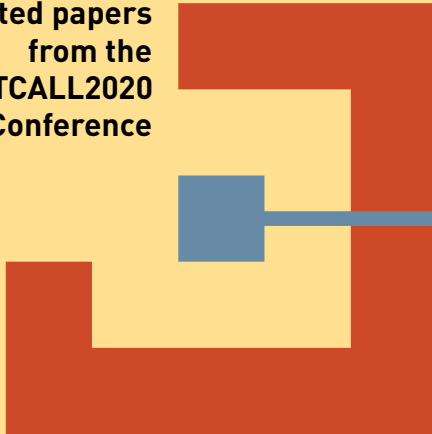


# TEACHING with TECHNOLOGY 2020

Selected papers  
from the  
JALTCALL2020  
Conference



JALTCALL  
2020



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JALT Central Office  
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## 2

## Taking an English Language Curriculum Online

Steven Asquith, Phoebe Lyon, and Kathryn Jurns, Kanda University of International Studies

### Abstract

Whilst online courses have become ever more prevalent in the educational field in recent decades, their efficacy is still debated, especially with respect to language communication classes, which traditionally entail human interactions. Although there has been previous, limited research conducted into online learning options at the same tertiary institution (Mynard & Murphy, 2012), online courses were still far from ubiquitous in the Japanese landscape of tertiary language education curricula at the time of this study. However, adoption of online courses would allow for the expansion of current programs, enabling non-traditional students access to equal education opportunities as well as offering institutions a practical alternative to having to cancel lessons owing to unforeseen circumstances. This study investigates whether online lessons of the core curriculum classes offered in a language-focused Japanese university context, and which were based upon the regular in-class course content, offer comparable value to the regular classroom-based lessons in terms of students' perceptions of the delivery, structure, and usefulness of the lessons. By providing practical descriptions of how the traditional classroom lessons were adapted and delivered online, as well as quantitative feedback comparing the students' perceptions of the online versus classroom lessons, the paper will highlight the challenges of creating online course content, considering both instructors' and students' viewpoints.

昨今の教育現場において、オンライン授業は広く取り入れられるようになったが、外国語コミュニケーション科目に代表される対話に重きを置く授業では、オンライン化によって具体的にどのような効果が得られるのかまだ論議の余地がある。過去に当学でオンライン授業に関する小規模な研究が行われたが (Mynard & Murphy, 2012) 講義のオンライン化はその当時、日本の大学の語学教育カリキュラム上で全く普及していなかった。しかしながらオンライン授業を採用することにより、社会人を対象に教育の門戸が開かれ、やむを得ない事情により休校・休講になった授業の振替処置がとりやすくなるなど、既存の語学プログラムの更なる発展を期待できる。この研究では、日本の一語学大学において正規の対面授業と同一の全学共通教育カリキュラムを用いたオンライン授業が、対面授業と比較した場合、学生が講義の進行、構成、有用性において同等の価値を得られたと感じるか調査する。従来の対面授業がオンライン化に至るまでの実用例をまじえ、学生を対象にした対面・オンライン授業への意識調査と共に紹介しながら、本論文では、教員・学生双方の視点からオンライン授業構成の抱える今後の課題に焦点をあてる。

**Keywords:** online lesson, in-person lesson, blended learning, student perceptions

キーワード: オンライン授業、対面授業、ブレンド型学習、学生の意識

As online learning opportunities have become more common in recent decades with the advancement of technology, and even more so in 2020 with the recent campus closures of educational institutions due to COVID-19, the fact remains that there is still considerable debate about whether online offerings are able to produce the same desired educational outcomes as in-person lessons. Whilst online learning environments have proven effective at accommodating students' different learning and social styles (Jeschofnig & Jeschofnig, 2011) as well as catering to non-traditional students, it is difficult to overlook the obvious drawback of a lack of face-to-face interaction. This study was conducted at a language-focused university in Japan. Being that the basis of lessons is on communication, this paper will draw on quantitative data and qualitative testimony to investigate whether the lessons offered online were able to offer comparable value based upon student and teachers' perceptions to the in-person, classroom-based lessons traditionally offered. Value is defined both quantitatively through the evaluative items' ratings and qualitatively through the perceptions of students and teachers.

## Literature Review

This study is an analysis of students' perceptions of the value of online lessons in comparison to in-person lessons with respect to the language skills used, the amount of interaction occurring, and the lessons comparative perceived value. At the time of the study, the university did not offer online courses or lessons for students. However, a previous study conducted by Mynard and Murphy (2012), whereby students completed 100% of their tasks online in an "experimental day", showed that whilst students had found the online activities both useful and convenient, they had expressed concerns regarding possible limitations in technology and how these might negatively impact their experience. Of note, the purpose of this study was not to replace the traditional classroom setting, but rather to investigate the possibility of providing a blended learning environment to help accommodate a temporary change of schedule in the first semester of the 2020 academic year, resulting in 13 weeks on campus instead of the usual 15. Although the semester would be shortened, the amount of material that needed to be covered would remain the same. Thus, a blended learning approach, which involves delivering instruction "through a combination of physical and virtual instruction" and which aims to combine the best features of both (Garrison & Vaughan, 2011), was one option proposed by the university. If implemented, the online lessons were to be interspersed amongst the in-person lessons during the semester.

Fortunately, research indicates that blended learning courses improve learning outcomes for students (Garnham & Kaleta, 2002; Twigg, 2003) and have led to higher average scores (Kenney & Newcombe, 2011), and increased course completion rates in some cases (Garrison & Kanuka, 2004). An important consideration when adapting an in-person course to an online environment is ensuring that course goals and objectives are successfully met (Koszalka & Ganesan, 2004). As such, the online lessons that the teachers created were

designed with the key learning outcomes in mind, incorporating a variety of tasks that are typically found in in-person lessons across the curriculum, such as listening, reading, speaking, and writing skills which become progressively more challenging as students advance from first to second year. In addition to a focus on the four skills, of which some have more or less of an emphasis depending on the course, there are the following nine overarching outcomes: audiovisual analysis, awareness of self as learner, textual awareness and control, criticality and interpretation, textual fluency, interactive capacity, interpretation and expression of multimodal meaning, lexico-grammatical control, and intercultural capacity. These outcomes are founded in the multiliteracies approach implemented throughout the department and are described in detail in Johnson et al. (2016). In an effort to preserve a level of interactivity common in in-person lessons, teachers included collaborative discussion tasks within the online lesson materials. Whilst the nature of online/asynchronous discussions allows students to access the discussion at different times and therefore better enables them to control the pace of interaction (Huang, 2000), it is also promising that interactions in online contexts have been found to be highly valued in many studies (Bollinger, 2017; Li, 2015; de Freitas et al., 2015; Wells, 1999).

It is also important to consider that “technology quality, online tools and face-to-face support are predictors of learner satisfaction” (Kintu et al., 2017, p. 17). Due to the introduction of iPads into classes in 2014, which all students own and use in their lessons on a regular basis, a logical assumption would be that students would feel less apprehension towards technology in the classroom than they had in the Mynard and Murphy (2012) study. However, it should be noted that the students were not familiar with the Canvas learning management system (LMS) that was used for the purpose of the online lessons created during this study. Many students may have had the experience of using alternative LMSs such as Google Classroom or Schoology; however, this was only in the context of regular in-person lessons. For students participating in this study, this was the first time to take an online lesson at the institution and therefore they were not accustomed to having a lesson without a teacher present to offer support.

## **Methodology**

The purpose of this study was to ascertain students’ perceptions of the value of a one-off, online lesson, versus traditional, in-person lessons in the context of an international university. To do this, seven researchers created online lessons for the six core-courses of the English Language Institute (ELI) curriculum taught during students’ first two years at the university. The courses are Freshman English and Foundational Literacies, both taught at the first-year level and which focus on listening and speaking, and reading and writing respectively. Media English (ME), English for International Communication 2 (EIC2), Academic Literacies: Reading (AR), and Academic Literacies: Writing (AW) are taught in the second year. ME and EIC2 focus on listening and speaking, while AR and AW focus on their namesakes.

Students who participated recorded their perceptions of online and in-person lessons in a survey as a basis for comparison of the two types of lessons. Both lesson types were conducted during their regularly scheduled lesson times. Each online lesson was given to two

classes for each of the six courses. In total, data from 124 students were analyzed. This figure was achieved by removing incomplete or duplicate responses and only selecting responses for which students completed both the in-person and online surveys. This resulted in a total of 124 pairs of responses ( $N = 124$ ). The data was analyzed using a repeated measures analysis of variance (rANOVA) to measure if results were statistically significant. This measure was chosen because of the counterbalanced, within-subjects design of the study.

The online lessons were constructed using the LMS, Canvas, and were designed to reflect typical learning outcomes of a regular, 90-minute, in-person lesson. The lesson content creators included tasks incorporating listening, analysis, writing, and/or collaborative discussion practice. Additionally, in an attempt to better replicate a traditional lesson, many teachers included online individual response tasks and peer-to-peer discussions. It should be noted that the free version of Canvas was used, which is more limited in functionality than the paid version.

The administration of the online lessons was fairly straightforward. Prior to the lesson, students were oriented to Canvas. For some, this included an orientation lesson, but for others, there was a more basic walkthrough of the functions they would be using. On the experimental day, students were asked to come to their regularly scheduled lesson times. At the commencement of the lesson that was to be completed online, participants exited the classroom and went to a common area to complete the online lesson. They were told to communicate using online methods if they encountered any issues. Finally, students returned to the classroom 5–10 minutes before the end of the lesson to complete the survey for the study. While the study was meant to replicate a student's experience of doing an online lesson, the lessons were administered during regularly scheduled lesson times to assuage the workload required of the participants.

For the study, a quasi-experimental, within-subjects design with two conditions was used. The instrument, a survey, focused on the delivery, structure, and perceived value of the lesson as opposed to the content. Thus, the online lessons used similar processes to the traditional in-person lessons, just with different content. This involved each lesson creator adapting existing course materials to be delivered online. In order to improve reliability, a mixed-method research design was implemented to also gather feedback on the lessons through student comments. Participants were asked to complete the survey at two different points, once after an in-person lesson and once after an online lesson. To counterbalance the study, one class of the two participating classes from each course first completed the survey after the in-person lesson, before completing it again after the online lesson. The alternate class did the opposite, completing their first survey after the online lesson followed by the in-person lesson and survey. In both cases there was a rest period of one week between the two classes. The purpose of implementing this rest period was to give them time between each type of lesson; the hope being that they would rate the in-class lesson on its own merits and not rate it in comparison to the online lesson and vice versa.

The data collected were used to analyze students' perceptions of in-class versus online lessons in an attempt to understand the following three questions:

1. What language skills did students feel they were using in each lesson type (online and in-person)?

2. How much interaction occurred between classmates and with the classroom teacher in each lesson type?
3. How did students evaluate the level, usefulness, use of technology, ease to follow, and level of interest in each lesson type?

## Results

### Quantitative Analysis of Students' Perceptions of the Online Compared to In-person Lessons

Student perceptions of the online materials compared to traditional in-class lessons were recorded based upon three criteria: 1) Perceptions of the skills used, 2) Perceptions of the amount of interaction taking place, 3) Perceptions of level, usefulness, ease to follow, technology use, and interest. Participant responses (N = 124) were analyzed once incomplete, duplicate, and single responses were removed. A repeated measures analysis of variance (rANOVA) was used to analyze the data for statistical significance as this best suited the counterbalanced, within-subjects design of the study.

#### Skills and Interaction

Students' perceptions of the extent to which each skill was used during the lessons were calculated by asking them to input percentage values based on the question "During the lesson, how much, in terms of a percentage, did you use each of the following language skills?". Therefore, for instance, if each skill were being used equally all four mean values would be 25%.

**Table 1**

Descriptive Statistics of Participant Perceptions of Language Skills Use

Skill	Condition	N	Mean	SD
Speaking	In-class	124	32.94	20.86
	Online	124	9.15	12.08
Listening	In-class	124	28.98	19.51
	Online	124	25.16	27.30
Reading	In-class	124	19.36	16.44
	Online	124	27.35	24.33
Writing	In-class	124	18.52	18.09
	Online	124	38.49	25.18

\* $p < .05$

(Adapted from De Veas et al., 2020)

Although the results comparing students' perceptions of the skills used in in-class and online lessons are not especially surprising, there are a few notable points of interest. As one might expect, reading and writing were perceived to be used much more in the

online lessons than in the in-class lessons and these differences were statistically significant; reading,  $F(1, 123) = 9.30, p = 0.003$ , and writing,  $F(1, 123) = 77.04, p < 0.001$ . The difference between perceptions of the use of speaking between online and in-class was also significant ( $F(1, 123) = 123.29, p < 0.001$ ). However, if anything, the mean value of 9% speaking in the online lessons is unexpected given there was no spoken component in the online lessons. The only skill which was not statistically significant in its difference between online and in-class was listening, which was perceived to be used almost the same amount. This is also somewhat surprising given that the online lesson lacked spoken interaction and only used written instructions. Thus, these results may reflect the extensive use of video and audio texts in the Freshman English online lessons.

Students perceived the online lessons to be much less interactive than the in-class lessons both in terms of interactions with their peers (in-class:  $M = 3.57, SD = 0.86$ ; online  $M = 2.21, SD = 1.68$ ) and with their teacher (in-class lesson:  $M = 1.86, SD = 1.35$ ; online:  $M = 0.60, SD = 1.13$ ). These results were also both statistically significant (interactions with peers:  $F(1, 123) = 71.35, p < 0.001$ ; interactions with teachers:  $F(1, 123) = 83.10, p < 0.001$ ). Although it is unsurprising that there was less interaction in the online lesson, this may be important to students' ratings of the evaluative items below.

### Student Evaluations

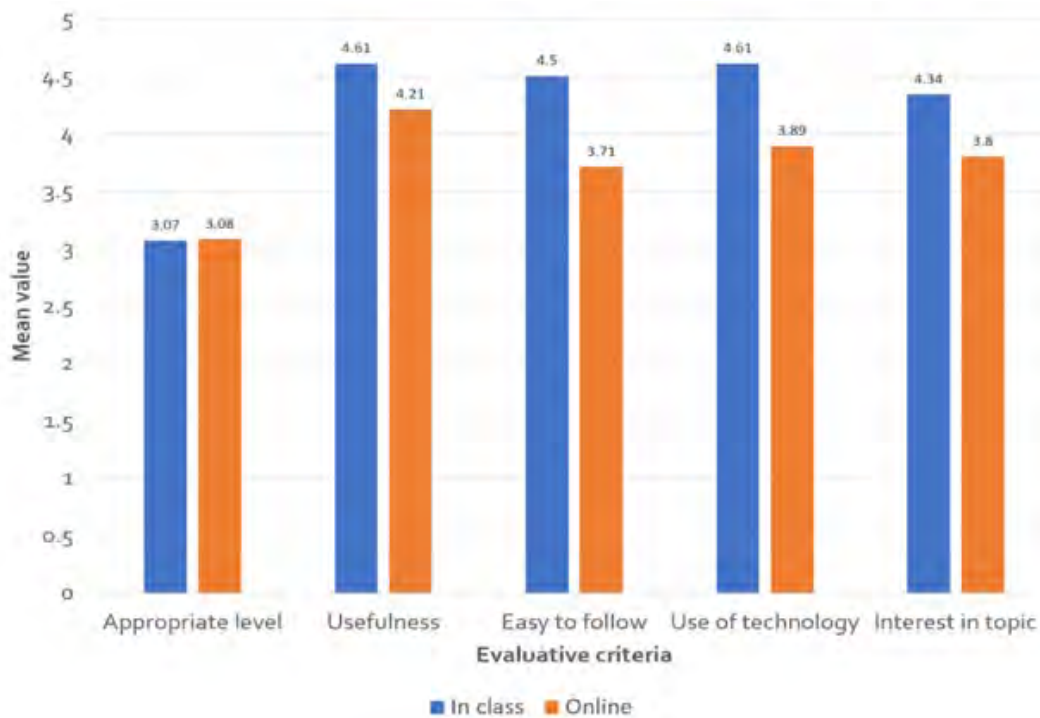
Student perceptions of the comparable value of in-class and online lessons were recorded using rating scales for level appropriateness, usefulness, ease to follow, use of technology, and interest. The mean values and standard deviations for each of the rating questions were recorded and an rANOVA was run to compare if the difference between in-class and online conditions was statistically significant. The difference was found to be statistically significant in students' perceptions of usefulness ( $F(1, 123) = 13.64, p < 0.001$ ), the ease to which they could follow the materials ( $F(1, 119) = 32.65, p < 0.001$ ), the use of technology ( $F(1, 123) = 25.26, p < 0.001$ ), and the level of interest ( $F(1, 123) = 21.18, p < 0.001$ ), with students perceiving the in-class lessons to offer greater value. There was no significant difference between student perceptions of level appropriateness.

Although, overall, the in-class lessons scored more highly on the evaluative criteria, it would be wrong to conclude that the online lessons were viewed negatively. In terms of the usefulness, ease to follow, use of technology, and interest in the topic, the mean values for the online lessons were positive, all rating higher than a three on each scale, which is above the midpoint of 2.5. Overall, therefore, students' perceptions of online lessons were still positive, even if they did not rate as highly as the traditional, in-class lessons.



**Figure 1**

Comparison of Mean Values of Evaluative Items.



(Reprinted from De Veas et al., 2020)

### **Qualitative Analysis of Student Perceptions of the Online versus In-person Lessons**

#### **Students' Comments**

The wide variety of comments students provided in the survey mirrored the varying perceptions recorded by the evaluative items. These highlighted the difficulties and advantages of the online lessons. Many students stated that they enjoyed the online lesson finding it useful and interesting, especially in practicing their writing skills. However, several students mentioned that they found instructions difficult to follow online and some stated their preference for meeting in person, especially with reference to speaking. Overall, comments provided a selection of positive and negative views on the online format.

**Table 2**

Students' Comments from the Online Survey

<b>Positive Student Comments:</b>
Good lesson! So interesting
It is a good way to learn myself.
If I can see an example when I write something such as a research paper, it is helpful.
The lesson has some advantages, but also has some disadvantages I think.
The topic was really interesting and shocking for me. I was surprised by the technology in this site.
いい経験になった [It was a good experience]
オンライン授業のメリットは、体調が悪くて家にいてもできるという点である。学校に出向くことができなくてもみんなと同じ授業を受けられるのは革新的だ [The good point about online lessons is that if you are unwell you can take them at home. It's innovative that we can take a lesson together without going to campus]
<b>Negative Student Comments:</b>
I was confused to do this class.
I want to take a lesson from you in direct.
課題が時間内に終わらないので減らして欲しい [I couldn't complete the materials in time so I would like you to decrease them]
レッスンというよりただ動画を見せているだけでは?とも思う。ライティングの勉強にはなるがそれを添削してくれるわけではない。 [I think it was more like just watching videos. It wasn't like regular writing practice as you couldn't get corrections]
この授業スタイルなら家でもできる。ホームワークと変わらない非効率な授業に思えました。 [We could complete this lesson style at home. It was no different to homework so I think it was an inefficient lesson]

## Discussion and Limitations

### Challenges for Teachers

Canvas is a vast, polished and professional LMS which is easy to use and intuitive for learners and teachers. The system allows teachers to create pages with multiple embedded media and then link these to discussion feeds easily, although, developing online lessons was found to be time consuming by the researchers. The lessons created were simple, clear and intuitive. However, it became apparent that lesson instructions needed to be very precise as it was not possible to deal with unanticipated misunderstandings given that students were away from the teacher and teachers were not able to check work until it was completed. The teachers also felt that they were unable to monitor students effectively, especially with respect to maintaining the university's English-only policy.

Using the free version of Canvas also limited which functions the researchers were able to include in their lessons. The paid version of Canvas may have enabled inclusion of other activity types. Over the last six months (since the start of emergency remote teaching) teachers' knowledge has improved and students have become more accustomed to online

learning. Given this experience, the addition of apps that allow for more student-to-student asynchronous interaction would be easier to integrate into the curriculum in the future, and potentially prove beneficial.

### **Challenges for Students**

An additional area that needed extra care was in the initial student set-up procedure, as students had to first go into the Canvas settings and register their email addresses so that the teacher could then add them to the course and give them access to the materials. Doing this remotely was potentially time consuming and difficult for some students, especially in an environment in which they could not easily ask for help. As well as not being able to ask the teacher, students were also often missing the benefits of peer support as they completed the online materials. Completing this part of the set-up together in-class was preferable as a few students in most classes still had difficulty logging on and finding the materials despite using instructional videos and in-class directions.

This unfamiliar LMS, whilst allowing for a similar experience across all classes, added a burden for students already comfortable using other platforms previously during in-person classes. This may have also negatively impacted students' perceptions of the online component of the blended learning lessons. If this study were to be repeated it may be better to choose an LMS familiar to students and teachers to better compare the perceived value of online and in-person lessons.

Overall, however, students' comments on the survey included both positive and negative views on the online format. Also, in terms of the lesson design, it was positive that there was not a significant difference in the appropriateness of the level between the online and in-person lessons. This suggests that the lessons were well-designed for what the students were expected to be able to complete.

### **Conclusion**

In this research project the comparative value to students and teachers of online and in-person lessons was evaluated using a mixed methods approach. Quantitative analysis of students' perceptions of the value of each lesson format showed that in-person lessons were rated significantly more valuable than online lessons in terms of usefulness, ease to follow, use of technology, and interest in the topic. This more positive evaluation may have been because in-person lessons were also considered to be more interactive by students. However, even though online lessons were not viewed as valuable as in-person lessons, they were still viewed positively overall. Students' comments also showed a range of positive and negative opinions about the online lessons which were reflected in the evaluative ratings. From a teacher's perspective, designing and creating the online lessons, although not difficult, was more time consuming than in-person lessons, and it was found that care especially had to be taken to give very precise and clear instructions. It should be noted that teachers needed to make sure that the goals of the lesson fitted with the affordances of the LMS, and that all students, including absentees, were well-orientated to the technology. If this was achieved, then teachers felt that effective and engaging materials could be created online despite these

lacking a spoken interactive component. Online lessons, as part of a blended learning environment may, therefore, be an option in providing better access to students for lessons in which in-person spoken interaction is not required.

## References

- Bollinger, A. (2017). Foreign language anxiety in traditional and distance learning foreign language classrooms. (Doctoral dissertation, Liberty University).
- De Freitas, S.I., Morgan, J., & Gibson, D. (2015). Will MOOCs transform learning and teaching in higher education? Engagement and course retention in online learning provision. *British Journal of Educational Technology*, 46(3), 455-471.
- De Veas, K., Frazier, E., Jurns, K., Asquith, S., Lege, R., & Lyon, P. (in press). In-class or online? Investigating student perceptions of asynchronous online lessons [Manuscript submitted for publication]. *Literacies and Language Education: Research and Practice* 3.
- Garnham, C., & Kaleta, R. (2002). Introduction to hybrid courses. *Teaching with Technology Today*, 8(6). <http://www.uwsa.edu/ttt/articles/garnham.htm>
- Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95-105.
- Garrison, D.R., & Vaughan, N.D. (2011). *Blended learning in higher education: Framework, principles, and guidelines*. Jossey-Bass.
- Huang, H. (2000). Instructional technologies facilitating on-line courses. *Educational Technology*, 40(4), 41-46.
- Jeschofnig L., & Jeschofnig P. (2011). *Teaching lab science courses online: Resources for best practices, tools, and technology*. Jossey-Bass.
- Johnson, N.H., Lyddon, P.A., Nelson, M.E., Selman, A., & Worth, A. (2015). JALT forum: Reimagining contemporary EFL curricula. In P. Clements, A. Krause, & H. Brown (Eds.), *JALT2014 conference proceedings*. JALT.
- Kenney, J., & Newcombe, E. (2011). Adopting a blended learning approach: Challenges, encountered and lessons learned in an action research study. *Journal of Asynchronous Learning Networks*, 15(1), 45-57.
- Kintu, M.J., Zhu, C., & Kagambe, E. (2017). Blended learning effectiveness: The relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education* 14, (7). <http://doi.org/10.1186/s41239-017-0043-4>
- Koszalka, T., & Ganesan, R. (2004). Designing online courses: A taxonomy to guide strategic use of features available in course management systems (CMS) in distance education, *Distance Education*, 25(2), 243-256. <https://doi.org/10.1080/0158791042000262111>

- Mynard, J., & Murphy, P. (2012). An investigation into offering flexible language courses utilising blended learning. *Studies in Linguistics and Language Teaching*, 23, 101–137.
- Twigg, C. A. (2003). Improving learning and reducing costs: New models for online learning. *EDUCAUSE Review*, 38(5), 29–38.
- Wells, G. (1999). The zone of proximal development and its implications for learning and teaching. In *Dialogic inquiry: Towards a sociocultural practice and theory of education* (pp. 313–334). Cambridge University Press.

### Authors' Bios

**Steven Asquith** is a senior lecturer at Kanda University of International Studies and co-editor of JALT's *The Language Teacher*, My Share column. He is interested in training learners to be more autonomous, especially relating to learning vocabulary, digital pedagogies, and new learning design.

**Phoebe Lyon** is a Principal Lecturer for Curriculum and Assessment at Kanda University of International Studies, Japan. Her research interests include learner autonomy, learner identity, materials development, and assessment.

**Kathryn Jurns** is a lecturer at Kanda University of International Studies. She received her Master of Education in Adult and International TESOL from the University of Cincinnati. Her research interests include academic writing in EFL, peer evaluation, and foreign language speaking anxiety.