Students' Perspectives of Attendance Taking and Student-Teacher Communication Via the ARS During the First Year of Emergency Remote Teaching

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Abstract

The move to emergency remote teaching (ERT) in 2020 due to the coronavirus pandemic forced instructors to seek ways of providing their course content remotely. It also compelled them to consider how they might carry out their standard non-content-related classroom practices of taking attendance and creating and maintaining student-teacher communication channels while distanced from students. In response to these latter needs, the multifaceted Attendance Record Sheet (ARS) was created (Rubrecht, 2020). With this single document, student attendance could be taken and communication with students could be fostered both remotely and consistently. Previous analyses of ARS use revealed it to have fulfilled its intended aims effectively, often beyond expectations (Rubrecht, 2021b, 2022b), yet students' perceptions of the weekly ARS and its various completion and submission requirements remained to be investigated. To this end, an online student questionnaire was administered at the end of the 2020 academic school year in order to gain information about students' views of the ARS and how they interacted with it. Results revealed that although some students acknowledged the sheet's shortcomings, they nevertheless regarded it highly, particularly because they understood its purpose and recognized the myriad benefits its use provided to all course participants. As a majority of students found the sheet to be clear and supportive to their learning, most expressed a desire to continue using it in future academic years should they be required to continue studying remotely, which ultimately was the case for many. Questionnaire results and pedagogical recommendations are presented and discussed.

Keywords: COVID-19, Coronavirus, Emergency Remote Teaching, Remote Teaching and Learning, Attendance, Communication, Japanese University

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Introduction

The World Health Organization's (WHO) official declaration on March 11, 2020, that the novel coronavirus COVID-19 outbreak was a pandemic prompted the closure of many educational institutions worldwide. As a result, emergency remote teaching (ERT) was initiated to protect the health and well-being of students, faculty, and staff. These closures brought about numerous disruptions to the normal processes and practices with which both instructors and students were familiar. Due to the declaration's timing, Japan's 2020 academic school year (hereafter, AY2020), which was scheduled to begin in April, was postponed to the second week of May so that all concerned parties — from students and instructors to parents and university IT departments — would have ample time to prepare for courses to be moved into an online-only educational environment.

For instructors at Japanese universities, the weeks-long postponement of AY2020's spring semester meant that there was time for them to move their course material online and become familiar with the tools they would use to conduct their classes remotely (e.g., Zoom). Not inconsequentially, this brief period also gave instructors the opportunity to consider and examine their previously standard classroom practices to determine if and how they might be altered to fit this new virtual educational environment.

Considering the newness of remote teaching and learning (RTL) brought on by the pandemic, the two standard non-content-related classroom practices that instructors needed to consider were (1) the taking of student attendance and (2) the creating and maintaining of student-teacher communication channels (STCCs). As explained elsewhere (Rubrecht, 2020), many instructors wondered if the practice of taking attendance (PTA) would be feasible when conducting classes in online spaces because pre-pandemic, PTA had been predicated on students' physical presence in a specific time and place (e.g., in a classroom with the instructor). During RTL, this conventional concept of attendance had to be reconsidered and reimagined. Indeed, the expansion of virtual education due to the COVID-19 pandemic required new, more flexible views about and measures of attendance (National Forum on Education Statistics, 2021).

In planning their remote courses, some instructors intended to take attendance in real time (e.g., over Zoom), but there was the non-trivial concern that students would not be adequately equipped with the appropriate technology to attend and participate as expected in online classes (see Bettinger & Loeb, 2017), either from the outset or consistently over time. This concern was particularly acute in Japan due to the country's historically poor rankings in information and communication technology (ICT) implementation in educational settings (Maita, 2020; Nae, 2020; O'Donoghue, 2020; OECD, 2020). In the end, many instructors simply abandoned PTA altogether during ERT, largely because it was viewed as subordinate to the task of providing lesson content online and overall course aims (Rubrecht, 2020).

Regarding STCCs, instructors would have endeavored to establish and continually foster them to reduce the transactional distance between them and their students (see Moore, 1993), address students' increased levels of anxiety, depression, and feelings of social isolation (Aguilera-Hermida, 2020; Department of Education, 2021), and aid them as they experienced technical problems and various disruptions to their learning (Peper et al., 2021) during RTL. Instructors relied heavily on LMS use (Chaka, 2020), with many creating discussion spaces so that students could ask questions and communicate with all course participants (Aljahromi, 2020; Gasell et al., 2022; Moreno et al., 2021), even during synchronous online classes

(Cooper, 2022; Majewska & Vereen, 2021). Likewise, videoconferencing applications like Zoom were utilized as instructors attempted to mimic as best they could the pedagogical procedures they had used previously in their traditional classroom-based teaching and learning environments (CBTLEs). However, communicating through videoconferencing applications has numerous drawbacks (see Massner, 2021, for an expansive overview), with students' opinions about using videoconferencing for lessons being mixed, both prepandemic and during RTL. While some have espoused positive views (Candarli & Yuksel, 2012), especially due to its flexibility (Wang et al., 2018) and because instructors can evince their caring and availability through this medium (Massner, 2021), others were considerably more negative regarding its use, as it can be perceived to provide an inferior learning experience which dampens motivation to learn (Serhan, 2020).

Even with the above-mentioned technology concerns aside, there were additional communication barriers to overcome. In not a few cases during RTL, students' webcams and microphones remained off during synchronous videoconferencing lessons, not only because remote students are reluctant to broadcast information about their private living environments (Wang et al., 2018) but also often because of university directives¹, with the unexpected result being that many synchronous lessons became passive one-sided affairs little different from asynchronous lessons.

Having realized from the outset the importance of taking attendance — both the relevance of its function in educational settings (see Rubrecht, 2022a) and students' comfortable familiarity with the practice after years of experiencing it in CBTLEs (Rubrecht, 2021a) — the instructor/researcher (hereafter, I/R) of the present study sought a means by which to simultaneously take attendance remotely and create and maintain STCCs in a way that would be simple, non-threatening, and receptive to students. To this end, the Attendance Record Sheet, or ARS, was constructed. Explained in detail elsewhere (Rubrecht, 2020), analyses of students' ARS submissions in AY2020 revealed that it fulfilled its intended dual purpose well (Rubrecht, 2021b, 2022b). Its use also exposed unexpected areas of difficulty experienced by Japanese university students (Rubrecht, 2022a).

Even so, there was one final area of ARS use that required exploration: that of students' opinions about this multifunctional document. Although research that explored Japanese university students' views of attendance at the university level both before and during RTL revealed them to be generally positive about the practice, particularly regarding the role it fulfills in educational settings (Rubrecht, 2021a), the students enrolled in AY2020 were never queried as to their views about attendance and attendance-taking methods prior to the commencement of RTL. Considering that (a) other instructors either used less burdensome forms of attendance (e.g., the clicking of a "Send Attendance" button on the university's learning management system, or LMS) or had abandoned PTA completely during RTL (Rubrecht, 2020) and (b) ARS submissions were to be completed and emailed to the I/R weekly², it remained unclear if and to what extent students were burdened by or took a disliking to this novel method of attendance taking and STCC opening. In short, although students were found to engage with the ARS in ways and to degrees that far surpassed

¹ Many universities urged instructors to tell students to leave their webcams off to reduce internet bandwidth burdens.

² There were two main student requirements for ARS submission: (1) the renaming of each ARS according to what was termed the proper file renaming convention, or PFRC (see Rubrecht, 2022a), and (2) the completion of one specific mandatory section within the ARS itself (the ARS included additional non-mandatory sections; see below).

expectations (Rubrecht, 2021b), it was not yet known what they thought of it as an attendance-taking and STCC-promoting tool or how they viewed the many necessary requirements stipulated for ARS submission.

The current article presents details of analyses of the results of an online student questionnaire administered at the end of AY2020 (from December 2020 to January 2021) to students enrolled in the I/R's remote courses at three Japanese universities. After first presenting a brief literature review and explanations about attendance, STCCs, and the ARS, the article will detail the study's methodology, participants, and the responses to the questionnaire. The article will end with a discussion of the conclusions drawn from the research. Pedagogical insights drawn from the research and future research directions will end the paper.

Literature Review

Attendance

It may come as a surprise to many that the taking of student attendance is actually quite nuanced and not as straightforward as it may initially appear. Traditionally, the practice is based on the premise that students are to be in a particular physical space at a particular time (e.g., in a classroom when their instructor is there) to receive tutelage. If students fail to clear either of these prerequisites, then the instructor would mark their student rosters to indicate student absence.

Attendance at pre-tertiary levels has been touted to increase students' learning opportunities and, by extension, their course achievement (National Center for Education Statistics, 2009), but at the university level, research examining correlations between attendance and factors including students' comprehension of course content and academic achievement have found mixed results (e.g., Credé, Roch, & Kieszczynka, 2010; Devadoss & Foltz, 1996, as cited in Rocca, 2004; Marburger, 2006). Nevertheless, some researchers (e.g., Bijsmans, & Schakel, 2018) have found attendance to be one of the most important predictors of success in higher education, with others arguing that attendance is by far a clear determinant of both academic performance and attainment (Newman-Ford et al., 2008).

In preparation for ERT, the I/R explored the topic of attendance and research investigating it to gauge if its use in remote and virtual learning environments would outweigh its abandonment (Rubrecht, 2020). Although attendance typically tends to decrease over time in courses regardless of the teaching format (Brennan et al., 2019), RTL during AY2020 was clearly a special situation. Being unplanned, mandatory, and unfamiliar to most if not all course participants, there was concern that students' virtual "absences" would increase because of student anxiety, depression, and/or loneliness (Aguilera-Hermida, 2020; Peper et al. 2021). Frustration, confusion, and even course abandonment due to technological or other personal issues were also matters (Hagedorn et al., 2022), as was what was later to be termed "Zoom fatigue" (Massner, 2021; Nadler, 2020; Peper et al., 2021; Ramachandran, 2021). Consequently, in preparing for and designing his AY2020 lessons, the I/R decided that continuing PTA would likely prove beneficial, especially if it could be coupled in some way with STCC creation. In this way, the Attendance Record Sheet, or ARS, was born.

The ARS

The ARS has been explained at length elsewhere (see Rubrecht, 2020, 2021b, 2022b), but in brief, the original version of the sheet³ was meant to cover all three areas of attendance, participation, and engagement (e.g., as an STCC) in a way comparable — though not wholly analogous — to that outlined by the National Forum on Education Statistics (2021). That is, via weekly email submission, the ARS was to:

- (1) indicate student *attendance* (which means their being *present* in a course in which they are enrolled, whether virtually online or physically in a classroom);
- (2) allow for *participation* in the course (or their involvement in the course via activities either directly or indirectly related to their schoolwork) by their (a) renaming their ARS files in accordance with the proper file renaming protocol, or PFRC (which involved both English and keyboarding skills; see Rubrecht, 2022a), (b) completing various sections within the ARS itself (see below), and (c) submitting the ARS within a specified time window; and
- (3) allow for *engagement* in their education, as students were required to complete course tasks each week and reflect on those tasks as they completed their ARSs prior to submission.

The various sections on the ARS were "Boxes" in a table. The instructions for each were:

- Box 1: "What did you learn in today's lesson (what was the topic)? Please summarize." Its purpose was for students to explain what they were to have (or ideally, what they actually had) engaged in and/or learned in their remote lessons that week. Box 1 completion was mandatory.
- Box 2: "If something was fun or difficult about today's lesson, please explain." Its purpose was for students to reveal information about their remote lessons so that courses could be improved (e.g., by the I/R providing additional lesson explanations or modifying course activities).
- Box 3: "If you need help with anything or if you want to tell me something, please write it here." Its purpose was for students to relay anything they wished to convey to their instructor, including calls for lesson assistance or questions or comments that were outside the scope of lesson content.

The ARS was constructed for several additional reasons. First, considering the state of ICT in Japan, as explained above, even the so-called "digital natives" (Prensky, 2001) of the current set of university students could not necessarily be expected to possess the digital skills required to effectively engage in RTL (see Gallardo-Echenique et al., 2015), especially during the early stages of the pandemic. As such, requiring the use of tried-and-true and familiar-yet-simple technology (e.g., email rather than unfamiliar software) to check attendance and create STCCs was thought to smooth students' transition to remote learning (see Rubrecht, 2022b, for reasons supporting email use; see also Morin, 2021). Second, using other attendance-taking methods (e.g., self-reporting via a Google Forms document or the click of a "Send Attendance" button in an LMS) would have been too akin to instructors' long-standing "it's just a warm body in a seat" lament, as they would have been inaccurate proxies for engagement and would not function as a means for the instructor to assess if students had

³ The ARS underwent periodic modification to increase its usability.

actually received or otherwise internalized the lesson material (National Forum on Education Statistics, 2021; see also Goodnough, 2020).

Third, a student failing to submit an ARS regularly (e.g., several weeks in a row) would indicate a "student of concern," thus spurring the I/R to contact that student to determine if they were experiencing problems or other learning obstacles (e.g., technological difficulties, mental health issues). Because the I/R could respond to students' Box 3 problems and questions in a timely manner (see Ferlazzo, 2022), thereby evincing an appreciation of their circumstances (Bozkurt et al., 2020), the transactional distance between the I/R and students could be reduced. Fourth, requiring students to submit an ARS weekly for attendance-taking purposes was also done in part to help students develop a weekly course routine. This was deemed important because students were no longer having to physically travel to campus to attend lectures, which normally alerts students to the courses to be attended that day. Without a routine, it was suspected that students learning remotely from home would lose track of time and either accidentally miss assignment deadlines (Chhetri, 2020; Morin, 2021) or procrastinate, the latter of which both increased with the advent of RTL due to the lure of and easy access to social media, online gaming, or various streaming services (Hawthorne-Castro, 2020, as cited in Iglesias-Pradas et al., 2021; Jones, 2020) and hindered academic achievement in online learning (Cormack et al., 2020; Kim & Nembhard, 2019). In short, the requirement of having students submit an ARS weekly during a specific window of time was meant to develop in students a persistence in positive academic behavior (see Weijers et al., 2021) via clear and consistent course content reception, consumption, and engagement.

Participants and Courses

The participants in the study were 77 students in different years of study enrolled full time at three Japanese universities in the Tokyo metropolitan area. They were volunteers from a pool of 144 students who had taken classes with the I/R across both remote semesters of AY2020. The students in this cohort were of differing majors (e.g., commerce, law, management) taking a variety of courses with the I/R (e.g., English language courses, lectures, seminars). Their TOEIC scores mostly ranged between 400 and 800. The courses for these non-English majors were taught predominantly in English, but Japanese was used on occasion when it was deemed necessary. All potential study participants were informed that (a) questionnaire completion was voluntary, (b) responses would not impact their final grades or standing at their university, (c) the questionnaire was for research purposes, and (d) their anonymity would be maintained.

Most of the I/R's AY2020 courses were taught in a flipped-classroom style because of uncertainty regarding students' ability to secure suitable and reliable technology (e.g., webcams, consistent internet access) and distraction-free spaces for course participation (Theodosiou & Corbin, 2020) during this exceptional academic year. Courses were taught via a mixture of synchronous and asynchronous lessons (i.e., via the use of Zoom and on-demand videos, respectively) in a way that allowed for varied content transmission, feedback, and active communication among course participants (Wilson & Stacey, 2004). The style of lesson engagement could change from week to week, and some lessons involved both synchronous and asynchronous instruction.

All the I/R's AY2020 students were instructed to submit an ARS each week of lessons. There were numerous requirements for ARS completion and submission:

- Students were to download the ARS template from the I/R's website in their choice of either Microsoft Word or PDF format.
- Being mandatory, completion of Box 1 primarily allowed the I/R to remotely assess the accuracy of student engagement (i.e., to check that students were engaging in the correct lesson content and activities each week). It also and not insignificantly allowed for learning reflection (Ambrose et al., 2010). Boxes 2 and 3 were not required but their completion was repeatedly encouraged as they aided in the development of student-teacher communication.
- Each ARS was to be completed in English, although Japanese was acceptable.
- ARS completion was to be done after lesson time for synchronous lessons or after assignment completion for asynchronous lessons.
- To aid the I/R's workflow (e.g., the downloading and organizing of students' many course documents), students were told that each ARS was to be renamed from the generic "Attendance Record Sheet (ARS)" file name to that which was in line with the PFRC (e.g., "Taro Tanaka Wednesday 1 May 13 ARS"). Students were provided with multiple explanations and examples of the PFRC (see Rubrecht, 2022a).
- Each ARS was to be submitted via email within a specific time window of time: after class time but before midnight on the day of the lesson (exceptions were allowed in special circumstances).
- Homework assignments (if any) were to be sent as attachments along with that week's ARS via a single email.

Methodology

At the end of AY2020, all students enrolled in the I/R's courses were asked to complete an online Google Forms questionnaire about the ARS. Information about the questionnaire and its link were provided through each university's LMS. The rationale for the questionnaire was explained via LMS announcements as well as over Zoom during lessons, and the voluntary nature of questionnaire completion and its purpose for research were reiterated.

The questionnaire, which was written in Japanese, asked questions on a range of topics, from student attendance to aspects of the ARS and ARS submission, including their own interaction with the document. Most questions were presented in a multiple-choice format (often on a Likert scale), but several were open-ended (often requests for reasons or explanations). Students were told that they could use either Japanese or English when answering the open-ended questions. All responses were put into a spreadsheet and tallied, though this was occasionally met with some difficulty for two reasons. First, due to the nature of open-ended questions, some students provided more than one categorizable response to individual questions⁴. Second, some open-ended responses acknowledged contrary stances to their multiple-choice selections. For instance, in numerous instances a student would select a positive multiple-choice option about a topic but then acknowledge and explain the negative aspects of that topic in their open-ended response. In the face of these difficulties, the I/R broke down each open-ended response into its smallest component parts and categorized each accordingly. Finally, it must be noted that not all students answered all questionnaire questions, and for the purposes of the current research, all questionnaire respondents are treated as members of a single cohort, that is, there was no breakdown of student participants in terms of their university, major, year of study, or gender.

⁴ A similar difficulty was experienced previously (see Rubrecht, 2021a).

Results

This section presents the results of responses to the questionnaire. Due to space limitations (a) questionnaire questions are simplified and (b) only the most commonly conveyed response categories are presented. Additionally, some percentage calculations evince rounding error.

[Q1]: Overall, what do you think of the ARS as an attendance-taking method?

- Very good: 32 (42%)
- Good: 32 (42%)
- Neither good nor bad: 11 (14%)
- Bad: 2 (3%)
- Very bad: 0 (0%)

[Q2]: What is your opinion of using the ARS for attendance-taking purposes compared to other attendance-taking methods your other instructors used?

- Much better: 17 (22%)
- Good: 34 (44%)
- Neither good nor bad: 20 (26%)
- Worse: 6 (8%)
- Much worse: 0 (0%)
- Other instructors did not take attendance this year: 0 (0%)

[Q3]: Why do you think so for [Q2]?

< Positive Responses >

- Can ask questions directly: 10
- Allows for course content reflection: 9
- Standardized/easy to complete: 8
- Usable (clear) method: 8
- Assures/proves attendance: 6
- Not always possible to join Zoom: 4
- Opportunity for interaction with teacher: 3
- < Negative Responses >
- Requires more time/steps to complete: 6
- Using Zoom or LMS is easier: 4
- ARS unnecessary as homework is emailed: 1
- No confirmation of emailed ARS: 1
- ARS use means reduced Zoom participation: 1

[Q4]: The ARS was created in part to help students keep track of their learning and weekly assignments. How often did you fill in Box 1 with the assignment topic or with what was learned that week?

- Weekly without fail: 67 (87%)
- About once every two weeks: 4 (5%)
- About once a month: 1 (1%)
- Several times: 4 (5%)
- Not very often: 1 (1%)
- Never: 0 (0%)

[Q5]: How helpful was it to your learning or review of course material to look back on what you learned each week in order to fill in Box 1?

- Very helpful: 15 (19%)
- Helpful: 42 (55%)
- Neither helpful nor unhelpful: 15 (19%)
- Unhelpful: 5 (6%)
- Very unhelpful: 0 (0%)

[Q6]: The ARS was created in part to have students inform their instructor about what was fun or difficult about each week's lesson. How often did you fill in Box 2 with this information?

- Weekly without fail: 53 (69%)
- About once every two weeks: 8 (10%)
- About once a month: 4 (5%)
- Several times: 4 (5%)
- Not very often: 7 (9%)
- Never: 1 (1%)

[Q7]: Why (for [Q6])?

< Responses Written at Least Once a Month >

- To record my impressions of or reflect on each lesson: 13
- To share my thoughts/what I found difficult: 7
- I (mistakenly) thought it was required: 6
- The teacher should know students' reactions/feedback (e.g., about difficult areas): 5
- < Responses Written Less Frequently Than Once a Month >
- Box 2 was not required: 2
- The teacher will solve problems over Zoom: 1
- Box completion was not fun: 1
- Too tired to complete: 1

[Q8]: Do you think this information (i.e., that which was either fun or difficult) is information that your instructor should know?

- Yes: 75 (97%)
- No: 2 (3%)

[Q9]: Why (for [Q8])?

- < "Yes" Responses >
- Student assessments constantly required for future lesson improvement: 21
- Lesson adjustments/improvements useful for teachers and students: 21
- Increases teacher's comprehension of students' comprehension/progress/level: 9
- Online classes make measuring students' proficiency difficult: 3
- Teachers should know students' interests/opinions, especially during RTL: 3
- < "No" Responses >
- Subjective impressions not useful for class content: 1
- Having fun is irrelevant when students must learn: 1

[Q10]: The ARS was created in part to provide students with weekly opportunities to ask questions or give comments to their instructor. How often did you use the ARS to ask questions or give comments?

- Weekly without fail: 17 (22%)
- About once every two weeks: 9 (12%)
- About once a month: 6 (8%)
- Several times: 24 (31%)
- Not very often: 16 (21%)
- Never: 5 (6%)

[Q11]: Did your instructor answer your question or reply to your comment?

- Yes: 61 (79%)
- No: 11 (14%)

[Q12]: If you answered "Yes," how satisfied were you with your instructor's answers or replies in general?

- Very: 46 (60%)
- Somewhat: 8 (10%)
- Sufficiently: 5 (6%)
- Not very: 0 (0%)
- Not at all: 0 (0%)
- No response: 18 (23%)

[Q13]: If you answered "No," why were you think that was?

- My comment did not require a reply: 4
- Instructor was busy: 2
- I did not ask many questions: 1

[Q14]: What did you think of the ARS as a teacher-student communication tool during remote teaching and learning?

- Very good: 30 (39%)
- Good: 32 (42%)
- Neither good nor bad: 12 (16%)
- Bad: 2 (3%)
- Very bad: 0 (%)
- No answer: 1 (1%)

[Q15]: If remote teaching and learning were to continue next year (AY2021), would you want your instructors to use the ARS?

- Yes: 68 (88%)
- No: 8 (10%)
- No answer: 1 (1%)

[Q16]: Why (for [Q15]'s answer)?

< "Yes" Responses >

- Can ask questions easily individually/directly: 13
- Good for remote communication from/with students: 11
- The ARS is easy to understand/use (for teacher and students): 11

- Clear/efficient for confirming/tracking attendance: 8
- The ARS allows for lesson material reflection: 7
- < "No" Responses >
- Questions can be asked other ways: 4
- Other ways to take attendance preferred: 2
- Forgetting to submit an ARS equals an absence: 1
- ARS should only be necessary when students have questions: 1

[Q17]: What was the timing of your ARS submissions with respect to submission deadlines?

- Always before: 55 (71%)
- Often before: 18 (23%)
- Occasionally before: 3 (4%)
- Rarely before: 1 (1%)
- Always after: 0 (0%)

[Q18]: How much attention did you pay to ARS file renaming?

- Much: 71 (92%)
- Some: 6 (8%)
- A little: 0 (0%)
- None: 0 (0%)

[Q19]: If you could make changes to the ARS, what would you add or delete?

- ARS and weekly assignments should be just one document: 3
- Add a Box: degree of student comprehension of lesson content: 3
- Provide ARS receipt confirmation: 1
- Divide Box 3: question and comment boxes: 1
- Change Box 2: just "Lesson Impressions": 1
- Write important ARS instructions in Japanese: 1

[Q20] Please provide any impressions or opinions about the ARS if you have any.

- Good for attendance purposes: 12
- Useful for asking questions: 4
- Expressions of gratitude to the teacher: 4
- Helps students become more comfortable with the teacher: 1
- Useful for lesson review: 1
- Concern no ARS receipt confirmation: 1
- Satisfied with the current ARS: 1

Conclusions and Discussion

The purpose of the current research was to investigate students' perceptions of the ARS during AY2020, that is, it meant to determine what they thought of the ARS as an attendance-taking and STCC-promoting tool and, consequently, how they engaged with the document. Analyses of the responses provided above led to the following four determinations being made:

1. Students overall viewed the ARS positively, both as an attendance-taking method and as an STCC, though its various shortcomings were nevertheless apparent.

- 2. A vast majority of students were cognizant of the ARS' multifunctional nature, particularly as it worked as (a) an attendance-taking method, (b) a vehicle for weekly lesson reflection, and (c) a means for asking questions or giving comments directly and privately to their instructor.
- 3. Students engaged with the ARS well, as evinced from their claims about their timely submissions of the ARS as well as their renaming of the document weekly.
- 4. The ARS appeared to function so well that most study participants wished to continue using it in the event of continued RTL.

In short, the I/R created the ARS so that it may be used to multiple ends during RTL. In his personal and professional view, the ARS functioned well as intended, but its use came with some drawbacks. Even as the ARS's shortcomings are noted, particularly the time and energy costs it places on all users, including course instructors who utilize it (see Rubrecht, 2021c), it was nevertheless put to effective and fruitful use.

There are several final points worth discussing. First, as students' questionnaire responses were naturally made based on their own individual perspectives and circumstances, some of their comments and feedback could not be considered useful for ARS or lesson modification (e.g., students were not aware of their classmates' internet connectivity difficulties or lack of tech savviness). Second, students seemed appreciative of the ARS as an STCC, as the I/R endeavored to be timely with his responses to students' questions and comments and with lesson feedback. This mirrors results found elsewhere (e.g., Moreno et al., 2021) and is indicative of the crucial nature of the immediacy of instructor feedback during remote learning (Baker, 2004; Moreno et al., 2021). Third, as the I/R continued to teach courses remotely in AY2021 and in AY2022, the ARS was put to further use, with modifications made based on students' responses from this study. For instance, Box 3 was separated into question and comment Boxes, and a Box was made requesting information about the extent to which students comprehended lesson content, among other alterations.

Finally, the comments made by students for [Q11] that stated that the I/R did not answer questions or reply to comments they wrote in the ARS did not go unnoticed. While some students admitted that in some cases a reply was not warranted, the I/R made reading each ARS a priority, and if a question were posed, the I/R would, with near certainty, have answered it. Possible reasons for no replies from the I/R, in order of decreasing likelihood, include:

- Students asked rhetorical questions, thereby not warranting a response.
- The I/R determined a response to be unnecessary (e.g., "I learned something new today").
- Students' odd or unclear phrasing of questions in English meant that the I/R did not perceive them to be actual questions.
- With several thousand ARSs received in AY2020, the I/R, being human, may have accidentally overlooked several ARS questions.

In the end, having an informal channel of communication like the ARS was beneficial in producing positive effects, especially as adaptations were required in the move to ERT (see Iglesias-Pradas et al., 2021). As of this writing (i.e., the waning months of 2022), the coronavirus continues to disrupt people's lives both in Japan and elsewhere. It is hoped that instructors, upon learning about the positive benefits of ARS use, may take up the document or some version of it and use it for their own classes in the way they best see fit.

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