

Preparing Local Students for the Global Workplace Through Inquiry-Based Language Learning

Andrew Pitman

To foster learner development of the types of English skills necessary for eventual participation in the global marketplace, teachers in modern learning environments can utilise digital technologies and the internet to take learning beyond classroom walls and into real-world contexts, where students can more easily engage in inquiry-based learning and, thus, more easily engage with real-world problems. This paper provides a practical illustration of such a technologically supported inquiry-based pedagogy in the design of an inquiry-based unit of study for intermediate to advanced proficiency Japanese high school and university learners of English.

グローバルなビジネス市場への参加に必要な英語力を育むため、現代の学習環境における語学教員はデジタル技術やインターネットを駆使して、学びの場を教室から実世界に広げている。学習者はこれによってより容易に探究型学習を行うことができ、現実社会の問題に取り組むことができるようになった。本論は、探究型学習の枠組みにおいて、日本の高校・大学における中級から上級レベルの英語学習者に実践したICT活用の探究型学習の実例を示す。

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Japanese policy makers for English language education “highlight the need for Japanese universities to cultivate students with English skills to participate in the global market” (Chin Leong, 2017, p. 2). The development of business-related language skills can be facilitated by inquiry-based learning, which challenges learners to engage with real-world problems. In modern learning environments, teachers can also utilise technology to help students move beyond the confines of their classroom walls into real-world learning environments. Together, inquiry-based learning and technology can aid the development of language skills and facilitate students’ transitions from local students to global professionals.

This article proposes a pedagogical design for inquiry-based language learning in the context of intermediate to advanced language programs at Japanese high schools and universities. The design is foregrounded with an outline of inquiry-based learning design philosophy, followed by a discussion of inquiry-based learning design principles.

Inquiry-Based Learning Design Philosophy

Inquiry-based learning is a process by which students critically engage with resources related to a real-world problem. The process is aimed at fostering the metacognitive skills that are vital for developing disciplinary knowledge (Laurillard, 2012). In inquiry-based language learning, learners’ development of language-related knowledge arises from critical engagement with the language appearing in resources related to real-world problems.

According to van Joolingen et al. (2005), the inquiry process consists of five successive stages: 1) analysis, 2) hypothesis generation, 3) experiment design, 4) data interpretation, and 5) conclusion. Applied to language learning, analysis might consist of deconstructing exemplar models of language functions. Hypothesis generation would then involve learners formulating researchable questions related to topics of their own choosing. In their experiment design, learners can decide what types of linguistic data to collect and how. Data (i.e., language) interpretation involves comparison (synthesising data), critical thinking (evaluating data), and demonstration of the language function in focus for assessment. Finally, useful concluding tasks include reflections upon what was learnt about language, what was difficult, and how such difficulties may potentially be overcome in the future.

Inquiry-Based Learning Design Principles

Regardless of theoretical orientation, inquiry-based learning design is based on three main principles, related to tasks, resources, and guidance (Conole et al., 2008; Hmelo-Silver et al., 2006; Laurillard, 2012).

Inquiry-based learning designs set tasks that challenge learners to synthesise disciplinary theory with examples of real-world practice. These tasks aim to guide learners towards their own discoveries and formulations of knowledge by fostering inquiry skills, such as “questioning, investigating, analysing, hypothesizing, designing, interpreting, sharing, arguing, [and] synthesizing” (Laurillard, 2012, p. 125).

In an inquiry design, learning resources consist of what is available to students both within and outside the classroom. Rather than merely representing knowledge formulated by experts, teacher-provided resources serve as models of examples that students are tasked with locating within structured domains. Therefore, clearly delineating the scope of resource options and preparing students to adequately analyse and select appropriate resources from among these options, rather than providing students with a narrow range of materials. This approach fosters inquiry skills that will equip students to learn independently, beyond the classroom.

A hotly-debated, focal principle of inquiring learning design is guidance, or the degree of scaffolding provided. On the one hand, Hmelo-Silver et al. (2006) argue that inquiry learning needs to be highly scaffolded and should therefore be strongly guided. On the other hand, Laurillard (2012) suggests that the more scaffolding a learning approach entails, the more it approximates rote learning. Regardless of these contrasting views, in the context of language learning, students must first memorise linguistic expressions to a certain degree in order to be able to identify their usage in real-world contexts. In addition, students still need a high degree of guidance in the identification of language functions that have been newly learnt. Therefore, for inquiry-based learning to be effective for language development, a high degree of scaffolding is initially required in terms of students' learning of linguistic expressions as well as the identification of their functioning in real-world contexts. Greater guidance is required in the early stages of an inquiry and with less proficient English users. However, scaffolding should be relaxed as students progress so that the learners can independently produce examples of the intended outcomes (such as those given at the link provided in Appendix 2). Students must also receive feedback for work produced at each stage of inquiry so that their skills can be consistently developed and improved.

Situating Inquiry-Based Learning Design in Language-Learning Contexts

The bulk of recent studies related to inquiry-based learning in connection to language learning and technology advocate the use of certain technologies to aid the development of language skills in particular and to improve language learning motivation in general (e.g., Dooly & Sadler, 2016; Ebadi & Rahimi, 2018; Park & Hiver, 2017; Yamazaki, 2018). However, the language education literature lacks research on the implementation and evaluation of inquiry-based learning designs. A shift

in focus from the technologies that can aid pedagogical design to the robustness of the design itself would benefit the profession on a broader pedagogical level in relation to fostering inquiry skills and language knowledge.

The pedagogical design proposed here (see Appendix 1) focusses on persuasive language as it is used in relation to issues presented in various forms of news media. The design is suitable for intermediate to advanced learners of English at senior high school and university levels. The unit consists of ten core lessons, followed by student presentations, and then a final reflection lesson. Moreover, the unit is divided into six task stages, which are based on the inquiry process stages proposed by van Joolingen et al. (2005), outlined above in the section on Inquiry-Based Learning Design Philosophy. In Task Stage 1, students nominate and discuss topics within the domain of current social issues in the media. In Task Stage 2, persuasive language concepts are introduced. In Task Stage 3, students analyse news media texts related to the selected topic. Task Stage 4 has students work in pairs to find additional topic-related resources and evaluate materials suitable for supporting their own viewpoints on the topic. In Task Stage 5, students present their own TED Talks-styled presentations, using persuasive language tools with the aid of visual resources. For the sixth and final task stage, students contribute to a class blog to reflect on what they learnt throughout each stage of the inquiry process. To adapt the design for lower proficiency learners, more scaffolding would be required. For example, at Task Stage 1 (topic selection) and Task Stage 4 (resource selection), students could be provided with specific examples to choose from. In this pedagogical design, topical and functional vocabulary, as well as typical grammatical structures used for persuasive oration and writing, should be focussed upon in detail, as students at lower proficiency levels may lack the ability to discover these independently.

Inquiry-based learning is motivated by topic content (Laurillard, 2012). For content to be motivating and relevant, students should be placed at the centre of the topic nomination and selection process. The role of teachers is to facilitate this process by providing structure. For language learning, this structure may consist of focus on a language function (e.g., persuasive language, as in the proposed design) combined with a resource domain (e.g., news media). In this example, the proposed pedagogical design begins with an introductory lesson (Task Stage 1) consisting of small group and whole class discussion of current media issues, with related images and video used to elicit ideas. Motivated

by prior research findings (e.g., Lee & Hsieh, 2019), technology is used to facilitate discussion with the aim of decreasing student L2 anxiety and increasing willingness to communicate. To keep students at the centre of the topic selection process and to facilitate fair and equal contribution of ideas throughout the class, students discuss issues in groups of three or four and then post their ideas anonymously on Poll Everywhere (<https://pollev.com/>) using their mobile phones, tablets, or laptops. Students' ideas are displayed to the class. Then, the more stimulating and popular issues (e.g., nuclear power, the economy, immigration) can be highlighted by the teacher to direct class discussion, which should cover the source and nature of these issues as well as the contrasting viewpoints of their various stakeholders. Next, the students are asked to brainstorm and discuss the nature, purpose, and domain of persuasive language as a segue into Task Stage 2.

With topics nominated and selected by students, Task Stage 2 involves the deconstruction of exemplar authentic texts (Rothery, 1996) to expose students to relevant linguistic expressions, in this case of persuasive language, used in real-world contexts. Articles from newspaper websites (e.g., *The Asahi Shimbun*) and TED Talks presentations offer a broad range of resources. Students are tasked with identifying examples of persuasive language use and categorising them according to the Aristotelean concepts of *ethos* (appeals to the authority or credibility of sources), *logos* (appeals to logical thought or argument), and *pathos* (appeals to emotions) (Kaewpet, 2018) to better understand persuasive techniques and facilitate their use. In this task stage, each of the three persuasive concepts (or techniques) is focussed upon individually in a lesson using multiple sources predominantly featuring it. Students then develop definitions of the persuasive techniques by comparing different examples of persuasive language covered in the three lessons. Refined class definitions can be compared to the original Aristotelean concepts. With this approach, students are guided towards discovering persuasive techniques on their own rather than simply being tasked with locating "correct" examples of certain ones. This process enables the activation and development of inquiry skills, including questioning, analysing, and interpreting (Laurillard, 2012).

For Task Stage 3, students are tasked with sharpening their understandings of *ethos*, *logos*, and *pathos* via a more procedural and guided deconstruction (see Rothery, 1996) of additional authentic texts. In a language lesson, student comprehension of texts is of foremost importance. Simple comprehension questions based on readings and presentation viewings can be completed, peer-checked,

and discussed as a class. Then, students should be ready to identify the use of persuasive language within those texts. This step can be approached by tasking students to find examples of persuasive devices within a text, appropriately categorise those examples, and justify their decisions. Answers can be shared via Padlet (<https://padlet.com/>), allowing students to post ideas to a class discussion board. To extend further, students can compare texts and evaluate them for their persuasive effectiveness, developing and exercising critical thinking skills in the process (Laurillard, 2012). To this end, students can compare the appropriateness of persuasive devices and the effects these have on target audiences. For example, is *pathos* more likely to affect people who can relate to an issue from personal experience? Is *ethos* more likely to resonate with lower or higher levels of education? Students can also identify and characterise intended audiences to develop a deeper understanding of persuasive devices within social contexts (Valdés et al., 2014).

With clearly defined persuasive techniques in mind and inquiry skills at hand, students should be ready to explore and evaluate resources independently to formulate and support a position on their chosen issue in Task Stage 4. Teacher delineation of the scope of resources should be guided by what students can access in their daily lives (Laurillard, 2012), such as TED Talks presentations, newspaper articles, and publicly available governmental and NGO statistics. For Task Stage 5, students are paired by topic and tasked with creating their own contrasting TED Talks-styled presentations (e.g., one advocating the use of nuclear power and one opposed) using a slideshow application to facilitate and encourage the integration of persuasive visuals such as images, graphs, and tables. In this way, although students are playfully pitted against each other, they work together to respond to major opposing arguments and pool resources to create the most persuasive presentations possible. This method also serves to shift the focus away from students' emotional responses and towards the skill of persuasively arguing a viewpoint.

The domain of the presentation can break learners out of the confines of the traditional classroom construct (Kress, 2013). Students can present not only to the class but also to the wider school community and upload their videos on YouTube to engage with the general public. This approach broadens social presence (Garrison et al., 2010) so that students can receive feedback from a real-world audience beyond their teacher and classmates. Note, however, that students need to be made aware of YouTube's terms of service before proceeding and

that teachers should maintain responsibility for the account used for uploading presentations.

Finally, students are tasked with contributing to a class blog using Kialo (<https://www.kialo.com/>) to reflect upon what they have learnt in the inquiry process (Laurillard, 2012). This activity garners peer feedback regarding the effectiveness of approaches to inquiry for the benefit of and application to future learning. The teacher can summarise student contributions using Voyant Tools (<https://voyant-tools.org/>), which enables teachers to quickly present student ideas to the class as creatively visualised keywords and concordances and ideally help students remember what they have learnt more effectively than through more conventional means. The reflection process is useful for students to apply what they have learnt to future inquiry units and to language-related challenges. Feedback is also useful for teachers in making adjustments to the pedagogical design and improving their approach to future inquiry-based study.

Examples of technological utilisation within this pedagogical design are included in the link in Appendix 2.

Conclusion

This paper presented an approach to preparing local language learners for participation in the global workforce by means of inquiry-based learning. Motivated by Japanese language policy for English education, it illustrated an inquiry-based learning design specifically focussing on persuasive language and targeted at intermediate to advanced Japanese high school and university students of English. Further research on the development and effectiveness of inquiry-based learning designs may prove useful for the alignment of language education outcomes with language policy goals.

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Andrew Pitman is a PhD candidate at the University of Melbourne and a former researcher at the university's Language Testing Research Centre. He taught English in Japan from 2016 to 2018, starting at an *eikaiwa* before moving on to a prestigious high school. He then



returned to Australia and completed a Master of Applied Linguistics, receiving first-class honours. His minor thesis focussed on language testing validation and successful graduate-level L2 university writing, whilst his PhD focusses on the academic English language needs of undergraduates in their first year of university study.

Appendix 1

Model Inquiry-Based Language Learning Pedagogical Design (Based on Laurillard, 2012)

Task stage	Characteristics
1. Students nominate and discuss topics within the domain of current social issues in the media. (one lesson)	Topics are elicited with the aid of recently published images, articles, and video material from established media sources. Scaffolding: Low. Structure is provided as a guide, placing students at the centre of the topic selection process.
2. Teacher introduces language function (persuasive language: ethos, logos and pathos). (four lessons: one per concept, then feedback/summary lesson).	Via deconstruction of exemplar texts, students define the Aristotelean concepts of ethos, logos, and pathos. Scaffolding: Medium. Students are led to defining concepts of persuasion via questioning, analysing, and interpreting exemplar texts. Feedback: Development and comparison of class meanings to original concepts (comparison with “expert” views).
3. Students are socialised via finer deconstruction of additional exemplar texts. (three lessons: two for analysis, one for feedback/summary)	Online newspaper articles and TED Talks presentations are deconstructed for student comprehension and fostering of comparative, evaluative, and critical-analytical skills. Scaffolding: High-Medium. Students are tasked not only with comprehension but also with comparative evaluation of texts and critical analysis. Feedback: Comprehension and critical analysis teacher feedback; class discussion feedback from evaluation, comparison, and critical analysis of texts.
4. Students work in pairs to: a) search for resources within teacher-delineated domains, and b) evaluate materials suitable for supporting viewpoints. (two lessons)	Resources can come from TED Talks videos, credible online media publications, government, and NGO websites. Scaffolding: Low-Medium. Resource domain is delineated but broad; students must put their developed comparative, evaluative, and critical-analytical skills into practice. Feedback: Teacher feedback for completed text analysis worksheets, ensuring that resources provide relevant and rich information. Exemplary completed forms can be offered as examples to any pairs who may be having difficulties.
5. In pairs, students successively present contrasting viewpoints. (number of lesson periods depends on class size; presentations should be approximately five minutes’ duration)	Students present their own TED Talks-styled presentations using persuasive language tools with the aid of visual resources to persuade their audiences, with school community members encouraged to engage with the presentations. Scaffolding: Low: Presentation guidelines are provided as <i>suggestions</i> to aid persuasion. Structure is provided – for example, Microsoft Power Point as the baseline presentation technology. Feedback: Teacher (and guest teacher) expert evaluation, comments from the wider school community and the general public.
6. Students reflect on their learning. (one lesson)	Students contribute to a class blog to reflect on what they learnt throughout each stage of the process. Scaffolding: Low. Domain and structure only. Feedback: Student to student only. Teacher marks the task as being completed and summarises comments to wrap up the unit.

Appendix 2

Link to Examples of Technological Utilisation Within the Pedagogical Design

- <https://sway.office.com/hlFACzu9bPLb5pg6>