

Translation education in the Japanese university setting: developing global communication skills for students

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ABSTRACT

In this essay, I explore the meaning and potential of teaching translation and popularizing the use of translation studies (TS) in a university setting. TS has managed to establish roots for itself, slowly but surely, over the last two decades in Japan. Universities are offering more and more courses that treat translation within the context of intercultural communication, literature, and linguistics, and invigorating academic societies. The effects of translation education on students are diverse and beyond simple foreign language learning: Translation is vital in enabling people from different cultures and even different lifestyles to interact.

Japanese industries want global talents to have the ability to apply their knowledge and skills especially in science and technology in the appropriate contexts, and to benefit others by sharing information as they work in groups to formulate designs for technological innovation. These human resources have to render their messages of information in the proper format and communicate it in a way that suits their intended audience. In other words, what people need to transcend professional boundaries and collaborate with a diverse community in international society is the “ability to translate.” Learning how to translate, then, helps free people from the shells of their individual thinking patterns and acknowledge the need for flexibility and adaptability from a meta standpoint.

KEYWORDS

Japan, university education, discussion, communication capability, global human resources

1. Translation education in the Japanese university setting

Operating from the perspective of Japanese education and against the backdrop of recent social conditions and changes in the educational context, this essay examines the meaning and potential of teaching translation and popularizing the use of translation studies (TS) in a university setting.

1.1 Interlingual translational and English as a foreign language

The definition of “translation” varies according to the objectives and perspectives in question. At its core, however, translation is the process of taking something that someone wants to communicate in one given system of symbols, and converting that content into a different symbolic representation that an audience can understand. Although the realm of TS covers three traditional categories of translation—interlingual translation, intralingual translation, and intersemiotic translation—in academic discourse (Nida 1964), most people probably see translation as a fundamentally interlingual process. When you say that you are researching or teaching translation in Japan, you generally get the same types of reactions: colleagues assume that you must be good at English, while students tend to shrink back, saying, “I’m not very good at English, so I do not think I would be able to get through the class.” Such reactions are readily understood. Considering that Japan is an Asian community

with a mother tongue that sits on the periphery of the world's languages, the general Japanese population normally presumes that "translation" means recasting something from a given language into English – a major global language – or vice versa.

The Japanese government has recently started to make English a compulsory subject in the elementary school curriculum and emphasize the importance of learning the language (MEXT Website 2014) as the surge of "globalization" presses on, but the idea of studying a foreign language still fills most Japanese people with a kind of defeatist, discouraging attitude. The term globalization is used in this paper to refer not simply to free market capitalism or a mainstream commercial value but more to the intensification of worldwide social and economic relations which link distant localities (cf. Giddens 1990). It is obvious that you need a means to communicate in order to be linked with others beyond your local community.

The difficulties of using English for Japanese for contextual and/or linguistic reason are widely noticed among researchers, and various learning methods have been suggested (Sato et al. 1994). Japanese is the only language many Japanese people ever really encounter on a day-to-day basis; as the Japanese community does not need English in everyday life, people rarely use or practice it. The lack of regular use means that developing fluency in the language is quite a challenge. Such realities can set off a typical chain reaction whereby people tell themselves that they can't use English, which means that they doubt they'll be able to do translation and – especially when college credits are at stake – see a translation class as a potentially perilous undertaking. Yet, interlingual translation is the central focus of TS. Being good at English is certainly an enormous advantage for students hoping to engage through discussion and earn

credits in my university translation classes, where we look at many English sentences on a regular basis.

1.2 Translation as a means of communication and approach to interpersonal interaction

In addition to interlingual translation, TS also encompasses intralingual and intersemiotic translation. From a conceptual perspective therefore, translation refers to these three main types of conversion. Even Japanese people who decide to go through life without ever venturing into the international scene will nevertheless use Japanese to communicate in some way, shape, or form on a regular basis. When people speak Japanese to each other, they may adapt the ways in which they put things according to the person to whom they are talking, or modify the content of what they are saying based on how the other person reacts (Nohara 2012). We adjust and metamorphose our communication styles according to our audience, our situation, and our objective regardless of what language we are dealing in. Therein lies the meaning of translation at its highest-level of conceptualization—a construct that applies to phonetic symbols and letter symbols, as well. If you perceive translation as the process of clarifying your semiotic substance when your audience might not understand the words or symbols you are using, you can see how it functions as a means of communication adjustment (Nohara and Kawano 2014), and a form of courtesy to others.

The latter use of translation to express courtesy or—to borrow a term that Japanese people continue to embrace—a mode of “hospitality” to visitors from other communities (outsiders) is where one can adjust (add or reduce) information to offer. If we are capable of withholding information from outsiders and demanding that other

people study Japanese, then it follows that we should be able to turn things around: we can convert what we want to say into easy-to-follow semiotics and provide information. That is also one strategy that Japan, a country that builds its communication channels on the foundation of a minor language (language of limited diffusion, see Radó1987), can take in adapting to the standpoints and approaches of others.

2. The gradual development of TS in Japan and issues in the Japanese educational field

Japanese universities are in the process of importing the theories and research methods of TS, which grew into an academic discipline mostly in the West, and attempting to establish the field as an area recognised for research. Historically, Japan created its own expertise and identity through the translation of Chinese (a practice that began in the Nara period) and, further down the line, European languages like Dutch, German, and English (Twine 1991). To Japanese people, with their relatively fringe native language, translation has been an essential communication tool for the survival of the state, a tool for diplomatic relations, and even a tool for self-formation. While the practice may have been a popular topic for authors and essayists to take up, that thematic prominence in literary circles has not prompted much in the way of research in, teaching of, or debating translation (Nohara 2014). That said, TS has managed to establish roots for itself, slowly but surely, over the last two decades. Universities are offering more and more undergraduate and graduate courses that treat translation and interpretation within the context of intercultural communication, literature, and linguistics, invigorating

academic societies that discuss translation and precipitating an increase in the number of studies, textbooks, and papers on the topic. Given the nature of TS as a research subject, discussions at meetings of academic societies across the world are beginning to draw not only researchers in the field but also professional translators, students, and bilingual intellectuals. The field is developing a healthy and active diversity.

As suggested above, however, the Ministry of Education, Culture, Sports, Science and Technology (MEXT)'s efforts to improve English education in Japan can do little to overcome the simple fact that there are so few opportunities to use English in Japan and there are only a few universities and faculties that attract students with particularly high levels of English proficiency. At institutions that have traditionally offered translation-oriented classes and drawn students with strong English abilities, such as Aoyama Gakuin University, International Christian University, St. Paul University, the Tokyo University of Foreign Studies, and Kobe College among others, the curricula combine theory and practice to create flexible programmes for training the translators of the future. The conditions are however different at universities where the students' English and foreign language skills are not as exceptional. Although the students might exhibit an interest in translation, these sorts of institution cannot offer practical training courses—sometimes the only kind of classes that they can offer focus on reading existing translations, comparing them with the originals, and discussing matters from a cultural perspective, thereby reducing the students' role to that of passive observers. That is one of the biggest problems facing Japan, a country that is largely monolingual from the interlingual translation viewpoint.

3. Translator training as a practical science: preparing for the Tokyo Olympics

One of the reasons why the professions and practices of translation and interpretation are currently attracting so much attention is in anticipation of the 2020 Tokyo Olympics (Azuma 2015). With the “hospitality” concept that was touched on earlier having played a pivotal role in helping the Tokyo delegation win the bid for the games, discussions are now focusing on how Japan will extend that “hospitality” to Olympic participants and spectators. From efforts to train translators and interpreters to initiatives aimed at developing an effective system for providing temporary translation staff, improving the quality of translation services, making use of volunteers, and developing translation tools, the translation market is starting to enliven. This coincides with the new movement of the International Organization for Standardization (ISO) which provides requirements for the delivery of “a quality translation service”. How these new requirements might affect the market is being paid much attention (ISO 2015).

The current political administration’s notable emphasis on practical science (Asahi Newspaper June 10, 2015)—temporary though it may be—might infuse the translator-training effort with even more energy. All the questions about “what kinds of human resources society needs” and “what the humanities produce in terms of education and research” could very well find their answers in the field of translation, as a field which can relate theory and practice. Be that as it may, there is still the issue of how to compartmentalize the elements of translation-related education between universities and technical schools. We also have to find a way to keep TS—the

theoretical underpinning of the teaching resource development, translation evaluations, and translation analyses that universities and other organizations have engaged in—from decaying under the budgetary constraints currently squeezing the humanities, which are driven by the perception that humanities rarely pay any immediate returns on investment. This perception may be based on the tendency that what students learn in translation courses does not always yield instant benefits as soon as they get jobs, that it does not necessarily drive product commercialization, and may lack other simple values that can be commodified. As a consequence, researchers in the field have to demonstrate how the theoretical and conceptual thinking abilities that accompany studying translation can influence students towards success in their performance. One of the promising approaches to that challenge is the next topic: the education of global human resources, which refer to more communicative and often internationally capable characteristics expected in industrial societies.

4. Honing translator skills in a broad sense: a means for training global human resources

Sluggish economic conditions and escalating environmental issues have made innovative human resources a global need. Some argue that translation skills, in the broad sense of the term, represent one way to meet that demand. At a 2014 meeting of the Science Council of Japan for instance, reports that the “practice of ‘translating’ gives people a platform for reflecting on their own language and culture, experiencing other cultures, developing a more comprehensive perspective, and recognizing diversity in the world” (Torikai et al.

2013). Experts are thus viewing translation as a tool for global human resource development. Industries want human resources to have the ability to apply their knowledge and skills in the proper contexts and benefit others by sharing information as they work in groups (companies, research institutes, and sections, for example) to formulate designs- particularly for technological innovation. To be helpful and positive contributors, these human resources have to render their messages of information in the proper format and communicate it in a way that suits their intended audience. In other words, what people need to transcend professional boundaries and collaborate with a diverse community in international society is the “ability to translate” (Nohara 2014). That idea also holds true for people who never need to interact in a foreign language: whenever people who have little experience in certain communication environments and lack a common set of communication rules try to interact with each other, “intra-lingual translation” paves the way to mutual understanding. Learning how to translate, then, helps free people from the shells of their personal or community-sensitive thinking patterns and acknowledges the need for flexibility and adaptability from a meta standpoint.

There is thus a substantial, pressing need to help university students and up-and-coming researchers in science and engineering acquire better translation skills (in the broad sense of the term) (Nohara and Kawano 2014), a point that is discussed in more detail later. As global warming and other environmental concerns continue to grow increasingly dire, the well-being of Japan—a country vulnerable to the effects of natural disasters—will depend on communication that unites society, lifestyles, and scientific technology.

As explained above, university curricula in Japan feature a blend

of instruction in conventional “translation” (interlingual translation) and education in the communication accommodation skills (intra-lingual translation and intersemiotic translation) that internationally capable human resources need. The pedagogical methods and senses of purpose behind those educational offerings cover a broad spectrum. In the next section, I profile the methods I use in classes, the aims of the different approaches, and student reactions to the content.

5. Translation education in practice

The interlingual translation classes taught may go by different names – Translation Theory and Practice, Translation, and Intercultural Communication, for example – depending on the setting, but they all share a basic focus on the theory and practice of translation and aim to use translation as a platform for encouraging students to think about communication and interacting with others. Although the classes deal mostly with interlingual translation, discussions often extend into interlingual and intersemiotic translation. Higher-level classes also incorporate a considerable amount of practice with intersemiotic translation.

Three methods of teaching are generally applied. Class discussion is the main format for each method, but the other components have unique features and different objectives: understanding the basics of language culture, understanding translation theory, and understanding the connections between translation and other fields. Ultimately, all the approaches aim to help students acquire a command of translation theory and deepen their awareness of the complicated mechanisms of translation.

5.1 Method 1: Questions + Large-group discussion

Goal: To help students grasp the basic concepts for understanding translation

For the first step of this method, the teacher asks students some questions, such as what they make of abstract concepts like “translation,” “language,” “meaning,” and “equivalence”, in order to stimulate them to assess their own comprehension of the core ideas. As students give their answers, the class as a whole develops a stronger awareness of the overarching concepts. One question often used is, “What does ‘translation’ mean?” Student A might say, “Converting a written text into a different language,” while Student B might say, “Translation is about more than words—it also involves rendering a culture in a different way” (see Figure 1). Based on the students’ different readings, the teacher can emphasize that translation is not as simple as just rephrasing something; the practice also entails thinking about linguistic norms and customs: whether you can use that new reading in a different cultural context and, if not, how you can put it so that the content pragmatically fits the situation. By prompting discussion through this line of questioning, Method 1 lets the entire class—students and instructor included—delve deep into the relevant concepts together (Nohara 2014).

Translation

Rendering a meaning/message in a given symbolic system

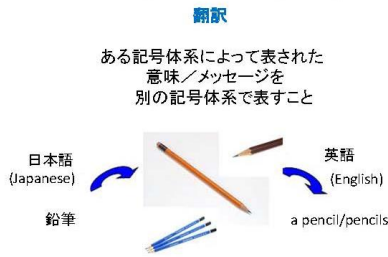


Figure 1: A slide from a class presentation (2014)

5.2 Method 2: Translation exercise (homework) + Report/presentation + Large-group discussion

Goal: To help students understand the universal components of the diverse translation field through actual practice

This approach requires students to do a translation exercise as homework and then present their results. After the presentations, the class discusses the possible contextual reasons behind the differences in the students' translations, and the effects of the various interpretations, in order to arrive at a clearer perspective on translation theory. The process has the students discuss the divergent features of a few different student assignments and existing translations often by professionals, concentrating mainly on the decision-making criteria, objectives, functions, and effects of translation. After underscoring the diversity of translation, the teacher can move onto an explanation of relevant translation theory.

Here is how that approach worked with *The Very Hungry Caterpillar* as the source text, for example. One student wanted to

have the caterpillar (the main character of the story) say the phrases “*itadakimasu*” (a phrase that Japanese people say before eating) and “*gochisō-sama deshita*” (a phrase that Japanese people say after eating), which are not semantically in the original English text. The student argued that “Japanese parents tell their children to say ‘*itadakimasu*’ and ‘*gochisō-sama deshita*’ at mealtime, so they should be in the translation.” On what basis might a translator add those types of lines to a children’s book? One answer lies in the educational impact of the genre: by including *itadakimasu*, *gochisō-sama deshita*, and similar phrases, the book allows readers to learn common Japanese expressions and thereby derive more educational value from the text. Considering the skopos and the function that children’s books are supposed to serve, the student’s reasoning was valid. The addition of *itadakimasu* also represents a “Japanization” of the text, which ties into the theories of domestication and foreignization. Through applied translation exercises and discussions of the topic, the method facilitates the instruction of theoretical concepts.

Below are some of the presentations by students and the conversations we had in class, including the above discussion of the “*itadakimasu*” issue. The student group was assigned to lead the discussion and the first female speaker initiates the talk rather effectively.

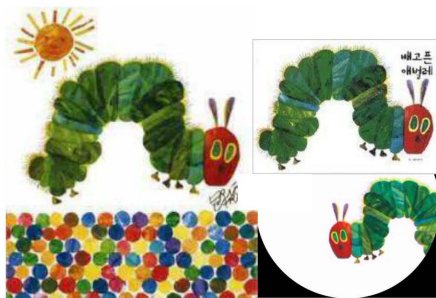


Figure 2: The Very Hungry Caterpillar and its Japanese and Korean translation

Student (female):

Does anyone need more time to think? No? All right—let’s start the discussion, then. The Very Hungry Caterpillar is a children’s picture book that falls into the “educational” category, as it aims to teach things like numbers, days of the week, the names of different foods, and the ways to count individual food items. The target audience is preschool children: kids who are at the age where they are just starting to learn how to say numbers and days of the week. The story is about a hungry caterpillar, just hatched, that eats lots of different foods over the course of a week, grows into a bigger caterpillar, weaves a cocoon, and finally emerges as a butterfly. I would like to begin by taking a closer look at Hisashi Mori’s Japanese translation, which does a fascinating job of assimilating the story to Japanese conventions.

Take a look at #3 on the handout: “In the light of the moon, a little egg lay on a leaf.” Mori made “the moon” the subject and reworked the phrase to “*Oya, happa no ue ni chiccha na tamago*” (“Look here—a little egg on a leaf”) … “*Otsuki-sama ga, sora kara mite imashita*” (“The moon said, looking down from the sky.”). He adds a line that is not anywhere in the original, making it a really free translation. One of the interesting things about translation is that you can throw in things that aren’t there in the source text. Let us go to page 17, where the caterpillar starts eating lots of different things. In Mori’s translation, the “On Saturday he ate one piece of chocolate cake” phrase turns into a question for the reader: “*Doyōbi, aomushi no tabeta mono wa nan deshō*” (“What did the caterpillar eat on Saturday?”). Next, Mori adopts a motherly tone as the narrator lists off the morsels: “*Chokorēto kēki to*” “*Suika desutte!*” (“Chocolate cake and” “My, my, some watermelon!”). Here, again, Mori inflects the story

with a new brand of expression.

As we worked on our translation of the book, we decided to try to emulate the freedom of Mori's translation and focus on conforming the whole story to Japanese sensibilities. For "He started to look for some food," we chose to depart quite a bit from the original and rendered the line as "*Saa, gohan-sagashi ni shuppa-tsu*" ("Here we go—it's time to look for some food!"). We wanted to add a dimension of excitement, something that a character would say as they head off for an adventure. The scene where the caterpillar goes on eating and eating is another place where we made some changes. Thinking that onomatopoeia and mimetic sounds might make the story more enjoyable for the reader, we decided to put in a "*mogu-mogu*" (munching sounds) for everything that the caterpillar eats.

Teacher:

Why did you put this "*gochisō-sama deshita*" (a phrase that Japanese people say after finishing a meal) here?

Student (female):

We thought that putting "*...suru to onaka no guai mo yoku narimashita*" ("...and the caterpillar felt much better") right after a "*mogu-mogu*" (munching sounds) would be a strange transition. The "*gochisō-sama deshita*" also emphasizes the fact that it is the caterpillar's last day of eating before he goes into the pupal stage.

Teacher: So even though it is not in the original, you added a "*gochisō-sama*" because that is what Japanese people say when they finish eating. That gives the book a stronger educational element.

Student (male):

Our next section gets a little more technical. One of the things we struggled with was which tense to use. The English version, as you can see, is completely in the past tense. If you translate that into Japanese directly, you end up with a dull pattern of similar sentence endings: “*nantoka deshita*” and “*nantoka datta*” (both refer to “was so and so”). We also wanted to give the text a sense of presence and immediacy, to create a feeling that would enable kids to imagine the story happening around them while their mothers or fathers are reading. That is another reason we had trouble deciding whether we should use the present tense for the whole text, the past tense, or a mixture of the two—if that was even an option. When we used both tenses together, it did not sound as unnatural as we thought it might.

On the page with “he ate through” line (“*ringo o tabeta*” [“he ate the apple”]), for example, there is a hole in the picture of the apple; the “through” idea comes through in the visual. We mulled over and over how to translate that sentence, but we did not come up with any good ideas. We just left it at “A—*ringo ga hitotsu*” (“Oh—one apple”), simply adding the “one,” and moved on (laughs). If anyone has a good idea, let us know!

Student (female):

The next big challenge we encountered was the counting section that starts with “one apple” and “two pears.” We had two options: we could either use native Japanese words (*hitotsu*, *futatsu*, and *mittsu* [one, two, and three]) or normal counters (*ikko*, *niko*, and *sanko* [one, two, and three]). It was a really tough decision. Considering that the work is a picture book for children, we decided to go with “*hitotsu*,” “*futatsu*,” and “*mittsu*” because the letters looked better and easier to read in hiragana (the Japanese syllabary and the standard writing

system for children's books) than "*ikko*," "*niko*," and "*sanko*" did.

One can see that the student group's presentation includes a number of significant issues which can be easily linked to theoretical explanations.

5.3 Method 3: Small-group translation exercise + Discussion

Goal: To establish a deeper understanding of translation and its connections to more notions in other fields

Like Method 2, Method 3 has students do translations themselves and discuss their results. The primary goal of Method 3 is to help students think and discover more about how translation relates to linguistics, communication theory, literary theory, and other fields—namely how translation is to do with human communication and interaction in general. After having the students do a translation task in groups, the teacher then asks them to reflect on the impact that in-group communication had on translation-related problem solving.

The translation tasks included intralingual and intersemiotic translations and they challenged the author selected groups, for example, to rewrite a newspaper article weighing the pros and cons of nuclear power for an audience of elementary school children, or to write copy based on a story from a children's book which suggested some moral teachings. The following is an example of the source material and copy phrases a student group created:

自分探し、なう。

(Searching for who I am now)

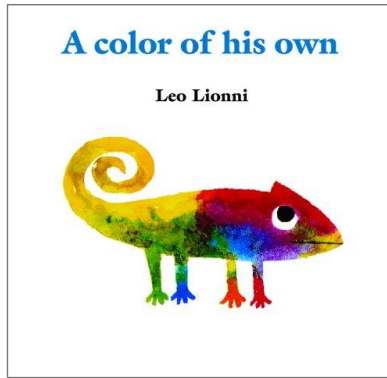


Figure 3: *A Color of His Own* and a copy students created

In the story, the chameleon seeks for the way to stay in one color, hating his fate to keep changing his look according to the environment. You can find a message for children in the picture book, for instance, *that your identity is in your personality, or the important value of being yourself. Students can debate what they want to convey from the text and then express it in the form of a short phrase such as that in the example.* Each group thinks about the processes they used to merge their members' different ideas into a single answer. For the last step, the teacher can ask the groups to discuss the differences between translating through group-based communication and translating alone.

These three methods have discussion as a common activity. Thinking in translation should not be closed within individuals and their ideas should be externalized so that they can yield clear awareness about translation (Nohara 2014). Combining these three methods in a class environment not only enables students to gain translating experience and learn the pertinent theories, but also

stimulates the development of flexible communication which is necessary for globally capable characters.

In order to coexist with our world's diverse mix of cultures and value systems instead of simply yielding to the cultures and tendencies of dominant nations, people need to put themselves in a position to encounter differences—not only other languages and cultures but also other fields—by looking at things from different perspectives. How to communicate the same content in different settings most effectively, how to use theory in practice, and how one's area of specialization connects to other fields are crucial questions that students confront when they find themselves in new environments or positions.

It is also useful for the teacher to sometimes give out surveys and hold group discussions after class to gauge student reactions to these methods. Below is some of the responses received during 2008-2010.

- I learned that translation is an integral part of communicating with others and something that we do subconsciously.
- I used to think that rhetoric was just a literary tool. Now, though, I understand that it plays a big role in everyday life, helping us convey messages effectively.
- Having always assumed that that translation meant keeping the original meaning intact, it was eye-opening to learn how translators often need to alter the surface meaning to get the intended message across.
- Now I know that “translating” something does not necessarily mean that you have to convey exactly the same meaning as the original text. You need to take everything with a grain of salt.
- I want to be more strategic in my communication, which basically comes down to translating my ideas.

Many responses echo these examples, reinforcing the general sense that students have started to recognize the need to take a more conscious approach to translation and communication, and that students are beginning to venture out of the familiar Japanese communication framework, which represents just one mode of interaction, and embrace a more flexible communication style.

6. The “global human resource” wanted in the field of sciences and technology

Next, looking from the standpoint of educating science and engineering graduates who can operate in the global working environment (what we call ‘global talents’); we can ask what skills and abilities are required for such global talents which can be provided or strengthened through translation theory and practice education. One example is through a case study at Tokyo Institute of Technology and the program to educate capable young scientists and engineers who can engage in science communication activities (Norton and Nohara 2009).

6.1 Science and engineering communication abilities required by industry

What is strongly required these days by industry (in addition to science and engineering and specialist abilities) is not just English ability, but also broader communication ability, a cooperative approach and flexibility (Kasagi, 2013). Especially for science and engineering students, there are many who have poor awareness vis-a-vis personal communication. According to surveys, many

students feel insecure in casual, face-to-face conversation without a clear purpose. If questionnaires are conducted in departments such as electrical engineering, mechanical engineering, physics and chemistry, opinions such as those below are often expressed:

- I cannot successfully convey what I want to say
- I cannot extract what I want to hear
- I feel bad about continuing the conversation
- I am worried about being boring
- I feel insecure about understanding the other person's intention

(Tokyo Tech survey 2008-2010)

It appears that such consciousness of weaknesses in human communication comes in many cases from the conversion from language to digital methods. As with “symbol1: information1, symbol2: information2”, communications are fixed through the step of transmitting words and meaning, and the opinion is often heard that, “despite intending to converse according to my own “correct” coding, I was unable to do so successfully”. There is a strong awareness that it is possible to automatically convert meaning in a fixed manner, but even if intention can be transmitted through words, do we have the ability to define the phenomenon clearly and remove ambiguity and polysemy as much as possible? This is connected to the thinking that “communication which depends on context is inaccurate, non-scientific and not good,” and to the inability to express himself/herself while considering the background and social context of the partner before his/her eyes.

6.2 Practical ability in science and technology communication

The importance of communication in science and technology is one further factor in the background to requiring communication ability in science and engineering personnel. This is required in sharing and discussing information between specialists and non-specialists, and includes the need to explain specialist information in simple terms (Kaji et al. 2009). Especially, there are many countries like Japan where natural disasters frequently occur, and in societies where scientific information connects directly to the safety of the ordinary citizen, there is a right for citizens to have access to science and technology-related information. There is the recent example of a major earthquake in Tohoku and nuclear accident (2012). In addition, science and technologies such as genetic recombination, global warming and alternative sources of energy problems, IPS cell etc., raise various arguments ethically and socially. Activities such as science cafés, public lectures etc. are increasing but the problem is who should take responsibility. It may thus be essential to teach intralingual translation of science and technology in context.

The theory of translation, science communication education and training may be useful to the student who is seeking to convert (and switch 'codes' in) the scientific information held to another in a different context, and seen from different perspectives and values. We can also think of various educational practices for science translation from the language of science and technology to more general language; for example, in the form of the holding of science cafes, visiting science classes in primary schools, internships in the media (newspaper publishing company, magazine corporation and museum) (Norton and Nohara 2009).

Furthermore, through science communication education it is

important to recognise not just practical skills but also the importance of information conversion (translation). Especially in the case of the science and engineering students who add law and theory, flexible “translation” is an indispensable means of iterative learning to make cooperation successful for those who are weak in communicating with others, and is effectively provided through practical training.

7. Conclusion

In this essay, I have expressed, based on my own experience, ways in which translation education is carried out in Japanese universities, as well as some of the results which can be expected. Graduates who can actively participate globally are required to exercise leadership in not only their own specialist abilities, but also be able to work together with other cultures in groups on problem solving. Especially, society needs talents who can practice science and technology communication. Education which is aligned to the culture and environment of Japan is thus required.

The effectiveness of translation education is high with its training in flexible and rich communication ability. It has to be repeated that what people need to transcend professional boundaries and collaborate with a diverse community in international society is the ability to translate. Translation is key to enabling people from diverse cultures and background to interact.

Noting that attention is being given to education and training in the translation field in relation to the hosting of the Tokyo Olympics, it is also necessary to keep advancing translation education as part of global human resource education. At the September 2013 meeting of the Japan Interpretation and Translation Society, its 14th conference,

within the “interpretation training and guidance method research” project, “translation research and education project joint symposium: the social significance of university-based interpretation and translation education” took place and debated the significance of interpreter and translator training at universities. Raising translation education to the reference standard from the Science Council of Japan, also the rich debate which took place at that symposium, demonstrated that the significance of university translation education is being acknowledged. Translation practice in groups is also enjoyable and creative co-work. Beyond translator training, in addition it can be seen as surpassing mere language education and awareness of different cultures, and offering great potential to be a part of education “nurturing global talents” required in the current society.

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