



Title	Killing two birds with one stone : Does Active Learning (AL) based writing course simultaneously develop L2 learners' critical thinking and L2 proficiency?
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## **Killing two birds with one stone: Does Active Learning (AL) based writing course simultaneously develop L2 learners' critical thinking and L2 proficiency?**

**Hideki Goya**

### **Introduction**

The advent of Active learning (AL) in education has led to substantial research among scholars (Mizokami, 2014) and reported on its pedagogical impact on academic skills in various subject areas (e.g., Freeman et al., 2014). Reflecting such trends, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) officially suggested that AL be implemented in higher education institutions in Japan (Central Education Council, 2012). What followed was that Japanese universities took AL based teaching (ALBT) into serious consideration and contrived ways to providing a better curriculum in which university student's academic skills could become well cultivated while taking courses as anticipated learning outcomes of the provided curriculum. The present study pursued advocating evidences for ALBT in an English as foreign language (EFL) context, particularly for the developmental relationship between English proficiency and critical thinking ability in a project based learning (PBL) writing class at the college level.

### **Research Background**

AL has been documented and widely recognized in higher education overseas (e.g., Ito & Kawazoe, 2015). Bonwell and Eison (1991) proposed AL in the 1990s and the primary objective in their work was to change teaching structures from a traditional lecture style to one that focused more on engaging learners (Mizokami, 2014). The advocates claimed that AL consists of activities that involve learners' higher cognition

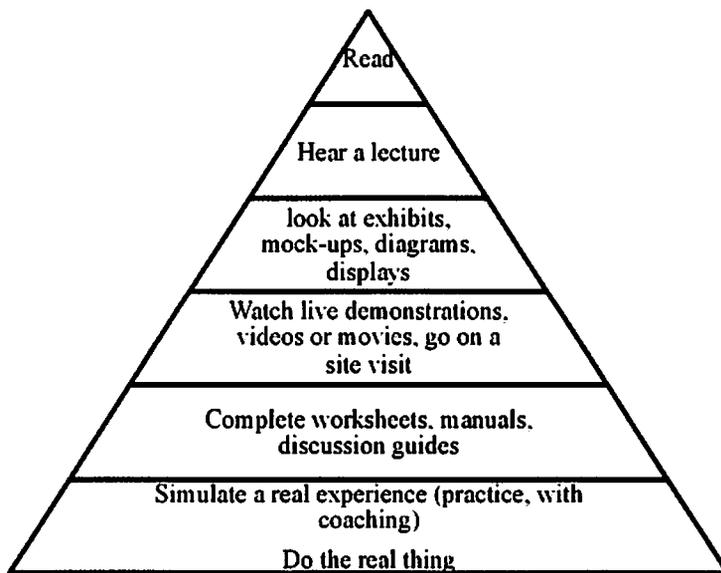
and engagement in their learning (1991).

Other scholars also realized the significance of engaging learners in a deeper manner. For instance, Gokhale (1995) described AL as a group of techniques that engage students more deeply in the process of learning course materials by enhancing their critical thinking and fostering the development of self-directed learning. Greene (2011) was also in line with Gokhale (1995), claiming that AL can be carried out using hands-on experiences so that learners learn by actual engagement.

One can easily notice that the AL approach seemingly lacks a concrete definition. (Yasunaga, 2015). Due to the abstractness of AL, misconceptions have been spread. It may seem that any class could be recognized as ALBT as long as the teaching structure includes an activity in which learners need to participate actively. Such misunderstanding has led to poorly organized classrooms with less effective learning among learners (Yasunaga, 2015). Nevertheless, most scholars agree that the learner's cognitive engagement with materials, classes, peers, and instructors is the key to successful learning, which is an essential component of ALBT.

Despite AL's popularity skyrocketing, it is still open to harsh criticism. More specifically, AL has been frequently denounced for its lack of substantial theoretical accounts; AL has been explored pedagogically rather than theoretically driven. For instance, a bulk of literature refers to the Learning Pyramid introduced by the National Training Laboratories (NTL, 1956) to show the significance of learners' cognitive engagement in classroom. Figure 1 illustrates the structure of the learning pyramid.

As seen in the pyramid, what is implied is that the higher cognition the class requires, the more retention learners can achieve (Kobayashi, 2015). This is a well-known example of AL's theoretical deficit. That is, although the pyramid overwhelmingly accounts for the necessary elements of successful learning in AL and greatly impacts on pedagogy today, a significant issue lies: the lack of empirical evidence to back up the pyramid (Mizokami, 2014). In short, the pyramid heavily relies on the practical experiences of both teachers and learners. Such blind faith in AL is similar to an anecdote of Confucius's aphorism: "I hear and I forget. I see and I remember. I do and I



*Figure 1. The Learning Pyramid (NTL, 1956)*

understand.” In short, it is merely an intuitive belief with some predictable problems.

One of such problems is that the ALBT requires teachers to be linguistically more adept than teachers with traditional approaches. Therefore, teachers may have to spend more time on preparation and assessment outside of the class (Peters, 2011). Another challenge is the slow development of learners’ proficiency levels due to a limited amount of time for linguistic exposure under the current school curriculum (Peters, 2011). Furthermore, the degree of pedagogical impact on learners varies due to the lack of well-developed materials available among teachers; class content also becomes discrete, and there is an inconsistent level of learners’ consciousness directed towards learning (Maeda, 2015). In line with Peters, Chikada and Sugino (2015) also pointed out that AL can be unsuccessful when learners have negative feelings towards ALBT such as (1) being too embarrassed to cooperate with others; (2) dealing with the burden of interaction with others; and (3) being indifferent towards being active in learning. This is in line with

Matsushita's contention that AL forces learners to be active; they do not have a choice as to whether or not they participate in the learning because the highly structured learning modules are set up in advance (2015).

Chikada and Sugino (2015) further described the current situation in higher education in an expression of "double externality." One external pressure is that learners are forced to engage in ALBT because they are required to be active under the present curriculum as mentioned above. The other external pressure is for educators. The curriculum and classes must be driven by ALBT as per the ministry of education's regulations. What should be noted when implementing AL in that there needs to be a consistent understanding of AL and how it can be implemented in language classes; otherwise, ALBT classes may become unsuccessful.

Currently, however, the Central Education Council in Japan suggested that AL be included as a keyword in the new Course of Study, and it will officially be included in the curriculum in Japan by 2020 (Central Education Council, 2012; 2014). In ALBT classrooms, learners are expected to actively and cooperatively work on issues in which they are interested. In doing so, learners will gain an appropriate attitude towards diversity, leadership, teamwork, and communicative skills while cultivating sensitivity and cognitive skills as a result of deep learning. The overall objectives are stated in the current Course of Study (MEXT, 2010):

To develop students' communication abilities such as accurately understanding and appropriately conveying information, ideas, etc., deepening their understanding of language and culture, and fostering a positive attitude toward communication through foreign languages. (p.1)

What made the council include this in the new Course of Study is the "poor" result of standardized tests carried out by PISA and MEXT (Mizokami, 2014) in the immediate past. That is, students learning under the current curriculum have showed lower scores on questions that test their ability to apply learned knowledge that require the application of learners' higher cognitive ability (e.g., observation, analysis, comprehension, and interpretation) in science. In other words, Japanese students have issues employing what

they know to analyze something new to them.

What MEXT is hoping for learners to achieve is a foundation of knowledge and academic skills in a subject area that can be employed in solving problems to foster cognitive abilities for logical thinking and rich expressions in languages (Central Education Council, 2012) and for this trend of holistic education to continue (Central Education Council, 2014). In order to successfully implement such consistency in education, the idea of AL has become a key concept that will be employed in the whole education system from elementary school to college. Without this common system, it will be hard to implement and continue this system beyond the current generation. In short, all classrooms at any level of schools in Japan have to strive for creating a learning environment where learners autonomously pursue their own learning, and all educators, administrators, and curriculum designers should be responsible in creating such environment.

ALBT classrooms can build in a complex teaching structure such as “Project Based Learning” (PBL). PBL is a creative activity in which learners are expected to cooperatively work on a selected issue to solve it actively without the instructor’s assistance (Higashino & Takashima, 2007). Specifically, the learners identify issues, collect relevant data, analyze the data, interpret the result, and propose a solution to the issue in a content-based class. In doing so, learners will be able to strengthen their cognitive abilities actively and autonomously (Higashino & Takashima, 2007), especially their critical thinking ability. Hirayama and Kusumi (2004) established a measurement scale to assess the dispositions that enhances critical thinking ability.

In order to examine the learning effect of PBL instruction in a content-based reading class, Kusumoto (2015) conducted a study which employed the Critical Thinking Disposition Scale (CTDS) (Hirayama & Kusumi, 2004) in a pre-post designed investigation in a semester long content-based reading class at a college level in Japan. She found a statistically significant difference between scores before and after the implementation of the PBL and concluded that L2 learners improved their critical thinking disposition. This disposition is crucial in developing critical thinking abilities

(Kusumoto, 2015).

Given PBL's significant impact on cognitive skills development, what lacks in the previous studies is whether PBL also helps learners improve not only their critical thinking ability but also their English proficiency. In fact, it was reported that there is little empirical investigation (Broek & den Ende, 2013) in this area. Thus, the present study was carried out with a guided question: What is the relationship between cognitive skills development and L2 proficiency development in a college PBL writing course?

## **Methods**

The present investigation was a semester-long (i.e., 16 weeks) study where participants from an academic writing class at the college level continuously received instructions exclusively in English in a PBL structure. The study examined to what extent PBL may impact the development of proficiency as well as cognitive skills. Specifically, during the semester, the participants were given a project in which they had to find a topic towards a locally related issue such as the economy, politics, or a peace-keeping activity. Then, the participants explored the individually selected issue in and out of the class with consistent help from native speaking instructors of English (heretofore referred to as NS instructors). The NS instructors participating in the project had sufficient teaching experience, and their role in each session was to facilitate their critical view to the issue, review the participants' writing and discussion, and monitor the participants' overall learning. Specific research questions addressed in the present investigation are as follows:

Research question 1: Does the PBL writing course at the college level improve L2 learners' proficiency and cognitive ability?

Research question 2: What impact does the PBL course give to proficiency as well as cognitive ability development according to the proficiency levels?

## **Participants**

All participants ( $n = 22$ ) were college students at a local university in Japan and learning English as a foreign language (7 male and 15 female). Their age ranged from 18 to 21 years old, and their major was either English, English education, Spanish, or elementary education. They were all native speakers of Japanese, and none of them were highly advanced in English use.

## **Course description**

The investigated PBL class was an introductory writing class consisting of a full semester long PBL in which students learned basic academic writing skills in English. The class was taught through English by the researcher as well as five NS instructors except for classes where three Japanese experts were invited from the fields of the economy, politics, and peace-keeping. The experts presented necessary information in Japanese for the project and interacted with the participants.

During the semester, the instructors periodically assigned five prompted essay writing opportunities that took 20 minutes each and gave feedback and suggestions afterwards. As part of these writing assignments, individual students explored local issues related to Okinawa's globalization in the economy, politics, and peace-related activities. The students participated in presentations by invited experts from the aforementioned fields, identified local issues, discussed them with the NS instructors living in the community, and conducted essay writing in and out of class. The NS instructors continuously discussed the issues with students in a small group to provide culturally different viewpoints. At the end of the course, students had a forum where they shared their own views on individually selected local issues related to Okinawa with others.

## **Instruments**

Two measurements were employed twice, before and after the implementation of the PBL. One measurement was the Critical Thinking Disposition Scale (Hirayama & Kusumi, 2004) mentioned earlier (see Appendix A). The other measurement is for

English language proficiency called the can-do statements modified for the present study. The most commonly accepted is the “Common European Framework of Reference for Languages: Learning, teaching, assessment” (Council of Europe, 2001), a guideline used to describe the achievements of learners of foreign languages. For the present study, the B1 level statements were employed (see Appendix B). The participants were asked to self-assess own proficiency level by judging if the B1 level statements adequately describe their linguistic capability varying from 1 as “Strongly disagree” to 5 as “Strongly agree.”

## **Procedure**

The research was conducted in a pre and post design. Specifically, the participants took two measurements in the first week as part of the course orientation. The specific procedure is as follows:

- (1) On the first day, two measurements were carried out as a pretest. First, the participants self-assessed their own language proficiency by ranking what they could do with English in terms of listening, reading, speaking, and writing.
- (2) The participants were directed to work on the Critical Thinking Disposition Scale by choosing numbers that illustrate their cognitive disposition.
- (3) Starting on the second day, the participants worked on a project dealing with individually selected issues relevant to the local community. The class was divided into five groups, each of which was led by a native speaker of English who monitored their learning by giving suggestions, facilitating group discussion, and engaging in interpersonal talk. Periodically, the participants were required to present the outcomes of their project and to share different perspectives.
- (4) In earlier stages of the project, the participants interviewed Japanese experts from the various fields to collect evidence and facts related to their selected topics.
- (5) The participants were given five prompted writing assignments in class every two weeks. The format of the assignments was similar to TOEFL writing in that the participants wrote their opinion to a given topic or statement in about 20 minutes.

(5) At the end of the semester, the participants held a forum where a public audience was invited. In the forum, the participants presented their projects and discussed issues they explored and offered solutions to the issues.

(6) As a posttest, the participants were asked to take the same measurements (i.e., Can-do statements and CTDS). In each of the measurements, the order of the statements were randomized which made the researcher assume there would be no or very limited order effect.

## Analyses

In order to scrutinize whether the PBL writing course at college level impacted the developments of cognitive ability and proficiency, descriptive (e.g., *Means* and Standard deviation or *SDs*) as well as inferential statistics (e.g., *t*-tests) analyses were employed. As for an overall learning effect on cognitive ability and proficiency development, two two-tailed paired *t*-tests were carried out. Independent variables were test types (i.e., pretest and posttest). A dependent variable was each score of two measurements (i.e., pretest and posttest) of the Can-Do statements and CTDS. As for the cognitive and proficiency growths, four independent *t*-tests were conducted. Independent variables included grouping participants according to either cognitive levels (High vs. Intermediate) or proficiency levels (High vs. Intermediate). Dependent variables were the growth of participant's cognitive ability and proficiency, which was calculated by subtracting pretest scores from posttest scores of each measurement (i.e., Can-Do statements and CTDS).

## Results

Figure 1 presents the means and standard deviations (*SD*) of pretests and posttests for each measurement. According to Figure 1, the mean scores of pretest and posttest were 2.81 (*SD* = .62) and 3.05 (*SD* = .54) for the Can-Do statements and 3.56 (*SD* = .35) and 3.57 (*SD* = .30) for CTDS respectively.

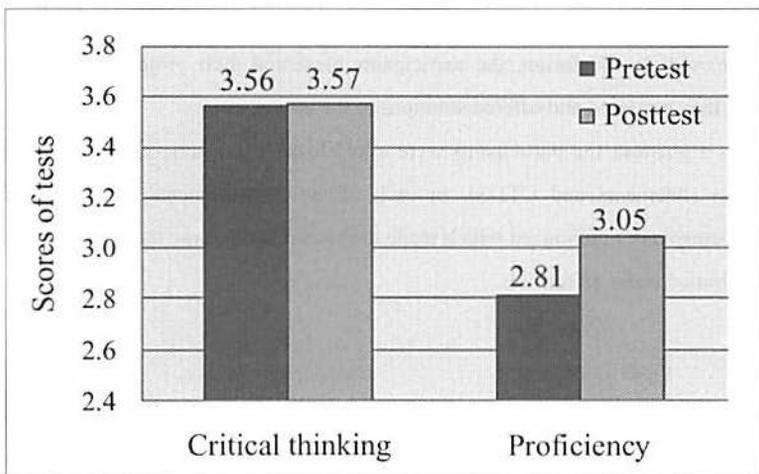


Figure 1. Means and SDs for Can-Do Statement and CTDS

To examine whether there is any significant difference in these means, the differences between the means of the pretest and posttest scores were tested using two-tailed paired *t*-tests. As for proficiency, the difference was significant:  $t(21) = -2.71$ ,  $p < .05$ ,  $d = -.41$ . The result indicates that the participants developed their proficiency in general. As for cognitive skill development, however, the difference was not significant ( $p = .87$ ). The result indicates that the participants did not have significant development in their cognitive skills. Table 1 indicates the result of the *t*-test.

Table 1.

Results of the *t*-Test on Means of Cognitive and Proficiency Growth

	Mean	SD	<i>t</i>	<i>p</i>	<i>d</i>
Proficiency Growth	-.23	.49	-2.71	.03	-.41
Cognitive Growth	-.01	.28	-.17	.87	.03

In order to compare the growths of each category (i.e., proficiency and cognitive skill) according to the participants' levels (i.e., high and intermediate) of proficiency and cognitive skills, the participants were divided into two groups based on the pretest's results. Subsequently, a mean difference of groups in proficiency ( $n = 11$  for the high proficiency group and the intermediate proficiency group) was found statistically significant:  $t(20) = -7.11, p < .01$ , and  $d = -3.03$  for proficiency. This indicates that in terms of the proficiency level, both High and Intermediate groups were statistically different.

The mean scores and *SDs* of the intermediate proficient group were 2.30 ( $SD = .53$ ) for the proficiency pretest, 2.72 ( $SD = .48$ ) for the proficiency posttest, 3.43 ( $SD = .36$ ) for the cognitive skill pretest, and 3.48 ( $SD = .29$ ) for the cognitive posttest, respectively. As for the high proficient group, their mean scores and *SDs* were 3.33 ( $SD = .33$ ) for the proficiency pretest, 3.38 ( $SD = .40$ ) for the proficiency posttest, 3.69 ( $SD = .30$ ) for the cognitive skill pretest, and 3.66 ( $SD = .30$ ) for the cognitive posttest, respectively. Figure 2 presents such scores according to the proficiency as well as cognitive groups.

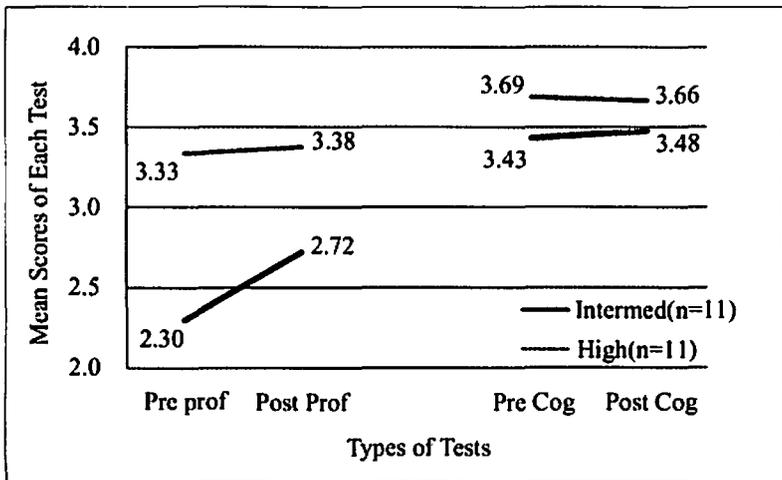


Figure 2. Mean Growths of Proficiency and Cognitive Skills by Proficiency Groups

To scrutinize whether there was a meaningful development of proficiency and cognitive skills among the participants within each of the groups, the mean growths were subjected to four two-tailed paired *t*-tests. As for the proficiency growth of the intermediate proficient group, a significant development was observed in proficiency:  $t(10) = -3.11, p < .05, d = -.83$ ; however, this was not observed in cognitive skill ( $p = .68$ ). Furthermore, the high proficient group also did not show any significant development in either proficiency ( $p = .61$ ) or cognitive skills ( $p = .74$ ). What is indicated by the results is this specific PBL writing class significantly impacted the intermediate proficient group in terms of proficiency. Table 2 indicates the result of the *t*-tests on the mean growths of cognitive skills and proficiency in the two proficiency groups.

**Table 2.**  
*Results of t-Tests on Mean Growth of Cognitive skill and Proficiency by Proficiency Levels*

Groups by Proficiency Levels		Mean (SD)	<i>t</i>	<i>p</i>	<i>d</i>
Intermediate group	Proficiency Growth	-.43 (.46)	-3.11	.01	-.83
	Cognitive Growth	-.05 (.37)	-.43	.68	.43
High group	Proficiency Growth	-.05 (.47)	.53	.74	-.13
	Cognitive Growth	.02 (.17)	-.34	.61	.10

## Discussion

Based on the self-perceived proficiency of English as a foreign language (i.e., Can-do statements) and the Critical Thinking Disposition Scale (CTDS), the present study explored the developmental relationship between proficiency and cognitive skill and reported several findings. The findings answer our first research question: *Does the PBL writing course at college level improve L2 learners' proficiency and cognitive ability?* The current investigation found that the participants developed overall proficiency through the semester-long PBL writing course at the college level. The study

revealed that the mean difference of the can-do statements (i.e., B1 level of CEFR) scores before and after the course was statistically significant.

However, the study did not find supporting evidence for the overall development of cognitive skills among the participants. We anticipated a simultaneous development in both proficiency and cognitive skills as learning effects of the semester-long PBL writing course. The study reported that the mean difference of the pre-post CTDS scores was not statistically significant ( $p = .87$ ) despite our expectation. Thus, we can safely conclude the PBL writing course did improve the overall proficiency of the participants but not their cognitive skills.

Another finding answers our second research question: *What impact does the PBL course give to proficiency as well as cognitive ability development according to the participants' proficiency levels?* According to the finding above, the present study revealed that the participants who self-claimed to be at an intermediate level showed significant development in their proficiency ( $p < .05$ ). As for cognitive skills development, on the other hand, none of the proficiency groups showed any statistically significant progress at all. Thus, we can draw the conclusion that the PBL writing course impacted the L2 learners at the intermediate level of proficiency in terms of proficiency development but not cognitive skills development.

One question accrued from our findings is why the current PBL writing course did not show simultaneous development of the cognitive skills and proficiency among the participants on the whole. Another question is why only the participants at the intermediate proficiency level showed significant proficiency development, but not others. This was somewhat surprising when considering the previous findings in the field.

Generally speaking, the PBL is widely accepted as a pedagogically effective teaching method that simultaneously and sufficiently promotes improvement of language competence, cognitive skills, and content of the subject through continuously working on a project in a learner-centered and content-based instruction (e.g., Higashino & Takashima, 2007). In fact, a content-based reading class at the college level in the form of PBL significantly impacted that critical thinking disposition that seemingly enhanced

their critical thinking ability (Kusumoto, 2015).

Our PBL course was carefully designed to promote learning effects in the cognitive and proficiency development. The course consistently assigned group work exclusively in English with native speakers' consisting of four to five participants who collaboratively worked on the projects. More specifically, in line with previous works in the field (e.g., Kusumoto, 2015), the participants had to listen (hear instructions, explanations, suggestions, and questions), speak (ask questions, reply to the questions, discuss group topics, and give feedback), read (articles, instructions, class materials, comments), and write (essays, weekly responses, summaries, and emails for questions to the native speakers). Yet, unlike in the previous finding, our PBL failed to promote cognitive skills development as a whole. Several factors may account for such discrepancy.

First, a focus on language might have overweighed the focus on cognitive skills in this course. As described earlier, the participants involved in our investigation took the course as a requisite to graduate. It was created to improve writing skills in another language (e.g., English) but not cognitive skills. More specifically, the embedded project asked the participants to contribute their learning in the form of an English essay in the essay journal and in the form of oral presentation at a forum open to the public. The objective of both activities was to present the outcomes of the semester-long investigation of local issues with support of the native speakers of English and Japanese experts in the filed of economics, politics, and peace-keeping activities.

The participants needed to have an adequate level of language proficiency in order to present their learning outcomes, which might be a causal factor to overlooking the importance of critical thinking in their project. That is, although the course syllabus emphasized the importance of critical thinking abilities to conduct their own projects and the course values of such development, the participants focused on language learning to complete essay writing and oral presentations through the daily practice of English with native speakers of English. The above point is always unconsciously and implicitly required in a session sequence throughout the semester. In short, language proficiency

received the most focus as their primary goal of learning. Thus, they put more value on improving their English proficiency than on thinking critically. The impact of this will need to be investigated in future studies using a more qualitative approach.

More importantly, misunderstanding of PBL as a type of Active Learning (AL) is worth evaluating, which is another consideration for successful PBL implementation. As Yasunaga (2015) and others (e.g., Matsushita, 2015) pointed out, the recent AL enthusiasm overspread in pedagogy resulted in its misapplication in classrooms. In particular, many tend to perceive any classes comprised of an activity engaging learners in discussion as a successful classroom implementation of AL (Yasunaga, 2015).

In 2012, the Central Education Council announced that AL would be a key approach in the future of education in Japan and defined what AL was. Researchers and educators have also presented their own views of AL. What is important is that this view is not completely congruent with the MEXT's definition. That is, the MEXT also emphasizes an importance on additional values such as morality and social competence while others researchers reinforce the importance of the application of gained knowledge as production (e.g., Mizokami, 2014). Such an inconsistent definition of AL confused teachers. In this sense, our PBL writing course might be a little different from others examined in the filed.

Our study may accrue an idea that ALBT can be categorized on a basis of continuum scale in which a more language focused PBL is on the one end while a more cognitive skills focused PBL is on the other. Our PBL might have been at somewhere closer to the former end, which resulted in less improvement of cognitive skills. In contrast, others (e.g., Kusumoto, 2015) might have been at somewhere closer to the latter end, which resulted in rich progress of cognitive skills. Thus, given that how we design PBL impacted what skills develop, we need a careful design by considering the nature of AL so that learners can develop language proficiency and cognitive skills simultaneously in a form of PBL. In fact, AL can be regarded as following two types if conducted in EFL context: AL is any teaching practices that turn learners to be active learner with higher cognitive skills, or AL is a teaching method that contrives ways to improve language

proficiency in content learning (Nishikawa, 2015). In this sense, where a particular ALBT classroom falls in depends on several factors taken into account to develop the teaching structure. What is implied here is, no cookie-cutter design that universally fits to any language learners. Needless to say, however, such view deserves further investigation that clarifies the incongruence of AL's theoretical conception in future.

Methodological deficits also deserve a meticulous consideration. First of all, all measurements were based on self-rating scales that do not necessarily reflect participants' linguistic competence and cognitive capability. This might have affected our investigation. In this sense, how to distinguish learners' disposition of proficiency, cognitive levels, and more importantly activeness needs more theoretical account for a more valid measure. In addition, a lack of control group might have also affected how to draw the conclusion of what had found in the current framework. There might have had more development in cognitive skills if a comparison was conducted with intact group of learners from a traditional teaching classroom such as grammar translation (Kusumoto, 2015). Lastly, collecting information of participant's language learning experiences and learning style preferences will definitely triangulate with the present finding for a better picture of simultaneous development of proficiency and cognitive skills.

### **Pedagogical implication**

Although our findings did not successfully draw an advocating conclusion of simultaneous development of proficiency and cognitive skills, it is still worthwhile to carry out the PBL when considering great impacts on proficiency development especially among intermediate proficient learners. Taken together with what has been said in the previous studies, the PBL course needs to build in an activity in which the learners are required with production. As AL advocators claimed, gained knowledge needs to be employed for problem-solving so that learners can become adequate critical thinkers (e.g., Mizokami, 2014).

The present study aptly suggests that any PBL in EFL include productive activities in the target language. Such activities can be class debates, group discussions, and pair

works that relate to the learner's life followed by the input focus activities. In particular, teachers may need to pose questions that can enhance learners' ability to think critically by engaging in comprehension activities first. Subsequently, sharing, discussing, and arguing in a meaningful output activity should train linguistic competence. In this way, the learners will naturally engage themselves and become ready to accept, deny, and compromise own views with convincing reasons discovered while investigating projects by themselves.

## **Conclusion**

Given that AL will be practiced under a new Course of Study in near future, what has been found in the present study would add a significant finding to the AL investigation. As is evident in the present study and unlike to the previous investigation, our PBL writing course at college level did not help grow overall cognitive skills among EFL learners over a semester. Yet, the integrated approach in our PBL has lent hands for successful improvement of English proficiency. Considering the mixed findings existing in the field, AL should be viewed as not categorical, rather, continuum. Our PBL writing course may consist of more elements contriving ways to improve language proficiency, and others may consist of more elements built in to turn EFL learners to be active learners with higher cognitive skills in general. Nevertheless, the both meet a whole purpose of AL practices at higher education. That is, we hope to turn our students to be autonomous learners through the rigid curriculum (e.g., Harmer, 2007).

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Critical Thinking Disposition Scale

Class [                    ] ID 学籍番号 [                    ]

As of April 21, 2015

[ 問 1 ] 以下に挙げた各文を読んで、その内容があなたにどれほど当てはまるかを右欄に記入し、下記の尺度に就いて、あなたに一番当てはまる数字を一つ選  
び、文頭の( )に記入して下さい。ご協力ありがとうございます。

尺度 (1:全く当てはまらない 2:幾分当てはまらない 3:どちらともいえない 4:幾分当てはまる 5:とても当てはまる)

- |   |   |
|---|---|
| 1. ( ) 新しいものにチャレンジするのが好きである。                      | 16. ( ) 物事を正解に考えることに自信がある。                    |
| 2. ( ) たとえ意見が合わない人の話にも耳を傾ける。                      | 17. ( ) 結論を下す場合には、彼たる医師の判断にこだわらる。             |
| 3. ( ) 外国人がどのように考えるかを勉強することは、意義のあることだ<br>と思う。     | 18. ( ) いまいる女学生の人と接して多くのことを学びたい。              |
| 4. ( ) 様々な文化について学びたいと思う。                          | 19. ( ) 医師を立てて物事を考える。                         |
| 5. ( ) 考えをまとめることが得意だ。                             | 20. ( ) 何か複雑な問題を考えると、混乱してしまう。                 |
| 6. ( ) 建設的な提案をすることが出来る。                           | 21. ( ) は意見<物事を聞へることが出来る。                     |
| 7. ( ) 何事も、少しも緩むずに進めたい。                           | 22. ( ) 彼に立つかわからないことでも、出来る限り多くのことを学びたい。       |
| 8. ( ) 自分が無意識のうちに抱った見方をしていないか振り返るようにし<br>ている。     | 23. ( ) 何かの問題に取り組むときは、しっかりと集中することができる。        |
| 9. ( ) 結論を下す際は、出来るだけ多くの事実や証拠を採る。                  | 24. ( ) 物事を見るときに自分の立場からしか見ない。                 |
| 10. ( ) 一つ一つの立場でだけではなく、出来るだけ多くの立場から考えよう<br>とする。   | 25. ( ) どんな状況に対しても、もつと知りたいたいと思う。              |
| 11. ( ) 誰もが納得できるような説明をすることが出来る。                   | 26. ( ) わからないことがあると質問したくなる。                   |
| 12. ( ) 自分とは違う考え方の人に興味を持つ。                        | 27. ( ) 複雑な問題について順序立てて考えることが得意だ。              |
| 13. ( ) 生涯にわたって新しいことを学び続けたいと思う。                   | 28. ( ) 物事を考える時、他の意見について考える余裕がない。             |
| 14. ( ) いつも周りのない判断をしようとする。                        | 29. ( ) 物事を決めるときには、客観的な知識を心がける。               |
| 15. ( ) 一筋縄ではいかない、ような難しい問題に何しても取り組み続けるこ<br>とができる。 | 30. ( ) 自分とは異なった考えの人と議論するのは面白い。               |
|   | 31. ( ) 私の欠点は気が配りやすいことだ。                      |
|   | 32. ( ) 公平な見方をするので、私は仲間から判断を任せられる。            |
|   | 33. ( ) 自分の意見について話し合うときには、私は中立の立場ではいられ<br>ない。 |

## Can-Do Statements (Based on CEFR's B1 level)

【問 2】 以下に挙げた各文を読んで、その内容があなたにどれほど当てはまるかをお聞かせします。下記の尺度に従って、あなたが一番当てはまる数字を一つ選び、文頭の ( ) に記入して下さい。ご協力ありがとうございます。

尺度 1：できない 2：少しできる 3：それなりにできる 4：わりとできる 5：よくできる

**About listening**

- ( ) 1. 外国の行事や習俗などに関する説明の概要を、ゆっくりはつきりと読まれたら、理解することができる。
- ( ) 2. 自然な速さの録音や放送(天気予報や空港のアナウンスなど)を聞いて、自分に安心のある、具体的な情報的大部分を聞き取ることができる。
- ( ) 3. 自分の周りで話している少し遅めの聞き取りでも、はつきりとなじみのある発音であれば、その要点を理解することができる。
- ( ) 4. はつきりとなじみのある発音で話されれば、身近なトピックの短いラジオニュースなどを聞いて、要点を理解することができる。

**About reading**

- ( ) 5. 字句を目的として書かれた新聞や雑誌の記事の要点を理解することができる。
- ( ) 6. インターネットや参考図書などを調べて、文章の構造を意図しながら、言葉や仕事に関係ある情報を手に入ることができる。必要であれば時に辞書を用いて、言葉と関連づけながら理解することができる。
- ( ) 7. グラムのやり方、申込書の記入のしかた、もの組み立て方など、知らない手順を理解することができる。
- ( ) 8. 平易な英語で書かれた長めの物語の筋を理解することができる。

**About speaking**

- ( ) 9. 身近なトピック(学校・趣味・食事の楽しみ)について、簡単な英語を幅広く使って意見を表明し、情報を交換することができる。
- ( ) 10. 病状やお悩みといった制所において、詳細にまた自信を持って、問題を説明することができる。関連する詳細な情報を提供して、その結果として正しい処置を受けることができる。
- ( ) 11. 個人所に安心のある具体的なトピックについて、簡単な英語を多様に入れて、社交的な会話を続けることができる。

尺度 1：できない 2：少しできる 3：それなりにできる 4：わりとできる 5：よくできる

**About listening**

- ( ) 12. 駅や店などの一般的な発音で、関連した制所の購入などといったサービスに関する短いなどの問題を、自信を持って詳しく説明することができる。相手が出発力があれば、丁寧に依頼したり、お礼を言って、正しいものやサービスを受けることができる。
- ( ) 13. 使える語句や表現を覚えて、自分の経験や夢、希望を順序立てて、話しを述べながら、ある程度詳しく述べることができる。
- ( ) 14. 短い読み物か短い新聞記事であれば、ある程度の理解さをもつて自分の感想や考えを加えながら、あらすじや要点を順序立てて伝えることができる。
- ( ) 15. 自分の考えを事前に準備して、メモの助けがあれば、両き手を指ささずにように、聴取者のあるトピックや自分に安心のある事柄について述べる。
- ( ) 16. 自分の安心事であれば、社会的状況(ただし自分の安心事)について、自分の意見を加えてある程度すらすらと発表し、聴取者から質問があれば相手に理解できるように答えることができる。

**About writing**

- ( ) 17. 自分に自信ありのある語彙(学校、趣味、好きなこと)での出来事や、身近な状況で使われる語彙・文法を用いて、ある程度まとまりのある文法で、描写することができる。
- ( ) 18. 新聞記事や映画などについて、専門的でない語彙や表現でない文法構造を用いて、自分の意見をまとめて、あらすじをまとめたり、基本的な内容を報告したりすることができる。
- ( ) 19. 身近な状況で使われる語彙・文法を用いれば、筋道を立てて、作業の手順などを示す説明文を書くことができる。
- ( ) 20. 物語の順序に従って、時行歴や自分史、身近なエピソードなどの物語文を、いくつかのパラグラフで書くことができる。また、近況を詳しく伝える個人的な手紙を書くことができる。

**Killing two birds with one stone: Does Active Learning (AL)  
based writing course simultaneously develop L2 learners'  
critical thinking and L2 proficiency?**

呉屋 英樹

要旨

近年、文科省の推し進めるアクティブラーニングは多くの研究者や教育関係者の注目を集めている。本研究は外国語として英語を学ぶ日本人大学生の批判的思考能力と言語能力の育成に目標を定めたプロジェクト型学習を行い、両方の能力におけるその教育的効果を調べた。対象となった授業は英語ライティングの入門講座で、16週間に渡り、英語母語話者との交流を通じて議論を行いながら、自らで選択したトピックについて調べ、発表し、議論し、そしてエッセとしてまとめた。事前事後テストの結果より、全体的に言語能力の成長が見られ、特に中級程度のレベルの学習者では、上級レベルの学習者では見られなかった言語能力の向上が見られた。その結果をもとに教育的示唆と理論的示唆が示された。