturing main idea/ summarizing	4.60	0.63	4.59	0.61	4.66	0.48
1.3 Making an interpretation	4.47	0.68	4.37	0.71	4.41	0.75
1.4 Understanding attitudes	4.30	0.73	4.16	0.82	4.26	0.83
1.5 Conversational purposes	4.50	0.73	4.58	0.62	4.66	0.66
1.6 Using information/detail for a report/ presentation	4.30	0.76	4.28	0.83	4.16	1.06
1.7 Pleasure	3.90	0.97	3.87	0.99	3.76	0.96

Table 6: Needs for speaking skills

2. Purposes for the Needs of Specific Speaking Skills	Occupation					
	Student		Public		Private	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
2.1 Meeting	4.30	0.86	4.29	0.83	4.21	0.87
2.2 Negotiation	4.37	0.83	3.91	1.03	4.14	0.99
2.3 Giving information	4.58	0.69	4.56	0.67	4.41	0.82
2.4 Conversation	4.57	0.70	4.51	0.73	4.57	0.65
2.5 Telephoning	4.30	0.84	4.28	0.86	4.36	0.81
2.6 Giving opinions	4.53	0.68	4.45	0.73	4.41	0.65
2.7 Persuasion	4.11	0.91	3.77	0.92	3.79	0.87
2.8 Using appropriate gestures	4.32	0.75	4.13	0.84	4.21	0.79
2.9 Presentation	4.53	0.66	4.33	0.75	4.38	0.75

Table 7: Needs for reading skills

3. Purposes for the Needs of Specific Reading Skills	Occupation					
	Student		Public		Private	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
3.1 Understanding a topic	4.50	0.77	4.49	0.67	4.47	0.60
3.2 Capturing main idea/ summarizing	4.52	0.77	4.59	0.63	4.60	0.56
3.3 Obtaining information for further discussion/ sharing	4.45	0.74	4.47	0.68	4.43	0.70
3.4 Using information/ detail for a report/ presentation	4.39	0.74	4.31	0.78	4.22	0.86
3.5 Pleasure	4.09	0.88	3.88	0.88	3.78	0.94
3.6 Making an interpretation/ an analysis	4.44	0.77	4.19	0.92	4.17	0.88

Table 8: Needs for writing skills

4. Purposes for the Needs of Specific Writing Skills	Occupation					
	Student		Public		Private	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
4.1 Persuasive writing	4.21	0.78	3.95	0.85	3.81	0.85
4.2 Descriptive writing	4.55	0.62	4.35	0.76	4.26	0.76
4.3 Narrative writing	4.42	0.70	4.31	0.78	4.14	0.78
4.4 Giving information	4.55	0.65	4.50	0.65	4.40	0.67
4.5 Report writing	4.48	0.65	4.36	0.72	4.29	0.73
4.6 Comparative writing	4.43	0.72	4.23	0.81	4.14	0.85
4.7 Giving reasons/ explanations	4.58	0.59	4.36	0.79	4.40	0.72
4.8 Giving opinions	4.48	0.74	4.30	0.82	4.33	0.80
4.9 Argumentative writing	4.45	0.72	4.03	0.90	4.05	0.89

3. To investigate the content, teaching methods and length of English training suitable for setting up intensive English courses for students, government officials and employees of private organizations

As concerns the course content, the previous results shown in Tables 2 to 8 illustrate that the learners who enrolled in the intensive English courses were interested in courses focusing on all language skills. This will be discussed further in the discussion part. Table 9 below shows participants' views towards the teaching method, length of a course and other details relevant to course management. In this part, participants were allowed to answer, not to answer, or even choose more than one answer that reflected their opinions. The percentage was calculated against the total number of participants in each group, i.e. students (n = 132), government officials (n = 138) and employees from private organizations (n = 51). According to the data presented in Table 9, participants from all groups would like to attend classes in which integrated skills are taught (students = 84.85%, public = 78.99% and private 88.24%). Their interest in other courses lies mostly in teaching methodology (students = 34.85%, public = 46.38% and private 33.33%). Other courses they suggested were mostly English

for Specific Purposes or Occupational Purposes courses such as English for Engineering, English for Health Care, English for Teachers, English for Flight Attendants, English for Business and English for Work. Some would like to target specific skills such as presentation techniques, public speaking and business negotiations. With regard to the length of the courses, the learners (students = 50.76%, public = 43.48% and private 64.71%) agreed on 30 hours being the ideal.

As for the methods of teaching, a large number of students supported the use of blended learning and e-learning (93.18% and 68.94%). The government official group also had positive attitudes towards the use of e-learning and blended learning teaching methods (71.74% and 89.13%). The employees from private organizations did not show much interest in e-learning programs (49.01%) as compared to blended learning (94.12%). The results also showed that all groups of students preferred teacher presence in class (student = 89.39%, public = 74.64% and private = 96.08%). As regards the teachers, the participants reported a preference for English native speaker teachers (student = 67.42%, public = 61.59% and private = 70.59%) over Thai teachers (student = 25%, public = 23.91% and private = 25.49%).

Table 9

		Occupation					
		Student		Public		Private	
		N	%	N	%	N	%
Skills	Individual skills	19	14.39	27	19.57	6	11.76
	Integrated skills	112	84.85	109	78.99	45	88.24
Other courses	Teaching methodology	46	34.85	64	46.38	17	33.33
	Classroom research	25	18.94	21	15.22	10	19.61
	English test development	28	21.21	26	18.84	9	17.65
	English media development	34	25.76	53	38.41	10	19.61
	Others	7	5.30	23	16.67	8	15.67

		Occupation					
		Student		Public		Private	
		N	%	N	%	N	%
Length of intensive courses	Less than 15 hours	3	2.27	13	9.42	0	0.00
	15 hours	8	6.06	13	9.42	1	1.96
	20 hours	15	11.36	20	14.49	2	3.92
	25 hours	3	2.27	2	1.45	2	3.92
	30 hours	67	50.76	60	43.48	33	64.71
	More than 30 hours	40	30.30	32	23.19	13	25.49
Teaching methods	E-learning	91	68.94	99	71.74	25	49.01
	Blended learning	123	93.18	123	89.13	48	94.12
	Teacher presence in class	118	89.39	103	74.64	49	96.08
Teachers	Native speaker teachers	89	67.42	85	61.59	36	70.59
	Teachers of other nationalities	0	0.00	2	1.45	1	1.96
	Thai teachers	33	25.00	33	23.91	13	25.49
	Others	10	7.58	18	13.04	1	1.96

The Results from Interviews with Learners

Interviews were given to volunteer participants representing each group. A total of 46 participants volunteered to give more information. There were 20, 14 and 12 participants representing the student, public sector and private sector groups, respectively. According to the responses from the interviews with the students, their aim for taking intensive English courses was to brush up and to improve their English (65%, n = 13). They also needed to prepare themselves for a proficiency exam for their higher education (30%, n = 6), and for their career (5%, n = 1). The reasons influencing their choice of Chulalongkorn University Language Institute (CULI) included suggestions from others (35%, n = 7), reasonable course fees (15%, n = 3), convenience (15%, n = 3), their trust in CULI (10%, n = 2), familiarity with CULI (10%, n = 2) and others (15%, n = 3). Other responses were, for example, native speaker teachers (this could be traded for qualified and experienced non-native teachers) and small class size. The courses that this group of participants would like to take were exam preparation

courses, i.e. CU-TEP, TOEIC, TOEFL and IELTS, and speaking and writing courses. They suggested CULI place students based on their level of proficiency if possible, and use more effective methods to advertise courses.

For the second group, government officials, their goals for taking intensive English courses were to prepare for a proficiency test for their studies (57.14%, n = 8) and to improve their language skills (42.86%, n = 6). The criteria behind their choice of CULI were the quality of instructors (50%, n = 7), familiarity with CULI (28.57%, n = 4), reasonable course fees (14.29%, n = 2), and convenience (7.14%, n = 1). The courses that they were interested in taking were thesis writing, academic writing, basic language skills, effective communication and other exam preparation courses, i.e. CU-TEP, IELTS, and TOEFL.

The last group, learners from private organizations, shared similar goals towards language learning. They needed to improve their English to meet job requirements (83.33%, n = 10) and to further their studies (16.67%, n = 2). The factors that influenced their selection of CULI were their trust in CULI's instructors and CULI itself (33.33%, n = 4), convenience (33.33%, n = 4), reasonable course fees (16.67%, n = 2), and suggestions from friends (16.67%, n = 2). The courses that they would like to take were grammar, basic language skills and exam preparation courses, i.e. CU-TEP, IELTS and TOEFL.

Discussion

Based on the framework of needs analysis proposed by Hutchinson and Waters (2006), the necessities, lacks and wants of learners in language should be explored. According to the findings, the learners' needs did not focus on one language domain. They expressed their needs or wants for English skills in all areas. As mentioned earlier, they value the importance of English (Kittidhaworn, 2001; Panpreuk and Mahapootong, 2007 and Dueraman, 2013). In this study, despite their heterogeneous backgrounds, the findings revealed that the skills the participants needed the most were the same – identifying the main idea for the two receptive skills (listening and reading), giving information and explaining reasons for the writing skills, and carrying on in conversations (conversational skills) for the speaking skills. However, the skills that they needed were for different contexts relating to their occupations or backgrounds; for example, the

student group expressed the need for English skills that help them with their studies. On the other hand, learners who work in public and private organizations desired to improve their language skills for work. The courses that a language institute offers should, therefore, cover a wide range of English skills and should be made appropriate for each group of participants. This can be achieved by further analysis of TLU (Hutchinson and Waters, 2006). Contexts where language is used should further be analyzed to enhance the teaching and learning (Bracaj, 2014 and Morrison et al, 2011).

Further investigation of the participants' needs in each specific English skill revealed that listening for the main idea and for communication ranked top, as supported by studies conducted by Kittidhaworn (2001), Panpreuk and Mahapoontong (2007), Wiriyaichitra (2003) and Litticharoenporn (2014). This can be explained by taking a look at the percentages of the skills that people find themselves involved in every day. Listening skills account for the largest proportion (skillsyouneed.com, 2012). Also, the need to improve these listening skills may arise from the fact that English is not greatly used in Thailand (Biyaem, 1997 cited in Noom-Ura, 2013), resulting in the lack of ability among Thais and, consequently, their need for improvement. As for reading skills, although in many studies these skills were not chosen as those first in need of training, further investigation has shown that the students still lack important reading skills. According to the findings of this study, the reading skills that the participants needed the most were reading for the main idea and making a summary. Khittidhaworn (2001) revealed similar findings indicating that the students expressed a need for reading for comprehension, i.e., reading for the main idea. This also corresponds with the results gained from the study conducted by Chawwang (2008) who posited that students needed to have their reading comprehension skills enhanced.

Similar to the listening skills, as for the speaking skills, the participants considered giving information and conversational skills as important needs. These are basic skills that can be used both in classrooms and at work. Other more advanced skills such as meetings, negotiations, telephoning, presentations and especially persuasion are more specific to particular types of tasks, so their need to master these skills was not as great as general speaking skills.

Litticharoenporn (2014) also found that all of the stakeholders' needs in her study were greater for general speaking skills such as effective discussion in class, group discussion and study groups in which they had to exchange ideas, as well as for communication with teachers in and out of class, which are general conversational skills. As for writing skills, the needs for giving information through writing outweighed those for others. Communication across borders is now exceptionally common, and exchanging information through writing such as email is, therefore, unavoidable. However, as the characteristics of writing vary from one context to another, more analysis on students' needs as regards the genre of writing, e.g. writing an academic essay, business report or email correspondence, needs to be further conducted.

Interestingly, as found in this study, the needs of using all English skills for pleasure, e.g. reading for pleasure and listening for pleasure, gained the lowest mean scores compared to others. This underlines the assertion that Thai people do not use English in everyday life (Biyaem, 1997 cited in Noom-Ura, 2013).

With regard to the overall administration, it can be concluded from the findings that CULI should consider offering intensive English courses of at least 30 hours in length. Longer courses might be appropriate for exam preparation, e.g. TOEFL, IELTS, etc. The use of technology to enhance teaching and learning should be taken into account. Various course schedules should also be arranged for students' convenience. Moreover, students expect to learn with native speakers of English, or with competent and experienced Thai teachers. Courses that include integrated skills are more preferable than those focusing on one skill (Unkaew, 2010). The results in this part are similar to what Naphon (2008) reported in terms of the length, course schedules, teachers, and skills that are taught in class. In addition, the findings revealed a difference in the reasons behind the participants' selection of the language institute. The participants who have jobs made a decision based mainly on the credibility of the language institute and its teachers, while course fees were considered an important factor for the student group.

Conclusions and Recommendations

Based on the results of the study, the courses that learners who sought intensive English courses needed cover all English language skills, namely speaking, listening, reading and writing. All groups needed the same language skills, but in different contexts (studies or work). Their needs were mainly based on their intention to improve their English either for work or higher studies, and on the requirements for them to gain proficiency test scores. The content of each course should cover the skills that learners can use in everyday life such as giving information, reading for the main idea, and conversational skills. The courses offered do not have to be for a single skill. Integrated skills, for example, listening and speaking, can be taught in a conversation course.

Recommendations for a language institute are to offer courses that focus on English skills for academic purposes and for work, and to run examination preparation courses. The skills to be taught should include listening for the main idea and for conversational purposes, reading for the main idea and summary, speaking for conversational purposes and giving information, and writing for giving information. Choosing experienced and knowledgeable English native speaker teachers or Thai teachers should be taken into account as qualified teachers are an important criterion prospective participants use when enrolling in a language program. Other criteria include course fees and convenience (time and location). As for the length of courses, 30 hours is an acceptable standard. More hours can be added to such courses as TOEFL, IELTS, TOEIC, etc. that require more time for practice. In this case, technology can be used to support teaching and learning. Moreover, to attract more learners, a language institute might incorporate the use of technology in teaching.

Since this study aims to investigate learners' needs of English skills to arrange courses that respond to the needs of the public, further studies conducted on each particular group of learners and the skills they lack are suggested. As mentioned earlier, students will benefit more if the course meets their needs. Means analysis, context analysis or TLU analysis should be considered. Many researchers (West, 1994 and Gómez García, 2010) also recommended that needs assessment be conducted more than one time so that clearer pictures of learners, in terms of their needs, wants and lacks, can be fully elicited. Moreover, if a

course is to be developed for a particular group of learners, it is necessary to include all stakeholders like their supervisors, administrators and teachers in the process of needs assessment (Kaewpet, 2009).

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Biodata

Chatraporn Piamsai, Ph.D. is a lecturer at Chulalongkorn University Language Institute (CULI) and the English as an International Language (EIL) program. Throughout her career, she has taught a wide range of courses, i.e. Business English Oral Communication, English for Economics, Foundation of English Language Assessment and Evaluation, and Language Assessment and Evaluation in English for Specific Purposes (ESP). When conducting this research study, she served as Deputy Director of Academic Services Department. Her interests include learners' use of learning strategies, different aspects of language assessment and evaluation in both general English and ESP, as well as the use of technology in English language teaching and learning.

Incorporating Online Tools to Promote English Reading for EFL Learners: an Action Research Study

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Abstract

The purpose of this action research was to explore EFL learners' English reading and learning experiences while using online tools in a face-to-face EFL classroom. The pedagogical intervention, based on the use of infographics as the main learning assignment along with other online tools: Padlet, Google Docs, and Canva, was implemented to promote English reading for EFL learners. The data were gathered from students' reflections and questionnaires. The findings revealed that the class tasks over the period of eight weeks, incorporating online tools, enhanced students' experience when reading English. The students viewed the use of infographics as motivating, and the easy-to-read visual texts enabled them to understand the assigned reading topics much easier. In addition, the infographic assignments incorporating the use of online tools encouraged them to actively participate in English reading activities in a collaborative atmosphere while allowing them to exercise their creativity and develop positive attitudes toward the supportive role of technological tools in educational settings.

Keywords: English reading, infographics, online tools

การใช้เครื่องมือออนไลน์เพื่อส่งเสริมการอ่านภาษาอังกฤษของผู้เรียน

ภาษาอังกฤษเป็นภาษาต่างประเทศ: งานวิจัยในชั้นเรียน

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บทคัดย่อ

งานวิจัยในชั้นเรียนนี้มีวัตถุประสงค์เพื่อศึกษาการอ่านภาษาอังกฤษและประสบการณ์การเรียนรู้ของผู้เรียนภาษาอังกฤษเป็นภาษาต่างประเทศที่ใช้เครื่องมือออนไลน์ประกอบในชั้นเรียนปกติ โดยแทรกรูปแบบการเรียนรู้ การสอนผ่านกิจกรรมการใช้อินโฟกราฟิกและเครื่องมือออนไลน์ ได้แก่ กระดาน แพนด้า เล็ต กูเกิล เอกสาร และเว็บแคมวา เพื่อส่งเสริมการอ่านภาษาอังกฤษให้กับผู้เรียน โดยเก็บข้อมูลความคิดเห็นสะท้อนกลับ แบบสอบถาม ผลการวิจัยพบว่าช่วงระยะเวลาแปดสัปดาห์ของการเรียนที่ใช้เครื่องมือออนไลน์ การเรียนการสอนประกอบช่วยเพิ่มพูนประสบการณ์การอ่านภาษาอังกฤษของผู้เรียน ผู้เรียนเห็นว่าการใช้อินโฟกราฟิกสร้างแรงจูงใจในการอ่าน และการใช้ข้อความที่มีรูปและอ่านง่ายช่วยให้ผู้เรียนเข้าใจหัวข้อการอ่านภาษาอังกฤษได้ง่ายขึ้น นอกจากนั้น กิจกรรมการเรียนรู้ผ่านอินโฟกราฟิกผสมผสานกับการใช้เครื่องมือออนไลน์ต่างๆ ยังช่วยเสริมสร้างบรรยากาศการเรียนรู้ร่วมกันระหว่างผู้เรียน ส่งเสริมโอกาสให้ผู้เรียนได้ใช้ความคิดสร้างสรรค์ และสร้างทัศนคติเชิงบวกที่มีต่อบทบาทของเทคโนโลยีในแวดวงการศึกษา

คำสำคัญ: การอ่านภาษาอังกฤษ อินโฟกราฟิกส์ เครื่องมือออนไลน์

Introduction

Reading is recognized as an essential academic language skill for all foreign language learners and through reading, students learn new information and learn to synthesize, evaluate and interpret the subject matter (Noor, 2011). Anderson (2003) stated that individual learners with good reading skills are able to make greater progress in other areas of language learning, while those without good reading ability may encounter many challenges in a language classroom. In a Thai EFL tertiary-level context, reading competence is important to Thai students as they are exposed to course texts, references, and online materials that are in English. However, many of them have poor English reading skills and thus require improvement in reading comprehension strategies (Wisaijorn, 2009).

English education in a Thai educational context emphasizes the development of students' language proficiency to achieve purposes such as communication and business to gain economic competitiveness in the globalized era and also focuses on lifelong education (Darasawang, 2007). An English as a foreign language classroom selected in this action research focuses on English skills development and aims to motivate students to extend their exposure to English language inside and outside the classroom so that they can develop their English language skills and increase content knowledge which is useful for their future study and careers. Nonetheless, most of the students in the selected class have low levels of motivation and proficiency with limited vocabulary knowledge. Many of them need improvement in all English skills, particularly the reading skill which is an important skill to support and enable them to comprehend increasingly more complex content that is specific to their fields of study. To address the problems in the Thai EFL classroom, it would be necessary to look for ways to motivate students to read and increase their reading skills at the same time.

According to Velandia et al (2012), new information and communication technologies have become an important tool that can encourage new interests and abilities among people. Crane (2012) argued that teaching tools for teaching and learning with technology or Web 2.0 tools are ideal for students' learning English

because they provide them opportunities to use authentic language and be actively engaged in learning by motivating them to listen, speak, read, and write. There are many online tools that can be used at various levels and in various subject areas. Holzweiss (2014) listed several web tools that teachers can integrate into the curriculum to motivate student learning. Collaboration tools such as Google Docs and Padlet, for example, are web tools that allow students and teachers to share documents and files, whereas Piktochart, Easel.ly, and Canva are tools that help students to create instant infographics online.

By incorporating technology in English education, Cote Parra (2015) found that technology-supported learning environments allow a dynamic and more engaging way of learning to foster student interaction and the use of a foreign language in authentic contexts. Donaldson (2014) argued that the use of Web 2.0 technologies in classrooms can empower learners to take a more active role in their learning through collaborative online opportunities. It can be seen that technological innovations like online tools can help redesign learning and teaching in higher educational environments, and this would be beneficial to students to improve their competence in the target language.

Regarding reading skill development, infographics can be powerful sources for engaging students in critical analysis via close reading. Davis and Quinn (2013) stated that infographics can support reading comprehension and writing while strengthening critical thinking and synthesizing skills. Krauss (2012) suggested using infographics as a tool for engaging and developing analysis and interpretation capabilities, both when students interpret the graphics and when they create them. Using online programs for infographic creation such as Pikochart, Visual.ly, Infogr.am and Canva, which are user-friendly and do not require design skills, not only support the language learning process in a motivating way, but also increase students' computer literacy (Wertz & Saine, 2014).

In order to enhance student motivation to read English texts and to develop English reading for students with low levels of motivation and limited vocabulary knowledge and reading skills in *English for Science and Technology*

2 class, Maejo University, the teacher/researcher decided to introduce a technology-related change to classroom instruction. The classroom action research was conducted to provide students with an opportunity to practice applying reading strategies when reading texts with the help of infographics and technological online tools. The study aimed at addressing the following research questions:

1. Can infographic assignments make English reading easier and students more motivated?
2. What are students' views about technology tools: Google Docs, Padlet, and Canva, in terms of the advantages, disadvantages and obstacles to the implementation of such online tools in the classroom?

Review of Literature and Related Studies

Technology integration in a classroom

Using technology in foreign language learning and teaching is useful for both teachers and students. According to Altun (2015), technology-based instruction can contribute to the quality of teaching and the learning experience. Technology is a facilitating and supportive tool of education with which teachers and students can get a great deal of benefit. To integrate technology in language teaching, Altun (2015) argued that since different technological materials offer different advantages, a teacher should be aware of utilizing technology by applying technology to his/her teaching skills and needs. In addition, to achieve the full benefits of incorporating technologies into educational settings, it is necessary for teachers to understand appropriate ways to integrate the technological tools to support students to learn meaningfully and to participate in authentic experiences that build motivation and enhance learning (Keengwe et al., 2008).

Web 2.0, the second generation of the Internet, offers a wide variety of tools, such as Google Docs, Popplet and Prezi, which allow multiple users to collaborate on shared documents (Jacobs & Seow, 2014). To help students gain competence in the second language, Crane (2012) suggested that teachers should

incorporate Web 2.0 tools into language instruction by providing a meaningful and interesting context for the introduction of new items, encouraging students to use English for communication, and paying attention to different student learning styles and cultural differences. Moreover, using a variety of resources available through Web 2.0 can help promote interest in learning for English-language learners and provide an atmosphere that supports the learning. The Internet, especially with Web 2.0 and social networking tools for communication and collaboration, offers creative tools allowing students to practice English skills even outside the classroom. It is obvious that students benefit in a number of ways when using Web 2.0 tools as integral parts of lessons.

In this action research, the selected Web 2.0 tools are Google Docs, Padlet and Canva. The descriptions of each are presented below.

Google Docs

Google Docs is free browser-based software offered by Google providing applications including a word processor, a spreadsheet, a presentation package and a form designer (Firth & Mesureur, 2010). Google Docs gives students a way to publish and share their work (Yamauchi, 2009). Jacobs and Seow (2014) provided an example of using Google Docs with a group of students collaboratively writing a research report. After the students had finished their individual research, they shared their draft in Google Docs so that every student could view the document and had an equal opportunity to comment or edit the shared document. As they worked together on the report, peer interactions were facilitated, and as a result, higher order thinking skills were stimulated. Through the process of collaborative writing, students are able to recognize the value of cooperation and learn to be aware of their contributions to teamwork achievement. In addition, the study by Matta Abdelmalak (2015) showed that students agreed that using Google Docs gave them a sense of learning community and was a great way to collaborate since it allowed all members to work on the document collaboratively. It can be said that this Web 2.0 tool influences

students' learning experience by changing the ways they collaborate and construct knowledge.

Padlet

Padlet (<https://padlet.com>) is an online board that both teachers and students can use to express their thoughts or to post content on the page (Kaya, 2015). Byrne (2015) identified "Padlet" as one of the collaborative research tools that is a free-of-charge service allowing the creation of online pages of shared notes, videos, and documents. Using Padlet in classroom learning increases the cooperation and collaboration among students, who can access the virtual walls anywhere and anytime (Kaya, 2015). Based on Fuchs (2014), she used Padlet to increase student participation in class and pointed out several advantages of the Padlet wall by saying that "Padlet is a useful tool in the information literacy classroom because it works on a variety of different devices, does not require participants to create accounts to use it, and requires no special technical know-how" (Fuchs, p.7). Fuchs then concluded that using Padlet in instruction has provided a supportive space for collection and classroom collaboration because students are encouraged to contribute and learn from one another.

Shields (2014) suggested several learning activities in combination with Padlet. For example, Padlet can be used to create lesson plans, vocabulary lists, multimedia projects, assignment postings, collaborative group work and brainstorming, teacher or peer feedback, and much more. Moreover, this user-friendly tool allows the posting of pictures, videos, links and digital documents like Word files or PDFs. Shields further explained that creating an account for Padlet allows teachers to save and edit Padlets and also Padlet URL can be embedded into a website. These features have made Padlet a potential collaborating space.

Infographics in classroom instruction

An infographic is "a visual representation, chart, or poster of information about a particular topic" (Fowler, 2015, p.44). Krauss (2012) explained that an

infographic is an engaging method to teach new information and critical thinking as a visual presentation of data can make the brain process more effectively.

Infographics are regarded as promising learning tools that can be adapted to any educational setting to enhance students' learning experience. Matrix & Hodson (2014) studied the benefits of infographic adoption in the online college classroom by incorporating a research-based graphic design assignment into coursework. Their study revealed that teaching with infographics encouraged students' visual digital literacy competencies which are essential for 21st century learners. They also concluded that the infographic assignment is well suited for online and blended courses offering a motivating learning experience to today's students of Gen Y learners, who prefer using digital tools to interact and perform a more active role in their learning process.

Additionally, Davidson (2014) explained that when students work on their infographics projects, they reach several literacy goals. They learn appropriate methods for filtering information to find credible sources. They learn how to sort data and interpret what they find and to decide what they can use to provide evidence for their points. Students can also develop their media and digital literacy by exercising their creativity in creating their own designs and revising their design elements until they find the right combination of information and artwork to communicate their message.

There are a lot of options for creating graphs, charts, and other visuals. Commonly used web-based applications for creating infographics are Infogr.am, Piktochart, Easel.ly, Dipity, Google Drawing tools, PowerPoint and NCES (Abilock & Williams, 2014) and Canva (Neltner, 2015). In this study, Canva (www.canva.com) was selected. Neltner (2015) explained that Canva is "an online graphic design program that can be used to create anything from blog graphics, Facebook headers, to posters to flyers" (Neltner, p.24). She further added that Canva is free to access and user-friendly as it is a drag-and-drop image editor and also users can download a PDF or JPEG of creation to share. As such, Canva is a good choice for infographic creation which can be handled even by users who are not technologically-savvy.

In this action research, Canva and other two more collaborative online tools: Google Docs and Padlet were integrated into the instruction practices to support reading activities, learning motivation and engagement.

Methodology

Research design

This classroom action research was to incorporate infographic assignments and some online tools into classroom instruction over the period of eight weeks to enhance English reading for EFL students. Since this study focuses on one instructor and the instructor is also the researcher, the findings from this study, have limited generalizability.

Participants

The participants in this study were 27 tertiary-level students enrolled in *English for Science and Technology 2*, 1/2015 academic year, Maejo University, Chiang Mai campus. Among these participants, 22 majored in Architecture and the rest were Computer Sciences, Information Technology and Biotechnology students.

Materials

Throughout the eight week period, four infographic assignments were designed to engage the students in close reading to comprehend the English texts and to practice reading strategies such as taking notes and summarizing as well as developing digital literacy skills using technological tools. These were facilitated by using Google Site as a class portal where the extra and relevant resources were found, in combination with other online tools access. The integration of Web 2.0 tools was implemented as follows:

- Infographics, a representation of information in a graphic format, were the main online tools used in this action research. They allowed readers to understand the information more easily as they combine texts, images, and other visual elements to help readers to focus on essential facts.

- Padlet walls were used for whole-class engagement and students' infographics exhibitions.
- Google Docs were used for collaborative writing among group members.
- Canva, a free graphic design tool website available on www.canva.com, was selected for the students to design and create their own infographics in order to present what they had learned from the assigned reading texts in a creative and motivating way.

Typically, a task involved the students in a close reading activity. The reading contents were part of Unit 1, concerning innovations and Unit 2, concerning environmental issues, respectively. The following table describes the four infographic assignments.

Table 1 Descriptions of four infographic assignments

No.	Aims	Descriptions	Web 2.0 technologies in use
1	To practice note taking strategies and get students to know about Canva, a free website for making infographics, and to learn how to use it.	After studying different types of innovations, students choose one innovation inspired by nature to study. They collect and filter what they have learned, taking notes about the main ideas and supporting details. They then organize the notes and present them in the form of graphics using Canva. They post their infographics on the Padlet wall. To get the students be aware of the usefulness of an infographic criteria, they are reminded of following the criteria strictly and also are assigned to evaluate their peers' products.	<ul style="list-style-type: none"> - Canva - Padlet

No.	Aims	Descriptions	Web 2.0 technologies in use
2	To practice note taking strategies and to get to know Google Docs.	Students are assigned to study reading texts about a particular innovation, reading, rereading, discussing and assessing their understanding with peers before recording notes about the main ideas and supporting details. To finish the assignment, they are encouraged to further their reading and sharing of information on Google Docs, created by group leaders. Each group, again, creates an infographic to present facts on what they have learned about that particular innovation using Canva. Their final product is placed on the Padlet wall.	<ul style="list-style-type: none"> - Google Docs - Canva - Padlet
3	To increase students' English reading comprehension skills and motivation to read English texts.	After studying and close reading three infographics about food wastage, students get into groups and share what they have learned from the infographics. They help each other make an outline with comprehensible and sufficient content or details to share knowledge about "Food waste". Then, they are assigned to create their own food waste infographic which will be posted on the Padlet wall. They are assigned to write feedback on reading from infographics on the Padlet wall.	<ul style="list-style-type: none"> - Three selected infographics about food wastage - Canva - Padlet

No.	Aims	Descriptions	Web 2.0 technologies in use
4	To increase students' English reading comprehension skills and motivation to read.	Students are assigned to study about e-waste presented in a graphic format. After that, close reading with ten questions is completed by each pair, and then the students get into groups to study different topics concerning e-waste. A jigsaw reading activity is applied to foster an expert on each particular topic. Again, they form a new group to share their knowledge with the other group members on Google Docs, created by a group leader. They collaboratively work online to organize what they want to present and how to design an infographic to represent the content. They create the group infographic and post it on the Padlet wall.	<ul style="list-style-type: none"> - E-waste infographic - Google Docs - Canva - Padlet

Data collection

The methods of data collection in this classroom research included student reflections posted on Padlet walls, a journal kept by the teacher/researcher and a questionnaire consisting of five close-ended questions with 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) and five open-ended questions (see Appendix) adapted from Majid (2014), Abdelalak (2015), and Aikina & Zubkova (2015). To collect the data, the students were asked to write two reflective texts either in Thai or in English on two separate Padlet walls with regard to reading with infographics and the creation of infographics to understand how the use of infographics could influence their English reading. Additionally, the observations of the participants' involvement in the learning activities were recorded. The participants were requested to complete an online questionnaire

consisting of close-ended and open-ended questions to express their preferences about online tool implementation one week after the last assignment was completed. The questionnaire was in Thai so that the participants could understand the questions. The participants answered the open-ended questions in Thai.

Data analysis

Data collected from the close-ended questionnaire were analyzed quantitatively to determine the mean and the standards deviation. The students were asked to rate their agreement to the five statements. A rating guide is as follows: 4.21-5 = strongly agree, 3.41-4.2 = agree, 2.61-3.4 = neither agree nor disagree, 1.81-2.6 = disagree, and 1-1.8 = strongly disagree. In addition, the students' reflections and responses to the open-ended questionnaire were analyzed using content analysis. The data from the instructor's journal were used to substantiate the data collected from students' reflections and comments. The data obtained were analyzed to understand how exposure to and the use of online tools could impact the students' English reading and learning experience.

Findings

In order to address research question 1: Can infographic assignments make English reading easier and students more motivated?, the results obtained from the close-ended questionnaire are displayed below to present descriptive statistics for students' perspectives towards the infographic assignments and the online tools applied. The students were asked to rate their agreement to the five statements as shown in Table 2.

Table 2 Questionnaire results: descriptive statistics

Statements	Mean	Std.	Interpretation
1. Infographic assignments increased students' willingness to read the target language.	4.15	0.662	Agree
2. Infographic assignments helped students to better understand written texts.	4.30	0.609	Strongly agree
3. Infographic assignments enabled students to remember words and language structures better.	3.67	0.734	Agree
4. Infographic assignments encouraged students' creativity.	4.63	0.492	Strongly agree
5. Infographic assignments made the studying process motivating.	4.04	0.649	Agree

*N = 27

Table 2 shows that most students had very strong to strong opinions about the positive contributions of infographic assignments. In terms of reading comprehension, the activities encouraged them to read English texts, and most importantly, they helped them to comprehend the written English texts much easier. In addition, the students agreed that they gained knowledge about words and language structures and perceived that this technology-based activity increased their creativity and motivation to learn.

The analysis of students' written reflections on reading English texts from infographics revealed that infographics can make English reading easier, and that students become more motivated. Most students expressed the view that infographics make reading English texts easier and also make reading an interesting, rather than a boring activity. The frequent keywords expressed were: "easy to understand", "easy to read", "understand easily", "help to understand", and "make me understand more easily". Some other keywords were "interesting" and "not boring". In addition, their responses to English reading activities using

infographics show that most of them realized that some elements applied in infographics promoted their understanding of the topics presented. The students mentioned that “photos”, “images”, “graphics”, and “diagrams” incorporated in infographic presentations made the texts “attractive”, “interesting”, “beautiful” and “easy to read”. Other responses revealed that students viewed infographics as presenting a text in a simple and straightforward way as well as in a creative and beautiful fashion, making reading activities more motivating and easier.

The students were asked to reflect on their experience of infographic creation assignments and gave positive responses about the activities. The following excerpts show how the students explained in their own words what they had experienced in the assigned activities:

I have more fun and want to learn more.

Infographics help make learning easier and are easier to understand.

I think infographics make me understand English subjects better than words alone.

Infographics help me better understand English and encourage my creativity.

The statements above indicate that the technology-integrated infographic assignments not only encouraged the students to read English texts in a more engaging way and understand English more easily, but also created a better learning experience by allowing students to exercise their creativity in generating their own infographics using online tools.

In addition, one of the students stated that infographic assignments made English learning more interesting, and she was looking forward to this kind of classroom. Another one also shared a similar viewpoint by stating that infographics increased her desire to read and learn English and an infographic activity interested her and she loved it. These statements show that the infographic assignments positively influenced students’ English reading.

Furthermore, the data from the teacher’s journals also supported the findings. A high level of student participation was observed. For example, the

students did well in the close reading activity and contributed great time and effort to infographic creation. Though all students were new to Canva, the infographic creation web, they were able to use it to make their own infographics with a drag-and-drop image editor without difficulty.

To answer the second research question: What are students' views about technology tools: Google Docs, Padlet, and Canva, in terms of the advantages, disadvantages and obstacles to the implementation of such online tools in the classroom?, the students were asked to complete open-ended questions by expressing their preferences about online tool implementation. It was found that throughout the period of the technology-integrated instruction, the students experienced learning that was different to traditional teaching methods. They expressed the feeling that technology-integrated learning activities made their learning convenient, interactive and motivating. For instance, one student explained that:

Working and submitting the assigned tasks became convenient through the use of online tools, using infographics made English reading easier to understand, and creating one's own infographic on Canva was a new and easy way to present information that can attract the readers.

Some students indicated that they learned and developed skills including reading, listening, cognitive and critical skills as well as online literacy skills. They learned how to use different online tools to benefit their learning. The students also felt that online tools supported interaction between students and the teacher allowing students to work collaboratively to achieve a shared goal, and to receive guidance and feedback from the teacher.

Furthermore, many students' comments on the infographic-incorporated reading activities show that they had a positive experience using online tools. They perceived that technology can facilitate their learning and create a vivid learning atmosphere which is different from the tradition-based language classroom. Some statements revealing the students' views are:

I had fun with this kind of classroom.

I need to learn and use more online tools.

Technology makes learning easy and convenient.

I would like this kind of classroom to happen in the future.

This class is interesting and different from others though the Internet connection is sometimes a problem.

The students' views toward the technology tools: Google Docs, Padlet, and Canva, in terms of the advantages, disadvantages and obstacles to the implementation of these online tools in the classroom are presented as follows:

Google Docs

The students regarded Google Docs a useful online tool. They said that using Google Docs allowed them to collaborate with group members on the same document without time or place limitations. One of the students stated that *"Using Google Docs makes collaboration easy because we were able to work together while being apart."* Another statement reflected the benefit of Google Docs as a space that allowed online discussion between group members.

Padlet

From the teacher's observation, the students actively collaborated and interacted on an interactive wall of Padlet. They learned to post digital sticky notes to share their ideas, resources and learning products with other users. It can be said that Padlet is a whole-class engagement wall, and some students expressed their preferences on these walls by stating that:

Padlet is so easy to pin up opinions.

It is easy to post and pin my infographics.

Padlet is a good tool to show a collection of students' products.

Canva

Many students were impressed by Canva. They found out that Canva made the learning process more interesting and fun. It enabled them to present

what they had learned from reading the texts in a more creative and interesting way. One student stated that “*Canva allows creativity and a new way of knowledge presentation.*” Some statements indicated that Canva was considered a user-friendly online tool which can make English text presentation fascinating and the English learning process more enjoyable.

Additionally, several students realized the usefulness of personal computers with Internet connections and smartphones. The former allowed more opportunities for online resource access and the latter made learning in a technology-integrated classroom more convenient, anytime and anywhere. Nevertheless, some data obtained from the students showed that utilizing infographics and online tools in English learning led to several problems or hindrances. The results from the open-ended questions were analyzed and the data reveals three main significant factors affecting learning. They are the Internet connection problem, the lack of vocabulary knowledge, and being unfamiliar with the online tools. The statements below illustrate their reflections:

We need to learn more about English vocabulary.

Having good vocabulary knowledge would make it easier to understand English.

High speed Internet is needed for the better operation of the online tools.

Because I am not familiar with Canva, I find it hard to make a good graphic format.

Furthermore, a statement made by one of the students revealed that though technology-integrated learning activities provided some benefits, they inhibited her long-term memory of information, so she preferred paper-based instruction where she could jot down notes allowing new knowledge to remain in her memory longer. This indicates that learners’ learning styles can affect each individual perspective towards a particular teaching approach. Another interesting point that the students considered valuable in a technology-supported classroom was the role of the teacher. This indicates that a supportive teacher is always an important component in any classroom instruction. Some students

shared some suggestions for the successful learning through the use of infographic assignments:

Though infographic makes it easier to understand the English texts, we still need time to read and digest the information in detail.

Good computer connected to the Internet is important to complete the tasks assigned.

Some comments from the students are useful and helpful for the teacher to prepare better learning activities in the future. One stated that it would be good to spend more time learning how to use Canva to create infographics. Another suggested that additional online resources such as videos should be integrated to make learning more interesting.

The data obtained from the study not only demonstrate the benefits of integrating infographic assignments and online tools into classroom instruction, but also provide some technical and instructional challenges. By observing student participation, although some students felt a new motivating atmosphere in reading activities, some felt uncomfortable experimenting with new online tools, and some students with high levels of computer anxiety found it confusing to understand and complete the assigned tasks.

The teacher/researcher may have overestimated students' digital skills, considering that they belong to the digital generation. The use of such technology may have caused some students to feel uncomfortable and then develop negative feelings about the technology-integrated classroom. It appears that these students struggled with the use of certain tools, and became discouraged with the blended learning environment. This evidence indicates that not all students have the same level of computer literacy. In addition, the teacher should not overestimate students' digital skills, but should provide adequate training and step-by-step instructions on how to use the selected online tools. To develop students' technical fluency with Canva, an infographic creation tool, for example, the students need to be provided with a better understanding of infographic devices and the basics of design. Moreover, they require more practice to become

familiar with Canva procedures. It can be said that it is important for the teacher to be aware that it may take considerable time for some students to feel comfortable using new technological tools and obtain new skills.

Discussion

It is clear that the students had a positive experience engaging in infographic assignments and applying different types of online Web 2.0 tools to complete the given tasks. The findings revealed that reading infographics could be an alternative reading activity to assist students to comprehend English texts more easily because they integrate words and graphics to present complex information quickly and clearly (Davidson, 2014). At the same time, an infographic made it easier to understand than words alone and was considered a supportive tool that increases student motivation to read. In addition, the students expressed different views toward each online tool they employed. Google Docs was viewed as a great tool for communication and collaboration. The whole class was able to contribute to the Padlet walls by posting their notes and presenting their production easily and in real-time. Canva, in addition, was seen as a novel tool to present complex information in a more attractive and comprehensible way by integrating words and graphics. Data from the classroom observation also confirmed that the tasks provided an opportunity for the students to perform other skills other than language skills to achieve the learning outcomes. Most of them learned to use online tools, especially Canva, without difficulty and create an attractive infographic of the assigned topic.

Furthermore, in this study, the Padlet wall seems to play a supportive role in this teaching context by encouraging students to participate more. It was used as an online space for whole-class engagement and students' infographics exhibitions. It was found that this online space inspired the students to complete their assignments and therefore increased engagement. It enabled the students to see other people's work and to learn from one another. In a future application, it would be more beneficial to students if the teacher manages them to give peer-to-peer critiques. Peer comments would encourage them to become more critical

and gain valuable insights into the strengths and weaknesses of the design choices. This interactive space is regarded as an online community where the students can share, interact and sustain social conversations. It is thus crucial for the teacher to consider making available space such as a Padlet wall as it allows students to discuss, share and present their work or self-generated infographics, and this will encourage student responsibility and involvement as well.

As one of the major drawbacks that can hinder student performance is the instability of the network system, the teacher requires a backup plan in case of technology failure and should deal with technical issues and any enquiries quickly. Apart from this, students' learning style preferences can impact the attitudes toward a particular teaching technique or instructional tool. To support students with different learning styles, different types of tasks and online tools to match student learning styles should be carefully designed. For example, group work that encourages students with good computer skills to mentor others is a good idea, or selecting some interesting videos on YouTube to introduce a new learning topic can attract student attention. In addition, since most students are accustomed to paper-based instruction, they need time to learn when incorporating online and traditional teaching. It is therefore necessary for the teacher to equip them with sufficient learning strategies and be a facilitator during the activities, as well as monitoring the students' learning process, and providing assistance and feedback when appropriate.

Moreover, to implement the use of infographic assignments and online tools to assist EFL reading and to improve students' reading comprehension successfully, students require some development of vocabulary knowledge and more practice in making full use of the online tools. Students who lack basic knowledge of English might spend too much time figuring out how to start the work. The teacher should therefore encourage learners to acquire sufficient reading vocabulary knowledge that would support their reading for comprehension. Thus, it would be a good idea to present the target vocabulary in infographics and pre-teach it. Furthermore, to understand the use of infographics, it is important that students develop a better understanding of infographic devices

and the basic components of infographic design before creating their own infographics. A good infographic should pay attention to purpose, style, evidence including data and citation, and format (Davis & Quinn, 2013). In terms of ICT skills, since students possess different levels of computer skill, the teacher should provide training and clear instructions to increase students' confidence to employ different online tools to benefit their learning outcomes. In addition, the technical ability and creativity of teacher is also significant in order to create a successful learning environment. Therefore, teachers themselves should receive continuing training in technology implementation to develop more effective instruction.

As the research results have revealed several educational benefits of the use of an online tool, teachers are encouraged to employ appropriate technology to support learning achievement. In addition, they should take into consideration the previously mentioned suggestions to use online tools to assist and improve students' English language learning. Teachers who understand appropriate ways to integrate technological tools will be able to provide meaningful learning and authentic experiences that enhance learning for their students (Keengwe et al., 2008).

Conclusion

The results of the action research confirm that infographic assignments can make learning English easier and motivate EFL students to read English texts in an enjoyable way. In addition, the students identified the benefits of using technological tools, which provide a learning environment that made learning convenient, engaging, and fun. Through a close reading activity, they were exposed to more than just English texts. Reading from infographic provided them with an opportunity to closely examine images, graphs and much more. They therefore improved their reading skills little by little and developed positive attitudes towards English reading activities. Moreover, online tools such as Google Docs, Canva, and Padlet, which required them to conduct various levels of thinking and skills, enabled the promotion of critical and creative thinking as well as collaborative skills.

Using infographic assignments therefore has potential to promote English reading in the EFL class and motivates as well as engages the students in the language learning process. It could be one of the most effective instruction ideas to assist EFL reading, and is a novel creative way to improve the reading skills of students. Incorporating technology in the classroom can clearly enable the teacher to teach better and can enable the students to learn better. Since technology has made a great contribution to the language learning process, it is important that today's language teachers learn how to take advantage of the technology and how to integrate it with their other teaching skills and the curriculum framework (Altun, 2015).

All in all, it is evident that the use of technologies can be advantageous to classroom teaching and studying. Consequently, integrating appropriate online tools into a language classroom to encourage reading in English and to increase the motivation to read is advisable. It is hoped that the findings of this action research will be useful for English language teachers and EFL students in developing better teaching and learning outcomes through the use of technological tools of the 21st century.

Limitations

The research was conducted in a particular classroom setting with a small sample size, and therefore the generalizability of the findings should be viewed with caution. However, the results advocate the positive use of technological tools such as Web 2.0 in classroom settings for English language learning, which can boost reading skills and motivation.

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Appendix

An online questionnaire consists of 5 close-ended questions and 5 open-ended questions as follows:

Close-ended questions

Please consider the following statements if you strongly disagree to strongly agree (1-5).

1. Infographic assignments increased students' willingness to read the target language.
2. Infographic assignments helped students to better understand written texts.
3. Infographic assignments enabled students to remember words and language structures better.
4. Infographic assignments encouraged students' creativity.
5. Infographic assignments made the studying process motivating.

Open-ended questions

Please express your opinions towards the following questions.

- Question 1: Which is the most interesting/motivating/useful online tool you have experienced from the infographic assignments? Why so?
- Question 2: What are three things you felt the most valuable about technology-integrated learning activities?
- Question 3: What problems did you encounter with the infographic assignments incorporated by different online tools?
- Question 4: Can you describe any problems and successes in completing the infographic assignments using online tools?
- Question 5: Do you have further comments about the infographic assignments?

Biodata

I completed a B.A. in English and M.Ed. in TEFL from Chiang Mai University and received a certificate of completion in the online teacher training course: Building Teaching Skills Through the Interactive Web, from American English Institute, University of Oregon. I am currently a lecturer at the Faculty of Liberal Arts, Maejo University, Chiang Mai. My research interests include blended learning approach and L2 vocabulary acquisition.

การใช้ Dynamic Assessment ในห้องเรียนที่มีการเรียนการสอน ภาษาอังกฤษเป็นภาษาต่างประเทศ

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บทคัดย่อ

Dynamic Assessment (DA) เป็นรูปแบบการทดสอบและประเมินผลที่เป็นส่วนหนึ่งของการทดสอบและประเมินผลแบบโต้ตอบระหว่างครูและนักเรียน (interactive assessment) ซึ่งการทดสอบในลักษณะนี้จะผสมผสานการเรียนการสอนและการทดสอบประเมินผลเข้าด้วยกัน Dynamic Assessment (DA) ได้รับการพัฒนามาจากทฤษฎี Socio Cultural Theory of Mind (SCT) ของ ไวกอตสกี (L.S.Vygotsky) โดยมีจุดมุ่งหมายให้เป็นทางเลือกอีกแบบหนึ่งสำหรับการทดสอบแบบ static assessment ซึ่งไม่มีการให้คำแนะนำหรือข้อมูลป้อนกลับให้กับนักเรียนในระหว่างการเรียนรู้และการทดสอบ บทความนี้มีจุดประสงค์ที่จะนำเสนอการนำ Dynamic Assessment (DA) ไปใช้ในการเรียนการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ โดยในส่วนแรกจะกล่าวถึงกรอบแนวคิดทางทฤษฎีของ Dynamic Assessment (DA) ตลอดจนปัญหาและอุปสรรคในการนำ Dynamic Assessment (DA) เข้ามาใช้ในห้องเรียน ในตอนสุดท้ายของบทความได้สรุปข้อเสนอแนะเกี่ยวกับการนำ Dynamic Assessment (DA) ไปใช้ในการเรียนการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ

คำสำคัญ: Dynamic Assessment (DA), zone of proximal development, ห้องเรียนภาษาอังกฤษเป็นภาษาต่างประเทศ, การทดสอบและประเมินผลทางภาษาอังกฤษ

The Integration of Dynamic Assessment into the EFL Classroom

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Abstract

Dynamic Assessment (DA) is a subset of interactive assessment which integrates teaching and assessment together through the use of mediation. It originated from the principles of Socio-Cultural Theory of Mind (SCT) developed by L.S. Vygotsky and his colleagues. DA has been developed with the aim to provide an alternative to static assessment which does not provide the immediate feedback to students during the learning and testing process. The aim of this article is to discuss the integration of dynamic assessment into the EFL classroom. The article discusses the theoretical constructs of DA and some concerns for the integration of DA in the EFL context. The article concludes with some recommendations for further use of DA in the EFL context.

Keywords: Dynamic assessment, zone of proximal development, English as a foreign language classroom, language assessment

Introduction

Dynamic assessment (DA) refers to the integration of assessment and instruction which is an approach based on the principles of Socio-Cultural Theory of Mind (SCT) developed by Vygotsky and his colleagues. Dynamic assessment (DA) which has been developed as an alternative to traditional, static psychometric tests is considered as a subset of interactive assessment (Haywood & Tzuriel, 2002). The goal of dynamic assessment is not limited to evaluating the learner's present performance level but providing assistance during the learning process in order for teachers to gain useful information regarding students' performance level.

Language learning and assessment in Thailand: Some background and challenges

Traditionally, assessment has been used as an information-gathering activity to gain insight into learners' current level of knowledge or ability (Baily, 1996; McNamara, 2004). Because of its nature in measuring learners' current development or what the learners have already learned, it is also called "static assessment" by some researchers (Feuerstein et al., 1979). In recent years, static assessment has received a lot of criticism as most critics believe that the learner's performance is not static, that is, it can keep on improving and expanding. Poehner (2008) pointed out that L2 educators and teachers were frustrated by static assessments because they were seen as activities that are "distinct from, and perhaps even at odds with, the goals of teaching". This type of criticism can be seen in complaints about "teaching to the test" or "assessment-driven instruction" from teachers (Teo, 2012).

Since then, assessment reformers have emphasized the need for a closer connection between assessment and meaningful instruction (Shepard, 2000). According to McNamara (2000), language tests play a powerful role in many people's lives. This is obviously true in the field of language learning where tests have been used by teachers and evaluators as important devices for the purposes of assessment, evaluation as well as other purposes related to the process of language learning. Additionally, for many years test scores were considered as

the only true indicator of testee's performances without any attention to the process of learning and teaching (Birjani & Sarem, 2012).

This "teaching to test" situation can be clearly observed in Thailand where English is considered a foreign language. Thai students are still studying to pass exams which are informed by structuralist and behavioral views of language and language learning. English language teaching in the Thai context still relies on rote memorization and grammar translation methods. This might result from the tremendous public pressure on students, teachers and schools to raise scores in high-stakes tests such as the O-NET examination. Teachers' attention during classroom interaction is therefore geared towards the treatment of students' grammatical errors, even in tasks that require greater attention to communication, discourse and appropriateness. This situation has led to a growing demand for tailored instruction that targets high-stakes tests.

A recurring criticism of tests used in high-stakes decision-making (such as entry to college, university, or prestige faculties) is that they distort instruction by forcing teachers, whether they want to or not, to teach to the test (Garb, 2003). This type of situation can be harmful to language learning as Herman (1992: p.74) states that "time spent on test-taking often neglects higher-order thinking skills". Other researchers also suggest that while student scores will rise when teachers teach closely to the test, learning often does not change (Shepard, 2000; Smith and Fey, 2000). In fact, in many EFL classrooms in Thailand, instruction is synonymous with preparing students for these high-stakes tests.

With the current education reform in Thailand towards a knowledge-based society, many educators want to move away from traditional rote memorization towards student-centred learning, learner autonomy and the development of critical thinking skills. This new concept of "learning to learn" is in sharp contrast with the dominant "teaching to test" method in Thailand. According to Freeman (2001), the purpose of education today is to produce autonomous life-long learners, and the emphasis should be placed on assessing pupil's ability not only on acquiring information and skills, but also on their ability to transfer and use information, skills and thinking and problem-solving strategies in a wide and flexible range of contexts. In short, it is by concentrating on the process of learning, and students' engagement in this learning process that

teachers can facilitate the acquisition of effective learning skills for the 21st century (Shepard, 2001).

What this means for Thai students studying English language is that greater emphasis should be placed on alternative forms of assessment that promotes learner autonomy. In recent years, there has been a major paradigm shift from a focus on traditional forms of assessment to a greater focus on assessment for learning. The top priority of assessment for learning lies in using assessment to promote student learning through involving students actively in the assessment process (Black and William, 1998). The aim should be a combination of low-stakes, ongoing, formative assessment that guides teaching and learning, tied tightly to both the curriculum and the state's high-stakes summative test (Garb, 2003). Dynamic assessment is one form of assessments that can be implemented in a language classroom to strengthen instruction and assessment.

What is Dynamic Assessment?

Dynamic assessment has been developed by assessment researchers through Vygotsky's Socio-Cultural Theory (SCT) of learning which emphasises the central roles of social interaction and culturally constructed artifacts in the organization of human forms of thinking (Lantolf and Thorne, 2006). In other words, proponents of SCT believe that the process of human learning occurs through social interaction with other human beings and the environments surrounding them. According to Haywood and Tzuriel (2009) dynamic assessment or DA refers to assessment of thinking, perception, learning, and problem solving by an active teaching process aimed at modifying cognitive functioning. DA, therefore, is a combination of instruction and assessment into one single activity which makes it different from static testing where examiners present problems or questions to examinees and record their responses without any help or guidance as they believe that it would interfere with the examinees' performance.

As the term *dynamic* implies change, the major goal of DA is to assess the process of thinking that is constantly changing. Through DA, teachers and students engage in a dialogue to find out the students' current level of performance on any task and share with each other the possible ways in which that performance might be improved. This teacher's intervention during the

assessment challenges conventional views on teaching and assessment by supporting the idea that teaching and assessment should not be seen as separate activities but should instead be fully integrated.

Theoretical Constructs of DA

The central concept of the dynamic assessment (DA) was grounded in the concept of Zone of Proximal Development (ZPD) in Vygotsky's (1978) Socio-Cultural Theory and Feuerstein et al.'s (1988) Mediated Learning Experience (MLE).

Zone of Proximal Development (ZPD)

One of the key constructs of Vygotsky's sociocultural theory is the Zone of Proximal Development (ZPD). Zone of Proximal Development (ZPD) refers to the difference between what an individual can do independently and what he or she can do with assistance or mediation. In ZPD, the development of the learner's ability cannot be seen only from their actual or current development, but also their ability to respond to mediation which can provide an insight into their future development. In SCT, knowledge is constructed through an interaction between a child and the environment (a teacher) through the use of symbolic tools such as language. Hence, ZPD can be viewed as a gap between what an individual can learn unassisted, and what he can learn with the help of a more knowledgeable peer. When applied specifically to a learning context, ZPD proposes that learning may be greatly facilitated through interactions between students as novices and a more knowledgeable and experienced person such as a teacher (Behrooznia, 2014) through tools called mediators.

Mediation

Vygotsky argues that human activities and mental functioning are mediated and facilitated by tools, cultural practices, and artifacts. Mediators, whether they are objects, symbols or people, help transform spontaneous impulses into higher mental processes such as approaches to problem solving (Tziona Bohrer-Levi, 2012). In the case of language learning, successful learning actions may depend to some extent on how the language learning is mediated.

Thus, whether it takes the form of a textbook, opportunities for L2 interactions, direct instruction or other forms of teacher assistance (Donato et al., 1992), mediation is an essential instrument of cognitive change. Through this interaction process, learners may use what Kozulin (1998) referred to as a “symbolic tool” to understand their own environment. Wertsch (2007), influenced by Vygotsky’s theory, proposed two concepts of mediation: implicit and explicit mediations. The concept of thinking aloud is an example of implicit mediation which is relatively transparent and easier to control when compared to explicit mediation which is intentional and obviously introduced into the course of activity either by the individual or by someone else such as a teacher. In the context of language learning, teachers can use mediation to collaborate on an assessment task which is closely relate to each student’s current level of performance in order to enable the teachers to move students to the next level of their ZPD.

Imitation

Through interaction, learners will start to imitate what their teachers do. Imitation in the context of SCT is not mindless copying of an activity but an intentional and selective mental activity which is a stepping stone towards internalization (Newman & Holzman, 1993). That is, what the learner imitates may gradually become internalized through the interaction process, thus needing less assistance from the teacher to accomplish the same task later on.

Internalisation

When learners are able to complete the tasks that were once possible through mediation or assistance from others on their own, it means that they are able to bring externally formed mediating artifacts into their thinking activity. Aljaafreh and Lantolf (1994) provide three conditions for successful internalization. First, assistance should be graduated with only implicit help offered initially. Next, help should only be offered when needed. And lastly, help should occur through dialogue between learners and a teacher.

DA Formats and Approaches

According to Lantolf and Poehner (2004), there are two approaches to DA: interventionist and interactionist.

Interventionist DA

Interventionist DA can be defined as a more formal and standardized approach that involves quantifiable assistance and aims towards quantifiable measurement. In other words, assistance takes the form of standardized interventions that make use of predetermined guidance, feedback and support. Two formats which exist within interventionist DA are referred to by Sternberg and Grigorenko (2002) as the ‘sandwich’ and the ‘cake’ formats.

• The Sandwich format

The sandwich format consists of three stages: pre-test, intervention (instruction) and post-test. The intervention in this format comprises structured teaching and guidance designed to help the examinee to arrive at the correct outcome or answer. First, the test takers are asked to complete pre-test activities; second, they are given instruction (planned in advance or adjusted to test-takers’ needs derived from their performance during the initial test); and finally, they move on to a series of post-tests. Instruction occurs between the pre-test and post-test stages throughout the process of test administration.

• The Cake format

With this format, assessment involves intervention (or feedback) from the examiner during the test procedure itself. The examinees carry out testing activities that are given item by item. If they cannot solve an item correctly, they are provided with instruction presented in the form of pre-fabricated hints.

Sternberg and Grigorenko (2002) explain the format as successive hints that are presented like layers of icing on a cake and the number of hints varies according to examinees. In other words, the examiner provides the examinees with hint-based instruction and determines how many hints an examinee needs to solve the item correctly. Guthke, Heinrich and Caruso (1986) developed a language aptitude testing instrument based on this assessment format which

provides examinees with five pre-fabricated hint: 1). vague hint, 2). more explicit hint, 3). even more explicit hint, 4. a very explicit hint, and 5). correct pattern and explanation of the solution.

Interactionist DA

In the interactionist approach, learning occurs through a cooperative or dialogic interaction between the examiner and the examinee (Poehner, 2005). A cooperative or dialogic interaction refers to an interaction in which the examiner immediately reacts to the examinee's needs, and learners are allowed to post questions and receive immediate feedback. During the interactionist DA sessions, leading questions, hints or prompts are not planned in advance and teacher-learner interactions are fine-tuned to the learner's ZPD.

In recent years, many researchers have become interested in the integration of DA in language learning (e.g., Leung, 2007; Poehner and Van Compernelle, 2011; Rea-Dickens, 2006; Tzuriel, 2011) and classroom based assessment (Ableeva, 2008; Ableeva & Lantolf, 2011; Sternberg & Grigorenko, 2002). In the next part we will discuss some theoretical background and key concepts of DA.

DA Literature Review

In recent years, there has been rich research literature on DA both in psychological and in educational fields. Language educators have begun to examine the pedagogical applications of DA on L2 reading (e.g. Abdolrezapour, Tavakoli, and Ketabi, 2014; Ajideh & Nouradad, 2012; Kozulin and Garb, 2002), on L2 writing (e.g. Aljafreh and Lantolf, 1994; Alavi and Taghizadeh, 2014; Panahi, Birjandi, and Azabdaftari, 2013) and on L2 speaking (e.g. Anton, 2009; Poehner, 2005). Among the four language skills, the L2 listening comprehension skill has so far received the smallest share of L2 DA research (Ableeva, 2010; Hidri, 2014).

Research in DA with special focus on language learning first began with research being conducted on the relationship between DA and children with specific language impairment or with language differences (e.g. Anton and DiCamilla, 1998; Donato and McCormick, 1994; Lantolf and Appel, 1994;

Lantolf and Poehner, 2008; Kozulin and Garb, 2002). Among these studies, it was found that DA could improve reading comprehension among 23 at-risk immigrants from Ethiopia studying EFL in Israel. The teachers in this study were trained to offer suggestions and ask questions to help students verbalise their decision making processes. This seems to confirm the inseparable link between assessment and instruction as Lantolf (2009) put it, “assessment and instruction are both moments of a single process.”

The use of DA in the foreign language classroom was reported in the studies conducted by Poehner (2009) and Lantolf and Poehner (2011) who integrated DA into the classrooms of K-5 primary school students for 15 minutes per day with the hope to improve the correct use of grammatical structure of Spanish. In a study conducted by Poehner (2009), it was found that working cooperatively in activities improves everyone’s performance (2009) as students take turns to engage in one-on-one interaction with the teacher. When a student answers incorrectly, the teacher either prompts the same student until he or she gets the correct answer or indicates that the response is incorrect, provides assistance, and asks a different student to provide the correct answer. With these two approaches, Lantolf and Poehner (2011) note that students seem actively engaged, and many times, are asking if they could volunteer the answer.

In another study conducted by Davin (2011), the development of 9 students was observed as they participated in large and small group mediation provided by the class teachers and by their peers. Davin’s findings suggest that there are some students who could move from assisted to unassisted performance during the large group DA. These students could also act as mediators during small group work for those who still require mediation. Based on this finding, Davin (2011) suggested that DA can be integrated into the language classroom of an early language programme and that small group work is an essential part of DA as it provides students with opportunities to request mediation either from the teachers or from peers. To summarise, these studies all demonstrated the contribution of DA to L2 pedagogy both for individuals and for groups.

DA in the L2 classroom context

The focus of this section will be on the implementation of dynamic assessment in L2 classroom setting. Dynamic assessment (DA) can be implemented in the language learning classroom to strengthen instruction and assessment. In a DA classroom, instruction and assessment can occur simultaneously. At present, there is growing support for the use of DA in second language pedagogy (Anton, 2009; Lantolf and Poehner, 2004; Poehner and Lantolf, 2005; Poehner, 2005; Ableeva, 2007, 2008; Summer, 2008). One of the reasons for this growing support is because researchers believe that language acquisition and learning can be achieved through joint interactions between instruction and assessment (Davin, 2013).

Poehner (2009) proposed two approaches of dynamic assessment that could be applied to the language classrooms: a cumulative approach and a concurrent approach. In the cumulative approach, a teacher directs all mediation to the same student. In this approach to DA, the teacher engages individuals in dialogue within the whole classroom setting. During daily instruction, when a student makes an error, the teacher will provide pre-scripted prompts one by one, adjustable upon the student's response, until the student is able to formulate the response correctly. Poehner (2009) distinguished between primary interactants—those speaking directly to the teacher—and secondary interactants—those listening in the background. Because the exchange occurs in the social space of the class and before the other students, it has mediating potential to the whole class.

In the concurrent approach, on the other hand, a teacher interacts with all students instead of directing the mediation to a single student. When an individual gives an incorrect answer, the teacher provides mediation and calls upon other students to reformulate the answer, thereby creating a group of ZPD.

Concerns for the integration of DA in the EFL context

Despite notable literature on DA as described earlier which describe the usefulness of DA, it is still difficult to replace conventional static language tests in the Thai EFL context with DA even though this form of static assessment is believed to be limited as it does not promote learners into becoming independent

knowledge constructors and problem solvers (Birjandi and Sarem, 2012). In this section, the limitation and challenges of implementing DA in the EFL context as an alternative form of assessment will be discussed.

When it comes to applications and implications for learning and teaching, every new paradigm or theory has some advantages and disadvantages. One of the challenges in implementing DA in any language classrooms is the fact that DA is a far more time-consuming assessment method than static testing. DA requires more skill, better training, more experience, and greater effort from teachers than static testing. Even with proper training, DA examiners must be able to determine each learner's problem and appropriate mediation required and how to interpret the difference between pre-mediation and post-mediation performance. This process requires more time to administer than static testing and can be a challenge to many Thai EFL teachers because of the current short fall of teachers (Mackenzie, 2011). Additionally, with a class size of up to 30 learners, targeting the development of an individual might represent an unrealistic model for classroom teachers. Because of the large class size, finding proper mediation or treatment that works for a large number of students is another challenge for DA whose goal is to integrate instruction and assessment (Haywood and Lidz, 2003).

So far we have looked at the challenges of integrating DA into the EFL classroom from the perspective of practicality. However, the greatest controversy of the integration of DA concerns the goals of assessment. There are essential differences between traditional static assessment and DA with regards to validity, reliability and fairness of dynamic assessment.

The issue of validity

It is argued that learning-centered assessments such as DA must meet the validity and fairness criteria if they are to provide meaningful and accurate information for further learning and teaching. Bachman (2000) has characterized validation as a process of deciding whether a test measure is really worth counting. In other words, validity challenges assessors to defend their interpretations of assessment performance and to consider the consequences of assessment for individuals, programs, institutions, and society.

However, the fundamental difference between DA and psychometric testing lies in their different relationships between assessment, teaching and learning. Psychometric testing and dynamic assessment are fundamentally two distinct activities with different goals and methods. With traditional psychometric tests, assessment is believed to be a standalone activity that reports the products of learning but is not intended to impact teaching and learning directly (Alderson and Wall, 1993; Cheng 2005; Cheng, Watanabe and Curtis 2004). The assumption that processes of validating standardized tests can be unproblematically applied to classroom assessments such as DA has been questioned on the grounds that these two types of assessment differ in many ways (Moss, 2003). While psychometric or standardized tests seek to isolate abilities, which are believed to be stable and fixed, dynamic assessment is less interested in observing consistencies in performance and more on the process of development. These different goals have important implications for how assessment validation is approached as they shift the focus of assessment from a measurement activity to one that focuses on learner development. This implies a shift from assessment being a mere observation of performance to cooperation with learners and intervention. Through DA, it is argued, the validity of assessment is derived from its success in promoting learner development

Reliability

In psychometric testing, a reliable test refers to a test in which performance is the same across different learners and different administrations. However, as mentioned earlier, the goal of DA is to support learners' development through guided prompts. Thus, change is expected and should be viewed positively. To resolve this fundamental difference, standardization of the mediation process could be implemented to improve greater reliability of DA (Buchel and Scharnhorst, 1993) as in the interventionist approach to DA. On the other hand, it should also be noted that the goal of DA assessment is not on traditional stability but improvement of students' performance which could result from rigorous documentation of the interactive process between the teacher and learners.

Fairness

It is undoubtedly true that the intention of every assessor is that their assessment practices are fair. But how can one justify what fairness is. Delandshere (2002: p 1480) asks the following:

“When the same test is given to all sixth graders in a state to find out whether their educational experiences yield similar achievements, is it because we are working from a theory stating that if students have all been taught the same thing, they all will learn it in the same way at the same time? It seems unlikely that any educator would articulate such a theory.”

Even though the term ‘fairness’ has not been clearly defined, Gipps (1999) argued that the major developments in assessments have been driven by attempts to achieve this concept of fairness. It was believed that the standardization of tests was an act of fairness where similar contexts for all test-takers would reduce differences in performance. However, in SCT where the learner’s development occurs out of an interaction of each individual with the world, fairness refers to the idea of treating or interacting with people differently in order to teach and for them to learn within their ZPDs (Swain, 2010). Thus, in theory, mediation in DA provides the condition for perhaps the most fair and equitable testing process possible because it is being adjusted to meet the specific needs for each learner’s development.

Recommendation for further use of DA in the EFL context

A large class size and heavy teaching workload makes it difficult for a teacher to interact with not just a single ZPD but a group of ZPDs. A one-to-one format of interaction between teacher and student has become a challenge to classroom teachers who have to interact with a group of ZPDs. In recent years, there have been some recommendations of ways to implement DA into the L2 classroom. Lin (2009) suggested administering a set of pre-formulated supportive hints and mediations which could provide teachers with information about students’ needs and their potential responses to mediation. Poehner (2009) developed a framework called group dynamic assessment (G-DA) in which

teachers can negotiate with a group of learners to co-construct several ZPDs. Poehner's framework of G-DA proves to be attractive in the field of language learning (Saniei, Birjandi and Abdollahzadeh, 2015) as it offers L2 teachers and practitioners a more realistic model of applying DA with groups of learners rather than individuals. This framework is more welcoming as it is less time and energy consuming to language teachers in Thailand who must accommodate a class size of more than 30 students.

In order to successfully implement DA in the Thai EFL context, more research on the implementation of DA in group settings is needed. Although DA might prove to be helpful in uniting teaching and assessment, it might not be practical for students in a large class due to time limitation (Davin and Donato, 2013).

Another way to successfully implement DA in L2 classrooms is through computerized DA (C-DA). Since computer-based tests are increasingly common, DA researchers are beginning to explore the possibility of electronically delivering mediation (Poehner, 2008). Some distinct advantages of computerized dynamic assessment are that it can be administered to a large number of students. In addition, students may be re-assessed as frequently needed and reports of learners' performances are automatically generated.

The use of peer-to-peer mediation (Kaufman and Burdern, 2004) can also be used to apply DA in the L2 classroom. A number of studies in recent years (Swain and Lapkin, 1998, 2000; Swain, 2001) suggest that peers can serve as effective mediators. Moreover, through the interactions between learners in order to solve problems and their strategies for solving them, teachers can use this information to better plan instruction by addressing areas of weakness. Swain (2001) further suggested L2 teachers and practitioners to consider administering tests to pairs or groups of students, as this would "more faithfully mirror regular, daily classroom and non-classroom activity"

Conclusion

To conclude, although the process of implementing DA can be time-consuming and requires careful planning in advance, it is believed to be an innovative and valuable way of assessing students as it allows teachers to

integrate instruction and assessment simultaneously while reducing the student's test-taking anxiety. It is therefore important for L2 teachers and researchers to carry out more research in this area in order to fully understand the impact of dynamic assessment on L2 teaching and learning development.

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Biodata

Pimpan Syamananda received her B.A. (English) from Chulalongkorn University, M.A. (English Language Studies and Methods) from University of Warwick, U.K., and M.A. (British Cultural Studies) from University of Warwick, U.K. She is currently an instructor at Chulalongkorn University Language Institute. Her research interests include language assessment and motivation in language learning.

Vocational Students' Use of Vocabulary Learning Strategies

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Abstract

The present study aimed to investigate vocabulary learning strategies (VLSs) employed by vocational students. The participants of this study were 242 first-year high vocational certificate students studying in three fields: engineering, accounting, and hotel and tourism from five government vocational colleges in Krabi Province, Thailand. A questionnaire and an individual semi-structure interview were used to elicit the frequency of VLSs use. The results of this study revealed that among five strategic categories (determination, social, memory, cognitive and meta-cognitive), social strategies were ranked as the most frequently used. The participants employed strategies from all five categories at the frequency level of "sometimes". In addition, VLSs use varied based on a participant's fields of study (Sig. at $P < 0.05$, $P < 0.01$).

Keywords: vocabulary learning strategies, vocational students, AEC, fields of study

การใช้กลยุทธ์การเรียนรู้คำศัพท์ของนักศึกษาอาชีวศึกษา

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Abstract

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาการใช้กลยุทธ์การเรียนรู้คำศัพท์ของนักศึกษาอาชีวศึกษา กลุ่มตัวอย่างคือนักศึกษาประกาศนียบัตรวิชาชีพชั้นสูง ชั้นปีที่ 1 จำนวน 242 คน ใน 3 สาขาวิชาคือ สาขาวิชาวิศวกรรมศาสตร์ สาขาวิชาบัญชี และสาขาวิชาการโรงแรมและการท่องเที่ยวในวิทยาลัยอาชีวศึกษา 5 แห่งในจังหวัดกระบี่ เครื่องมือที่ใช้ในการเก็บข้อมูลคือแบบสอบถามการใช้กลยุทธ์การเรียนรู้คำศัพท์ และแบบสัมภาษณ์กึ่งโครงสร้าง ผลการวิจัยพบว่า จากกลยุทธ์การเรียนรู้คำศัพท์ทั้งห้ารูปแบบ (กลวิธีการหาความหมายด้วยตัวเอง, กลวิธีทางสังคม, กลวิธีการจำ, กลวิธีเชิงพุทธิปัญญาและกลวิธีพุทธิปัญญา) นักศึกษาใช้กลวิธีทางสังคมมากที่สุด กลุ่มตัวอย่างใช้กลยุทธ์การเรียนรู้คำศัพท์หลักทั้งห้าประเภทในระดับความถี่บางครั้ง นอกจากนี้การใช้กลยุทธ์การเรียนรู้คำศัพท์ของนักศึกษาสามสาขาวิชามีความแตกต่างกันอย่างมีนัยสำคัญ ($P < 0.05$, $P < 0.01$).

คำสำคัญ: กลยุทธ์การเรียนรู้คำศัพท์, นักเรียนอาชีวศึกษา, ประชาคมเศรษฐกิจอาเซียน, สาขาวิชา

Introduction

Vocabulary learning has long been highlighted as critical in learning languages (Atasheneh & Naeimi 2015; Behbahani, 2016; Chon, Shin & Lee, 2012; Nation, 2001; Thornbury, 2002). Wilkins (1972) stated that “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (p. 111). In addition, insufficient vocabulary knowledge will negatively impact the development of students' skills in reading, writing, listening and speaking (Alhaysony, 2012; Hu & Nation, 2000; Liu, 2011). Therefore, in order to improve vocabulary acquisition, students need to apply effective vocabulary learning strategies (Nation, 2001; Nirattisai & Chiramanee, 2014; Teng, 2015; Walum & Charumanee, 2014).

Vocabulary learning strategies (VLSs) are defined as a set of actions, behaviors or techniques that learners use to help them find out the meaning of new or unknown words, to retain those words, and to use them in oral or written communication (Cameron, 2001; Intaraprasert, 2004; O'Malley & Chamot, 1990; Schmitt, 1997; Takač, 2008). The VLSs have been classified by different scholars (Gu & Johnson 1996; Nation, 2001; Oxford, 1990; Schmitt, 1997). Schmitt's taxonomy (1997) is one of the VLSs classifications that is widely-known and widely accepted among researchers (Nirattisai & Chiramanee, 2014). For this reason, this current study was based on Schmitt's classification (1997) in developing the instruments.

Schmitt (1997) proposed five sub-categories of VLSs: determination strategies, social strategies, memory strategies, cognitive strategies and meta-cognitive strategies. The first, determination strategies, consists of the strategies that learners have to determine the meaning of the words without interaction with others; whereas, social strategies are ways that learners use to find the word meaning by interacting with others. Memory strategies refer to the strategies in which students associate new words with previous knowledge. Cognitive strategies are similar to memory strategies; they include repetition and using mechanical means. Lastly, metacognitive strategies involve the strategies that learners use to control and evaluate their own learning.

Schmitt (1997) points out that many learners use strategies to facilitate acquiring vocabulary. According to Gu (2010), VLSs can be used by foreign

language learners as a tool for deciding not only how to learn, but also what to study. Nation (2001) asserts that by using VLSs, learners can acquire a large and rich vocabulary. Gu and Johnson (1996) concluded that learners equipped with a range of VLSs can deal with new or unknown words much more efficiently than those with insufficient VLSs knowledge.

As discussed above, VLSs play a critical role in language learning by helping learners expand their vocabulary. Due to the importance of the VLSs, many studies on VLSs use have been conducted. Those studies have focused on students' use of VLSs at the high school level (Walum & Charumanee, 2014), the vocational level (Teng, 2015) and the university level (Asgari & Mustapha, 2011; Boonkongsaen & Intaraprasert, 2014; Kalajahi & Pourshahian, 2012; Komol & Sripetpun, 2011; Nirattisai & Chiramanee, 2014; Saengpakdeejit, 2014; Siriwan, 2007; Suppasetserree & Saitakham, 2008; Wanpen, Sonkoontod & Nonkukhetkhong, 2013). The aforementioned studies examined students' VLSs use, and relationship between VLSs use and vocabulary knowledge.

With regard to VLSs use, Boonkongsaen (2012) points out that a factor affecting VLSs use is students' fields of study. Some research revealed a correlation between students' fields of study and their VLSs use (Bernardo & Gonzales, 2009; Boonkongsaen & Intaraprasert, 2014; Tsai & Chang, 2009; Siriwan, 2007). In Thailand, vocational students need to become more proficient in English to cope with the international work opportunities for the AEC labor market (Ngmsa-ard, 2012). However, the English proficiency of vocational students remains weak (Saraithong & Chancharoenchai, 2012). Yomyao and Khammul's study (2012) revealed that vocational students had low scores in vocabulary.

It is, therefore, worthwhile to explore VLSs use of vocational students, studying in the fields of professions under the AEC agreements. The results of this study would add to the literature on VLSs use by vocational students. Additionally, the results could be beneficial to both vocational students and teachers. An understanding of the VLSs employed by vocational students would not only enable students to be aware of the VLSs they use, it would also provide valuable guidelines for language instructors to teach VLSs that are suitable for students' learning styles.

Research Questions

The purpose of this study was to explore vocational students' use of VLSs and the relationship between their choices and students' fields of study. The research questions were:

1. What kind of VLSs do vocational students employ?
2. Are there any variations of VLSs use among vocational students according to the students' fields of study? If so, what are the main patterns of variation?

RESEARCH METHODOLOGY

Participants

The participants of this study were first-year high vocational certificate students enrolling in five government vocational colleges in Krabi Province in the second semester of the academic year 2015. The participants were studying engineering, accounting, and hotel and tourism. Within the engineering field, 127 students were majoring in Mechanical Tools, Mechanical Technology, Information and Technology, Electrical Power, and Electronics Technology. Forty-one students were majoring in accounting and 74 students in Tourism and Hospitality.

Instruments

There were two main instruments employed in this study.

1. Vocabulary Learning Strategies Questionnaire

A questionnaire with a five-point Likert scale was used as the main instrument. The rating scales were ranked from (5) *always use* to (1) *never or almost never use*. The 39 items were categorized based on Schmitt's taxonomy (1997). They were divided into five main VLSs categories: items 1-8 for determination strategies, items 9-14 for social strategies, items 15-25 for memory strategies, items 26-31 for cognitive and items 32-39 for meta-cognitive strategies. The questionnaire was adapted from that of Nirattisai (2014), Thavonpon (2012) and Walum (2014). Three experts in the field of TEFL reviewed the content validity of the questionnaire. A pilot study was conducted in

January, 2016 with 34 first year high vocational certificate students majoring in computer business at Krabi Technical College to ensure the reliability of the questionnaire. Using Kuder-Richardson formula 20, the reliability of this questionnaire was 0.917 indicating that the items in the questionnaire were highly reliable.

2. Semi-Structured Interview

The individual semi-structured interview was used to elicit detailed information about participants' attitudes towards English and the VLSs employed by the participants. Each of the ten volunteer participants was interviewed for 15-20 minutes. The interview was audio-recorded. The researcher also took notes during the interviews.

Data Collection

The data were collected during January and February, 2016. Two hundred and forty-two first year high vocational certificate students out of the 298 (81.20%) completed the questionnaires. In addition, ten volunteer participants, four in engineering, three in accounting, and three in hotel and tourism were interviewed using Thai in order to avoid the misunderstanding between the researcher and the interviewees.

Data Analysis

Statistical Analysis

Descriptive statistics was used to compute mean scores and standard deviations (S.D.) of the VLSs data. The interpretation of the use of VLSs was applied from Srisa-ard (2002). The mean scores of the VLSs were interpreted as follows:

- 4.21 – 5.00 = Always used strategies,
- 3.41 – 4.20 = Frequently used strategies,
- 2.61 – 3.40 = Sometimes used strategies,
- 1.81 – 2.60 = Seldom used strategies,
- 1.00 – 1.80 = Almost never used strategies.

In addition, ANOVA was employed to analyze statistically significant differences between VLSs used among three groups of students.

RESULTS

This section reports the results of the students' use of VLSs and variations in students' use according to their fields of study.

1. The vocabulary learning strategies use of vocational students

The frequency levels of students' use of VLSs in each category were reported in Table 1.

Table 1: The frequency of students' use of VLSs based on category

VLSs Category	Mean	S.D.	Frequency Level
Social Strategies	3.35	.60	Sometimes used strategies
Determination Strategies	3.24	.58	
Memory Strategies	3.17	.67	
Meta-cognitive Strategies	3.11	.78	
Cognitive Strategies	2.96	.73	
Overall	3.17	.56	Sometimes

Table 1 summarizes the means of the frequency level of students' use of VLSs in each category from the highest mean to the lowest. It was found that the overall frequency level of VLSs used by the vocational students was in the range of "sometimes" (mean = 3.17), indicating that students sometimes used vocabulary learning strategies. Among five categories, *social strategies* category was ranked as the highest used strategy (mean = 3.35), followed by *determination strategies* (mean = 3.24), *memory strategies* (mean = 3.17), *meta-cognitive strategies* (mean = 3.11) and *cognitive strategies* (mean = 2.96) respectively.

Upon further examination, the mean scores of the students' use of 39 strategies at different level of use (frequently used, sometimes used, and seldom used strategies) are presented in Table 2 - 3.

Table 2 below shows the frequently used VLSs by the students.

Table 2: The frequently-used vocabulary learning strategies employed by students

No.	Strategies	Mean	Category	Frequency of use
4.	Analyze any available pictures or gestures	3.55	DET	Frequently used strategies
7.	Use an English-Thai dictionary	3.53	DET	
9.	Ask teachers for an L1 translation	3.50	SOC	
12.	Ask classmates for meaning	3.47	SOC	
11.	Ask a teacher for a sentence including the word	3.45	SOC	
3.	Guess word meaning from textual context	3.45	DET	
8.	Use a Thai-English dictionary	3.43	DET	
10.	Ask teachers to describe a similar meaning or provide a synonym of the word	3.43	SOC	
26.	Learn words through verbal repetition	3.43	COG	

As shown in Table 2, nine strategies that students frequently employed were ranked from the highest to the lowest mean. The strategy *analyze any available pictures or gestures* in the determination category was employed with the highest mean score of 3.55, followed by the strategy *use an English-Thai dictionary* in the determination category (mean = 3.53) and the strategy *ask teachers for an L1 translation* in social category (mean = 3.50). In terms of the categories, four strategies were in the determination category (Items 4, 7, 3 and 8), four strategies were in the social category (Items 9, 12, 11 and 10) and only one strategy (item 26) was in the cognitive category.

In the interviews, participants stated that the learning materials and classroom environment were important for their learning. The students explained that their English textbook contained various colored pictures and signs that aroused their interest in learning English in the classroom. As a result, they applied learning materials that the teacher provided in the classroom both inside and outside the classroom. With regard to using a dictionary, they stated that the teacher allowed them to bring any kind of dictionary into the classroom. They felt comfortable learning English vocabulary.

The VLSs sometimes and seldom used by students are shown in Table 3.

Table 3: Sometimes and seldom used vocabulary learning strategies

No.	Strategies	Mean	Category	Frequency of use
32.	Listen to and watch English media for example movies, songs, etc.	3.35	MET	Sometimes Used Strategies
13.	Discover new meanings through group work activity	3.33	SOC	
35.	Translate the word from English to Thai	3.29	MET	
15.	Study words with pictures	3.28	MEM	
22.	Associate the word with other words you have learned	3.27	MEM	
27.	Learn words through written repetition	3.24	COG	
16.	Connect words with a personal experience	3.23	MEM	
34.	Translate the word from Thai to English	3.23	MET	
19.	Spell words aloud when studying	3.21	MEM	
18.	Say words aloud when studying	3.19	MEM	
20.	Learn the words of an idiom	3.17	MEM	
24.	Remember words by underlining initial letter of the words	3.17	MEM	
21.	Connect the word with its synonyms or antonyms	3.14	MEM	
6.	Use an English-English dictionary	3.10	DET	
33.	Read English media for example cartoon books, magazines, novels, website etc.	3.10	MET	
37.	Play online games	3.10	MET	
38.	Try to speak or describe things in English	3.09	MET	
17.	Make a group of words by topic	3.05	MEM	
36.	Play vocabulary games	3.03	MET	
1.	Analyze part of speech such as verb, noun, and adjective.	3.02	DET	
30.	Take notes of newly learned words in class	3.01	COG	
23.	Stick the word and its meaning in the place where it can be obviously seen.	3.00	MEM	
31.	Review words by reading the vocabulary section in textbook.	2.95	COG	
39.	Practice by doing vocabulary exercise	2.95	MET	
2.	Analyze affixes and roots	2.93	DET	
14.	Interact with native speakers	2.91	SOC	
5.	Use flash cards	2.90	DET	
25.	Use physical action when studying words. For example, you walk when you remember the word "walk"	2.90	MEM	
28.	Keep a vocabulary notebook everywhere you go	2.62	COG	
29.	Listen to a tape of word list	2.60	COG	
				Seldom used strategy

As illustrated in Table 3, 33 strategies were ranked from the highest mean score of *sometimes used* VLSs to the lowest mean score of *seldom used* VLSs. The majority of vocabulary learning strategies (29 items) were sometimes used, while only item 39 in the cognitive category ‘*listen to a tape of word list*’ was seldom used, with the lowest mean value (mean = 2.60). For the strategies that the students sometimes employed, 11 items were in the memory category (Items 15, 22, 16, 19, 18, 20, 24, 21, 17, 13 and 25), eight items belonged to the meta-cognitive category (Items 32, 35, 34, 33, 37, 38, 36 and 39), four strategies were in the determination category (Items 6, 1, 2 and 5), four items were in the cognitive category (Items 30, 31, 28 and 29) and two strategies belonged to the social category (Items 13 and 14).

2. The variations in students’ VLSs use according to the fields of study

According to Table 4, there was a significant difference in the use of VLSs among vocational students in the three fields of study.

Table 4: Variations in students’ strategy use in five categories according to fields of study

VLSs Category	Fields of study						F	Patterns of variation
	Eng. (n = 127)		Acc. (n = 41)		Host (n = 74)			
	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.		
Determination Strategies	3.21	.56	3.26	.63	3.28	.58	.41	
Social Strategies	3.30	.63	3.32	.64	3.44	.52	1.21	
Memory Strategies	3.07	.66	3.22	.69	3.32	.65	3.37*	Host>Acc>Eng.
Cognitive Strategies	2.91	.75	3.00	.80	3.03	.66	.67	
Meta-cognitive Strategies	3.10	.80	3.13	.86	3.13	.69	.05	
Overall	3.11	.58	3.19	.58	3.25	.50	1.65	

Note: * Sig at $P < 0.05$

(Eng. = Engineering, Acc. = Accounting, Host = Hotel and tourism)

As revealed in Table 4, the results showed that the hotel and tourism students employed VLSs significantly more frequently than accounting and engineering students in the memory strategies. On the contrary, there were no significant differences across these three fields of study in the use of determination, social, cognitive and meta-cognitive strategies. Interestingly, although the use of strategies in the other four categories did not vary significantly according to students' major fields, the hotel and tourism students reported slightly higher use of all VLSs than engineering and accounting students. In addition, the mean score of social strategy reported by the hotel and tourism students was in the range of "frequently" (mean = 3.44).

The variations in the students' use of total 39 vocabulary learning strategies according to their fields of study were presented in Table 5 below.

Table 5: The significant variations in the students' strategy use according to fields of study

No.	Strategies	Fields of Study						F	Patterns of Variation
		Eng. (n=127)		Acc. (n=41)		Host (n=74)			
		Mean	S.D.	Mean	S.D.	Mean	S.D.		
Determination Strategies									
4.	Analyze any available pictures or gestures	3.46	.85	3.44	.63	3.77	.75	4.03*	Host>Eng >Acc.
Social Strategies									
14.	Interact with native speakers	2.77	1.05	2.83	.92	3.19	.95	4.26*	Host>Acc. >Eng.
Memory Strategies									
18.	Say words aloud when studying	2.99	.93	3.29	.93	3.47	.92	6.58**	Host>Acc. >Eng.
19.	Spell words aloud when studying	3.05	.92	3.34	.88	3.42	.97	4.22*	Host>Acc. >Eng.
Meta-cognitive Strategies									
37.	Play online games	3.29	1.12	3.00	1.14	2.81	1.18	4.31**	Eng>Acc >Host

Note: *Sig at P<0.05, ** Sig at P<0.01

(Eng. = Engineering, Acc. = Accounting, Host = Hotel and tourism)

Table 5 demonstrates significant variations in the use of VLSs according to fields of study. Five out of 39 VLSs had significant differences among the three fields of study. However, the results showed that there were three patterns of variation relating to three fields of study.

The first variation pattern, “Host > Eng. > Acc.” indicates that there was a significantly greater mean of hotel and tourism students than engineering and accounting students ($F = 4.62, P < 0.05$). In other words, hotel and tourism students used (item 4) ‘*analyze any available pictures or gestures*’ strategy (determination category) more frequently than engineering and accounting students.

The second variation pattern was “Host > Acc. > Eng.” indicating that there were significantly greater means of hotel and tourism students than accounting and engineering students. Three strategies that hotel and tourism students employed more frequently than accounting and engineering students were items 14, 18, and 19 ‘*interact with native speakers*’ ($F = 4.26, P < 0.05$), ‘*say words aloud when studying*’ ($F = 6.58, P < 0.01$), ‘*spell words aloud when studying*’ ($F = 4.22, P < 0.05$) respectively.

The third pattern “Eng. > Acc. > Host” shows that there was a significantly ($F = 4.31, P < 0.01$) greater mean of engineering students than accounting and hotel and tourism students. The results reported that ‘*play online games*’ strategy (item 37) had a higher frequency of use by engineering students than accounting and hotel and tourism students.

The results of the interview were in line with the responses from the questionnaires. During the interview, two out of three hotel and tourism students stated that they usually learned vocabulary from native speakers. During the internship, participants had to speak English with native speakers. When they did not understand the words, they asked the native speakers to speak slowly or to explain it again. In contrast, two out of four engineering students pointed out that they were exposed to English within the classroom and when playing games.

For ‘*say words aloud when studying*’, and ‘*spell words aloud when studying*’ strategies, three hotel and tourism students cited that they usually said and spelt the words out loud when they were studying vocabulary, especially when their English teacher taught these strategies in class. After the class ended,

the teachers assigned homework. They needed to remember the words, English sentences and their meanings. This was especially true for participants in hotel and tourism. Therefore, these strategies helped them learn and retain those words.

In terms of '*play online games*', three out of four engineering students informed that they frequently learned new vocabulary from the online games. They reported that while they were playing games, they had to follow English instructions. It was a new and different way to acquire English words.

Discussion

This study was limited to exploring VLSs use of first-year high vocational certificate students in three fields of study; engineering, accounting and hotel and tourism in Krabi Province, Thailand. The difference in using VLSs between males and females was not measured.

The results of this study showed that vocational students employed all five categories at the frequency level of "sometimes". A possible explanation for this finding may be related to the neglect of explicit teaching and learning of vocabulary (Hedge, 2000; Schmitt, 1997). In Thailand, vocabulary has not received attention as a subject, but is taught as a part of listening, speaking, reading and writing (Nirattisai & Chiramanee, 2014). Therefore, a lack of attention to vocabulary learning and teaching appears to be a key factor affecting students' use of VLSs (Siriwan, 2007).

The social category was used with the highest mean. The finding of this study was not in line with the results of Komol and Sripetpun's study (2011) and Nirattisai and Chiramanee's study (2014) which found that social strategies were the least used by university students. However, students need social support and interaction with others to learn languages (Chang, Weng & Zakharova, 2013). This was in line with the interview session. Seven students reported that their teachers created relaxed classroom atmosphere. Students felt comfortable interacting with others in classroom.

Among the 39 strategies, the strategy '*analyze any available pictures or gestures*' was reported as the most employed VLSs with '*listen to a tape of a word list*' the least employed. The most frequently used strategy of '*analyze any available pictures or gestures*' could be explained in relation to materials that

attract students' attention. According to Copper (as cited in Abebe & Davidson, 2012), pictures aid students to determine the meaning of words. Plass, Chun, Mayer, and Leutner (1998) and Oxford and Crookall (1990) also supported that visuals and verbal modes aided students to learn second language. Furthermore, Shahrokni's study (2009) suggested that the combination of text and images glossary could help students learn more vocabulary. In this current study, six students reported that there were many pictures and symbols in their English textbooks and learning materials that aroused their interest while they were studying.

Listen to a tape of word list was the least used strategy. This finding was consistent with a study done by Nirattisai and Chiramanee (2014). They found that students rarely employed the '*listen to a tape of word list*' strategy. One explanation of the present result seems to relate to Information and Communication Technology. Many new technologies have been invented to aid learning acquisition whereas a tape of word list appears to be out-of-date. Larrotta (2011) suggested that teachers provide activities which students can learn words in everyday-life instead of giving them vocabulary lists. In addition, teachers might use more modern technologies in the classroom. In students' interview sessions, six interviewees expressed that their teachers used various kinds of modern teaching and learning materials such as CD, dictionary online, or YouTube.

In relation to the variation in the students' use of VLSs and fields of study, the results showed three patterns of significant variation. Hotel and tourism students used the strategies '*say words aloud when studying*', and '*spell words aloud when studying*' which were in the social strategy greater than accounting and engineering students. However, engineering students employed the strategy '*play online games*' (meta-cognitive strategy) at a higher frequency than accounting and hotel and tourism students. One possible explanation might be related to the different characteristics of students. According to the studies of Bernardo and Gonzales, (2009), Boonkongsaen and Intaraprasert (2014), Tsai and Chang (2009), students from various fields of study employed different VLSs. The results of those studies also revealed that a field of study is one of the factors affecting students' VLSs use. In this study, hotel and tourism students were more

extroverted. Meanwhile, students with engineering background were likely to rely on media or technology.

The exposure to language can be one explanation for the participants' use of the social strategy, *'interact with native speakers'*. Students with more exposure to English tended to have a greater frequency of VLSs use (Nirattisai & Chiramanee, 2014). The hotel and tourism students had to work and interact with foreigners. Furthermore, they had more experiences in learning language outside the classroom, especially while they were trainees. The experiences provided them more opportunities to use and learn more vocabulary than engineering and accounting students. It was consistent with Boonkongsaen and Intaraprasert's study (2014) which concluded that learners who had exposure to English beyond classroom instructions employed VLSs more frequently than learners who had exposure to English only within classroom instructions. In addition, language learning experience had strong effects on students' VLSs use (Boonkongsaen, 2012).

The strategy *'analyze any available pictures or gestures'* was not only the most frequently used by students, but also had a significant difference among three fields of study. The results showed that hotel and tourism students used this strategy more frequently than engineering and accounting students. The difference may be explained with regard to learning materials that the teacher provided students in class. Students in all three fields of study reported that there were many colored pictures in their textbooks. Their teacher also provided interesting learning materials for them in class. This is consistent with the interview results. The hotel and tourism participants stated that they had to learn a lot of English vocabulary, words and phrases, technical terms and expressions, and symbols in their three English subjects while engineering students had to learn two English subjects. The accounting students described learning only one subject, Basic English. This suggested that hotel and tourism students had more opportunities to learn English through learning materials in classroom than engineering and accounting students.

Conclusion

This study aimed to investigate vocational students from varying fields of study with regards to their choice of VLSs. The results showed that, overall, vocational students sometimes used VLSs to learn vocabulary. Moreover, the students tended to rely on social strategies. In addition, there were significant differences of VLSs use among the three fields of study. The results of this study suggest that students should be aware of their VLSs use, realize the importance of VLSs, and know that different kinds of VLSs can be used and applied both inside and outside the classroom. So, they can utilize the VLSs that are appropriate to a specific situation. Moreover, the results indicate that students employed the determination strategy and social strategy more than the other strategies. In this respect, teachers should teach and encourage students to use a wider range of VLSs both in-class and in self-directed activities, so that students can take more individual responsibility for their own learning.

For future research, it might be worth exploring VLSs employed by other groups of professional fields of study using more research instruments, for example, class observation and in-depth interviews in order to obtain a deeper understanding of VLSs used by a wider range of vocational students.

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Action Research as Continuing Professional Development

A Special Interview with Asst. Prof. Dr. Betsy Gilliland,

University of Hawai‘i Mānoa

Pramarn Subphadoongchone
Chulalongkorn University Language Institute

In this issue of *PASAA PARITAT*, we are privileged to have an opportunity to interview Asst. Prof. Dr. Betsy Gilliland from the Department of Second Language Studies at the University of Hawai‘i Mānoa in Honolulu, Hawai‘i, USA. She holds a Ph.D. in Education from the University of California, Davis, and an MA in TESOL from the School for International Training (Brattleboro, VT, USA). Her research interests relate to the teaching of academic language, ranging from immigrant secondary school students learning to write for academic purposes in California to novice teachers of English for academic purposes learning to conduct classroom research while participating in a teaching practicum in Thailand.

With her expertise in action research, Dr. Gilliland was invited by Chulalongkorn University Language Institute (CULI) to serve as a featured speaker for CULI’s International Research Seminar held on July 15, 2016. Under the theme of *Action Research in ELT for Quality Instruction*, the seminar, which was meant to commemorate CULI’s 39th anniversary, was aimed at serving as a convivial forum for scholarly discussions among those interested in conducting research as part of their continuing professional development. Through the lens of action research, she discussed the diverse forms that novice classroom researchers’ studies take, using van Lier’s (1988) framework to situate the teachers’ research projects. She demonstrated the value of action research as a starting point for novice teacher-researchers wishing to investigate their students’ learning and their own professional practice.

Drawing on her extensive, hands-on experience in conducting and advising for action research projects, Dr. Gilliland graciously further shares with us in this interview her perspectives on action research as part of teachers' professional development.

1. Could you please briefly share with us what “action research” means to you?

To me, “action research” is research done by teachers in their own classrooms, investigating their students' learning. It requires both *action*, doing something different in teaching, and *research*, the systematic collection and analysis of data. Unlike traditional research, where scholars conduct research *on others*, in action research, teachers conduct research *with* their students and study *themselves* in the process (McNiff, 2013). Although it is possible for someone to conduct action research as a guest in another teacher's classroom, from my experience, it is much more difficult than when the teacher conducts research in her own class.

Reflection is a key practice that should be integrated throughout action research. Teacher researchers reflect before they begin research on potential areas for research; they reflect while teaching on how students are receiving the new interventions; and they reflect after collecting student work on what students have learned from the interventions. I hope that all teachers reflect on their practices, thinking about what happened, why it might have happened, and what they could do differently in the future. Reflection alone, however, is not action research. To go from reflection to research requires careful documentation of what happened, including some consideration of the impact of new actions on student learning.

2. In some teaching contexts, teachers are encouraged to conduct “collaborative action research.” What are the potential benefits and challenges of carrying out collaborative action research?

Collaborative action research happens when teachers collaborate (work together) with each other in the research process. They can design a research

study in which they all try out the same interventions with their students and collect the same forms of data, or they can conduct individual studies and meet regularly to support each other as they do their research. Either way, the collaboration helps overcome many of the potential limitations to teachers doing research on their own: they have the opportunity to talk through ideas before implementing them in the classroom; they can get feedback on their intervention design, data collection plan, and analysis outcomes; they can share drafts of written reports about their research process for responses from their colleagues; and they can provide emotional support when their peers are feeling overwhelmed or depressed by the research process.

Having tried to do collaborative action research myself, I can say that one of the huge drawbacks is time. Teachers are busy people, and trying to find a time when all members of the collaborative group can meet with each other on a regular basis is very difficult. This problem could be eliminated if the group were willing to meet online, using a forum where they could share their ideas, materials, and data with each other asynchronously. Another related problem is energy. We have probably all experienced situations where we are enthusiastic about a new venture and then lose energy as our other responsibilities become more pressing. A collaborative action research group where the members commit to supporting each other both academically and emotionally, however, could be an antidote to this common problem. If teachers find their action research team meetings energizing, then they will look forward to attending and continue to prioritize the process.

3. Action research has been criticized, to a certain extent, as being small-scale in nature and because of its generalizability. Some people are anxious about whether it is a legitimate form of academic research. What do you think?

I obviously think it's a legitimate form of research, and one that is worthy of being shared publicly! I do, however, know that this is not a universally held view. I had a couple Korean students who asked me whether they would be able

to get into PhD programs if they did action research for their MA theses. They had heard from classmates that Korean universities do not value action research because, as you say, it is too small-scale and not generalizable. I talked with them about how action research, when done well, can provide just as rich data as any other classroom-based qualitative study. The key is to do it well and be systematic in your data collection process.

Generalizability in itself is a false concern with much research, including action research. Unlike with statistical studies, the goal of action research and many other qualitative studies is to examine a context in depth and for the researcher to use his or her close knowledge of the classroom and students to understand what is going on in ways that a researcher without personal connections to the context could not do. While it is true that the findings from this study cannot be generalized to other contexts, if the researcher has provided a clear description of the classroom, the interventions, the students, and their learning, then readers can decide whether the interventions might work in similar ways in their own contexts based on their knowledge of their own students.

4. What other criticisms or concerns have you heard regarding action research?

One of the major critiques I have heard is that teachers are not able to do good quality data analysis. This can be a problem for teachers both as they are doing research and when they try to write and publish their studies. When I was an MA student, I remember feeling completely lost while trying to design an action research study, since I didn't think I knew what to do with my data. At that point, and I think many teachers may be in similar situations, I had not taken any classes on qualitative data collection or analysis. I had read journal articles where researchers presented qualitative findings and used various forms of coding to identify themes, but I didn't know how to do that myself. My writeup of my MA action research work was really just descriptions of student work, without any systematic analysis. I only learned how to analyze data when I went back to study for my PhD and took several classes on qualitative analysis.

I don't think, however, that this needs to be the case. Simon Borg (2015) writes about the importance of having mentors able to support teachers who are new to doing research. If teachers are able to find a mentor who has some confidence in analyzing data, then they can learn through experience as they design studies in their own classrooms. Qualitative analysis is not difficult, but to do it well does require being careful and documenting what you are doing. The same is true of quantitative analysis—you can show a lot with simple descriptive statistics, but you can also misuse statistics if you don't understand what you are analyzing. Having a mentor—a university professor or an experienced colleague—is a great way to learn how to do action research well.

Another issue is that many teachers do not have the time to invest in doing a thorough action research study when they are already busy with all the other demands of their teaching work. This, I think, is a legitimate concern, especially in places like American and Thai schools, where teachers have 6 or 7 class periods every day, plus additional duties like supervising student clubs, and very little time in the workday to plan their lessons or grade student assignments. When are they supposed to analyze data when they don't even have time to eat lunch? This is where collaborative action research and support from the school administration can be most valuable. If teachers are able to help each other out, and if they are given time in the school day to focus on their research in the company of other teachers also doing research, then they will be better able to find the time to do research that can benefit their teaching.

5. To some teachers, teaching seems to be a priority and conducting research tends to be last in a long list of tasks. In your opinion, why should teachers be encouraged to conduct action research? What are the benefits that typically justify the extra work involved?

As I noted above, time is a legitimate concern for teachers, and without time, it is difficult if not impossible to also do research into your teaching. I don't think it should be an excuse not to do something simple. All teachers need to spend time planning lessons and assessing students' progress, and both of these

core tasks can be part of an action research study. Since action research is specifically about trying out teaching ideas and evaluating students' learning in response to those new ideas, both planning and grading can be incorporated into the action research cycle.

What teachers need to do differently, therefore, is to be deliberate and systematic about documenting what happens in the class and then reflecting on what they are seeing. An easy way to document is to keep a running record while teaching, jotting notes in the margins of your lesson plan as you go. You could also keep a copy of the class list on which you make notes of which students respond in what ways to your teaching. Ideally, if you have taken clear notes, after class (or at the end of the school day), you can then write up a reflection and flesh out the notes so you don't forget what they were about. If you find it's too hard to write notes, you can audio record class sessions and then listen to them afterwards with your lesson plans and class lists at hand. Audio recording also allows you to notice things that you might have missed while teaching, such as a student's comment to her classmate while you were listening to another student.

This in itself is enough to be action research for your own benefit. Many teachers are surprised when they review their notes or listen to a recording of their classroom, since looking back allows you to see where students struggle or succeed in ways that you can't be aware of in the moment. If you realize that the new approach is challenging students in ways you hadn't anticipated, you can then modify your plans for future lessons. If on the other hand you realize that students who had not previously participated in class are talking, for example, or you see in their writing that they have learned the concept well, you know you can continue to use the new approach as you plan for later lessons.

The lack of time can also limit how much teachers are able to share their findings with others. Although publicly sharing the outcomes is an important aspect of action research, that does not mean you have to write up your study and publish it in an international journal. It may be enough to start by sharing your findings with your colleagues in your department at your school. One department

I worked in had an annual mini-conference where teachers shared with each other (no-one was invited from outside the department) and described things they had tried in their classes and how their students had responded. That counts! It only takes a short time to make copies of your activity plans or prepare a few PowerPoint slides showing what you did as you planned the new approach. Then you can talk casually with colleagues about what you did and answer their questions. It might be possible to make such a mini-conference part of your regularly scheduled department meetings, so that it doesn't even require time commitment outside of the school day.

6. Some teachers with less teaching and research experience may feel that they have “nothing to research.” Others may lack confidence in conducting action research and thus put it off until they feel that they have “more confidence.” What are your suggestions for them?

Related to the challenge of time, teachers may not feel like they are ready or able to do research that looks like what they read in books and published journal articles. This is exactly how I felt when I was an MA student just getting started with my own research. I didn't think what I was doing was innovative or interesting to anyone else. As I noted earlier, I didn't even really know what I was doing.

I advise teachers who don't think they have anything to research to do what I did: think about what's going on in your class. Then think about what isn't quite the way you hoped it would be. This is where you can start finding something research-able and worth researching. You can do research to figure out *what* isn't working, *why* things aren't working, *who* is affected when things don't work, and/or *how* you can modify your teaching to make things work better. Keep in mind that as a teacher, your ultimate goal should always be to help your students learn better; this doesn't mean, however, that you have to do research on your students' learning per se. You may want to focus on their experiences or perceptions of what you are teaching, or compare their performance on one activity with their performance on another activity.

To the second concern that teachers may not have the confidence to do research, I think you gain confidence with experience. You need to try out something new and then do it multiple times in order to feel like you can do it with confidence. Action research is no different. You may not want to share what you try with anyone, even your colleagues, the first few times you try it. That's OK!

Action research lends itself well to doing multiple cycles of teaching, observing, reflecting, and modifying the approach. You don't have to share what you did on the first try. But don't use that as an excuse not to try something new if you see that the way you are currently teaching isn't working as well as you had hoped. Read some books written for teachers, look at internet forums for teachers, and see what other people recommend. Try a new activity in your class. Take notes on what you see your students doing. Look over their work when they are finished. Think about what you see—how many of them have used the language forms accurately? How many have written more sentences than they did last week? How many have incorporated new vocabulary into their texts? What did you hope they would learn or do that they didn't do? How can you address this gap when you teach them next? At this point, you have just completed a cycle of action research. The activity may not be anything special, and your students may not have learned much, but you identified a teaching problem, acted on that problem with a new approach, analyzed your students' performance, and reflected on what you could do differently in the future. That's action research!

7. It seems that most of the literature on action research has laid emphasis on identifying concerns in the classroom, developing and evaluating classroom interventions, and monitoring the learning process and outcomes. Little is devoted to discussing the ethical issues in conducting this kind of research. Should we be more aware of the potential ethical issues involved in carrying out action research?

Most definitely. Action research carries some of the same ethical concerns as other forms of research, but also adds some others due to the relationship of

the teacher-researcher to her students. Like all research with human subjects, we need to be sure we are not doing anything that will harm participants (students) physically or emotionally. Common sense should be enough for us to identify any kind of teaching approach that would hurt students, but we also need to make sure we don't ask questions that could traumatize students or psychologically scar them. As teachers, we additionally need to make sure that we are not doing anything that will restrict what some or all of our students can learn. While the goal of action research is often to try out new and better ways of teaching, if there is a chance that students won't get the opportunity to learn what they need for the purposes of the class, it may not be worth the risk. There's a temptation to divide a class into two in order to have a control group and an experimental group, but if the control group is denied any instruction, then they lose out on the opportunity to learn what they would have with the regular curriculum.

We also need to make sure that we don't violate their privacy by sharing any personal information with others. In the United States, we are required to get consent from our students (if they are adults) or their parents (for students under age 18) if we want to use students' work for research purposes or do any research with them that will be reported outside the classroom. This means that we can of course do action research for our own purposes simply by trying new approaches and documenting how the students respond, but if we want to present any findings to colleagues at a conference or write about the research in an article, we need to have signed consent from all the students whose work we use. Once we have that consent, we need to make sure that no one would be able to identify the student from their work, so we have to give them pseudonyms (replace their real name with a fake name) and delete any information that could be connected back (such as if the students write about their family members' names or list their home address).

Finally, where teacher research is somewhat different from research done by outside scholars, we need to be acutely aware of the power differences and possibility of inappropriate influence on our students. If students are adults

(legally able to consent to participating in the study), they may be afraid that refusing to participate in their teacher's research project will affect their grades in the class or change how their teacher treats them. This is a more difficult challenge, but if the students trust their teacher, the teacher can explain that their participation will have no connection to the teacher's treatment in the class. It is also possible to do the research for your own purposes and then later get consent from students to use what they wrote or did during the unit for sharing outside class. Participants always need to know that they can withdraw their consent (choose to not participate any longer) at any time, even if they were initially willing.

8. When we write an article based on an action research project, should we follow the same pattern or organization as we do in other kinds of research?

I think the organization depends on your purpose in writing as well as the accepted formats for the place where you want to publish. Most academic journals have a preferred format—some even specify the titles for each section (most generally, Introduction-Methods-Results-Discussion)—while others seem to be more flexible. It is possible to write up an action research study in the same format as a traditional research study, but it may be more desirable to present it as a narrative in which you tell the story of how you developed your teaching approach and how each cycle progressed. It may also be important to refer specifically to action research literature in order to justify your study, since some reviewers may be concerned that a teacher doing research in his own classroom could be biased in interpreting the data.

9. Do you have any suggestions for teacher researchers who find it difficult to publish their research project? Some may be daunted by the writing and publication processes. What advice would you give to them so that they will not give up writing?

Start small! If you keep a blog, you can document your study through regular blog entries. If you use Twitter or Facebook, you can share your ideas, findings, and struggles as you work on your research. With social media, you can

also follow other action researchers working in schools around the world and see what they are doing, as well as connect your work with theirs. (One group of teachers in the UK has a dedicated Twitter account where they report on their action research: <https://twitter.com/thresearch>.) You may be able to find a virtual group of collaborators who are there to support your work.

Join local professional organizations where you can meet other teacher researchers and share your ideas orally before you try to write them down. Most professional organizations have a newsletter where members can write short articles related to their teaching work, too. If you are working on collaborative action research with colleagues, consider writing one article together rather than each trying to write your own. Another way to share the outcomes of action research is to establish a web site or resource collection for your program where teachers can share successful lesson ideas. The other advantage of having a group of colleagues is that you can provide each other with feedback on your writing, too. As with all writing, make it a habit. Write a little bit every day. Don't try to write an entire article in one day.

10. Apart from disseminating research findings through publications, do you have any suggestions that would encourage teacher researchers to use the findings to establish a cycle of enquiry and dialogue among themselves for their professional development?

This is where having a group of colleagues at your school or in your region is so important. You might want to look into the Japanese concept of Lesson Study, which is well established in Japan and beginning to be recognized in the US and UK as a professional development model that really works for teachers. Lesson study teachers will collaboratively design a teaching intervention and then observe each other teaching the same lesson in their own classrooms. After the observations, they reflect on the process and modify their teaching. Though most teachers in lesson study groups do not seem to publish their research, they are able to share with their colleagues in their schools and beyond through oral presentations and discussions.

We are grateful to Asst. Prof. Dr. Betsy Gilliland from the Department of Second Language Studies at the University of Hawai‘i Mānoa in Honolulu, who kindly shared with us her views on action research in ELT. With the rich assortment of theoretical insights, pedagogical ideas, and ethical concerns earnestly shared with us, we hope that our readers will find her discussion intellectually inspiring for their on-going professional development. As we all may be well aware, action research has long been employed as a tool to help teachers and researchers uncover pedagogical techniques and approaches to improve their classroom teaching practice. It is in particular viewed as an effective means of building the capacity of teachers as researchers of their own practice. It is beyond a shadow of a doubt then that those involved in the field of English language teaching welcome action research as its accruing findings have proved to be pedagogically useful for their professional pursuits.

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Interviewer

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Book Review

Introducing Needs Analysis and English for Specific Purposes

Series Editors: Brian Paltridge and Sue Starfield

Author: James Dean Brown

New York: Routledge, 2016. 231 pages.

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With introductions of the Routledge publisher together with the biographies of the author—Professor Dr. James Dean Brown and the series editors—Professor Dr. Brian Paltridge and Associate Professor Dr. Sue Starfield, *Introducing Needs Analysis and English for Specific Purposes* is a book for curriculum development in the area of English for Specific Purposes (ESP).

In the book, three parts with seven chapters are structured and presented in chronological order according to the needs analysis process implemented in the ESP curriculum development. Of these three parts, Part I, *Getting ready to do an ESP needs analysis*, is divided into three chapters. Chapter 1, entitled *Defining needs analysis in English for specific purposes (ESP)*, defines the terms of needs analysis (NA) and ESP. The chapter also categorizes types of ESPs, explains how specific ESP should be, and presents the initial options in ESP needs analysis. The next chapter, entitled *Focusing the ESP needs analysis*, begins with scale and scope of the NA, then discusses all possible aspects of constraints on ESP NA and ends with more discussion of types of syllabuses and their importance to NA. Chapter 3, entitled *Selecting and sequencing ESP needs analysis data collection procedures*, explores the characteristics of successful NAs and factors affecting information-gathering choices. The chapter also presents 32 alternative NA procedures and ends with discussion of useful strategies for blending the procedures through sequencing kinds of procedures and utilizing the case study approach.

The second part of the book is presented under the theme *Doing the ESP need analysis*. This part consists of two chapters. Chapter 4, entitled *Collecting ESP needs analysis data*, suggests NA data collection process and strategies. Chapter 5, entitled *Analyzing and interpreting ESP needs analysis data*, suggests how to analyze and interpret NA data. As for quantitative or numeric data, statistical analysis techniques and presentation are described while matrices and corpus analysis techniques and presentation are recommended for qualitative data. In addition, applications of triangulation and mixed method research techniques are also suggested in the chapter.

Part III is of *Using the needs analysis results*. The two final chapters included in this part are Chapter 6, *Using the NA results in the rest of the ESP curriculum*, and Chapter 7, *Reporting on the ESP needs analysis project*. In Chapter 6, key issues of student learning outcomes are suggested to be defined, interpreted, and presented in the NA results. Strategies for revising and organizing student learning outcomes and for having teachers utilize student learning outcomes to link the NA with all other curriculum elements are also included in the chapter. Additionally, the last part of the book includes Chapter 7, which explains how to organize and present the results in an NA reports. The chapter also raises some important issues for having NA report published and highlights some useful ideas for thought-provoking NA.

Being specifically designed with the provision of the author's relevant experience and realistic examples with research back-ups, I found this book as a contemporary and accessible handbook to be applicable to not only the ESL but also the EFL, as in Thailand, contexts. After the integration of the world economy such as the connections between Asia and Europe (Rothermund, 2001), and regional groupings such as the ASEAN Economic Community (Fredrickson, 2016), English has evidently become a much more important language as a medium for communication among ASEAN nations, the native languages of which are different. The English language needs for academics and careers, particularly in the EFL contexts, have entailed an increasing awareness of the teaching and learning of ESP. However, according to Bhatia (2005), there are still problematic issues of new graduates' competence in English language

communication in workplace settings. He also traced back to the issues of challenging tasks for teachers to provide their students with integrated knowledge between the language itself and the disciplinary communication in ESP courses. Brumfit (1984) also raised another issue of an ESP training course difficulty to sometimes relate an academic context in the classroom with a professional context in the real world. Richards & Schmidt (2010) described that since ESP is practical for different disciplinary groups of learners, it is inevitable to conduct needs analysis as a prior basis of the ESP curriculum development. Due to these issues and one of the specific features of ESP previously mentioned, it can be argued that the know-how of conducting the needs analysis in ESP courses should be introduced and widely be promoted to teachers and curriculum developers of ESP courses.

Introducing Needs Analysis and English for Specific Purposes could help resolve such aforementioned issues as the idiom, “You Reap What You Sow.” Initially equipping students with adequate skills of the English language and communication through provision of ESP courses for which curricula were systematically developed based on learners’ and stakeholders’ needs analysis data suggested in this book could be an appropriate alternative. This alternative could, to some extent, assist educational institutions to produce newly-graduated students with competence in English and communication skills in response to stakeholders’ needs for academic and professional aspects in the future.

Furthermore, since the content of this book was provided in the scope of ESP which covers English for a number of professions, the minimal usage of jargon and other academic conventions, such as e.g., i.e., and cf., as claimed in the book is a good idea to facilitate the understanding of the interested readers who are involved in different settings. In the book, the provision of theoretical background of ESP could deepen the understanding of the readers. Without the provision of the theoretical background, the readers may be misled into the relationships among the terms ESP, English for Academic Purposes (EAP), and English for Occupational purposes (EOP) based on the categories of ESP on Page 7, for instance. Practical tasks introduced in each chapter such as task 1.2 on Pages 17 to 18, can also help readers to check whether they comprehend the

theories and/or the concepts of ESP. In addition to the support of helpful theories and useful tasks presented in individual chapters, the readers' comprehension can be rechecked through personal reflection exercises placed at the end of important concepts in all chapters.

With such thoughtful design of this compact-sized handbook, it is also found that all that the author provides in the book should suit its target groups of readers, who are curriculum developers, pre-service and in-service teachers as well as postgraduate students in Applied Linguistics, Teaching English for Specific Purposes (ESP), TESOL and Education. All in all, this book provides an earnest and worthwhile contribution to its professional development value in the teaching of ESP.

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Reviewer

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