



WINPEC Working Paper Series No.E1520
February 2016

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This is a translation of the Japanese article written by Osamu Yoshie published in a book:

“Voices from Japan in a Multilingual World: Prospects for Fostering Human Resources and Global Communication”, Asahi Press, 2016.¹

Abstract:

Generally speaking, the overseas students who come to Japan to study in graduate school are highly motivated. Japanese universities will need to play a bigger role in the future in fostering international human resources development aimed at Japanese students while at the same time actively welcoming motivated overseas students, nurturing them into outstanding human resources to be returned to the world. In places where a variety of people with different native languages are gathered together, English is typically used as the standard language. Working to avoid the miscommunication which can arise in this situation is the first effort that needs to be made. Meanwhile, some overseas students voice a sense of discomfort towards the Japanese style of education, and this can also be seen as a variety of miscommunication. Expanding this more broadly, in the realms of job hunting and research cooperation between industry and academia there is miscommunication between companies and universities with regard to overseas students. This article will look at the educational and research practices of Waseda University's Graduate School of Information, Production and Systems, as it seeks to become a hub of international human resources development, in order to identify and discuss the latent problems which exist in international human resources development.

¹ 砂岡和子,室井禎之編『日本発多言語国際情報発信の現状と課題ーヒューマンリソースとグローバルコミュニケーションのゆくえ』2016年3月朝日出版社刊

keywords:

human resource development, globalization, miscommunication, engineering education, overseas study program

A New Graduate School Established in 2003 Based on a Completely New Concept

There is a master's program which has around 400 students enrolled, and nearly 90% of these are overseas students (as of September 2015). What is more, this program is found within one of Japan's science and engineering graduate schools. The school in question is Waseda University's Graduate School of Information, Production and Systems (IPS), and it is located within the Kitakyushu Science and Research Park: a campus established as a "knowledge hub" and "gateway to Asia" by Kitakyushu City. Since opening in 2003, the number of overseas students at IPS has continued to grow, reaching a point where, in some laboratories, there are virtually no Japanese to be found. Thus, the emphasis on IPS as a place for cultivating an international mindset amongst Japanese students has been superseded in many ways by an emphasis on accepting diverse human resources from overseas and equipping them for the private sector, particularly in Japan, as well as to make positive contributions back in their home countries. IPS welcomes the best and brightest from approximately 40 top schools worldwide with which Waseda University has signed partnership agreements, as well as attracts students seeking a globalized atmosphere within which to challenge and refine themselves. From its inception, and at a time when September enrollment and international courses were still a rarity amongst Japanese universities, IPS announced itself as a graduate school where Japanese and English were equally acceptable towards course completion, and it undertook to ensure that all lectures and office hours for students, as well as documents and application forms, were equally available in English and Japanese.

However, cultivating trust relationships with overseas partner schools is easier said than done; thus, it has taken more than 10 years to finally establish the double degree programs, student exchange systems and joint research structures which are

now in place. These days, when IPS holds its annual International Collaboration Symposium at the Kitakyushu Science and Research Park, representatives from practically every partner school are in attendance. Nevertheless, a great many issues remain to be addressed stemming from the fact that IPS is not fully prepared to handle the role of academic hub amongst the primarily Asian universities which it has targeted for partnership.

This highlights a fact which bears reexamining, namely that there is a major difference between providing an internationalized environment where Japanese students are developed into global leaders and providing a globalized environment where students from a large array of countries are educated. The former involves welcoming overseas students as a minority into an environment where Japanese students are the majority, and the overseas students become accustomed to Japanese educational and research methods. In such situations, it is standard to expect the overseas students to adapt to the Japanese way of doing things. It goes without saying that communication between teachers and the overseas students is of tremendous importance. In the latter case, however, being indifferent to the fact that Japanese students and educators constitute a minority is to unwittingly set up potential pitfalls. Quite often this is in the form of general miscommunication.

What follows is a description of the lessons IPS has learned in the course of attempting to become a hub of international human resources development. Unfortunately, these lessons are not enough to provide a rigorous, systematic framework for implementation; however, it is the author's hope that they will serve as a useful guide or aid for readers when thinking about international human resources development.

A Constructive Venue for Motivated Learners

A student who had graduated with an undergraduate degree in the arts enrolled in IPS. Despite the opinion of those around her that she would not succeed in an engineering graduate school, she not only easily completed her master's thesis, it

received the Best Paper Award at an international conference. She was a skilled artist and, because of her background, understood how color could be used in pictures to evoke different feelings and impressions. She capitalized on this strength to propose a color conversion method which, using images publicly available on the Internet, she demonstrated could enable even people with partial color-blindness to identify image boundaries. Research up to that point had generally concluded that color conversion greatly affects the impression people take from an image; however, the method proposed by this student softened this view. Although the student in this example enrolled in IPS because she was extremely motivated to study there, the ease with which she completed her degree could very well be a rare case of good fortune. However, in this author's opinion, the student's motivation to learn, combined with the guidance she received to apply her strengths, demonstrates the powerful, latent potential of education to change a person's future.

The tendency, however, when a student who lacks a sufficient engineering foundation enrolls, is to deny his or her potential. IPS handles this by giving students the ability to choose the type of course best suited to themselves. They can choose a research-centered course, involving a half-year of intensive lectures followed by a year-and-a-half of laboratory research; a balanced course, involving a year of lectures followed by a year of laboratory research; or a lecture-centered course, involving a year-and-a-half of lectures followed by a half-year of laboratory research. Such an arrangement appears to work well in providing "a constructive venue for motivated learners" where students representing a variety of nationalities and backgrounds are able to sustain the motivation necessary to ultimately produce research results and complete their course.

Language Barriers Are Not the Fundamental Cause of Miscommunication

IPS has had its share of communication problems when using English as a common language. When IPS first opened, some Japanese students felt lost in the all-English classes, and an effort was made to re-teach the same course material in Japanese for a

small number of these students. However, such complaints over the instruction language dwindled away over time. This was likely due to the ongoing trend of welcoming internationalization and globalization into research and education, and as IPS is a graduate school, this mindset was more naturally accepted. Generally speaking, the English grammar skills of Japanese students enrolling in IPS are comparatively strong and would be at a level sufficient to read and write papers in English. Some Japanese students struggle during the English language seminar discussions held immediately after laboratory sessions; however, by the latter half of the master's course, students have a clear understanding of the direction of their research and what aspects they want to emphasize, and this likely contributes to smoother English communications. If the students know what they want to say and are able to organize their thoughts, it is no surprise that they would be better able to express themselves in English. It is this author's observations that, beyond examples drawn from IPS, the level of English education in Japan instills a latent potential for English communication which is certainly not low.

When creating an academic community comprised largely of students from overseas, it is actually rather easy to resolve the underlying causes of miscommunication or dis-communication stemming from differences in mother tongue. At the very least, this is the conclusion which this author comes to when looking at the experiences of IPS over the past 13 years. Instead, the deeper, more fundamental cause of miscommunication is the fact that those providing research guidance do not properly realize that they are applying largely the same global leader development instructional methods that they would for Japanese students to overseas students who, by and large, have been raised with different thinking, customs, educational methods and curricula to those of Japan.

Echoing Einstein's comment that, "If you can't explain it to a six year old, you don't understand it yourself," a skillful speaker has a fundamental understanding which allows him or her to ascertain how much to expect from a listener and to then find a way to communicate in such a way that the listener will understand. In an educational setting as well, most teachers will adjust their teaching methods to suit

the comprehension level of their students. At IPS, however, the student body represents a great diversity of backgrounds and ways of thinking, and so far an educational method which can accommodate such a diversity has not yet been found.

At a certain university in Great Britain, the overseas students report a lower level of satisfaction with their classes compared with their British counterparts. This is primarily due to the overseas students' lower level of communication, which in turn is due to a lack of language skills. It is easy to imagine that, within this community, the communication level is dominated by the British students, as they are a majority, and this produces growing dissatisfaction as no effort is made to patiently include the views and statements of overseas students. In contrast to this, almost none of the students or teachers at IPS speak English as their native language, putting them on par with one another in terms of language ability. In other words, everyone within the IPS community recognizes their mutual lack of ability, and they are therefore more tolerant of one another. The shortcomings in communications at IPS, however, are by no means limited to language-related factors.

Cultivating Shining Students

In a nutshell, for a graduate school program which attracts a variety of students coming from a variety of educational backgrounds in terms of teaching methods and content, the key to success lies in whether or not each student can be empowered to capitalize on his or her own individuality and strengths. This is easier said than done, however, and we can readily imagine that the instructors who helped guide the student with an arts background, discussed earlier, invested a not inconsiderable amount of time and energy into her. Fundamentally speaking, teachers like excellent students, and they provide them with instruction which challenges and refines them and use seminar discussion as a catalyst for student action. And it seems to this author, and perhaps to the reader as well, that in this context, sufficiently efficient communication between student and teacher would often be a prerequisite. Educational programs use entrance examinations and other methods at the outset to

organize students by their ability, and this can be seen as a contributing to increased efficiency in communication. At the same time, however, while there may be some variation in student quality at the start of an educational program, any educational policy which guarantees a given standard of quality at the end of the program is extremely difficult to achieve. Furthermore, when the majority of the community is comprised of overseas students having varied educational levels and backgrounds, there is no single standard of quality which can be expected of them at the end of the program; rather, each student must be evaluated based on the added value which he or she has attained during the course of program completion. It is therefore important for the university which is accepting the students to adequately debate and discuss its methods and ways of thinking and to then fully convey this educational policy to candidates and current students. It is likely that most teachers will shrink from such a burden. However, it must be undertaken, because casually admitting students of varying academic ability and backgrounds will result in unhappiness for both students and the university.

Recognition that the University Must Also Change

University professors were students once, as well. Rare is the teacher who has not been shaped by the teaching methods he or she experienced as a student. Even in the author's case, at the outset of his career at IPS, he imitated the methods he was exposed to during his time as a seminar student, believing these to be the best. However, the Japanese mindset with regard to engineering tends to be industry-oriented, and this tendency is rapidly becoming more pronounced as collaboration between industry and academia continues to grow. Thus, when providing guidance to students from various countries having different views of engineering to that of Japan, it is essential that instructional methods be used which encourage the students to capitalize on their own individuality and strengths in pursuing their research. In the case of the author, an instructional method mainly involving short, 15 minute discussions with each student was arrived at after much

consideration about how to handle unavoidable, intuitive differences which arise in the course of discussion. Other methods are, of course, incorporated as well, including opportunities for team-led research and for discussion amongst all students in the laboratory of one another's research content; however, students fundamentally prefer to visit the author's office individually to communicate their ideas, as their repeated visits demonstrate. The intent of this example is not to show which method is the best; rather, it is to show that, at the very least, educators must recognize the need to rethink their own assumptions about the best way to teach or to provide research guidance when dealing with diverse students in a multicultural environment.

Students are young, tech-savvy and have friends of many nationalities with whom they communicate; thus, they are already more thoroughly internationalized than their teachers may realize. In addition, they possess a tremendous amount of information. Within communities composed of friends all of the same nationality, in a great many cases they provide one another, and their university of origin, with feedback about their learning environment in Japan. In other words, the university is being scrupulously evaluated on a daily basis. Thus, it is essential that the university create a policy statement which clearly explains such matters as its attitude towards globalization, methods for accommodating overseas students and standards for degree recognition, and it must adhere to principles consistent with the campus' consensus in dealing with students. In particular, what would seem to be needed is a degree of policy flexibility when it comes to assessing a degree's value and in the methods used to assess presentations during thesis defense.

At the same time, constant effort is needed to avoid the miscommunication which can arise when the daily life events of the overseas student are not kept distinct from laboratory, teacher and administrative interactions. Japanese universities are extremely careful in their handling of the still-immature students who join them just out of high school; however, a variety of potential personal issues, including mental and emotional issues, exist in the case of overseas students, regardless of whether or not they are graduate school age, and these issues are by no means easy to deal with. At IPS, a cooperative structure composed of a committee of teachers dedicated to

student life care, working in conjunction with administrators and off-campus counselors, has been put in place to handle such issues.

Importance of Communication with Overseas Universities

At IPS, our interaction with students begins approximately one year prior to their enrollment. This interaction is primarily via email, but every year it is successfully used to build student expectations for coming and studying at IPS. Behind all of this enthusiasm and excitement is the hard work of the local representative at the overseas university. He or she makes sure the campus receives information about IPS, finds candidates interested in studying abroad at IPS, assesses potential candidates' suitability and then, even though it is one year before the fact, encourages the candidates in furthering their education at IPS.

In recent years, no matter which Asian university one visits, be it in China, Taiwan, Korea, Thailand, Vietnam, Malaysia, India, Indonesia or elsewhere, the campus is decorated with evidence of student exchange and cooperative research agreements signed with Western universities. Amidst all of this, IPS has been successful at attracting students who are highly motivated to come here and study because of what IPS is and not because it appeals to some visceral desire to go study in some far-flung country. This is all thanks to the regular communication which IPS maintains with partner universities. It goes without saying that, although it is important to get on good terms with someone in a given partner university who will serve as a liaison in reaching out to and finding students, such a contact cannot be cultivated overnight. In the case of IPS, it often takes two to three years before such a relationship is successfully established. Given the effort involved in building such relationships with 40 different partner schools and then ensuring such relationships are well maintained, it is crucial that IPS choose an administrative liaison with excellent communication skills. This administrative liaison must work with the teaching faculty to ensure that IPS has a clear educational and research guidance policy to communicate to partner schools. On top of this, the liaison must ensure that

partner schools realize that IPS is fastidious in following this policy for students once they are in Japan and also ensure that students already at IPS provide feedback to their home universities. In the case of IPS, overseas students generally provide positive feedback about their daily life in the city where they live whilst in Japan.

At IPS, a double degree program and a program for enrolling third year undergraduates directly into IPS are offered to excellent students within partner schools. The projected trend for the foreseeable future, not just for IPS but for the world, is towards educational methods which incorporate multiple universities and graduate schools into the education of a single student. In such a situation, questions about how a student's research results are to be handled come up often. IPS knows firsthand the problems which can arise between universities regarding the intangible intellectual assets which each student acquires before, during and after his or her time in Japan. An extreme example which IPS has dealt with involved a student inappropriately applying his research results to acquire a second degree at his home university based upon the master's thesis he wrote for the double degree program at IPS. Although one could say this was just a case involving an unethical researcher, in a global environment where there are different ideas about what is or is not moral, we must not blithely write off such cases as part of running such a partnership program, as this constitutes an area of miscommunication between universities.

Becoming an Asian Academic Hub on Par with the West

To the question of whether IPS has reached a point where it can be considered an international human resources development hub which attracts motivated students from around the world, the answer is 'no,' and constant, continued effort is required to find better solutions to the problems highlighted thus far. However, no discussion can take place about what a human resources development hub should be unless Asian students, who tend to look to the West as their overseas study destination, are actually interested in and actually attending IPS. To attract these students, IPS employs many of the same effective methods used by other universities, such as

double degrees, joint degrees, year skipping and other attractive degree programs, as well as scholarship incentives. However, there needs to be a more fundamental appeal which motivates overseas students to come to Japan to study.

To attract overseas students, the university's educational and research opportunities themselves need to be distinctive and appealing. Amidst fierce competition between universities worldwide, IPS is looking to its communication with the local community as a means for developing its appeal.

IPS is located in Kitakyushu, a city which has been at the center of heavy and chemical industry development in Japan and which was once known as one of Japan's four major industrial zones. The city's push for industrial development led to such severe pollution by the 1960s that the expression "a sky full of smoke, a sea full of death" came to be used with regard to Kitakyushu. However, collective efforts made by the citizens, companies and government in the 1980s brought about a remarkable environmental resuscitation. A city with such a story can serve as a living textbook for the countries of Asia currently undertaking their own industrial development push. At the same time, IPS is, as its name states, an educational institution which seeks to merge information, production and systems technology together to explore new manufacturing paradigms for the future. By not limiting its learning environment to just the campus but, instead, working together with the city, IPS has the potential to build its appeal among the youth of Asia as a place offering the sorts of practical, hands-on research opportunities found nowhere else in the world. Becoming a university which works in close collaboration with its surrounding city is one way in which IPS can become an Asian academic hub and international human resources development hub; however, in order to expand the scope of collaboration beyond simple research with local companies, communication between the university and the local community will, no doubt, be indispensable.