Weaving Critical Thinking Skills into a Japanese University EAP Course

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This paper examines how critical thinking (CT) skills were integrated into a Japanese university English for academic purposes (EAP) course. At the end of the course, students ($N = 88$) completed a questionnaire and provided written feedback related to the usefulness of the collaborative projects and in-house textbooks at developing CT skills. The results indicated that most of the participants generally held positive views about the course and felt that their CT abilities improved. However, the students also identified several significant obstacles such as busy schedules, procrastination, 'social loafing', 'free riding', intragroup conflicts, and information and communication technologies (ICT) concerns that can hinder a learner's progress in an EAP course.

English language learners (ELLs) must frequently process online stimuli (e.g., Instagram photos, fake news stories) thanks to the ubiquitous and pervasive nature of mobile devices (Kukulska-Hulme & Viberg, 2018). Thus, it is essential that ELLs can scrutinize digital content with a discerning eye. Critical thinking is considered to be a core twenty-first century skill alongside communication, collaboration, creativity and digital literacy (van Laar et al., 2017). This paper will highlight how these skills were integrated into an English for Academic Purposes

(EAP) first-year course at a private Japanese university. The researchers developed an in-house textbook series that was based on a flipped and project-based learning foundation. During the final week of the course, 88 students completed a paper-based questionnaire and provided written feedback. This data, in conjunction with the researchers' classroom observations and critical reflections, was used to enhance the course during the second stage of the action research cycle.

Background: The AEA Course

In 2017, the researchers designed and implemented an Academic English A (AEA) program that operated on the 'quarter system' in the Department of British and American studies at a private university in central Japan. The goals of the AEA program are to develop students' critical thinking (CT), autonomous learning, communicative and intercultural competencies, and digital literacy (DL) skills. Each AEA textbook focused on two academic areas (e.g., presentations and report writing), with a variety of student-centered activities and practical exercises that were designed to foster learners' research, writing, and public speaking skills. QR codes were included in the textbooks to provide easy access to supplementary online materials (e.g., TED Talks). The AEA students also completed two collaborative assignments each quarter that exposed them to different presentation styles (e.g., PechaKucha) and writing genres (e.g., research reports). They were also required to use ICTs throughout the year, most notably on two different digital storytelling (DST) projects.

Flipped Learning and Project-based Learning

Flipped learning (FL) is a pedagogical approach that requires students to complete work at home and practice the skills they learned in class. This strategy can transform a classroom into "a dynamic, interactive learning environment" where the teacher guides learners as they utilize ideas and "engage creatively in the subject matter" (Flipped Learning Network, 2014, para. 4). FL can enhance students' digital competencies (Kostaris et al., 2017), learner autonomy (Han, 2015), creativity (Al-Zahrani, 2015), and critical thinking (Kong, 2014).

Project-based learning (PBL) is a student-centered, teacher-facilitated pedagogical initiative that incorporates important twenty-first century skills into

a classroom (Bell, 2010). Hedge (1993) claimed that a project is "an extended task which usually integrates language skills work through a number of activities" (p.276). PBL can foster ELLs' CT capacities (Greenier, 2018), digital and media literacies (Ribeiro, 2016), academic skills (Poonpon, 2011), and interpersonal abilities (Kettanun, 2015). At the other end of the learning continuum, PBL can also generate a certain amount of frustration if the workload is unevenly divided (Gibbes & Carson, 2014). Ferrari and Pychyl (2012) argued that "social loafing"—the reduced effort in collective environments where individual effort is not distinguishable — and procrastination are ingrained elements in academic life that can adversely impact group work projects (p.13). Concerns about the peer assessment process and free riding, which Forehand and his colleagues (2016) defined as the expectation that everyone will receive the same grade regardless of the workload distribution, are also noteworthy obstacles.

Critical Thinking

The researchers adopted Brookfield's (2012) definition of CT which describes it as a reflective and recursive process that integrates the following elements: (1) identifying assumptions; (2) checking the validity of these assumptions; (3) examining ideas from different perspectives; and (4) taking informed action. Critics have argued that the focus on high-stakes testing and teacher-centered learning environments in the Japanese school system have had a negative influence on students' CT abilities and creativity (Park, 2013). This deeply entrenched stereotype overlooks the fact that many Japanese students enjoy CT tasks and can benefit when criticality is incorporated into their classes. For example, Kusumoto (2018) claimed that the first-year Japanese ELLs in her study improved their CT skills and dispositions through a content-based, active learning initiative. A CT-based curriculum can foster ELLs' motivation (DeWaelsche, 2015), communication skills (Lin, 2018), cultural proficiency, and academic abilities (Snider, 2017).

Participants and Data Collection

The sample for this study was drawn from four AEA classes that were taught by two of the researchers. During the final week of the course, 88 students completed

a 19-question survey during class time (response rate 96.7%). The questionnaire was divided into the following three sections: (1) demographics, (2) multiple choice questions, and (3) open-ended questions. The questionnaire was paper-based, anonymous, written in Japanese, and developed from the researchers' classroom observations, teaching experiences, and critical reflections during the action research cycle (Burns, 2010). The researchers who taught the AEA course recorded their classroom observations in a notebook. The research team also had monthly meetings and numerous informal conversations to gauge the effectiveness of the AEA materials and troubleshoot any problematic classroom issues they were experiencing.

The participants were between 18 to 23 years old (M=18.98). First-year undergraduate students comprised 97.8% (n=86) of the sample. Eighty-six (97.8%) of the participants identified as Japanese in nationality; Korean and Chinese were the remainder (2.2%). Most of the participants' questionnaire responses were written in Japanese. A native-speaker of Japanese who is fluent in English translated their answers into English.

Results

It is beyond the scope of this paper to provide an extensive analysis of the data that emerged from this study. Instead, the researchers will briefly highlight two key areas below:

AEA Course: Critical Thinking

Sixty-one participants (69.3%) agreed, or strongly agreed, that the AEA program improved their understanding of the course topics (e.g., Sociology) and CT abilities. Twenty-three (26.1%) somewhat agreed, whereas four students (4.5%) disagreed that the AEA course had a positive impact on their CT skills (Figure 1).

Several participants appeared to genuinely enjoy discussing complex topics with their classmates. One student noted: "*It was wonderful that I could study history, politics, and social issues in English. I could deepen my understanding talking with classmates.*" There were also a small number of participants who voiced their displeasure over the course content. One participant stated: *"It*

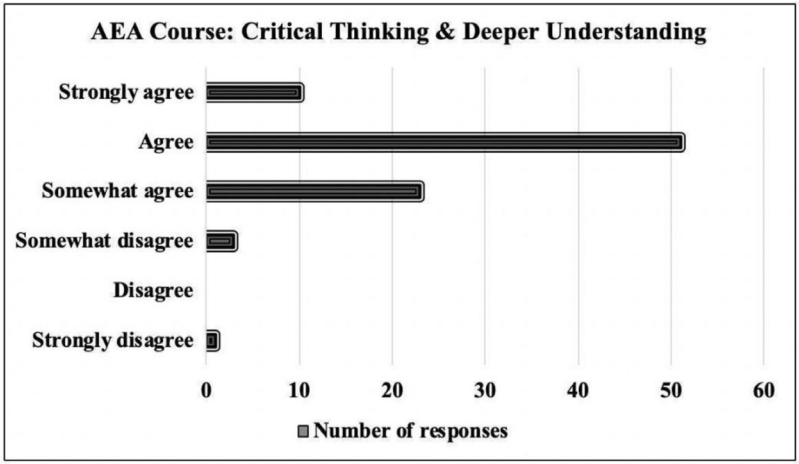

Figure 1. Effectiveness of AEA course at enhancing critical thinking.

would have been better to have more familiar topics for first-graders."

One notable classroom observation relates to the metamorphosis of the small group discussions from quarter one to quarter four. At the beginning of the year, the discussions were often stilted, and learners were hesitant to voice their opinions. By the end of the fourth quarter, most students appeared to be quite comfortable verbalizing their critical thoughts. While the students' familiarity with one another played a role in their willingness to communicate, it does not fully account for the criticality that emerged from the small group discussions. The researchers' holistic observations as experienced frontline educators echoed the participants' feedback.

Project-based Learning: Benefits and Challenges

The researchers hold that a PBL approach is the ideal way to integrate key twenty-first century skills into an EAP course. Several participants highlighted the importance of peer assistance. One student wrote: *"I learned from others' ideas. We divided up the tasks and pooled our resources so we could create a higher quality presentation."* Table 1 provides a summary of the PBL benefits that were identified by the participants. The items in the tables below are ranked in order of frequency, with number one being the most frequently mentioned benefit/drawback.

The participants also highlighted significant drawbacks of the PBL approach

(Table 2). The adverse impact of busy schedules and procrastination can be found in these comments: *"It was hard to meet up and a pain to use LINE to keep exchanging opinions"* and *"it sucks if a last-minute person is in your group."* Several critical comments were also directed at the social loafers, free riders, and

Table 1
Summary of Project-Based Learning Benefits

Item
1. Enhanced motivation
2. Improved academic skills
3. Strong bonds developed
4. Divided workload
5. Fostered learner autonomy
6. Sense of accomplishment
7. Improved communication skills
8. Technological assistance

Table 2
Summary of Project-Based Learning Challenges

Item
1. Busy & conflicting schedules
2. Procrastination
3. 'Social loafing' & 'free riding'
4. Discomfort with collaborative writing
5. Technological issues (e.g., different devices)
6. Concerns about the collective evaluation process
7. Intragroup conflicts

"difficult partners" in the AEA course.

Conclusion

The findings from this study indicate that most of the participants generally held positive views about the AEA course and felt that it helped them to develop their critical thinking skills. The combined FL and PBL pedagogical approaches were an effective way to foster Japanese ELLs' twenty-first century skills. At the other end of the learning spectrum, the participants identified a number of thorny issues such as busy schedules, procrastination, social loafing, free riding, intragroup conflicts, and ICT concerns that can hinder a learner's progress in a PBL-based course. We hope that this small-scale action research project will help educators and curriculum developers consider the challenges and rewards that can exist in technologically-enhanced PBL environments.

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