RESEARCH ARTICLES

An Implementation of Active Learning in an English-language Course in Japan

Glen Stewart
Bunkyo University, Japan

Hayo Reinders
King Mongkut's University of Technology, Thailand

This paper reports the results of an action-research project focused on the implementation of active learning in an English-language course in the Japanese tertiary-level teaching context. To determine the extent to which active learning principles were able to be incorporated into the programme, regular observations of classroom practice were carried out using video recordings of whole-class activities, as well as audio recordings of pair and group work. These were complemented with questionnaires, interviews and learner self-reports, along with a focus group with other teachers, and a teaching log/journal kept by the lead author. The results of the study indicate some progress with the teacher-researcher's ability to implement active learning. A number of recommendations for practitioners are drawn from the results to help mitigate some of the challenges in implementing such change in language teaching practice within the Japanese EFL context.

Keywords: active learning, action research, teacher development, innovation, change

Active learning is an approach that has a decades-long history in general tertiary-level education internationally. The approach was developed in response to the perception that university students were not actively engaged enough when in general education lecture-style classes. Further engagement was seen as necessary so that students could achieve "fundamental liberal arts goals" (Isbell, 1999, p. 4), such as their becoming sufficiently independent and critical thinkers. The approach started to receive attention in general higher education in Japan around 2010 (Mizokami, 2014). More recently, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) has recommended that active learning be implemented at all levels of the education system (Okada, 2019; Yoshida, 2016). Teachers should therefore be considering to what extent this is necessary in the specific course type(s) that they are responsible for. As a tertiary-level English-language teacher, I (the lead author) reflected about the necessity of implementing active learning in my own courses and ultimately decided that it was necessary. The main aim of the current article is to report the process that I went through to implement the approach in two classes of the same course type (a first-year, compulsory English-language course focused on helping learners to further develop their listening and speaking skills).

Literature Review
Active Learning
In the realm of general education, the term "active learning" still does not have a singular, concise definition (Shroff, Ting, &

Lam, 2019). A review of the relevant academic literature (Central Council for Education, 2012; Cooperstein & Kocevar-Weidinger, 2004; Dori & Belcher, 2005; Government of Japan, 2013; Ito, 2017; Ito & Kawazoe, 2015; Kamegai & Croker, 2017; Matsushita, 2018; Shroff, Ting, & Lam; 2019) indicates, however, that an implementation of the approach in a general education course in Japan would involve inclusion of a number of elements, as shown in Table 1.

Table 1
*Elements Needed to Implement Active Learning in a General Education Course in Japan*

- Engaging learners in the overall learning process
- Giving learners some ownership over the course
- Having learners take on some of the responsibility for managing their own learning
- Learners being proactive
- Learning by doing
- Interaction with peers
- Having learners deeply process the content being studied through their engaging in a range of activities to achieve deep learning and deep understanding
- Learners self-reflecting about their own learning
- Learners developing self-regulation and life-long learning skills
- Learners developing generic/employability skills - e.g. leadership skills

An often-cited model of active learning is Fink's (2003) Holistic Model of Active Learning (Figure 1). According to this model, learners firstly access information or ideas, then observe them put into action and/or put them into action themselves, and finally reflect on what and how they are learning, either alone or with others, to facilitate the meaning-making process (see Caine, 2020, for a more complete overview).

In ELT, active learning has not been formally defined, but literature on the various practical implementations share a number of characteristics (Caine, 2020; Ishikawa, 2016; Jones & Palmer, 2017). These include identification of the principles underlying the approach and incorporation of course components that are commonly part of English-language courses, for example, task-based language teaching (TBLT), cooperative language learning (CLL), problem-based learning (PBL), higher-order thinking tasks, and critical thinking tasks. The researchers cited above each operationalized active learning in slightly different ways. This was perhaps due to the type of course being taught in each case. What we do not see in such studies is a more comprehensive operationalization of the approach that is in part informed by local definitions of it (e.g., a focus on deep learning and generic/employability skills).

Figure 1
Fink's (2003) Holistic Model of Active Learning
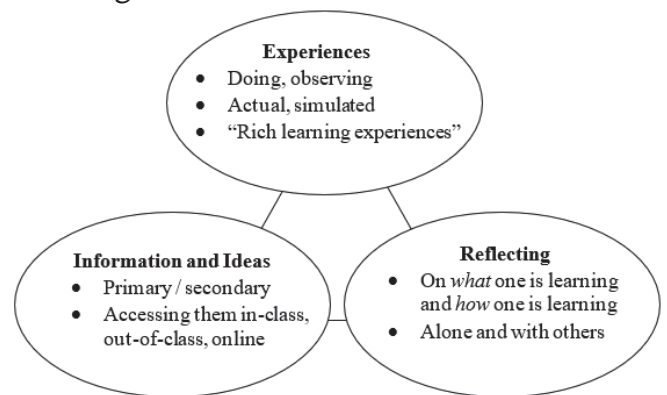
Methodology
This study was conducted with two compulsory first-year English classes in the fall term of 2019 at a tertiary institution just outside Tokyo in the Faculty of International Studies. The classes had twenty-three learners each (ages 18-20) and met once a week for ninety minutes for a period of fifteen weeks. The learners' mean TOEIC score was approximately 500.

Construct validity and ecological validity were established by providing a small

group of EFL professionals (including PhD holders) with the plans for the design of the study and the operationalization of active learning. Given that it was action research, I sought to establish trustworthiness by ensuring that the overall process had credibility, transferability, dependability, and confirmability (see Lincoln & Guba, 1985).

The Class Resource

The classes used a mandated resource called NetAcademy Next (ALC Press Inc., 2017). The resource was used by learners both during class and between classes as homework. NetAcademy Next is an Internet-based application for English-language self-study (Stewart, 2019). The section used by learners for the current study was the listening and speaking section. This section had multiple units. One unit was assigned for a specific class (e.g. week 5 - organizing a tour when on vacation). When using the application, the learners would firstly complete the six steps in the listening part and then the three steps in the speaking part. The learners would work individually with the application using a microphone and headphones to do this. Teachers responsible for conducting classes in which learners used the application were asked to allow learners to use the application individually for forty to sixty minutes in the class and then provide one or more follow-up L2 speaking activities that learners would complete with their classmates in the same class.

The Research Cycles

The overall action-research process had three research cycles based on the model provided by Kemmis and McTaggart (1988) (Figure 2).

Research Cycle 1 involved planning to implement. Thus, it did not conform to Cycle 1 in the figure above. This was because it was considered necessary that I use the first cycle to engage in such things as accessing the literature, reflection, operationalizing active learning, and devising a basic plan for the implementation. In Research Cycle 2, I engaged in the typical four-step process of plan-act-observe-reflect. Between weeks one and four, I collected data to formulate the action plan (this also involved revising the plan that I had formulated in Research Cycle 1) (plan). I implemented that in weeks five to nine (act). I also collected data during this time as a means to observe the impact of the action plan (observe). In week nine, I reflected on the impact to formulate the updated action plan (reflect). Research Cycle 3 proceeded in a similar fashion.

Data Collection

Figure 3 shows the data collection methods employed and when each method was employed.

Figure 2
Cyclical AR Model Based on Kemmis and McTaggart (1988) (adapted from Burns, 2010, pp. 8-9)
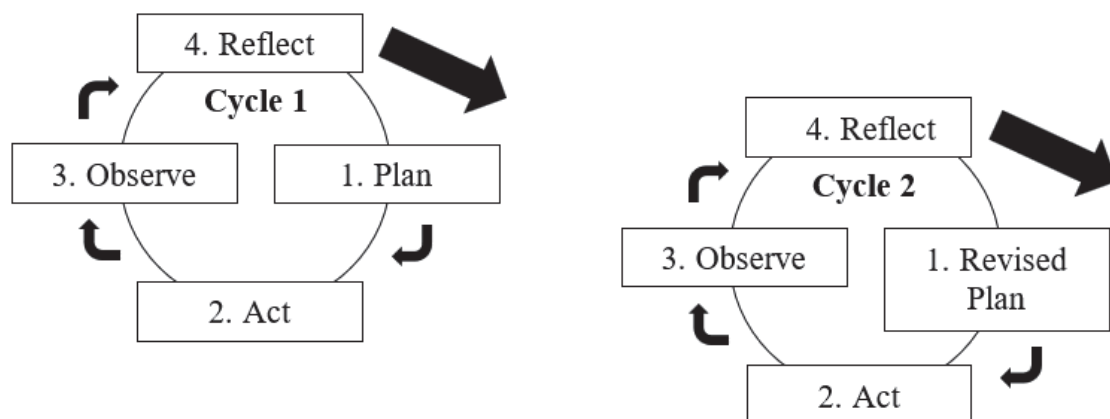
Figure 3
The Data Collection Methods Employed and When They Were Employed

RESEARCH CYCLE 1
(Up to Week 1 - Pre-Implementation Planning

Accessing the literature and reflecting, operationalization of active learning, planning (e.g., by deciding the course type and course components), pre-implementation reflection about my teacher cognition regarding active learning (with a main focus on beliefs)

↓

RESEARCH CYCLE 2
(Weeks 1-4) - Data Collection to Formulate the Action Plan

Semi-structured interviews (with a full-time faculty member and several learners), a focus group meeting with my fellow part-time teachers, a learner self-report, classroom observations, audio recordings of learners' pair work conversations, learner questionnaires, teaching log/journal, learner handouts, pre-/post-quizzes

↓

(Weeks 5-9) - Action Plan Implementation and Data Collection to Formulate the Updated Action Plan

Classroom observations, a learner questionnaire, learner self-reports, audio recordings of learners' pair work conversations, teaching log/journal, learner handouts, pre-/post-quizzes

↓

RESEARCH CYCLE 3
(Weeks 10-13, 16-) - Updated Action plan Implementation and Data Collection to Assess Progress

Classroom observations, learner questionnaires, semi-structured interviews with learners, audio recordings of learners' group task completion, teaching log/journal, records (e.g., attendance), post-implementation reflection about my teacher cognition regarding active learning (with a main focus on beliefs)

Though in most cases the instruments were created for the purpose of the study, Egbert's (2003) Task Engagement Questionnaire was adapted from Jones (2018) to determine learners' level of engagement during task completion. Jones (2018) adapted the questionnaire for use with Japanese learners. I drew on his adaptation to inform the creation of the post-group task engagement mini-questionnaire. The validity and reliability of all relevant instruments were established using reliability analyses and post-hoc item analyses using JASP (2018). (See Appendix C for the audit trail.)

All data collection methods related to some aspect of the formulated operationalization of active learning (see the Results section for this). Table 2 indicates the constructs/aspects of the operationalization that each data collection method sought to provide a measure for.

Table 2

Data Collection Methods and the Constructs/Aspects of the Operationalization

Data Collection Method	Operationalization Constructs/Aspects
Learner self-report about the importance of the course	Engagement
Classroom observations	Engagement, interactivity and cooperation, learner-centeredness and learner autonomy, deep learning, generic and employability skills
Questionnaire 1	All/Most
Post-group task engagement mini-questionnaire	Task engagement, generic and employability skills
Leadership mini-questionnaire	Generic and employability skills
Semi-structured interviews with learners	Learner-centeredness and learner autonomy
Pre-/post-quizzes	Engagement (mental exertion)
Self-regulation self-report	Learner autonomy (self-regulation)
Audio recording of learners' pair work conversations	Engagement, interactivity and cooperation, learner autonomy (self-regulation)
Review of learners' handouts focused on completion and peer feedback	Learner-centeredness and learner autonomy (reflection)
Review of learners' homework portfolio	Engagement
Learner self-report about the course and their progress in it so far	Engagement
Questionnaire 2	All/Most
Attendance record	Engagement
NetAcademy Next homework unit completion record	Engagement, learner-centeredness and learner autonomy
Teaching log/journal	Teacher cognition All above (as applicable)

Data Analysis

Data analysis was conducted as part of each research cycle. For qualitative data, I made transcriptions (e.g., of the audio recordings of the semi-structured interviews with learners) and then went through an informal coding process. For any quantitative data, I entered the data in a spreadsheet, checked and cleaned the data, and then used JASP to generate descriptive statistics: mean, mode, and standard deviation. To formulate the action plans in Research Cycle Two, I conducted a basic examination of all data to identify priorities; that is, anything related to the operationalization that should be changed. I then used the list of priorities to implement the action plan.

After I had completed Research Cycle 3, I conducted a latent content analysis (Dörnyei, 2007) focused on aspects of and influences on my teacher cognition. This included focus on teaching-related beliefs,

self-beliefs, teacher identity, teacher resistance, teacher autonomy, motives, the impact of previous educational experiences, the impact of other teachers, emotions, and context. Inductive coding was firstly used to derive themes from the participants' data, then deductive coding was used to identify the aspects of and influences on my teacher cognition that were relevant. I drew on Phakiti (2015) and Goss-Sampson (2019) to conduct paired samples *t*-tests for the mini-questionnaires and the results were included as part of the latent content analysis. The results of the latent content analysis were used to inform my reflections about the implementation overall.

Ethical Considerations

Permission to conduct the study was sought from the institution in advance and was granted. Participation was voluntary and all participants signed an informed consent form. Confidentiality was ensured by the careful handling and storage of participant data. Any identifying materials were destroyed after a period of two years.

Results

In this section, we detail the process followed to implement the approach. It is written from the perspective of the lead author.

Research Cycle 1

During this cycle, I operationalized active learning by conducting a comprehensive review of the general education and SLA literature. I also decided the course contents and components and engaged in pre-implementation reflection about my teacher cognition (in particular, my beliefs). Table 3 lists the constructs and aspects of active learning that were included in the operationalization.

Table 3
The Operationalization of Active Learning (The Learners)

Construct	Aspect
Engagement	Attendance, participation, enjoyment, connection with the course, exertion of mental effort, homework completion, reviewing at home, absence of boredom and frustration
Interactivity and cooperativeness	Use of English as the main language of communication in the classroom, engaging in pair work and group work, giving and receiving peer feedback, helping classmates
Learner-centeredness and learner autonomy	Asking for help based on one's needs, deciding what English is important for oneself, self-regulating during the course generally during class time, self-reflecting, choosing which homework topics to complete, providing feedback about and suggestions for the course
Deep learning	Taking part in review speaking tasks, using the English content from class to complete homework tasks, connecting newly learned English to existing knowledge, engaging in discussions with deep probing
Generic/ employability skills	Completing these tasks in their group (incorporating delivery skills and discovery skills), completing critical-thinking tasks, being a leader during group work

In all the cases above, the goal would be for me to try to either maximize or minimize each aspect through providing guidance and opportunities (in part through the class handouts) and support (when the learners were using the handouts), and through trying to change my teacher cognition (e.g., my beliefs) and my behavior. Learners were also given a dedicated handout that listed what they should do during the course to be an "active learner" (e.g., actively participate, mainly use English, ask for help if needed, avoid engaging in off-task behavior, etc.). It was translated into Japanese and was given to learners in class three.

When deciding the course contents and components, I decided to include specific techniques in most classes to try to encourage active learning (as operationalized) (see Table 4).

Table 4
Techniques Included in Classes to Encourage Active Learning (as Operationalized)

Review activities for spelling, meaning, pronunciation, and conversations; these were sometimes in the form of language games)
Pre- and post-quiz completion (the aim was to help learners to assess their language skills before they studied using NetAcademy Next so as to encourage increased mental exertion while studying)
Speaking activities (pair work - e.g. information gap tasks; and group tasks - e.g. higher-order thinking tasks, a jigsaw task)
Learners being a leader during group tasks
Group feedback from the teacher that all learners wrote down
Learner self-reflection about their study during the class

For pre-implementation reflection, I reflected specifically about my teacher cognition and active learning. This was individual reflection conducted in a structured way. I mainly drew on Farrell (2018a) and Burns (2010) to inform these reflections. During this reflection, I responded to multiple questions suggested by the authors, including about my beliefs. These reflections showed some awareness of what I did not know about the learners ("I am not always aware of how they like to learn") and the reason ("I do not always try to ascertain this information at the beginning of a course"), and what I knew about myself and what I thought I needed to change to facilitate implementation ("sometimes I prioritize getting stuff done rather than having proper class pacing"). Table 5 lists the beliefs that I discovered I had.

Table 5
Beliefs I Had (That Were Relevant to an Implementation of Active Learning)

I believed that… ● …it was important to help learners to develop their speaking skills. ● …I should be understanding about learner absences or lateness. ● …I should be a facilitator in the classroom. ● …the learners enjoyed playing language games. ● …I always provided a positive learning environment for my learners. ● …Japanese learners may like to be managed.

At this point in the implementation, it seemed essential to be aware of the above and try to finalize my pre-implementation planning so it was taken into account.

Research Cycle 2

My overall goal during research cycles two and three was to make changes to the course so that how it was being conducted was more in line with my operationalization of active learning.

Research Cycle 2 took place during weeks one to nine. It was divided into two parts: weeks one to four and weeks five to nine. Data collection and analysis conducted during weeks one to four helped to inform formulation of the action plan to be implemented from class five. The observation of the video recording was conducted out of class by my critical friend and me. We conducted the observation separately (i.e., we were both alone when we did so to ensure that we did not influence each other's perceptions of the in-class events). My critical friend was a fellow teacher in the same teaching context who agreed to observe the video recording of class two and provide observations/feedback based on the operationalization. Our observations indicated many of the changes that would need to be made.

First, some of my in-class behaviors could have been limiting learner engagement. For example, I spoke too much Japanese at times. My critical friend also pointed out that I used foreigner talk (e.g., instead of saying "take a photo", I started saying "take photo") when short on time. Further, some learners did not appear to understand all instructions given. Second, learner talk time needed to be increased. Third, the design of a group task I provided did not promote enough use of the L2. Fourth, not all learners were self-regulating / there was off-task behavior (e.g., at least one was using their phone for off-task purposes). Fifth, I was not providing enough guidance for group work, such as English that learners could use during group work to maximize their use of the L2 (e.g., "What do you think, Miwa?"), or support while learners were engaging in it.

Learner completion of the mini-questionnaires (task engagement and leadership) during this period indicated that overall the learners did not find the group task I provided interesting or challenging enough, that they had needed more skills and help to complete the task, and that they did not really like being a leader during group work or feel effective when doing so (see Appendices A and B). During the semi-structured interviews with the learners, one (participant 2I) asked that I include more English from NetAcademy Next in follow-up speaking activities (participant codes such as this one refer to individual students in the course; to access the data for individual participants, follow the link in Appendix C to the audit trail). All learners interviewed indicated that they wanted to do more speaking activities during class time.

Review of learners' handouts focusing on peer feedback indicated that I would need to provide more guidance for peer feedback giving. Review of learners' homework portfolios indicated that some learners were not completing their homework as expected (i.e., they were not writing the full twenty words for each task or submitting it on time). Audio recordings of learners' pair work conversations indicated that I needed to provide English that learners could use during pair work to maximize their use of the L2 (e.g., "How do you say ____ in English?"). In the extract below, when the learner asked "*sanjyuudo te nan to iu, eigo de*?", she was asking how to say "30 degrees" in English.

> (Learners 1B and 1I)
> 11 A: there is season in japan. the summer is very hot recently. the temperature is almost sanjuudo or more. sanjyuudo te nan to iu, eigo de?
> 12 B: sanjyuudo
> 13 A: celcius
> 14 B: iya, futsuu ni degrees
> 15 A: degrees. 30 degrees or more. 30 degrees or more. thank you.

Based on all of the above, I formulated the following action plan, and aimed to make the updates to the course from class five (see Table 6).

Table 6
The Action Plan

Speak less Japanese (the teacher and the learners), don't use foreigner talk, and give simple, clear instructions
Encourage learners to write the full twenty words in their homework portfolio and submit it on time
Provide more speaking activities at various points in a class to encourage more interaction in the L2
Provide more guidance for what learners should do when using NetAcademy Next to encourage self-regulation (e.g., ignore distractions, etc.)
Include more English from NetAcademy Next units in follow-up activities to facilitate deep learning
Better design the pair and group tasks so that they will facilitate more L2 use
Better design the group tasks so that they are more challenging and interesting to learners (at least reconsider the topics), better design that section of the handout so that it better prepares learners to complete the task, and provide more help
Provide English that learners can use to maximize their use of the L2 during pair work (e.g., "How do you say _____ in English?") and group work (e.g. "What do you think, Miwa?")
Provide more support for pair and group work (including learners' efforts to be a leader), and provide guidance for and English that learners can use when filling the role of leader during group work
Provide guidance and English that learners can use when engaging in peer feedback (e.g., "Next time, …")

I tried to achieve this either by changing my own behavior in class or by updating the class handout that I provided to learners in most classes.

Data collection and analysis conducted during weeks five to nine indicated that some positive change had been achieved as a result of implementing the action plan. The data collected indicated that I had increased opportunities for learners to use the L2 (e.g., during pair work) and learners' L2 use had increased. I also spoke mainly in English and my instructions were clearer. I was also providing more support for pair and group work. I was providing more guidance for how learners could self-regulate during their use of NetAcademy Next. I was providing improved pair and group tasks, more guidance for how learners could fill the role of leader during group work, and English that learners could use when filling that role. I was also including more English from NetAcademy Next units in review activities in an attempt to facilitate deep learning. I decided to keep working on any remaining issues.

Data collection and analysis during this time also helped to inform formulation of the updated action plan to be implemented from class ten. An entry in my teaching log/journal indicated that I believed that class five seemed to be too "busy" (i.e., there seemed to be too many activities to complete). My observation of the video recording of that class indicated that at least one learner was not self-regulating (e.g., she was using her phone for off-task purposes when using NetAcademy). I therefore provided specific guidance about this at the beginning of class six. I asked the learners to make predictions about the NetAcademy unit topic by looking at the unit picture, to take a note of any new English as they studied the unit, to ignore distractions as they studied, and to review after finishing studying the unit.

Review of learners' handouts focusing on peer feedback during this period indicated that I would need to provide more guidance for peer feedback giving (learner responses when completing Questionnaire 2 confirmed this to some extent). That said, review of learners' peer feedback giving after class nine (using their audio recordings and

their handouts) indicated that some learners' peer feedback giving ability had increased. Other data collected at this time indicated that I would have to provide learners with individual strategic thinking time to encourage increased L2 use during group work. It was also clear that I would need to continue working on several other issues, including those related to learners' homework.

Based on the above, I formulated the following updated action plan, and aimed to make the updates to the course from class ten (see Table 7).

Table 7
The Updated Action Plan

Provide support for pair and group work (and English that learners can use to maximize their use of the L2), encourage learners to write the full 20 words for their homework tasks and submit their homework on time
Have learners put their smart-phones in their bags before using NetAcademy Next to try to prevent off-task behavior
Provide a self-report section for learners to indicate how they self-regulated before, during, and after use of NetAcademy Next
Make each class less busy - e.g., by having learners do listening steps 1–4 only in NetAcademy next (and not steps 5–6)
Provide strategic planning time for group work to maximize English use and help make the course less difficult (and make other adjustments to the class handout for the same reason)
Provide guidance and English that learners can use when engaging in peer feedback, as well as more support

As before, I tried to achieve this either by changing my own behavior or by updating the class handout that I provided learners in most classes.

Research Cycle 3

Data collection and analysis conducted during week eleven indicated that some positive change had been achieved as a result of implementing the updated action plan. The classroom observation indicated that I was maintaining previous improvements. Some issues remained, however. First, some learners still lacked the ability to self-regulate to the extent expected during class time (e.g., few appeared to review after finishing using NetAcademy, and there was chatting in Japanese during their use of the application). That said, it was difficult to determine to what extent some of what I perceived to be off-task behavior was actually off-task. Second, the learners completed the mini-questionnaires again in class twelve. Their perceptions of the class twelve group task were not significantly different to those of the class two group task (see Appendix A). Further, the learners continued to not like being a leader during group work (see Appendix B). That said, they did indicate feeling more effective. Third, I believe that at least one of my classes during this period was too "busy". In addition, some of the results of the semi-structured interviews conducted during this period were a surprise to me. For example, they indicated differing preferences in regards to things such as their desire to speak to a native speaker (the teacher) or their classmates during speaking activities (participants 1E, 1F, 1P) (though there had been mention of this earlier in the implementation), how NetAcademy Next should be used (1D, 1E, 1F, 1P, 2H, 2L), and what my role in policing their use of the L1 should be (1F, 2W, 2X). Ideally, I should have been more aware of such preferences earlier on in the implementation.

Did I improve?

As noted earlier, after completing research cycle three, I conducted a latent content analysis. I used that to inform my reflections about the overall implementation

and my teacher cognition. Based on that reflection, it would appear that a range of positive changes related to my teacher cognition and my teaching practice were achieved (see Table 8).

Table 8
Positive Changes Related to My Teacher Cognition and My Teaching Practice

Teacher Cognition
- I increased the extent of my practical knowledge (i.e., knowledge about learners' needs, goals, preferences, abilities, and anxieties)   - In line with the above, some beliefs changed, e.g., I had believed that the learners enjoyed playing language games; however, they actually wanted to engage in more regular L2 speaking activities (i.e., information-gap tasks) instead   - Some beliefs were elaborated, e.g., I had believed that it was important to help learners to develop their speaking skills; however, data collection indicated more fully why it is important   - I became more aware of the impact of my teacher cognition on my teaching practice
Teaching Practice
By the end of the implementation, I was…   - using less Japanese   - not using foreigner talk (or was quickly self-correcting)   - providing improved instructions in English   - providing more L2 speaking activities for learners in line with both the operationalization and learner expectations   - noticing that learner talk time had increased   - including more English from NetAcademy Next in follow-up activities on the class handout   - providing more support for pair and group work, as well as guidance and English that learners could use when filling the role of leader during group work   - providing more English that learners could use to maximize their use of the L2 during pair work (e.g., "How do you say _____ in English?") and group work (e.g. "What do you think, Miwa?")   - providing strategic planning time for group work to maximize English use and make the course less difficult (and including simpler activities for the same reason)   - providing improved guidance and English that learners could use when engaging in peer feedback, as well as more support

Several issues remained at the end. First, I had the perception that I sometimes prioritized achieving a lot in a class over proper pacing. This is not something that had changed in a positive direction by the end of the implementation. Second, my ability to design engaging group tasks appeared to be still somewhat limited. Third, my ability to encourage all learners to self-regulate when using NetAcademy Next (and during class time generally) and complete their homework as expected remained limited. Fourth, only some learners had improved their ability to give peer feedback to the extent expected by the end of the implementation.

Discussion
Whether or Not to Implement

Many teachers and researchers may perceive English-language courses to already be "active" (e.g., Alves, 2015; Jones & Palmer, 2017; McMurry, 2018). Further, teachers already implementing Communicative Language Teaching (CLT) may question if their operationalization of CLT already incorporates aspects of active learning. This makes sense given that some widely adopted conceptualizations of CLT include aspects that could be considered "active" (see Brown & Lee, 2015; Richards, 2006). According to Brown and Lee (2015), for example, CLT includes a focus on learners being "active participants in their own learning process" (p. 32). As expected, the extent to which one's courses could be considered to already be "active" would depend on one's operationalization of active learning (or CLT) and the extent to which one is implementing the different aspects of it. This points to the need for English-language teachers to at least re-evaluate their teaching. My own decision to do this, and to implement active learning, led to a positive change in my teacher cognition and my teaching practice.

Operationalizing Active Learning for ELT

When we compare the results of the current implementation to that of others (see Caine, 2020; Ishikawa, 2016; Jones & Palmer, 2017; Mack, 2010; Montero-Fleta, 2012; Verma, 2011; Waluyo, 2020), both similarities and differences can be seen. One similarity relates to operationalizing the approach. How active learning has been operationalized depends on the individual teacher and their teaching context. This also holds true for the current implementation. Two of the main differences concern the comprehensiveness of the operationalization and the number and type of approaches, techniques, and strategies included. In regards to the comprehensiveness of the operationalization, other researchers have not sought to focus on and try to achieve change with the number of aspects that were focused on in the current study. That makes sense because, in my case, such a wide-ranging focus made the overall process difficult and time-consuming. That said, it could be argued that one's operationalization should be as comprehensive as possible without making it fall out of alignment with the specific course type, the course objectives, or the specific teaching context. There is no reason, however, that teachers need to focus on trying to change so many aspects of their teaching practice at once. In regards to approaches, techniques, and strategies, some of the authors cited above used some very creative and potentially engaging ones as part of their implementations, e.g., having learners create a how-to video in English (Caine, 2020) or having learners do research about a topic, fill out a brief sheet, and then present it using English to their group in the following class (Jones & Palmer, 2017). This shows that one must focus as much on the development or sourcing of such supporting techniques as on formulating an optimal operationalization. This is essential since such techniques not only serve a specific aspect of the operationalization and help the teacher to improve in regards to that aspect, but they may also serve to limit learners' resistance to the implementation generally.

Learner-Related Issues

A number of learner-related issues complicated the current implementation. Here I will mention two. First, it was found that some learners had certain beliefs, attitudes, and/or preferences which were not in line with the operationalization. For example, data collection quite late in the implementation indicated that two learners wanted to speak English mainly with me (a native speaker) rather than their classmates. This would appear to reflect one finding by Yonesaka and Tanaka (2013). In their study, a majority of the participants indicated believing that their achieving progress could be most readily facilitated by communicating with native speakers. Part of one's goal during an implementation of active learning is to encourage change in learners' beliefs related to such issues. To do so, one must elicit learners' thinking about these things early in the implementation and then make repeated attempts to encourage change in their thinking. Unfortunately, I did not do this enough. What is also clear from the results is that achieving the required change with learners' beliefs, attitudes, preferences, and behaviors may not be achievable during one implementation. This calls for a longer-term and collaborative effort to achieve this.

Second, it appears that some learners in the current study were not ready to self-regulate to the extent required. According to Nakata (2010), this may result from learners' intrinsic motivation still being affectively self-regulated rather than cognitively self-regulated (or both). That is, they may still be at the stage where they are primarily externally motivated (e.g., by the teacher) and they may not be ready to manage themselves and their own learning. If one's operationalization of active learning includes a focus on learner self-regulation and the learners are not ready, then

achieving a successful implementation may be difficult. In both cases above, we can see the value of learning adequately about our learners even before operationalizing. This is the case since, while we should seek to encourage change, our efforts should be context-specific and learner-centered.

Reflection about Teacher Cognition

Research has shown that a teacher's cognition affects their teaching practice (Macalister, 2016; Phipps & Borg, 2009). Given this, it makes sense to reflect on one's cognition to minimize its negative impact on one's practice. The results of this study indicate that reflection about my teacher cognition was essential to the implementation process. As in many other studies (see Farrell, 2018b), the most positive overall change was an increase in awareness related to the impact of my teacher cognition on my teaching practice. Further, that increase resulted from reflection engaged in at the end of the implementation. This indicates that teachers who are implementing active learning (or CLT) may benefit from engaging in similar reflection about their teacher cognition. In my own case, for example, it was reflection about motives that led me to realize that the reason why my classes were "busy" was potentially a need to self-enhance (Mruk, 2006). That is, a need to see myself as competent (and potentially even superior) led me to design overly comprehensive class handouts. Doing this kind of reflection both before and after an implementation could help to raise teachers' awareness of aspects of their teacher cognition that must change. It is also important to keep in mind, however, that achieving a positive change with all such aspects will not be achievable during one implementation, and it would therefore need to be the focus of ongoing efforts to change.

Having a Critical Friend

Having a critical friend was essential early on in the current implementation. As noted earlier, this was a fellow teacher in the same teaching context who agreed to observe a video recording of me teaching and provide observations/feedback based on the operationalization. This revealed several things about my in-class behavior that I was not aware of and which could have potentially negatively impacted the implementation; for example, I was using foreigner talk when short on time. These things could have negatively impacted learner engagement, the maximization of which was central to my operationalization. That said, this can be a particularly difficult part of such a process because of the feedback given and/or how it is given. Previous research has shown that some teachers may not like being observed (Lasagabaster & Sierra, 2011). Given this, such teachers may prefer instead to observe their own teaching and critically evaluate it as part of their own reflective process. In such a case, however, one's literature review would need to be sufficiently extensive, and when observing oneself, one would need to be sufficiently critical with oneself.

Conclusion

MEXT has been recommending for some time that active learning be implemented in tertiary-level courses in Japan. This article has reported on one implementation of active learning in an English-language course within Japanese tertiary education through an action-research process. As a result of going through the process, I (the lead author) increased my awareness of the ways in which my teaching needed to change, and some positive change was achieved with both my teacher cognition and my teaching practice. Therefore, the recommendation by MEXT to implement active learning in this context had a positive impact on me. It is therefore hoped that this article may inform and help other teachers who are considering implementing or are required to implement the approach.

References

ALC Press Inc. (2017). *ALC NetAcademy Next.* https://www.alc-education.co.jp/nanext/index.html

Alves, M. J. (2015). Ways to apply active learning in the college ESL classroom. *College ESL Quarterly*, *Spring.* http://www.languageartspress.com/ceq/spring2015.html

Brown, H. D., & Lee, H. (2015). *Teaching by principles: An interactive approach to language pedagogy* (4th ed.). Pearson Education, Inc.

Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners.* Routledge.

Caine, N. (2020). Integrating active learning into EFL course design: A case study. *Nagasaki University Repository*, *53*(4), 23–39. http://reposit.sun.ac.jp/dspace/handle/10561/1614

Central Council for Education. (2012). *Aratana mirai o kizuku tame no daigaku kyôiku no sitsuteki tenkan ni mukete: Shôgai manabi tsuzuke shutaitekini kangaeru chikara o ikusei suru daigaku e (Tôshin) [Towards a qualitative transformation of university education for building a new future: Universities fostering lifelong learning and the ability to think independently and proactively (Report)].* https://www.mext.go.jp/en/publication/report/title01/detail01/1380275.htm

Cooperstein, S. E., & Kocevar-Weidinger, E. (2004). Beyond active learning: A constructivist approach to learning. *Reference Services Review*, *32*(3), 141–148. https://doi.org/10.1108/00907320410537658

Dori, Y. J., & Belcher, J. (2005). How does technology-enabled active learning affect undergraduate students' understanding of electromagnetism concepts? *The Journal of the Learning Sciences*, *14*(2), 243–279. https://doi.org/10.1207/s15327809jls1402_3

Dörnyei, Z. (2007). *Research methods in applied linguistics.* Oxford University Press.

Egbert, J. (2003). A study of flow theory in the foreign language classroom. *The Modern Language Journal*, *87*, 499–518. https://doi.org/10.3138/cmlr.60.5.549

Farrell, T. S. C. (2018a). *Reflective language teaching: Practical applications for TESOL teachers* (2nd ed.). Bloomsbury Academic.

Farrell, T. S. C. (2018b). *Research on reflective practice in TESOL.* Routledge. https://doi.org/10.4324/9781315206332

Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses.* Jossey-Bass.

Goss-Sampson, M. A. (2019). *Statistical analysis in JASP 0.9.1: A guide for students.* https://jasp-stats.org/2019/08/21/statistical-analysis-in-jasp-an-update-to-the-students-guide-by-mark-goss-sampson/

Government of Japan. (2013). *The second basic plan for the promotion of education (Provisional translation).* Ministry of Education, Culture, Sports, Science, and Technology, Japan. https://www.mext.go.jp/en/policy/education/lawandplan/title01/detail01/1373796.htm

Isbell, K. (1999). An interview on active learning with Dr. James Eison. *The Language Teacher*, *23*(5), 4–5, 9.

Ishikawa, S. (2016). From principle to practice: Integration of the principles of English as a lingua franca, content and language integrated learning, deep active learning, and cooperative language learning in the design of

communicative English language teaching for Japanese college students. *JACET Chubu Chapter Journal*, *15*, 11–27.

Ito, H. (2017). Rethinking active learning in the context of Japanese higher education. *Cogent Education*, *4*(1), 1-10. https://doi.org/10.1080/2331186X.2017.1298187

Ito, H., & Kawazoe, N. (2015). Active learning for creating innovators: Employability skills beyond industrial needs. *International Journal of Higher Education*, *4*(2), 81–91. http://dx.doi.org/10.5430/ijhe.v4n2p81

The JASP Team. (2018). *A fresh way to do statistics.* JASP. https://jasp-stats.org/

Jones, B. A. (2018). *An experiential look at learner engagement in university EFL courses in Japan* (Publication No. 80616) [Doctoral thesis, University of Reading]. CENTAUR: Central Archive at the University of Reading.

Jones, B. A., & Palmer, R. (2017). Active learning in Japanese university EFL classes: Clarifying the construct. *Hirao School of Management Review*, *7*, 107–125. https://doi.org/10.14990/00002306

Kamegai, M., & Croker, R. (2017). Defining active learning: Japanese high school teachers of English. *Journal of Liberal Arts and Science Asahi University*, *42*, 65–79. http://id.nii.ac.jp/1128/00009097/

Kemmis, S., & McTaggart, R. (1988). *The action research planner* (3rd ed.). Deakin Press University.

Lasagabaster, D., & Sierra, J. M. (2011). Classroom observation: Desirable conditions established by teachers. *European Journal of Teacher Education*, *34*(4), 449–463. https://doi.org/10.1080/02619768.2011.587113

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Sage.

Macalister, J. (2016). Tracing it back: Identifying the impact of a trans-national language teacher education programme on classroom practice. *RELC Journal*, *47*(1), 59–70. https://doi.org/10.1177/0033688216631204

Mack, L. (2010). Teaching global English to EFL classes. *Intercultural Communication Studies XIX*, *3*, 202–220.

Matsushita, K. (2018). An invitation to deep active learning. In K. Matsushita (Ed.), *Deep active learning: Toward greater depth in university education* (pp. 15–33). Springer Nature Singapore Pte Ltd. https://doi.org/10.1007/978-981-10-5660-4_2

McMurry, D. (2018). An interview with Yuta Kawamura on active testing. *The Language Teacher*, *42*(1), 36–38. https://doi.org/10.37546/JALTTLT42.1

Mizokami, S. (2014). *Active learning and the transition of teaching/learning paradigm.* Toshindo.

Montero-Fleta, B. (2012). Looking beyond linguistic outcomes: Active learning and professional competencies in higher education. *Procedia – Social and Behavioral Sciences*, *46*, 1812–1819. https://doi.org/10.1016/j.sbspro.2012.05.384

Mruk, C. J. (2006). *Self-Esteem research, theory, and practice: Toward a positive psychology of self-esteem* (3rd ed.). Springer Publishing Co.

Nakata, Y. (2010). Toward a framework for self-regulated language-learning. *TESL Canada Journal*, *27*(2), 1–10. https://doi.org/10.18806/tesl.v27i2.1047

Okada, A. (2019). Education policy and the Japanese new knowledge society. *Хабаршы. Шығыстану сериясы*

[*Messenger. Oriental Studies Series*], *90*(3), 4–11. https://doi.org/10.26577/jos.v90i3.1424

Phakiti, A. (2015). Quantitative research and analysis. In B. Paltridge & A. Phakiti (Eds.), *Research methods in applied linguistics: A practical resource* (pp. 27–47). Bloomsbury.

Phipps, S., & Borg, S. (2009). Exploring tensions between teachers' grammar teaching beliefs and practices. *System*, *37*(3), 380–390. https://doi.org/10.1016/j.system.2009.03.002

Richards, J. C. (2006). *Communicative language teaching today.* Cambridge University Press.

Shroff, R. H., Ting, F. S. T., & Lam, W. H. (2019). Development and validation of an instrument to measure students' perceptions of technology-enabled active learning. *Australasian Journal of Educational Technology*, *34*(4), 109–127. https://doi.org/10.14742/ajet.4472

Stewart, G. (2019). Using ALC Press Inc.'s NetAcademy Next as the main resource in lower-level university English CALL classes in Japan: A case study. *The JALT CALL Journal*, *15*(1), 19–41. https://www.castledown.com/journals/

jaltcall/view-issue/?volume=15&issue=1

Verma, M. H. (2011). Active learning: A prerequisite for language development in the mixed ability class (MAC) of engineering students. *Advances in Language and Literacy Studies*, *2*(2), 185–196. https://doi.org/10.7575/aiac.alls.v.2n.2p.185

Waluyo, B. (2020). Learning outcomes of a general English course implementing multiple e-learning technologies and active learning concepts. *The Journal of Asia TEFL*, *17*(1), 160–181. http://dx.doi.org/10.18823/asiatefl.2020.17.1.10.160

Yonesaka, S. M., & Tanaka, H. (2013). First-year Japanese university students' language learning beliefs: Continuity and change. *The Electronic Journal for English as a Second Language (TESL-EJ)*, *17*(3), 1–20. https://www.tesl-ej.org/wordpress/issues/volume17/ej67/ej67a3/

Yoshida, H. (2016). Effects of active learning for curriculum management: With focus on the "Courses of Study" of Japan. *International Journal of Knowledge Engineering*, *2*(2), 77–84. https://doi.org/10.18178/ijke.2016.2.2.057

Appendix A
Post-Group Task Engagement Mini-Questionnaire

A significant difference was not found between the results for class two (Mdn=5.000) and class twelve (Mdn=5.290) on the task engagement mini-questionnaire (n=31, w=288.000, p=0.054). To conduct this analysis, I firstly checked the normality of the distributions of both data sets in JASP. The results indicated that there was a deviation from normality. I therefore decided to conduct a Wilcoxon signed-rank test.

Table A1

	Class 2			Class 12		
	Me.	Mo.	St.	Me.	Mo.	St.
	/7	/7		/7	/7	
This task was interesting to me.	5.32	5.00	1.40	5.58	5.00	1.29
I was challenged by this task.	4.48	4.00	1.46	4.74	4.00	1.15
I understood the rules for this task.	5.36	6.00	1.45	5.65	6.00	1.23
I had the skills to complete this task.	4.87	4.00	1.28	5.36	6.00	1.17
I received the help that I needed to do this task.	4.84	4.00	1.44	4.81	5.00	1.35
I will use the things I learned in this task outside of the classroom.	5.13	5.00	1.38	5.45	5.00	1.23
I have confidence I can do this task well in the future.	5.26	5.00	1.26	5.39	5.00	1.33

(Me. = mean, Mo. = mode, St. = Standard deviation)

Appendix B
Leadership Mini-Questionnaire

A significant difference was found between the results for class two and class twelve regarding their sense of effectiveness (n=37, t(36)=2.915), p=0.006; Cohen's d=0.479), with a small to medium effect size. However, a significant difference was not found regarding the extent to which they liked being a leader (n=37, t(36)=1.960), p=0.058). To conduct this analysis, I firstly checked the normality of the distributions of both data sets in JASP. I then conducted a normality check. The results indicated that there was not a deviation from normality. I therefore decided to conduct a Student's t-test.

Table B1

	Class 2			Class 12		
Item	Mean	Mode	Stand. Dev.	Mean	Mode	Stand. Dev.
	/7	/7		/7	/7	
I like being a leader during group work.	3.30	4.00	1.31	3.76	3.00	1.36
During group work, I'm an effective leader.	2.89	2.00	1.39	3.68	3.00	1.42

Appendix C
The Audit Trail
      The audit trail can be accessed here:
      https://1drv.ms/u/s!AsTuUBjep-eGh951qYRiS5Ai0A3TTg?e=XPR4JB

About the Authors
Glen Stewart is a part-time English-language teacher at the tertiary level in Japan. He teaches a range of compulsory and elective course types, including CALL, oral communication, reading, writing, and business. He has published in the area of CALL, MALL, teacher professional development, and curriculum development. He completed a PhD related to language teacher cognition in 2020. https://orcid.org/0000-0002-3414-3080 glenandrewstewart@gmail.com

Hayo Reinders (www.innovationinteaching.org) is TESOL Professor and Director of Research at Anaheim University, USA, and Professor of Applied Linguistics at KMUTT in Thailand. He is founder of the Global Institute for Teacher Leadership and editor of *Innovation in Language Learning & Teaching*. His interests are in out-of-class learning, technology and language teacher leadership. https://orcid.org/0000-0003-3635-1833 hayoreinders@gmail.com

PanSIG
Kyoto Sangyo University
May 12th-14th, 2023