

Implementing Research Beyond Your Classroom: Lessons Learned

Gregory Sholdt
Kobe University

Martin D. Stoute
Kobe Shukugawa Gakuin
University

Jacqueline Mull
Research Institute of English
Language Education

Reference Data:

Sholdt, G., Stoute, M. D., & Mull, J. (2014). Implementing research beyond your classroom: Lessons learned. In N. Sonda & A. Krause (Eds.), *JALT2013 Conference Proceedings*. Tokyo: JALT.

Language teachers can consider conducting small-scale classroom-based research with a secondary or main goal of developing research-related skills and knowledge. The Writing Fluency Project, a professional development project for language teachers interested in research, provided an opportunity to gain practical research experience while collaborating online with other language teachers across Japan. In this paper, two of the participating teachers share their experiences and describe lessons learned while conducting a study that required them to collect data outside their own classrooms. The project coordinator explains the value and difficulties of collecting data in multiple classrooms from the perspective of research methodology. The paper should provide insight into the research process, demonstrate the importance of sharing about experiences conducting research, and encourage language teachers to engage in their own research projects.

語学教師が授業を使った小規模な調査研究を実施するには、その副次的あるいは主たる目的が研究に必要な技術と知識を深化させることにある場合がある。調査研究に関心をもつ語学教師を対象とした職能開発プロジェクトであるThe Writing Fluency Projectは、全国の教師が互いにオンラインでコラボレーションしながら、実践的な研究経験を培う機会を提供するものである。本稿ではまず、プロジェクトに参加した2名の教員が授業以外でデータ収集を行なった調査研究の経験とそこで得られた教訓について述べる。さらにプロジェクト・コーディネーターが研究方法の観点から、複数の授業でデータ収集することの価値と困難性について説明を加えている。本稿の目的は、研究プロセスへの洞察を提供し、研究の実践経験を共有することの重要性を示すことを通じて、語学教師が自身の研究プロジェクトに着手することを促そうとするものである。

FOR MANY language teachers in Japan, knowledge and skills related to research methodology can be an important component of their professional skill-set. Teachers may wish to improve their classes through action research projects, engage in qualitative studies to develop a deeper understanding of their students, or employ quantitative methods to test theories and conduct experimental research (Borg, 2010; Brown & Rodgers, 2009; Nunan, 2005). This knowledge is also essential for producing quality research manuscripts, an expected duty for a career teaching at universities in Japan (Chenoweth & Pearson, 1993; Evanoff, 1993; McCrostie, 2010), and even important for critical assessment of published studies (Brown, 2004). For language teachers with limited graduate training in research methods, there are means for professional development through independent or collaborative study, online or distant education, and traditional classroom instruction.

Regardless of the method of training, the classroom learning will eventually be implemented in actual research projects in the field, and a great deal can yet be learned through this practical



experience. Even with the most thorough of research plans, unexpected issues may be encountered that can negatively impact the validity of a study and attenuate the value of the results. In certain cases, they can render the findings meaningless and make the efforts of the researcher and the time of the participants a waste. Although pilot studies are typically employed to test a research design before a full implementation, experienced researchers are better equipped to plan and execute their studies utilizing lessons from firsthand encounters with these unanticipated events. For beginning researchers, careful consideration should be given before starting any large-scale study. Even with a pilot study, there is still a lot that can go wrong. A good strategy can be to start a research career with small-scale studies that have the dual purpose of answering a modest research question and providing a means for gaining valuable experience (Sholdt, 2011). By gradually building practical experience through small studies, language teachers can deepen their knowledge and increase the likelihood of conducting meaningful, large-scale studies later in their research careers.

The main goal of this paper is to provide language teachers interested in research some insight into the research process and what can be learned along the way. It centers on a small-scale study that was conducted by two of the authors (Stoute and Mull) as a part of professional development project led by the other author (Sholdt). Stoute provides a narrative description of how the study, initially planned for only their own classrooms, ended up being implemented in multiple classrooms throughout an EFL department, and Mull shares lessons that were learned during the experience. Additionally, Sholdt presents a discussion on methodological issues related to doing research in multiple classrooms. Ultimately, readers should walk away with a sense of the value of practical experience when learning about research, along with specific strategies for conducting studies that require data collection beyond their classrooms.

The Writing Fluency Project: Professional Development Through Collaborative Research

In January 2012, a yearlong professional development project, the Writing Fluency Project (WFP), was initiated in order to provide a learning opportunity for language teachers in Japan to build knowledge and skills in conducting quantitative research through guided study and practical experience. During a pilot of the project (Sholdt, 2011), a Moodle-based online coordination site was developed that featured a schedule for a set of readings from a research methods text and procedures for a small-scale classroom-based study. Approximately 40 language teachers from around Japan initially joined the project and after getting connected online, they began working through the reading assignments and engaging in discussion in a forum on the Moodle site. In the spring semester, participating language teachers, mostly based at universities, each conducted the same replication study concurrently in their own classrooms, again following procedures laid out on the Moodle site. While engaged in the study, participants could raise questions, share experiences, and receive guidance in the discussion forum on the Moodle site.

The replication study was based on part of a study conducted by Bonzo (2008) that investigated the effects of two different topic selection methods on student writing fluency for a 10-minute freewriting activity. In the replication study, students were asked to write continuously for 10 minutes with the goal of writing as much as possible on a topic that was either selected by their teacher or selected freely by the student. The students' written products were scored on fluency using an index based on the number of unique words and total words. Following collection of data over several weeks, mean fluency index scores for both conditions were compared. This analysis was supplemented with additional demographic and qualitative data. At the end of the project, teachers worked individually or in pairs to produce publishable manuscripts based on their studies.

The Bonzo (2008) study was selected as the center of the professional development project because it utilized a minimally intrusive intervention, dealt closely with the conversion of language to metrics, and focused on a fundamental statistical procedure, the *t* test, which is used to test the difference between means from two samples. Conducting research is often a solitary affair, but by working on the same study concurrently with many other teachers and sharing about their experiences on the online coordination site, the teachers were able to maintain motivation, build confidence, and gain valuable insight. One of the main goals of the project was to help the participating language teachers develop an understanding of the unpredictability of the research process and the value of gaining experience. The teachers did indeed report a range of experiences involving the absences of participants, misunderstood instructions, imprecise scoring rubrics, and time constraints. As described in the following section, Stoute and Mull had the unique experience of conducting the study in classrooms taught by other teachers after receiving encouragement from administration to do so. This unexpected twist in their research added an extra layer to their learning experience.

Narrative of the Project Experience

Martin Stoute

After joining the WFP, Mull and I started to plan how to implement the writing fluency study at our shared university. We envisioned applying for administrative approval to conduct the study in two of our communication classes. We would run the project for 4 weeks, as recommended in the procedures, and have gathered all our data by the middle of the 15-class semester. One of our early concerns was getting administration approval, without which we could not do the study. To do this, we created a proposal package that included a copy of Bonzo's

original paper, an outline of the goals of the study, and a brief explanation of how it could have an impact on the writing fluency of our students. We indicated who would be involved, included relevant documents, and provided additional Japanese translations. Once the package was completed, we approached our immediate superior, the Assistant Dean, who serves as a liaison between the native English teachers and the university administration.

The Dean found the idea of the research very exciting, particularly because of insights it might yield towards understanding and improving our students' writing fluency. She even expressed an interest in having all students do the writing activity. She thought, however, that because the research measured writing fluency, it would make more sense to conduct our study in writing rather than listening or speaking classes. We agreed with her logic but explained that adopting her recommendation would mean a writing teacher, rather than Mull or I, would be required to gather the data. This did not pose a problem for her, and she even volunteered to conduct the experiment in her four writing classes. Another suggestion the Dean made was to extend the research period from 4 weeks to the entire 15-week semester. The meeting was a very positive experience and we were excited to receive such strong support for our research.

During the discussion, it was decided to ask the other writing teachers to join the project as well. From the Dean's perspective, including all the writing teachers in the project would encourage professional development within the English department on a wider scale and provide an opportunity for interaction and collaboration among teachers. From our perspective, it would provide the statistical benefits of a larger sample size but would also present us with unplanned issues and steps that would arise not only by working with others, but also through gathering and analyzing significantly larger amounts of data. At the same time, we knew we could share our experiences with the

other WFP teachers, which would give them insight into how this project could be expanded and allow us to benefit from their advice as we faced new challenges.

Because we would need to get permission from the writing teachers who would be conducting the studies on our behalf, many of whom did not work in our office and rarely saw us, we had to be particularly clear and specific in terms of procedures and tried to minimize the burden of collecting data. To simplify the data collection process and to minimize the intrusion we would make into the teachers' classes, we prepared writing papers, stapled in order with the topics on top, so even if a student missed a class, the teacher could easily collect a writing sample for the missed session. We also compiled an explanatory packet for each teacher before pitching the project to them and asking for their help in the data collection.

With the packets, we did our best to clearly and succinctly explain the justification, goals, and procedures of the study and indicate that a lot of thought and planning had gone into the research plan. This allowed the writing teachers to make informed decisions about whether and to what degree to allow the study to be implemented in their classes. Preparation of the packet was also useful in helping us clarify our thoughts about all the steps in the study's procedures, for example, just when during class the students should write, whether they should use erasers, or what to do if they missed a class. We had to have answers to these questions prepared so that all the supporting teachers could collect data in a consistent manner.

Ultimately, we convinced six teachers to collect data from their first and third semester students—a total of 22 classes with an average of 18 students in each class. Because it took us time to get organized at the beginning of the semester, we ultimately came up with a 10-week schedule, alternating between teacher-selected and student-selected writing topics. Throughout the

process of pitching the proposal and then working with teachers during the term, Mull and I made a concerted effort to express that we felt fortunate to have volunteers on our team, not to complain about any mistakes, and to be appreciative for their efforts.

Overall, the data collection stage was very successful, but not without difficulties along the way. We anticipated absent students, but occasionally students skipped topics by jumping to a different page, or did the same student-selected topic in consecutive weeks. Some students did not write anything, or simply wrote a few words in the 10 minutes allotted, rendering the data useless. Despite our instructions, some students nevertheless scratched-out or erased words, sentences, even small paragraphs. In other cases, the teacher accidentally assigned the wrong topic for that week. In one class, two writing activities were completed on the same day. Because of a typhoon, a number of classes skipped a week. Despite these problems, however, we were still able to gather a large pool of usable data with a much larger sample size than we could have obtained if working alone. Again, the support we received from our colleagues was a very positive aspect of this project.

Lessons Learned and Recommendations

Jaci Mull

In any research project, the researcher endeavors to be as prepared as possible. The scope of that preparation may not be obvious to new researchers. After working through the planning and implementation of the WFP at one university, we learned a great deal about what “being prepared” meant. The following points encompass the take-home lessons that came out of our experience and that will influence our future research endeavors.

Lesson #1: A well-prepared pitch improves chances of consent

No formal research should be done in a school setting without consent from the administration. The administration will want to know why you want to do the project, what you plan to do (in detail), and what you hope to learn from the project. When working with students, or other human subjects, they will also want to know that you are protecting the participants from any harm and that proper steps are taken to ensure that participants consent to the study. Answering all of these questions thoroughly and showing a benefit to the institution (e.g., improved teaching techniques, learner growth, research publications) makes this pitch even more attractive. Include as many of the following documents as you can and have them translated into all appropriate languages whenever possible: (a) some literature that sets up your research question, (b) a detailed but concise description of how you will gather the data, (c) student consent forms, and (d) a list of benefits for the institution, the students, or both.

Lesson #2: The project scale may change

The scale of a project may get smaller or it may get larger as administration and colleagues become involved. As soon as a researcher pitches the project to an administrator there is room for things to change. When we started our own project, we hoped to run the study in four communication classes. The administration could have allowed the project in only one or two classes and greatly reduced the scope of data we could collect. Alternatively, they could greatly increase the scale of the project. In our case, our request for four classes was expanded to encompass 22 writing classes—none of them taught by the researchers themselves. Although this was an additional challenge, embracing the change of scale became a great opportunity.

Lesson #3: Concise but thorough procedures are critical

Perhaps the most difficult lesson to follow through on has to do with how you conceptualize your procedures. When working alone, it is tempting to have a general set of procedures that can be tailored as the project develops. For your own internal consistency when doing the project, and to facilitate methodology writing later, being clear about your procedures, even when collecting data solo, is important. When working with a team, the precision of your procedures becomes even more critical for getting usable data. The challenge is making sure your colleagues are not burdened by extensive reading or long meetings in order to understand the procedures and your larger project, but do understand the project well enough so they can make educated decisions in their classes while collecting data for you.

Lesson #4: Consult with your colleagues

Before, during, and after data collection, it is important to communicate with your colleagues. Before the project begins, learn about your colleagues and their classes so you can minimize the burden you place on them. Once the project is underway, make sure you are available to answer questions and keep the project running smoothly for everyone. When asking colleagues to gather data for you, we recommend that you go out of your way to keep your project manageable. The favor will hopefully be returned. Finally, after the data is collected and analyzed, share your results with your colleagues. After making such a contribution to your study, they will almost certainly be interested to find out what was learned.

Lesson #5: Be prepared to throw out data

The more people that are involved, the more potential there is for the data to become inconsistent. There is a real chance that

some data will need to be thrown out, in spite of your and your colleagues' best efforts, in order to keep your sample consistent. Throwing out any hard-won data is difficult to do, but may be necessary for the overall integrity of the project.

Lesson #6: Expect the unexpected

A project of any size that deals with human subjects has the potential to present unexpected challenges. As researchers, we may do our best to anticipate and head off these challenges, but it is always quite possible that something will still surprise us. The larger the project and the more people involved, the higher the likelihood that something unexpected will occur. In order to be flexible without compromising your study, you will need to have your research question clear and be prepared to determine the effects a change in plan will have on answering that question. Be prepared to change plans as long as the end question is still answered in a methodical way.

Collecting Data Beyond Your Classroom: Methodology Perspectives

Gregory Sholdt

From a research methodology perspective, many of the issues related to expanding data collection that are identified and discussed by Stoute and Mull center on the validity of their study, or in other words, how truthful the study is on a whole. For small-scale studies and many action research projects, it may be sufficient to collect data from just the teacher's classroom, but ultimately, it depends on the research goals and the particular issues under investigation. Decisions to collect additional data beyond a teacher's classroom are often based on expanding the variables in the analysis by conducting the study in varied settings and improving the statistical power by increasing the sample size.

A key advantage of collecting data in a variety of conditions is that a researcher can incorporate into the analysis variables that are necessary to answer a research question or to better understand an issue under investigation (Cohen, Manion, & Morrison, 2005). For example, how students' writing fluency scores fluctuate under the two different topic assignment methods (teacher selected or student selected) may vary depending on their language levels. Perhaps students with higher level language abilities can produce more writing under the teacher-selected topics because of knowledge of vocabulary specific to the chosen topic. On the other hand, the field may be more level when students can choose topics that are familiar to them and for which they have a greater pool of vocabulary to use. If students are separated by ability level into different sections of a course, incorporating the different sections into the study will allow for this level of analysis. However, this does create additional issues for the researcher.

The addition of variables means that the analysis of the data becomes more complicated and unwanted factors can be introduced into the study. Whereas a basic *t* test is sufficient to statistically compare the frequency index means under the two topic selection conditions, introducing the ability level variable means more sophisticated statistical procedures are required. The researcher must be able to recognize which procedure is called for based on the research question and nature of the data being analyzed and must be able to interpret the results. Also, unwanted factors could come into play if the new sections of the course are dissimilar in critical ways. If different textbooks are used for students with different levels, this could influence the results. For example, one textbook may include writing exercises but the other does not. The additional writing practice may have an influence on the results. As the study expands, researchers need to take greater care to ensure the conditions for the data collection are as similar as possible.

Another major reason to collect data outside of a single classroom is to increase the statistical power of a study by increasing the sample size or the number of students participating in the study. Statistical power refers to the likelihood of a study producing a statistically significant result (Cohen et al., 2005). Along with some other factors, increasing the sample size will usually increase the likelihood that the study will be able to determine if a treatment is having an effect. With the writing fluency study as an example, it is possible that writing fluency is in fact increased very slightly when students are able to select the topics. However, with a small sample, the analysis may not be able to discern if that slight difference is an actual effect of the different topic introduction methods or just chance variation in output among the student participants. By increasing the number of students involved in the study, the researcher is more likely to be able to determine if that small difference is just chance variation or an actual difference in the conditions.

Increasing the number of students in a sample can have significant benefits for the study, but researchers should thoroughly explore the benefits and issues associated with this step. Without proper consideration, it can ultimately waste a great deal of time and energy of both the researcher and the student participants.

Conclusion

Stoute and Mull joined the Writing Fluency Project in order to build knowledge and skills in quantitative research methods and gain experience conducting classroom-based research. Basing the study in their own classrooms would have provided a sufficient opportunity to achieve those goals; however, unexpected circumstances led them to alter the research plan and collect data in other teachers' classrooms for an extended period of time. This resulted in a unique research experience and a series of valuable lessons.

This paper was prepared with three main goals. First, the authors intended to share their experiences, the lessons they learned, and background on relevant research methods with the hope that other teachers interested in engaging in classroom-based research may gain insight into the research process. Second, it is believed that this approach of sharing both successes and challenges of the research experience has value, and we hope to encourage further dialogue related to behind-the-scenes issues not often discussed in published research papers. Finally, the experience and lessons described by Stoute and Mull, participants in the Writing Fluency Project, should serve as evidence that important professional development can occur through collaborative research training and guided practical experience. Overall, the three authors sincerely hope that language teachers feel encouraged and motivated to make the jump from teacher to teacher-researcher after reading this paper.

Bio Data

Gregory Sholdt studied Educational Psychology at the University of Hawai'i and currently teaches in the School of Languages and Communication at Kobe University. His interests include teacher development, classroom-based research methods, English for academic purposes, and fluency instruction. He currently serves as one of the Consulting Editors for the *JALT Journal* and the Chair of the JALT Research Grants Committee. <gsholdt@gmail.com>

Martin Stoute studied philosophy at McMaster University in Canada and currently teaches at Kobe Shukugawa Gakuin University in Kobe. His interests include materials development and action research. He previously taught English in Mainland China and Taiwan. <mstoute@riele.org>

Jacqueline Mull is the Vice Dean of the Research Institute of English Language Education in Kobe, Japan and instructor at

Kobe Shukugawa Gakuin University. She has an MA in TESOL from Portland State University. Her interests include corpus linguistics and materials development. <jmull@riele.org>

References

- Bonzo, J. (2008). To assign a topic or not: Observing fluency and complexity in intermediate foreign language writing. *Foreign Language Annals*, 41, 722-735.
- Borg, S. (2010). Language teacher research engagement. *Language Teaching*, 43, 391-429.
- Brown, J. D. (2004). *Understanding research in second language learning*. Cambridge: Cambridge University Press.
- Brown, J. D., & Rodgers, T. S. (2009). *Doing second language research*. Oxford: Oxford University Press.
- Chenoweth, A., & Pearson, E. (1993). Launching a career at a Japanese university. In P. Wadden (Ed.), *A handbook for teaching English at Japanese colleges and universities* (pp. 3-14). London: Oxford University Press.
- Cohen, L., Manion, L., & Morrison, K. (2005). *Research methods in education*. New York: RoutledgeFalmer.
- Evanoff, R. (1993). Making a career of university teaching in Japan. In P. Wadden (Ed.), *A handbook for teaching English at Japanese colleges and universities* (pp. 15-26). London: Oxford University Press.
- McCrostie, J. (2010). The right stuff: Hiring trends for tenured university positions in Japan. *The Language Teacher*, 34(5), 31-35.
- Nunan, D. (2005). *Research methods in language learning*. Cambridge: Cambridge University Press.
- Sholdt, G. (2011). Getting started with quantitative research: A first study. *The Language Teacher*, 35(4), 52-54.