



The Impact of the Problem-Solution Pattern Instruction and Collaborative Revision on Business Writing in Blended Learning*

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The increasing volume of international business in Korea has contributed to the pedagogical needs of the business writing skill, particularly in terms of developing the content and organization. This case study explores the impact of the problem-solution pattern instruction (PSPI), i.e. the situation, problem, change and action (SPCA) pattern and collaborative revision on the enhancement of content and organization of business writing in blended learning. Three managers of an airline company in Korea participated in the study. Their writing assignments, field notes, reflective journals, and semi-structured interviews were collected for the analysis of the influence of the SPCA pattern and collaborative revision on their business writing. The major findings were as follows. First, the SPCA pattern was found to contribute to the development of business writing in terms of lexical signals, causal semantic relations, and grammatical category. Second, collaborative revision had a positive influence on the development of business writing by the participants' language functions and scaffolding strategies. In addition, blended learning was found to provide the environment for improving the quality of business writing. The results indicated that employing the PSPI and collaborative revision in blended learning is necessary for teaching business writing.

Key words problem-solution pattern, collaborative revision, blended learning, business writing doi: 10.15702/mall.2017.20.3.128

I. INTRODUCTION

Global business transactions have grown at such a pace that the employees of business organizations are increasingly asked to develop their communication skills in a way that the

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issues of varying business situations are properly addressed. In meeting this need, the teaching of business writing has been in demand to develop writing skills such as business emails, business letters, business meeting minutes, business memorandums, business plans, business proposals, business reports, and so on (Cowling, 2007; Gimenez, 2006; Flowerdew, 2003; Yeung, 2007).

In the pedagogy of L2 writing, the factors of content, organization, structure, and mechanics are said to play a very important role in the development of writing skill (Brown, 2007; Raimes, 1983; Tribble, 1996). The context of business writing shows that as an essential role, the rhetorical skill of problem-solving is expected to be gained for various business areas such as finance, accounting, marketing, management, human resources, etc. (Bhatia & Bremner, 2012; Dudley-Evans & St. John, 1998; Louhiala-Salminen & Kankaanranta, 2011). Despite the different expectations between L2 writing and business writing, the importance of the two factors of content and organization in the teaching of business writing has been emphasized to a degree at least similar to the teaching of L2 writing (Bremner, 2010; Bargiela-Chiappini, Nickerson, & Planken, 2007; Flowerdew, 2003, 2008).

Two pedagogical interventions were found to have a positive impact on the improvement of content and organization of L2 writing, which are a move pattern (Cheng, 2007; Huang, 2014; Johns, 2008, 2011; Negretti & Kuteeva, 2011) and collaborative revision (De Guerrero & Villamil, 2000; Hanjani & Li, 2014; Hedgcock & Lefkowitz, 1992; Storch, 2005). However, the impact of the two pedagogical interventions on content and organization of business writing has been understudied. Such a lack of research on business writing with respect to the two pedagogical interventions prompts a need to explore the instructional model in terms of content and organization. As a response to this demand, problem-solution pattern (Hoey, 1983) can draw the academic attention as the move pattern that can enhance the content and organization of business writing (Flowerdew, 2003, 2008; Scott, 2000). Secondly, collaborative revision in terms of the learner interaction can contribute to the improvement of content and organization of business writing (Bremner, 2010; Devitt, 1991; Gimenez, 2006). These two interventions are worth investigating as the potential instructional models with a focus on the content and organization of business writing. The combination of the two interventions attributed to the mixture of offline and online learning environments of blended learning (So & Lee, 2013, 2014; Yoon & Lee, 2010) should particularly be examined as the learning environment for business writing.

The purpose of this study is to investigate the influence of the problem-solution pattern instruction (PSPI) using the situation, problem, change and action (SPCA) elements and

collaborative revision on content and organization of business writing in blended learning. The two research questions for this study are: 1) Does the PSPI using the SPCA pattern in blended learning influence the development of participants' business writing?; and 2) How does collaborative revision in blended learning influence the development of participants' business writing?

II. LITERATURE REVIEW

1. The Problem-solution Pattern in Business Writing

The researchers of ESP (English for specific purposes) see that the writers of a specific genre "have used structural move analysis to describe global organizational patterns in genres" (Hyon, 1996, p. 695). Move patterns were found to be effective in relation to content and organization of both the L2 writing and genre-based writing (Cheng, 2007; Negretti & Kuteeva, 2011). The instances of applying the move patterns to writing instruction were found in the areas of research articles (Swales, 1990), business discourse (Bhatia, 1993), move sequencing as rhetorical strategies (Cheng, 2007), and lexico-grammatical features of the individual elements of a move pattern (Flowerdew, 2003, 2008; Huang, 2014).

Hoey's (1983) problem-solution pattern has been exploited primarily in locating problems and providing the solutions to it in written texts. The pattern was represented by four elements, which are the situation, problem, response, and evaluation (SPRE) and was frequently detected in technical reports and academic writing (Flowerdew, 2003; Scott, 2000). In an attempt to identify the individual elements of SPRE pattern in newspaper editorials and news articles, the analysis discovered explicit lexical signals as well as other lexical signals which were associated with the elements of SPRE pattern "in context" (Scott, 2000). To identify the lexical items that are explicitly or contextually associated with the individual elements of SPRE pattern, Flowerdew (2003, 2008) analyzed the corpus of executive summaries of business proposals. The analysis found out that the inscribed and evoking signals, causal semantic relations, and grammatical category together contributed to building the lexico-grammatical features of SPRE pattern which were considered to realize the content and organization of the written text under investigation.

In business writing and business writing instruction, the call for action to a problem is often identified as a rhetorical purpose of writing (Yeung, 2007). However, Hoey's SPRE pattern

seems to be lacking the role of meeting the demand in business writing, especially in terms of showing the direction of change and calling for the execution of the change. Such a limitation raises the need to adapt the SPRE pattern to a new pattern, situation, problem, change, and action (SPCA) so that the demand is appropriately met through business writing.

2. Collaborative Revision in Blended Learning

Vygotsky (1978) expressed that through the zone of proximal development, human cognitive skill is developed by interaction. The role of this human interaction is identified in the research of collaborative revision as another important factor of the instruction of L2 writing. The major interest of the studies related to collaborative revision was placed on the types of student interaction and its influence on the students' written outcome in terms of content, organization and vocabulary (DeGuerrero & Villamil, 2000; Hanjani & Li, 2014; Hedgcock & Lefkowitz, 1992; Neumann & McDonough, 2015; Storch, 2005).

Meanwhile, collaborative revision in the workplace is influenced by intertextuality to an extent relatively higher than collaborative revision in the setting of L2 writing (Bremner, 2010; Devitt, 1991). Intertextuality within the workplace entails the references to various written and spoken texts such as letters, phone calls, meetings, presentations, and so forth which have already been produced by other members (Bremner, 2010). Due to the intertextuality, business writing is affected by other member's text, which may often lead to conflicts in building the content and organization during collaborative revision among the members (Bremner, 2010; Yang, 2014). Among many factors, the writers' different roles (Cross, 2001) were indicated as being responsible for the different ideas of their writing in the workplace. Many studies related to collaborative revision were focused on how to reduce those differences by the learner interactions (Bremner, Peirson-Smith, Jones, & Bhatia, 2014; Staggers, Garcia & Nagelhout, 2008; Yang, 2014). Li and Kim (2016) examined the learner interaction during the collaborative revision and identified the types of the interactions in terms of language functions, scaffolding strategies, and writing change functions.

Blended learning at this point, particularly in conjunction with collaborative revision, deserves exploring which enables the participants to overcome the barriers of traditional classrooms (Miyazoe & Anderson, 2010; So & Lee, 2013, 2014; Yoon & Lee, 2010). With the supporting evidence of the effect on problem acknowledgment of their L2 writing (Yoon & Lee, 2010), the recent research has tested the robustness of its instruction model (So & Lee, 2013) and the effectiveness of peer response in blended learning (So & Lee, 2014). Such

efficacy of blended learning reverberated in the research of blended learning for the instruction of business English (Brett, 2000) and the workplace writing (Fontanin, 2008; Mesh, 2010), but little research had the opportunity of being conducted in the setting of an actual business organization, raising the need for further investigation in business writing.

The review so far manifests that most of the research conducted on collaborative revision has hardly represented the context of the actual workplace in which problem-solving skill of business writing is expected higher than in any other writing settings. It implies that there has been a rare opportunity for exploring the mechanism of consensus building facilitated by the collaborative revision in the actual workplace through blended learning.

III. METHOD

1. Participants

Three Korean managers of an airline company in Korea participated in an in-company course of business writing designed and taught by one of the researchers (the teacher) for six weeks. The summary of the participant's information is presented in Table 1.

(Table 1	Description	of the	Participants

Name	Gender	Age	TOEIC	Roles assigned by the employer	Main writing genres
Dugy	Male	32	910	Purchasing the terminal service	Contracts and emails
Jun	Male	31	990	Selling the terminal service	Contracts and emails
Kevin	Male	28	955	Operating the terminals	Manuals and emails

Dugy, the manager at the department of Cargo Services and Contracts, had neither studied nor lived in any English-spoken countries. He had worked with the present employer for four years. His role assigned by the employer was outsourcing the function of operating the terminals of the overseas international airports by awarding a contract with the subcontractor. In terms of the business writing skills, he needed to write business contracts and business emails on a daily basis. The topics mentioned in the business writing for his role included the negotiation of price terms and revision or renewal of the contract clauses. The challenges he faced with respect to the task of business writing were the issues of building the sentences and choosing the vocabulary.

Jun, with the experience of staying in the U.S. for 19 months to attend the language course, had been the manager of this airline company for three years. He was the manager in the same department but had the role opposite to Dugy's—selling and marketing their company's service of operating the terminal to the other airline companies within the Incheon Airport of Korea. For this role, he usually wrote contracts, business proposals, and thank-you letters. His efforts were directed at topics such as highlighting the values of his company's service and negotiating the terms and conditions of the service. Vocabulary, formality, and tone were the areas in which he found most challenging for business writing.

Lastly, Kevin was the youngest manager of the three with the shortest work experience of about two years. He worked in the department of Terminal Operation Services. He was in charge of quality assurance and safety of operating the terminals, which entailed the settlement of the claims, handling of the hazardous materials, and the security of the premises. Every week, he wrote a minimum of five emails and the two service assessment notices to the subcontractors of terminal operation. The topics he wrote about were the manuals and regulations on the safety which very often referred to the rules and legal obligations set by the international organization of aviation industry. Formality and vocabulary had constantly put pressure on him for his business writing.

2. Data Collection Instruments

For the qualitative analysis, the data sources included the participant's writing drafts, the offline and online classroom observations, the participant's reflective journals, and semi-structured interviews with the participants. First, the writing assignments were completed every week by the participant, producing six writing assignments for the six weeks. The total 18 drafts of the writing assignments by the three participants were collected to examine the lexical features and the organization of the text.

Second, observations were undertaken every week to collect the information on the participant's behaviors and interactions in both offline and online classrooms. For the offline classroom, the meaningful activities or attitudes of the participants were kept in field notes, and their conversations during the prewriting discussions were voice recorded. For the online classroom, the peer feedback during the online lessons were automatically recorded by having the participants upload their scaffoldings on an Internet blog prepared by the teacher. The feedback was provided in response to other participant's drafts of the writing assignments with the teacher's guidance which directed the focus on the content and the organization of these

drafts.

The participants were also asked to write a reflective journal after the second, fourth, and sixth writing assignments were completed. It was meant to provide the information on the participant's reflection on the comments from the peers and the teacher, the writing process and activities, etc. The participants were allowed to write the reflective journals in Korean.

Finally, the semi-structured interviews were conducted at the end of the offline lesson of the third and the sixth week. The interviews were voice recorded and focused on the matters of personal experience, behaviors, emotions, strategies, and background knowledge regarding the instruction with a special interest in blended learning.

Procedures

The business writing course through the PSPI using the SPCA pattern and collaborative revision in blended learning was carried out for six weeks. The topic of business writing was about low-cost carriers (LCCs), which had entered as a new competitor in the industry, especially to the existent airline companies such as the participants' employer. The participants were asked to write about how to respond to the threats posed by the LCCs' aggressive marketing. The writing assignments for the individual participant were two drafts of the executive summary of the business report, business plan, and business proposal. In the end, there were six drafts of executive summaries completed by each participant, resulting in 18 drafts from all participants. Writing a single draft involved two lessons - one offline lesson and the subsequent online lesson in the same week.

The participants were instructed on how to use the problem-solution pattern of SPCA in writing the executive summary. They were encouraged to focus on the individual elements of situation, problem, change, and action as defined in Table 2.

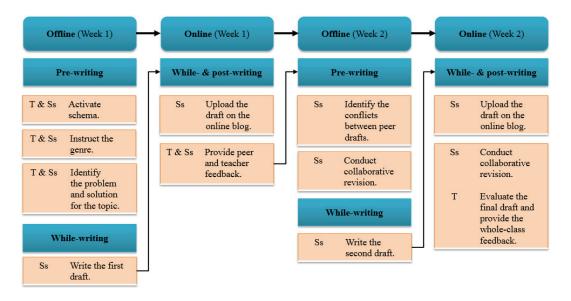
(Table 2) The Elements of the SPCA Pattern

Situation	Problem	Change	Action
A set of events that have	An event that needs to be	The necessary change to	The detailed process for
given rise to a problem	dealt with	solve the problem	the change

The instructional model for business writing using the SPCA pattern and collaborative revision in blended learning is presented in Figure 1. For the prewriting stage in the offline session of a lesson, the teacher helped the participants activate their schemata by having them

watch images or videos related to the topic. The introduction of major genres, business report, business plan, and business proposal was given in terms of the purpose and characteristics. Next, the participants had a discussion to identify the problem and recommend the solutions to it. In the later stage of the offline lesson, they began writing the first draft of an executive summary exploiting the SPCA pattern. As the while-writing stage of the online session, the participants completed and uploaded the draft onto the online blog outside the classroom. After the while-writing stage, the post-writing stage came as the participants read the drafts of the executive summary written by the other participants and provided them with feedback in the form of a reply. The teacher provided the participants with teacher feedback to the draft.

Both the offline and online sessions of the second week were for collaborative revision. In the offline session, the participants engaged in the pre-writing stage by identifying how their own writing differed from the other participants' writing. They then conducted the collaborative revision with the focus on the conflicts that such differences might cause around their company both internally and externally and what should be done to reduce those conflicts. They entered the while-writing stage by beginning to write the second draft. The teacher asked them to incorporate as many ideas of other participants into their own writing. When the participants completed the writing assignment back at home, they uploaded it to the online blog. Again, they followed the post-writing stage along with the collaborative revision and teacher feedback to their uploaded draft.



(Figure 1) The Instruction Model by PSPI and Collaborative Revision in Blended Learning

4. Data Analysis

1) Drafts of Writing Assignments

The lexical features, causal semantic relations, and grammatical category of the participant's writing assignment were analyzed in order to answer the first research question, which explores the influence of the PSPI using the SPCA pattern on business writing in blended learning. The inscribed signals and evoking signals (Martin, 2000) were analyzed for the writing assignments of the executive summary in order to examine the influence of the PSPI on the content and organization of the participants' business writing. In segmenting the SPCA pattern of their writing draft into the individual elements, the inscribed signals like 'problem' indicate the problem element while the evoking signals like 'pollution' or 'contamination' (in association with negative prosody) help the writer realize the problem element.

Discourse relations of situation and problem elements of the SPCA pattern were investigated by employing causal semantic relations (Crombie, 1985). These causal semantic relations were operationalized by adopting Flowerdew (2008) with the exception of the category of grounds-conclusion for the appropriateness for the present study. The category of causal semantic relations is presented in Table 3.

(Table 3) Categories of Causal Semantic Relations

Category	Example Phrase
Reason - Result	B the result of A
Means - Result	B by means of A
Means - Purpose	A in order to B
Condition - Consequence	B would result if A

Flowerdew's (2008) grammatical category was then used for the analysis of the discourse relations of the change and action elements of the SPCA pattern, as shown in Table 4.

(Table 4) Grammatical Categories

Grammatical Categories	Example Sentences
Premodifying adjective	Provided that the <u>recommended</u> mitigation measures are diligently implemented, it is considered that construction activities will cause only local and temporary disturbance.
Impersonal passive	It is <u>recommended</u> that suitable coloring and planting schemes be used.
Subject + passive	Ambient dust monitoring is <u>recommended</u> at the residential developments.
Active	The EIA study has <u>recommended</u> that guidelines on good site construction practices are included as contractual controls.
Other clause construction	Mitigation measures <u>recommended</u> for the construction phase will generally apply to maintenance dredging.

2) The Field Notes, Reflective Journals, and Interviews

The focus of the analysis was to investigate how the participants change their writing in trying to include the ideas of other participants into their own writing assignment through collaborative revision. Language functions during the discussion in the offline lesson, scaffolding patterns in peer feedback in the online lesson given to the drafts of writing assignments, and the resultant writing change functions between the participants' first and second writing draft were investigated. For the analysis, the taxonomy by Li and Kim (2016) was adopted.

For the interaction during the offline and online sessions, the field notes were descriptively analyzed and categorized. For the participant's experience of the instruction in blended learning, the emerging theme of the reflective journal was analyzed and the semi-structured interview was transcribed verbatim.

IV. RESULTS

1. The Influence of the PSPI Using the SPCA Pattern on Business Writing in Blended Learning

The first research question was examined in terms of lexical signals, causal semantic relations, and grammatical category. The results are presented as follows.

1) Lexical Features of the Participants' Writing Assignments

The analysis of inscribed and the evoking signal was conducted for the participants' writing

assignments. The total of 35 inscribed signals and 40 evoking signals were identified across the total of 18 writing assignments of the executive summary produced by the three participants.

For the inscribed signals, 'industry' (6), 'problem' (6), 'solve' (3), 'change' (3), 'implement' (3), and 'make' (3) were the frequently-occurring words in the elements of the SPCA pattern. For the evoking signals, 'LCCs' (9), 'service' (5), 'market share' (4), 'cost' (6), 'proposal' (3), and 'measure' (2) appeared frequently to realize the elements of SPCA pattern. The results are presented in detail in Table 5.

As the inscribed signal, a variety of words were used as the inscribed signals to indicate the elements of the SPCA pattern. The results indicate that the participants chose the words following the previous definitions of the individual elements of the SPCA pattern. The choice of the inscribed signal used, albeit multiple times, can be said to be the result of the participant's habitual choice, not representing the influence of the participant's role assigned by the employer. For example, 'challenge' was chosen exclusively by Kevin to indicate the situation element and was distributed across his other drafts. For Jun, 'implement' was chosen for the action element and distributed in the same way as Kevin. Interestingly, all three participants chose 'industry' indicating the situation element more than once and was distributed across their other drafts. 'Problem' in the problem element was chosen by Dugy and Kevin and was distributed throughout their other drafts. It might be noted that the inscribed signals used in the change and action element showed a degree of variety slightly higher than the situation and problem element. Inscribed signals such as 'solve,' 'plan,' 'change,' and 'chase' were used in the way that they indicate the change element. In the element of action, 'implement,' 'make,' 'investigate,' and 'chance' were used.

(Table 5) Inscribed and Evoking Signals in the Writing Assignments

SPCA Element	Inscribed Signal	Frequency	Evoking Signal	Frequency
Situation	industry	6	LCCs	9
	challenge	2		
	increasing	1		
Total		9		9
Problem	problem	6	service	5
	hard time	2	market share	4
	afraid	1	price	2
Total		9		11
Change	solve	3	service	4
	plan	2	cost	6
	change	3	quality	1
	chase	1	standardized	1
Total		9		12
Action	implement	3	figures	2
	make	3	proposal	3
	investigate	1	measure	2
	chance	1	customer	1
Total		8		8
Overall total		35		40

For the evoking signal, all the participants referred to LCCs in the situation element in order to describe that the topic to be addressed in the subsequent elements is related to the LCCs. Also, they expressed that the LCCs had a negative impact on their employer's business.

In the element of problem, the participants explained the problems that the recent entry of LCCs into the industry had created. The example writing drafts below show that they chose different words as the evoking signals, which are closely related to their own roles. Kevin, whose role was operating the terminal, viewed the potential deterioration of service quality as the problem.

Excerpt 1

Kevin: The more serious <u>problem</u> is that it is hard to reduce the cost of FSC (full-service carrier) because reducing the cost accompanies poor service <u>quality</u> which threatens the identity of the FSC. [WAD13]

In the change element, Kevin suggested strengthening of the service.

Excerpt 2

Kevin: To keep regular customers and attract people who are willing to pay for better services, our company must strengthen in-flight service. [WAD 15]

In the action element, Jun called for the investigation into the needs of the customer.

Excerpt 3

Jun: To make a choice between two options, we first need to investigate our markets, non-profit short routes, what our <u>customer</u> want. [WAD 09]

The above analysis of the lexical features has revealed that the PSPI positively influence the participant's developing their business writing so that it can address the problem in the business situation in a proper way.

2) Causal Semantic Relations of the Participants' Writing Assignments

Causal semantic relations of the participant's writing assignment were examined for the purpose of analyzing the cause-effect relations between the problem and the background for it. The frequency of the individual type of causal semantic relations is provided in Table 6.

Such causality not only allows the writers to get an insight into the essence of the problem - what has caused the present problem? - but also provides the rationale for the forthcoming suggestion of the solution to the problem. Hence, the causal semantic relations were examined only for the situation and problem element. In the situation element, the total of 18 relations was identified. The causal relation of Reason - Result (14) appeared with the highest frequency. There were also the non-causal relations (3) identified. In the problem element, the total of 17 relations appeared. Most frequent were Reason-Result (6), Means-Result (5) and Means-Purpose (4) with the non-causal relations (2).

(Table 6) Causal Semantic Relations

SPCA Element	Causal semantic relation	Frequency
Situation	Reason-Result	14
	Means-Result	1
	Means-Purpose	0
	Condition-Consequence	0
	Total causal	15
	Non-causal	3
	Overall total	18
Problem	Reason-Result	6
	Means-Result	5
	Means-Purpose	4
	Condition-Consequence	0
	Total causal	15
	Non-causal	2
	Overall total	17

In the situation element, Reason-Result among the four causal relations appeared most frequently. In the example of excerpts given below, the Reason-Result relation helped the readers foresee the problem to be addressed in the subsequent problem element by commenting on LCCs.

Excerpt 4

Dugy: However, the growth of <u>LCCs</u> in the air-transport market has brought about the serious problem to the FSC. [WAD 03]

In the problem element, the three most frequent relations were Reason-Result, Means-Result and Means-Purpose. First, the participants used the relation of Reason-Result to elaborate on the damage that the problem might bring to their organization in contrast to the role of simply heralding the problem itself in the situation element.

Excerpt 5

Dugy: The biggest problem lying before B Airlines is that the LCCs have rapidly <u>encroached</u> <u>upon</u> the market share for the <u>short-distance route</u> in which we had been once strong ...

[WAD 01]

Means-Result, which is the second most frequent relation in the problem element, presented the cause of the problem and provided more details of the problem as the problem element reaches its end. This type of relation was joined by the combination of the passive adjective and preposition –by. Such sequencing helped justify the solution suggested in the forthcoming change element.

Excerpt 6

Dugy: The biggest <u>problem</u> which FSC in Korea has faced today is deterioration of their operating cost structure <u>caused by</u> the decline of the ticket price and loss of their market share. Therefore, for B Airlines in harsh circumstance, the cost reduction, and restructuring have been an almost indispensable choice to compete with a new challenge. [WAD 05]

Means - Purpose, the third most frequent relation in the problem element, served to guide the direction of the solution to the problem. Of course, the suggested direction is not as specific as the solution addressed in the change element but serves to help the readers get more focused on it.

Excerpt 7

Dugy: <u>In order to overcome this challenge</u> from the LCCs, FSC companies <u>need to face</u> the existing two major problems squarely. <u>One</u> is reducing the payroll cost ... <u>The other</u> is maintaining the service quality ... [WAD 04]

The above analysis of causal semantic relations of the situation and problem element in the participant's writing assignment indicates that the causality in the participant's business writing seems to help the reader well understand the specificity of the problem and be prepared to hear the appropriateness of the proposed solution.

3) Grammatical Category of the Participants' Writing Assignments

Grammatical category exploited in the change and action element was found to serve the role of presenting the solution to the problem and calling for the action to be taken to implement the solution. In the change element, a total of 18 grammatical categories appeared, among which were Subject + passive (3), Active (8), and Other-statement (6). In the action

element, a total of 18 grammatical categories were found. Among them, Active (12) was the most frequent. The results of examination of the grammatical category are provided in detail Table 7.

In the change element, the category of Subject + passive, Active, and Other-statement were identified to occur most frequently. Though the category of Subject + passive did not provide any meaningful role in the text, the category Active played the role of not only suggesting the solution but also the specific processes to implement the solution.

Excerpt 8

Jun: So, to achieve this, I suggest two strategies as follow. First, we establish our own subsidiary LCC and \cdots The second strategy is operating multi-tiered seats for short routes. \cdots [WAD 09]

In addition, the category of Other-statement that had not been detected by the analysis of Flowerdew (2008) was identified in this study. It was used in providing the readers with the benefits that are available for the suggested solution.

Excerpt 9

Dugy: For business success through cost reduction, our company has been preparing to offer the multiple benefits *** enjoy the benefit which can get you the 20% cost reduction from payroll cost *** [WAD 05]

(Table 7) Grammatical Category

SPCA Element	Grammatical category	Frequency
Change	Remodifying adjective	0
	Impersonal passive	0
	Subject + passive	3
	Active	8
	Other-Nominalization	1
	Other-statement	6
	Total	18
	Non-lexico-grammar	0
	Overall total	18
Action	Remodifying adjective	0
	Impersonal passive	0
	Subject + passive	2
	Active	12
	Other-Nominalization	0
	Other-statement	2
	Total	16
	Non-lexico-grammar	2
	Overall total	18

In the action element, the category of Active was found most frequently in the way it encourages the readers to take the needed actions for the execution of the suggested solution.

Excerpt 10

Kevin: Airlines <u>must make a new team</u> to improve the in-flight experience of customers. By merging separate teams regarding in-flight service, it could make a synergy and have more power to push forward their new policies. [WAD 15]

From the above analysis, the grammatical category of the change and action element takes the role of presenting the solution to the view of the readers by detailing the process and benefits, and encouraging the readers to take or participate in the action for the execution of the solution. The overall results of the analysis of the influence of the PSPI on business writing in blended learning exhibits that the PSPI has a potential positive correlation with developing content and organization of business writing in terms of lexical features, causal semantic relations, and grammatical category.

Additionally, the three participants had the common experience that they benefited from blended learning in completing their writing assignment by using the flexibility of time and reference materials available in the online blog. Below are the excerpts from the semi-structured interviews.

Excerpt 11

Jun: I usually checked the teacher's instruction for the writing assignment and other participants' writing assignments uploaded on the blog. [INT 02]

Excerpt 12

Kevin: I think the biggest benefit from blended learning is that I can choose the time for the writing assignment. [INT 03]

These merits of blended learning were considered to have a positive influence on the participants' expanded range of selection of lexical signals, types of causal semantic relations and grammatical category.

2. The Influence of Collaborative Revision on Business Writing in Blended Learning

The influence of collaborative revision on business writing in blended learning was examined in terms of language functions, scaffolding strategies, and writing change functions. Below are the results from the analysis.

1) Language Functions of Prewriting Discussion in Collaborative Revision

Due to the very few occurrences, language functions during the offline discussion among the participants for collaborative revision were hardly identified. However, the participants' reflective journals and the interviews with them revealed very interesting explanations to such limited occurrences.

Excerpt 13

Jun: The discussion topic was profoundly technical so that my own understanding and background knowledge might not suffice in dealing with the topic. [RJ-05-02]

Excerpt 14

Kevin: I often felt tired when I came to the class after work. I also felt stressed from the hierarchical relationship with other participants who are all higher in position than me, which hindered me from arguing against their ideas. [RJ-05-03]

The characteristics of a business organization as a discourse community can be named as a possible reason for the participants' low engagement in the collaborative revision. The hierarchical relationship between the participants within a business organization, particularly in the Asian or Korean business organizations, might have put pressure on the participants of lower position during the discussion.

But during the prediscussion of the offline lesson in the fifth week, Dugy tried to help Kevin, who was struggling to consolidate the ideas of other participants into his writing. Dugy suggested that he and the other participants change the reader of their writing from the potential buyers to their own company.

Excerpt 15

Dugy: I think we might have to try to write the executive summary to our own company. It means that we go down to the position of the subcontractors who currently are in contract with our company providing the service of terminal operation. [OVR 05]

His idea was being in the position of their company's subcontractor in writing an executive summary of a business proposal, to win the bid for their own company as a fictitious buyer. He believed that such a strategy would enable Kevin to use his experience as the operations manager of the terminals and eventually enhance the executive summary.

Kevin agreed with this idea and later ended up producing a draft of an executive summary in collaborative revision in which he successfully included the other participants' ideas. In his earlier writing assignments, Kevin had shown a great respect to his present function and had failed to mention the word "cost" for fear of compromising the quality of service. But following Dugy's opinion, he eventually began to pursue the two conflicting values of service quality and cost in the change element of his executive summary during collaborative revision.

Excerpt 16

Kevin: The answer is clear. You must <u>chase two hares at once - cost and quality</u>. And we are the best hunter who chases those hares. We offer standardized services to several airlines. [WAD 18]

2) Scaffolding Strategies of the Online Collaborative Revision

The participants provided scaffoldings to the writing assignments produced by other participants, which were uploaded to the online blog. A total of 15 scaffolding strategies was

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identified. The prevalent strategies were direction maintenance (7), instructing (3), and intersubjectivity (5). Table 8 shows the types of scaffoldings strategies exerted by the participants in collaborative revision.

(Table 8) Scaffolding Strategies

Scaffolding Strategies	Frequency
Affective involvement	0
Contingent responsivity	0
Direction maintenance	7
Instructing	3
Intersubjectivity	5
Recruiting interest	0
Total	15
Non-category	0
Overall total	15

Direction maintenance, instructing, and intersubjectivity were mainly employed by the participants. Among them, the direction maintenance was most frequently used. By using this strategy, the participants delivered the message of "maintaining pursuit of the goal for the group work" (Li & Kim, 2016, p. 32) by expressing the implicit acceptance of the other participant's idea.

Excerpt 17

Kevin: The construction and the layering of the Change element look brilliant. [OVL 11]

Excerpt 18

Dugy: In the Change element, placing the sentence of general statement before the specific examples might easily catch the attention of the readers. [OVL 12]

Intersubjectivity was the strategy that was the second-most frequently used, which ensured that the participants "have a shared understanding of the situation and are in tune with one another" (Li & Kim, 2016, p. 32).

Excerpt 19

Kevin: The elaboration in the Change element was very impressive. Especially, I really liked the way you manifested that the specific solution suggested in the Change element had originated from the constituting factors of the Problem element. [OVL 04]

Excerpt 20

Dugy: Proposing the two solutions in the Change element looks okay. I think that such a trial would work well because what was already suggested in the Problem element would turn out to be linked to the Change and Action element in a very sophisticated way. [OVL 09]

As the third-most frequent scaffolding strategy, instructing was adopted by the participants. It represented "giving mini-lessons in an authoritative tone" (Li & Kim, 2016, p. 32). This strategy seems to be effective when the participant refers to what needs to be revised in the writing assignment.

Excerpt 21

Jun: The Change element should've presented the calculated labor cost for the three areas that are to be outsourced. After that, the Action element is lacking the specific ways of outsourcing the areas. [OVL 04]

Excerpt 22

Jun: (referring to the end part of the Problem element) It would be better if this part is moved to the Change element. [OVL 02]

The overall interpretation of the three prevalent types of scaffolding strategies can be considered to mention the aspects in relation to the content and organization of the participant's business writing in blended learning. For example, the excerpt 17, 19 (the first sentence), 20 (the first sentence), and 21 mention the content while the other excerpts mention the organization. In sum, the scaffolding strategies in collaborative revision can be said to positively influence the development of business writing.

3) Writing Change Functions in Collaborative Revision

The language functions and scaffolding functions adopted by the participants during collaborative revision brought about a change in the other participants' writing assignments. The analysis of writing change functions was conducted in terms of evoking signal, causal semantic relations, and grammatical category. The analysis of writing change functions of the participants' executive summary for the business plan is shown in Table 9.

Writing change functions were centered around the topic of how to respond to the problem that had been caused by the challenge of LCCs. Table 9 shows that Dugy and Kevin selected

cost and market share respectively as the evoking signal for the problem element, but in collaborative revision, they chose both cost and service. Thus, collaborative revision enabled the selection of evoking signal more appropriate for the writing topic, which resulted in the improved writing content.

As the first example of writing change for the organization of writing, Dugy's grammatical category of the change element in his first writing draft was Other-Nominalization, which proposed the solution in a very imposing way. But Kevin's scaffolding mentioned Dugy's being inconsistent in linking the problem and the solution and inspired him to change the grammatical category to Subject-Passive.

Excerpt 23

Kevin: The elaboration of the Change element is great, in which the way you identified the problem made your argument appealing. But the Problem element seems a bit weak in matching the objective of your writing. [OVL 03]

This writing change seemed to contribute to the organization of the Dugy's writing and resulted in politeness in suggesting the solution, which contributed to the higher credibility of his rhetoric. For the second example of writing change for the organization, the scaffolding provided by Dugy pointed out the lack of benefits to the stakeholders from the investment in Jun's plan.

Excerpt 24

Dugy: The Change element seems to have failed to show the benefits from implementing the solution. [OVL 06]

This encouraged Jun to change the grammatical category of the change element from Active to Other-Statement which presented the potential benefits from the business plan. For the last example, the scaffoldings by Dugy and Jun helped Kevin to change the grammatical category of the change element from Active to Other-Statement for presenting the potential benefits from the solution.

(Table 9) Writing Change Functions in the Components of SPCA Pattern

Problem Rephrasing cost -> cost and service Change Rephrasing outsourcing -> * Not applicable Other outsourcing and service quality -> Survice Action Deleting and establishment -> * Not applicable Not adding research Situation Adding LCC -> LCC and Non-causal * Not applicable hard time category -> Means-Result Problem Adding market share Means-Result -> * Not applicable Not adding * Not	ot applicable ot applicable er- ninalization
Situation No change No change No change * No cha	ot applicable er- ninalization
Problem Rephrasing cost -> cost and service Change Rephrasing outsourcing -> * Not applicable Other outsourcing and service quality -> Survice qu	ot applicable er- ninalization
Dugy Change Rephrasing outsourcing -> * Not applicable Other outsourcing and service quality ->Survice quality -> * Not applicable Not adding research Situation Adding LCC -> LCC and Non-causal * Not applicable hard time category -> Means-Result Problem Adding market share Means-Result -> * Not applicable Not adding * Not adding * Not applicable Not adding * Not adding * Not adding * Not applicable Not adding * Not adding	er- ninalization
Change Rephrasing outsourcing -> * Not applicable Other outsourcing and service quality -> Survice quality -> * Not applicable Not adding research -> *	ninalization
Outsourcing and service quality ->Su Action Deleting and establishment -> * Not applicable Note Adding research Situation Adding LCC -> LCC and Non-causal * Note hard time category -> Means-Result Problem Adding market share Means-Result -> * Note	ninalization
Action Deleting and service quality ->Su Action Deleting and establishment -> * Not applicable No or Adding research Situation Adding LCC -> LCC and Non-causal * Not hard time category -> Means-Result Problem Adding market share Means-Result -> * Not applicable No or Adding the Control of the Control o	
Action Deleting and establishment -> * Not applicable No or Adding research Situation Adding LCC -> LCC and Non-causal * Not hard time category -> Means-Result Problem Adding market share Means-Result -> * Not applicable No or Adding research	
Adding research Situation Adding LCC -> LCC and Non-causal * No hard time category -> Means-Result Problem Adding market share Means-Result -> * No	ıbject-Passive
Situation Adding LCC -> LCC and Non-causal * No hard time category -> Means-Result Problem Adding market share Means-Result -> * No	change
hard time category -> Means-Result Problem Adding market share Means-Result -> * No	
Problem Adding market share Means-Result -> * No	ot applicable
Problem Adding market share Means-Result -> * No	
<u> </u>	
Specifical Appropriate Maria Desirate	ot applicable
Jun ->cost and service Means-Purpose	
Change Adding, subsidiary -> * Not applicable No o	change
Deleting subsidiary and	
service	
Action Adding, investigate -> * Not applicable Activ	ve -> Other-
	ement
Situation Rephrasing service -> market No change * No	ot applicable
share and profit	
Problem Rephrasing service -> cost and Condition- * No	ot applicable
Kevin service Consequence ->	
Means-Purpose	
Change Rephrasing service -> cost and * Not applicable Activ	
service State	ve -> Other-
Action Rephrasing No change * Not applicable No c	ve -> Other- ement

^{*} Not applicable. (The analysis of causal semantic relations was applied only to Situation and Problem element. The analysis of grammatical category was applied only to Change and Action element.)

Excerpt 25

Dugy: The solution is not fully addressed in the Change element in terms of the reward from it. $[OVL\ 08]$

Excerpt 26

Jun: The heightened service quality including the in-flight meal and movie titles would provide the stakeholders with a more vivid view of the return from the solution. [OVL 09]

The analysis of writing change function shows that collaborative revision, mainly with the

aspect of the participants' scaffolding strategies in this study, has a positive relationship with the content and organization of the participants' business writing.

The writing change functions generated by the mix of the offline and online activities help draw the inferences that blended learning provided the participants with a space in which they could conduct collaborative revision in a closed loop so they could further negotiate the content and organization appropriate for solving the problem. Such relationship of blended learning with the quality of business writing in conjunction with collaborative revision is supported by the below excerpts.

Excerpt 27

Dugy: I usually benefited from the online blog by referring to the procedure of the assignments and the feedback from the teacher and other participants. I also enjoyed the review of the assignment in the offline lesson. [INT 01]

Excerpt 28

Jun: One of the best parts of this business writing course was that I was given feedback all throughout the lesson, in both offline and online lessons. That got me constantly seeking for words and expressions suitable for the writing purposes. [INT 02]

Excerpt 29

Kevin: I was able to concentrate on generating the ideas for writing, alone at home not being bothered by other people and at the same time using the resources in the online blog provided by the teacher. Back in the classroom, listening to other participants' ideas different from mine also helped me negotiate better ideas for the writing. [INT 03]

V. CONCLUSION

This study aims to investigate the influence of the PSPI using the SPCA pattern and collaborative revision on content and organization of business writing in blended learning. Based on the results of the study, the following findings and implications can be drawn.

The PSPI using the SPCA pattern is found to have a positive influence on the content and organization of the participant's business writing. The positive influence of the SPCA pattern can be specified with three linguistic categories. As the first category, it is suggested that the participants could properly present the problem and the solution to the readers by negotiating

the lexical features within the SPCA pattern. For the second category, the participants could also specify the problem and prepare the readers for the introduction of the solution by the right selection of the causal semantic relation. For the last category, the participants could present the solution and ask for the execution of it with the right grammatical category. Also, blended learning played a key role in helping the participants to actively join the above linguistic considerations more by providing them with the flexibility of time and opportunity of using the reference materials available in the online blog. Therefore, the PSPI using the SPCA pattern in blended learning was found to have a positive influence on developing the business writing in a way that the content and organization appropriately cater to the writing purposes.

Collaborative revision is considered to positively affect the content and organization of the participants' business writing. Language functions during the offline discussion provided the participants with the writing strategies useful for consolidating the different ideas. Scaffolding strategies through the online blog helped the participants include the ideas of other participants by providing the specific tactics of pointing to the direction, consenting to the other opinions, and showing the revisions to be made and so on. The combined influence of language functions and scaffolding strategies on the content and organization of business writing was manifested by the analysis of writing change functions, again in terms of the factors of influence of the SPCA pattern - lexical features, causal semantic relations, and grammatical relations. In parallel with collaborative revision, blended learning was found to contribute to the participants' expanding of the lexico-grammatical features, which otherwise might have been limited, and then fine-tuning these linguistic features for building the consensus by including the different ideas into their own writing.

The findings provide some clues supporting the positive influences of the SPCA pattern and collaborative revision in blended learning on developing business writing. They also raise the strong need of the application of the instructional model for business writing from the business organizations with the hope of satisfying the demand of developing writing skills for addressing the problems in varying business situations. There are some implications for pedagogical application to business writing courses and programs. In implementing the SPCA pattern, more explicit criteria based on those given in the study might be developed for differentiating lexical features. Causal semantic relations and grammatical category also need to be explored for fine-grading in the manner that the writing purposes of the business organization are better achieved. Second, for collaborative revision in the workplace setting, some other tools such as social networking services (SNSs), mobile messenger applications and chatting programs might be used so that the participant interactions can happen more actively.

Business organizations expect the different roles among the members and departments are managed properly through business writing so that the writing purpose - solving the problem - is appropriately met. In addition, the degree of the explicitness of PSPI in terms of providing the participants with lexico-grammatical features during the instruction might as well be determined through catering to the instructional need of the university students, e.g. the graduate students of the business school. For the active learners' interaction, peer response activities clarifying their respective roles in the peer response process are required to have more opportunity to embrace the ideas of others into their own.

A true experiment with a larger number of subjects will be needed for the effects of the PSPI using the SPCA pattern and collaborative revision in blended learning on developing business writing in the further study. It is also suggested that the period of the experiment be extended to over six weeks in trying to grasp a wider variety of data from the participant's writing activity. Reflecting on the proficiency level of the participants, the future study should expand the profile of the participants to the mid- and low-level proficiencies.

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