Integrating active learning and ICT in a British culture class for EFL university students

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EFL大学生のためのイギリス文化の講義における 能動的学習とICTの統合

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Abstract

In anticipation of educational reforms proposed for 2020 by the Ministry of Education, Culture, Sports, Science and Technology (MEXT, 2016) with the integration and enhancement of information and communications technology (ICT) and active learning in the classroom, a transformation of lecture-based teaching practices will be considered for a course in British culture. Preferred instructional formats from a constructivist perspective involve active learning, where students participate in writing, explaining, and reflecting—processes seldom employed in lecture-based teaching (Dufresne, Gerace, Leonard, Mestre, & Wenk, 1996). The lecture format of instruction, a traditional method that has changed little from centuries past, is representative of a substantial portion of teaching at universities in Japan. Typically, this involves students passively listening to lectures and taking notes. This article will detail relevant research in relation to teaching practices that may have a more desirable effect on student learning and development. Aspects related to ICT will be introduced; in particular, the utilization of cloud-based applications in education. In addition, studies investigating active learning will be presented. The Action Research Process (Burns, 2009) will serve as a guide in the formulation of a comprehensive plan of action for a university course on British culture.

Keywords: Active Learning, British culture, cloud-based applications, ICT, peer learning

Introduction

In general terms, active learning involves instructional methods aimed at engaging students in the learning process (Prince, 2004). Rather than dependence on passive input from teacher-centered instruction, an active process of student-centered learning is the definitive goal. Silberman (1996) describes active learning as student involvement in most of the work required to study ideas, engagement in problem solving and applying what has been learned. Bonwell and Eison (1991) mention the need for students to be engaged in activities that are meaningful and require them to think about the task at hand. Taking this into consideration, the means of promoting more student-centered learning can be heightened with the integration of ICT. Specifically, the utilization of cloud-based applications could

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enhance a variety of educational aspects pertaining to active learning. Cloud-based applications refer to software that are based primarily online and offer a simultaneous sharing component—elevating the ability for collaboration. Michael and Modell (2003) compiled a list of active learning activities that include the following: problem-based or case-based learning; cooperative/collaborative learning/group work of all kinds; think-pair-share or peer instruction; conceptual change strategies; inquiry-based learning; discovery learning; and technology-enhanced learning. Many of the activities listed could be readily integrated with cloud-based applications. ICT skills that students either possess or are in need of acquiring warrant the need to include these components in the educational experience. An investigation of familiarity with ICT in the daily lives of students in a comprehensive study (n = 50,274 respondents from 161 institutions in 11 countries and 43 U.S. states) revealed that over 92% of college students owned at least two internet capable devices, 91% owned a computer, and 92% owned a smartphone (Dahlstrom et al., 2015). The familiarity level with these technological tools among students is promising and may lead to ease in ICT accessibility and integration in the classroom. Utilization of active learning and ICT are a positive means of encouraging student-centered learning and peer learning in education. Applying cloud-based applications and the decentralization of teacher-centered instruction are a means of accommodating student needs to socially interact, engage in participatory learning, and to be actively involved in the creative learning process.

Action Research Process

This study will utilize a framework similar to that of the action research process, a methodology for assessing teaching practices. Action research has been applied in the humanities since the 1940s (Burns, 2005). Essentially, practitioners utilize qualitative and/or quantitative methods to find ways of enhancing their teaching while also trying to solve challenges faced in the classroom (Burns, 2009; Crookes & Lehner, 1998). A teacher-researcher attempts to first identify problems in the immediate teaching situation and to then take the steps of conducting a preliminary investigation,

developing a hypothesis, planning intervention to address problems, and then assess the results (see Figure 1). Initial steps include *problem identification* and *preliminary investigation.* These steps revolve around discussions of university teaching practices. In the stages consisting of *hypothesis* and *planned intervention,* the problem-solving means to handle the concerns of traditional lecture-based teaching will be presented along with a proposed plan of action. In the final stage of the action research process, this step will be partially fulfilled in this investigation since actual implementation of the targeted course is set for a future date. Nevertheless, the proposed modifications in the utilization of ICT and active learning were applied in related courses. Questionnaire results and interviews from those participants will serve as a substitute for formulating the final stage of the action research process.

Figure 1. *The Action Research Process*
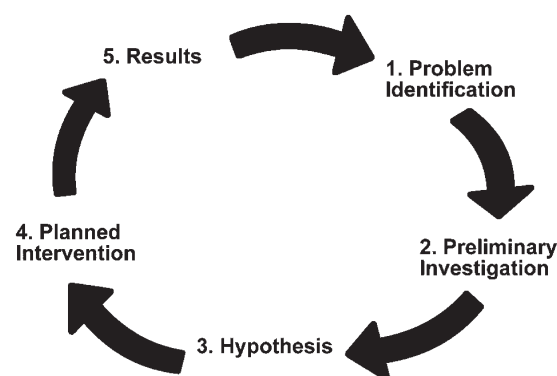
The matter of lecture-based instruction

Enhancing intellectual engagement is one of the main objectives of the college experience and yet traditional lecture-based teaching, one of the most widely utilized methods in the classroom, fails to motivate students and meet university demands (Smith, Sheppard, Johnson, & Johnson, 2005). Moreover, lecture-based teaching has even been described as being boring, irrelevant, and useless (Renner, 1993; Nandi, Chan, Chan, Chan, & Chan, 2000). Johnson, Johnson, & Smith (1991) state that as a lecture proceeds, students' attention to the content being presented continues to decrease. Additional criticism mentions the inability of lecture-based instruction to foster higher-order cognitive

and attitudinal goals (Cashin, 1985; Frederick, 1999; Renner, 1993). Moreover, alienated and superficial approaches—often characteristic of traditional lecture-based teaching—result in short-term memorization of content (Green & Dorn, 1999). In a comprehensive examination of results accumulated from 225 research studies focusing on teaching methods in STEM (Science, Technology, Engineering and Mathematics) education, it was found that a significantly higher percentage of students were likely to fail in traditional lecture-based courses than those enrolled in courses that integrated active learning with failure rate differences estimated at 33.8% and 22.8% respectively (Freeman et al., 2014). Additionally, Huba and Freed (2000) describe lectures as being beneficial only to the professors who teach the classes since the conditions for promoting learning (e.g., actively seeking new information, organizing it in a meaningful way, and explaining it to others) are essentially the elements utilized in giving a lecture. Mabry (1995) advises instructors to relinquish some control for the benefit of students who will learn more and will be able to retain information longer.

Constructivism and Active Learning

Active learning is based on constructivism which considers learning to involve a process of making meaning from existing knowledge and building on that knowledge for higher levels of understanding. The concept of constructivism does not explicitly provide directives on the means of achieving these aims, but it can be deducted that such results may come from an active learning environment that promotes engagement and interaction. Active learning does not refer to simply doing activities; rather, students are engaged in the process of reflection, evaluation, analyzation, synthesization, and the communication of information (Fink, 2003). Dufresne et al (1996) state that students would benefit from learning opportunities with new information or experiences, and also mention the following as being suitable for promoting student learning: (a) examine their own ideas; (b) determine the extent to which the new experiences make sense in relation to these ideas; (c) consider possible alternative explanations in

what they have experienced; and (d) evaluate the usefulness of different perspectives. Establishing a classroom format that can enable such interaction would be a substantial change from traditional mediums currently offered in lecture-based classes. However, this is not to dismiss the importance for guidance to be maintained in some context (e.g., Kirschner, Sweller, & Clark, 2006); rather, the inclusion of an active learning component should be considered as a means of solidifying knowledge and understanding for students. As pointed out in *Bloom's Taxonomy of the Cognitive Domain* (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956), learning is not merely rote memorization; rather, it involves analyzing and evaluating concepts, processes, procedures, and principles. Nearly a half century later, Anderson and Krathwohl (2001) introduced a revised version of the Bloom's Taxonomy (see Figure 2).

Bloom's Revised Taxonomy, a layout of educational learning objectives, is parallel in its perspective to many of the aims of active learning. The taxonomy is arranged in hierarchical order with each successive level being higher in complexity. At the base of the taxonomy lies *remembering*. This involves recalling or recognizing information, ideas, and principles. Students may remember facts, terminology, basic concepts, or whatnot without necessarily having a grasp of meaning. The second level includes *comprehension*, also referred to as *understanding* in some versions of the taxonomy. Here, students would be expected to be able to comprehend and interpret information based on prior learning. Demonstrating an understanding of information could entail providing comparisons, interpretations, descriptions, and so on. At the third level is *applying*. Students at this level may select, transfer or use concepts and principles to solve a problem or complete a task. Again, learners may refer to prior knowledge, identify connections, and apply that information to the task at hand. The fourth level is *analyzing*. Students would be expected to have the ability to distinguish, classify and relate information. The analyzing process may involve examining more details within concepts, finding evidence, and determining potential relationships, causes, and effects. At the fifth level lies *synthesizing*. Students may originate ideas and integrate them into a plan or proposal. Essentially, students at this

Figure 2. *Representation of Bloom's Revised Taxonomy*
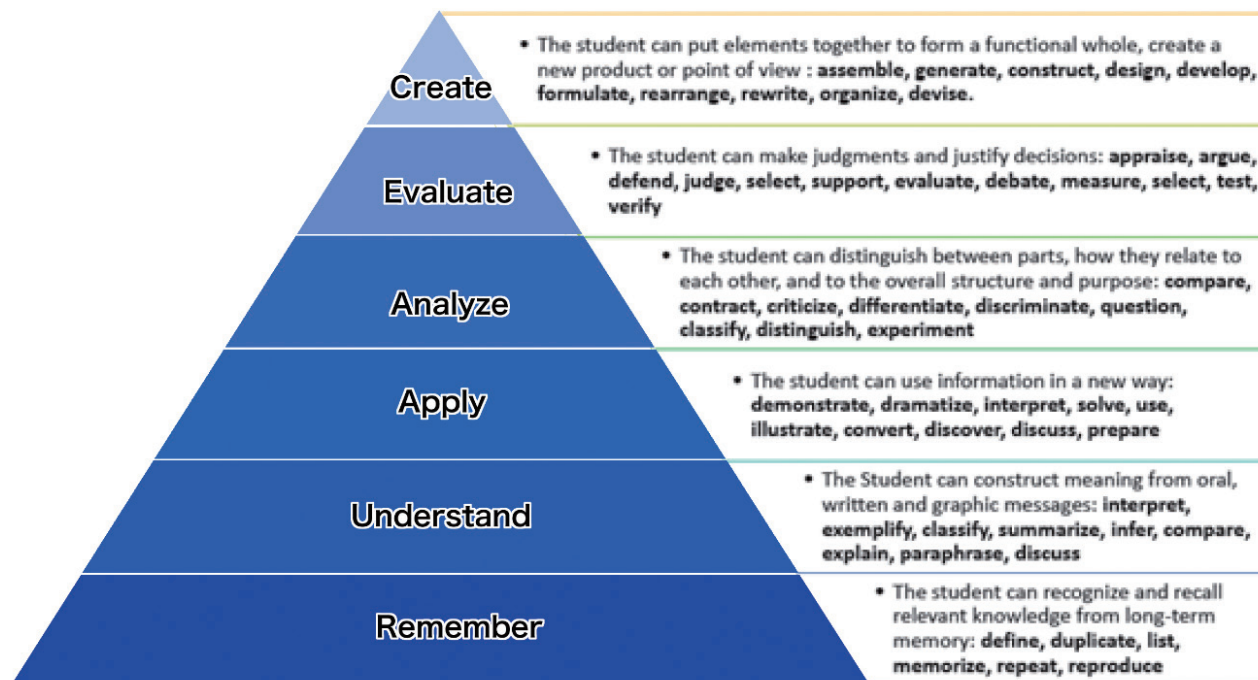
Note. Adapted from "*A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*" by L. Anderson & D. Krathwohl (Eds.). 2001, New York: Addison, Wesley Longman, p. 215.

level have obtained the ability to build a framework or pattern from a variety of elements and can relate those elements into one. The sixth and highest level of the taxonomy is *evaluating*. Students reaching this plateau would have acquired the ability to judge, critique, and assess. The evaluation process relates to the ability to formulate opinions and assess the validity of ideas or content based on evidence or a set of criteria. As illustrated in Bloom's Revised Taxonomy, many of the aspects described at each of the successive levels are representative of the aims of active learning—using existing knowledge and building on that knowledge for a higher level of understanding.

Activating learning in the classroom

A number of instructional approaches have been suggested over the years, and many of these may offer insight into ways of modifying lecture-based teaching to include aspects of active learning. In an investigation that reviewed research on active learning, Prince (2004) presents several recommendations for practitioners to consider:

…students will remember more content if brief activities are introduced to the lecture. Contrast this to the prevalent content tyranny that encourages faculty to push through as much material as possible in a given session. Similarly, the support for collaborative and cooperative learning calls into question the traditional assumptions that individual work and competition best promote achievement. The best available evidence suggests that faculty should structure their courses to promote collaborative and cooperative environments ….Studies also suggest that students will retain information longer and perhaps develop enhanced critical thinking and problem-solving skills, especially if PBL is coupled with explicit instruction in these skills. (p. 7)

Prince (2004) also mentioned that classes should not omit individual student responsibility, and that class activities should not necessarily be entirely team-based. These recommendations can provide some guidance in ways of integrating active learning into the classroom, but each course will have different demands and the course of action may vary in each particular case. As such, considering a variety

of suggestions may offer insight into the needs of instructors in different situations. In one study, Felder (1997) describes a simple and short activity that offers some resemblance to the active learning component but in the form of a structured question-answer period; an activity that he describes as being suitable, even for some of the most introverted professors. Likewise, Bonwell and Eison (1991) allude to a similar perspective by suggesting question-answer sessions but those that expand beyond yes-no answers. They also recommend that such sessions be periodically given between 10 to 20 minute intervals as a precaution to avoid problems with the listening attention span among students. Likewise, Smith (2005) suggests periodic breaks during lectures to allow students to engage and work together to process information. Informal cooperative learning allows students to become actively involved in understanding the content that they are supposed to learn (Smith, 2005). The use of periodic intervals is also suggested by Ruhl, Hughes, and Schloss (1980) but for reflective discussions. They recommend a pause of two minutes between 15 minutes of lecturing to allow students time to engage in pairwork to discuss, reflect, and share notes.

In approximately the same timeframe, a similar reflective periodic pause in the lecture allowing students time to reflect on content is suggested by Brame and Biel (2015), but in this case they recommend self-reflection specifically for reviewing and adjusting notes. In essence, students should attempt to write and review as much of the lecture content from each previous lecture session. Among a number of benefits, the routine and periodic timeline allows students to double-check and clarify content, and to also retrieve information from memory—strategies suitable for enhancing long-term memory. A similar short in-class reflective writing assignment is suggested by Angelo and Cross (1993). The activity attempts to keep students mentally focused on course content, and also provides a means to elicit feedback for the instructor so that a determination can be assessed as to what students have comprehended from the lecture. These suggestions could be particularly helpful for EFL students enrolled in courses similar to British Culture; those heavily laden with content.

Providing any sort of opportunity for students to participate in class redirects learning from being passive to being active. Essentially, maximizing an active learning approach necessitates meaningful conversation, interaction, reading, reflection, and writing about the content, ideas, and issues of the subject matter (Meyers & Jones, 1993). There are many potential ways of getting students involved in active learning, and these may consist of activities such as the following: class discussion, cooperative learning, problem-solving activities, experiential learning, role-playing, peer learning, fieldwork, computer-aided instruction, writing tasks, and so forth (Houston, 1995). As for collaborative group work (e.g., Johnson, Johnson & Smith, 1991), the time factor should still be of consideration in the context of in-class discussions since thoughts and opinions in real time require an equal span of reflection and processing (Tobin, 1986). Regardless of the activity in question, it is critical for students to have an adequate amount of time to formulate their thoughts and opinions before proceeding thereafter.

Integrating ICT as a mean of promoting active learning

As previously mentioned, the utilization of ICT in the classroom is one of the aims proposed in the 2020 MEXT reforms that has also encouraged methods in line with active learning. The use of ICT in the classroom can be adapted in innumerable ways, one of which is the inclusion of active learning. ICT use varies among teachers, partially based on their own abilities and the instructional purposes of the class (Hung & Hsu, 2007; Mueller, Wood, Willoughby, Ross, & Specht, 2008). Although ICT and active learning have been commonplace in many educational settings for some time, there have not been any set definitive practices. Bransford, Brown, and Cocking (2000) warn that the effectiveness of ICT is dependent on how the technology is utilized by teachers in the classroom. As such, a plan based on curriculum objectives (active learning and ICT integration), course content (British culture), along with consideration of student abilities and needs will be presented.

In the past quarter century, there has been a gradual shift away from teacher-centered instruction and more towards student-centered learning. An indirect effect of this change has redirected learning

from being primarily passive-input driven to active-output driven. The added element in the equation is ICT which has the potential to have a significant impact in the learning process. In organizing such tasks, merely assigning students into groups does not guarantee that collaboration and peer interaction will materialize. Some planning and guidance will be needed to avoid the advent of individual isolation within groups rather than the goal of cooperation among group members (see Table 1). Smith (2005) states that structuring cooperation among students is vital for group work to be truly collaborative. Johnson et al. (1998) advise teachers attempting to organize cooperative learning groups to consider the following: (1) specify the aims of the task; (2) layout the structure, e.g., group size, assignment of students to groups; (3) explain the task and the need for cooperation to achieve the task; (4) monitor interaction and progress in each group and intervene when needed; (5) evaluate learning outcomes individually and collaboratively.

Taking these aspects into consideration, a collaborative group assignment utilizing ICT in the form of cloud-based applications may fulfill many of the aforementioned concerns. The integration of ICT technologies into learning may alleviate some of the challenges and issues commonplace in pair and group activities alone. For instance, cloud technologies have become increasingly utilized in educational settings. Cloud-based applications such as the Google Suite for Education offer a means to engage in a direct and effective communication channel, anonymity in eliciting feedback, accessibility in sharing content, and the monitoring of student progress. In essence, the utilization of cloud-based applications in the classroom provide teachers with the means of creating an active learning environment.

Several cloud-based applications from the Google Suite platform were selected for utilization in a course on British culture for both individual and collaborative assignments. There are multiple applications within the education-based version of Google Suite, and those under consideration for the course include the following: Gmail, Drive, Calendar, Vault, Sheets, Forms, Docs, Slides, Sites, and Hangouts. A gradual introduction of cloud-based applications and brief training sessions should be integrated into several classes prior to initiation of the ICT collaboration assignments. In regard to the applications within the Google Suite platform, a brief description of features, capabilities, and planned use in the project will be presented. *Gmail* will be used primarily for direct communication. *Gmail* addresses will be shared among group members. The cloud-

Table 1. *Comparison of Learning Groups*

Traditional (Less Structured)	Cooperative (More Structured)
Low interdependence. Members take responsibility only for themselves. Focus is typically on a single product (report or presentation).	High positive interdependence. Members are responsible for their own and each other's learning. Focus is on joint performance.
Individual accountability only, usually through exams and quizzes.	Both group and individual accountability. Members hold self and others accountable for the quality of work.
Little or no attention to group formation (students often select members). Groups are typically large (4-8 members).	Deliberately formed groups (random, distribute knowledge/experience, interest). Groups of small (2-4 members).
Assignments are discussed with little commitment to each other's learning.	Members promote each other's success, doing real work together, helping and supporting each other's efforts to learn.
Teamwork skills are ignored. Leader is appointed to direct members' participation.	Teamwork skills are emphasized. Members are taught and expected to use collaborative skills. Leadership role is shared (e.g., rotation) among all members.
No group processing of the quality of its work. Individual accomplishments are rewarded.	Group processes quality of work and how effectively members are working together. Continuous Improvement is emphasized.

Adapted from "Pedagogies of engagement: Classroom-based practices," by K.A. Smith et al., 2005, *Journal of Engineering Education, 94* (1), p. 94.

based storage application *Drive* provides users with the option of both storage capabilities and ease of accessibility in shared-storage content. Therefore, this application will be of importance for students in accessing and sharing class materials along with contributing to collaborative assignments. The use of *Calendar* will primarily assist students in scheduling a time to work together on tasks requiring simultaneous contributions among group members. *Vault* is a standard application within Google Suite. It is primary an archiving tool that will be of importance for maintaining data. Similarly, the spreadsheet application *Sheets* will be used by the instructor to share links with students and organize data. Student use of this application will be optional. *Forms* will be used to evaluate student progress by collecting periodic feedback via questionnaires and quizzes. This application will also allow the instructor to monitor the collaborative environment of each group. Docs is a word processing application, and it can be an effective tool for all writing assignments; collaborative and individual alike (for further discussion see Fewell & MacLean, 2016). As for the application *Slides*, it will be used for creating presentation slides and for pair and group presentations. Additionally, the instructor will use the application for class presentations and to share presentation slides with students. Google's website platform *Sites* will be limited to sharing links and course content. The multifaceted video-conferencing, phone and chat application *Hangouts* will be introduced in class training sessions, and students will be encouraged to utilize its capabilities to maintain communication channels with group members. However, student utilization of this tool will be optional. In addition to these applications, the SNS platform *Google Communities* will be used by the instructor and students as the primary communicative medium for class-wide announcements.

British culture, active learning, and ICT

The objectives of the British culture course are to provide students with an overview of general cultural and historical aspects of the United Kingdom. In addition, a number of contemporary political and social issues will be introduced to students. The course textbook, *Britain for learners of English* (O'Driscoll, 2009), will be utilized for the duration of one academic semester. The textbook contains a substantial amount of content that can be especially challenging for EFL learners. As a result, the course will maintain a lecture-based component but will be modified to enhance aspects pertaining to active learning and ICT utilization. In order to enhance active learning, the format of traditional teacher-centered lecturing will be minimized to some extent. A substantial amount of content encompasses aspects of British culture, and avoidance of lecture-based teaching entirely would be counterproductive. Lecture slides embedded with interactive components such as short questions or discussion topics may provide students with opportunities to actively participate in lectures. Additionally, the use of QR codes could direct students to related lecture content or even be utilized to gather immediate feedback (e.g., *Google Forms*) from the audience. Several previously mentioned suggestions on modifications of lecture-based teaching will be utilized in the class; specifically, routine set intervals for reflection and discussion (e.g., Ruhl, Hughes, & Schloss, 1980). Although these brief intervals may provide students with opportunities to engage in active learning, there are also secondary benefits in terms of information gathering and double-checking content—critical strategies for EFL learners. Faust and Paulson (1998) have accumulated a list of active learning activities that could supplement a lecture-based university classes (see Table 2). Some of the activities include individual work while others include pair and group work. Instructors will need to determine the suitability of each activity in terms of course and learning objectives.

Certainly, a variety of factors such as those pertaining to the content being addressed, time considerations, as well as teaching and learning preferences may dictate the choice of active learning assignments to be integrated in a particular class. There are numerous class activities that can be integrated into lecture-based classes and may hopefully alleviate student boredom from the monotony of prolonged one-way directed speech. Any opportunity to add diversity in the presentation of class content with the element of active learning should be pursued. As such, many of the activities

presented (see Table 2) will be integrated in the course, British Culture, to more closely engage students in the active learning process.

One of the major projects in the course that will accommodate various aspects of the ICT component (through the utilization of several cloud-based applications) is the completion of a multifaceted collaboration project. In an attempt to maximize student exposure to ICT technologies while promoting an active learning environment, the collaboration assignments will extend throughout the duration of the course and should assist students in better understanding content—aspects of British culture—while also improving ICT skills. In sum, the first activity will consist of collaboration encompassing the preparatory stages of reading, writing, and reflection. Preparation for each class encompasses students interacting via cloud-based applications to complete reading and writing assignments. Online communicative interaction may assist students in aspects pertaining to peer learning and reflection of assigned content. In the in-class portion of the assignment, students reflect further on lecture content in periodic group discussions. The next stage involves the preparation for student presentations. In preparation, students work together to create presentation content in Google *Slides*. Thereafter, presentations will be assigned to students within their respective groups and later to the entire class. The general structure of the activity consists of three primary stages that include the following: preparation, implementation, and feedback. During the preparation stage, several applications will be utilized as the communicative mediums, including: *Google Communities*, *Sites*, and *Docs*. Additionally, in-class explanations will be supplemented with the use of *Slides* to present information concerning aspects of the project and provide other relevant information to students. The utilization of multiple communication applications are also intended to familiarize students more with cloud-based applications, adhering to the administrative aims of ICT enhancement and also reducing potential misunderstandings throughout the duration of the project. As a means of ensuring adequate preparation for planned group discussions in the project, students are required to upload notes and outlines of weekly discussion topics in a cloud-based folder before each class. Preparatory assignments will involve student submissions of written work in *Docs* and the uploading of other related materials via *Drive*. Students are encouraged to collaborate in preparation of discussion activities. Nearly all Google Suite applications are integrated with tools for collaboration, but the exclusive communication application Hangouts can be especially effective for students to coordinate work and share information with one another.

Table 2. *Techniques of Active Learning*

Activity	Description	Example Activities
Individual Exercises	Individual activities that provide instructor with feedback on student understanding and retention of material.	Daily journal; Reading quiz; Brief written response
Question & Answer	Tweaking questioning techniques which increase student involvement and comprehension.	Students summarize peer's answers; Students create quizzes
Immediate Feedback	Instructor stops periodically to give quick tests of the material to assess student retention.	Respond with hands raised after questioning during lecture
Critical Thinking	Begin group discussions of lecture material before it is presented to the class.	Inquire with questions or quizzes beforehand
Share/Pair	Place students in pairs to provide opportunities to share views, hone debate skills, and so forth	Discussion; Sharing notes; Peer assessment
Cooperative Learning	Place students in groups of 3 or more, present problem-solving tasks	Role playing; Panel discussions; Visual lists

Adapted from "Active learning in the college classroom," by J.L. Faust, & D.R. Paulson, 1998, *Journal on excellence in college teaching, 9* (2), 3-24.

In the actual implementation of the project, the initial framework will consist of group work. Students are to be placed in groups of three. The participants in each group are randomly changed every few weeks. In the activity, students are assigned content from the corresponding textbook chapter and class lecture. For instance, several weeks into the semester the focus of the lecture is on the topic of political life. In the course textbook, *Britain for Learners of English* (O'Driscoll, 2009), the topic encompasses a full chapter with subsections covering the following: public attitudes toward politics, style of democracy, constitution, style of politics, political party system, and modern situation. Subsequently, the activity would require students to focus on assigned readings in the textbook prior to each class and prepare a short written summary of each subsection. The written summary will be completed with the use of the writing application, *Docs*. Students may seek assistance from one another while undertaking this assignment, but each student will be responsible for submitting an individually written summary. The extent of this assignment merely consists of an outline with key concepts and terms from each subsection. Reading and writing assignments prepare students for group discussions that will be assigned at periodic intervals throughout the class lecture. Based on student input in the discussions, peer feedback will be elicited via Google *Forms* to ensure individual responsibility in preparation and to encourage participation among all group members. The component of peer learning is integrated throughout the activity. Additionally, feedback available to the instructor in *Forms* can readily provide information on class and student progress along with information on the retention of course content. The in-class procedure of the activity basically consists of structured group discussions with student rotation (e.g., turn-taking) to provide opportunities and equality in the amount of talk time among participants. At the conclusion of each timed discussion, students submit feedback via Google's survey application *Forms* about their partner's performance on the topic with scores set on a scale from 1 to 10 (high). The option of submitting comments will also be available. On a periodical timeline, the instructor will share anonymous comments and scores with students individually.

The presentation assignment consists of preparing slides in collaboration with other group members, conducting presentation sessions within the group, and ultimately giving a group presentation to the entire class. Presentation slides will be created collaboratively with each group member contributing to the project within a structured layout. This includes instructions on the number of slides to be created per student and a sample model for groups to follow. Additionally, students will be required to write a script in the presentation notes section of the *Slides* application. As a means of developing presentation skills, short in-group presentation sessions will be integrated in the course with students using individual smartphones, tablets, or laptops to display presentation slides. Following each presentation, group members will rate one another by submitting feedback (via *Forms*) on student performance in terms of content and delivery. The weekly assignments will prepare students to more adequately evaluate class content, interact and learn collaboratively, enhance presentation skills, improve ICT learning, and so forth. It should be mentioned that these assignments are a preparatory step for students to achieve one of the most challenging of all class assignments—conducting a full presentation. All students will be required to complete this task in front of the class, and the weekly assignments—with the use of structured peer feedback—will assist students in this endeavor. The full class presentation will be conducted by members of the group, each sharing an equal amount of work and responsibility in the preparation, creation, and implementation of the presentation. Feedback on individual participation and contributions to the project will be elicited via Google *Forms* from other group members. Likewise, *Forms* will serve as the feedback mechanism for the class audience in rating the quality of performance in group presentations. The presence of a continual and active communications channel that is integrated throughout all phases of the activity, via cloud-based applications, adds to the dimension of engagement, interaction, and responsibility in the learning process.

Results and Conclusion

In following the step-by-step process of the action research model (Burns, 2009), the final step was partially fulfilled in this investigation since implementation of the targeted course is set for a future date. Since the proposed ICT and active learning modifications in the lecture-based course British Culture have been applied in several other related courses, questionnaire results and interview comments from participants in those classes may serve as indicators on the viability of the proposed activities. Results from an investigation of discussion activities with a similar collaborative/ICT structural framework, but with the added component of pair work, offer some insight into the potential of the proposed modifications (see Table 3).

Table 3. *Students' Reported Learning Experience with Pair/Group Work*

About Pair/Group Work	Statistics		
	Count	Mean	* SD
1. Commonly used in my English language classes	98	3.70	0.90
2. I enjoy pair/group work	98	3.86	0.95
3. Pair/group work is useful for practicing English	98	4.16	0.89
4. I use mostly English during pair/group work	97	3.72	1.01
5. I slow down my speech to help others	98	3.50	1.07
6. Others slow down their speech to help others	97	3.77	0.84

* SD = Standard Deviation

Note. Reprinted from "Improving feedback and interaction for university EFL oral communication activities using cloud applications," by G. MacLean & N. Fewell (in press), Proceedings of the APLX 2017 International Conference on Applied Linguistics, Taipei, Taiwan: APLX .

The table displays questionnaire results of students who participated in an EFL university class utilizing pair/group discussion activities that likewise integrated collaboration and ICT cloud-based applications from the preparatory stages onward. As for the statistics listed in the table, a brief description will follow. Data were derived from the questionnaire results of students (n=98) who participated in pair/group discussion activities. Participants replied according to the extent of agreement or disagreement with each statement in typical Likert format. Specifically, the selection of responses ranged from answer choice 1 (an indication of strong disagreement) to answer choice 5 (an indication of strong agreement). As for individual items, the first was in reference to pair/group activities in other L2 classes. The second item (3.86) attempted to measure the extent of perceived enjoyment of pair/group activities. As for the third item, it referred to the usefulness of the activities (4.16), and the fourth item was in reference to L1 versus L2 use in the activities. Finally, the last two items were related to observed speech adjustments (3.50 self; 3.77 others). Better insight was perhaps gathered from interview comments with the majority of participants providing positive responses about the activity. However, some students mentioned concern with the unfamiliarity of pair/group work. (MacLean & Fewell, in press)

The abovementioned discussion and group presentation activities utilized content similar to those planned for the British Culture class; in particular, those concerning current issues and aspects of culture. Likewise, the ICT component consists of cloud-based applications from the Google Suite platform to provide students with additional opportunities to collaborate outside of class and to offer feedback to one another. The relative success of the discussion activity in a related EFL course may be attributed to several factors. For instance, the distribution of content and directives streamlined via several cloud-based applications—Google *Communities*, *Docs*, *Sheets*, and Sites—offers less likelihood for student confusion of assignment tasks. In addition, the systematic routine of evaluation in using the cloud-based application *Forms* along with the anonymity in feedback ensures individual responsibility in completing assignments. Moreover, students are able to make improvements based on peer feedback, and the available information also provides the instructor with a reliable source on student progress. As such, as similar layout will be utilized in the British Culture course.

The basis for following the framework of the action research process is to systematically analyze and reflect on teaching practices. A content-laden course, such as British Culture, that is traditionally taught in a predominantly lecture-based format could

benefit with some of the suggested modifications. An active-learning element and the integration of ICT cloud-based applications offer much in possibilities to improve the learning experience of students. Cloud-based technologies have only been recently applied in EFL settings, and innovative practices will need to be pursued to tap the potential of these applications. Modifications and adjustments of traditional teaching practices should be attempted in order to find more effective and beneficial ways for helping students to learn and obtain educational objectives.

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