

ORIGINAL ARTICLE

Working with International Simulated Patients to Improve Clinical English Training

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Abstract

Currently there is a push across Japan for better English training in medical universities. However, English language education in Japan remains notoriously ineffective. Japan was encouraged by the US Educational Commission for Foreign Medical Graduates to establish a more internationally acceptable system of medical training in order to meet global standards. This study sets out to answer the question of whether or not the use of international simulated patients (ISP) in clinical English training can improve learning outcomes in students and better help Japan's medical universities meet these global standards. The notion of using ISP in clinical English training is based on David Kolb's Experiential Learning theory. In order to observe the impact of ISP on medical professionals interested in improving their English clinical communication skills, a four-part workshop entitled Experiential English for Medical Professionals was held at Yokohama City University Medical Center from June 2014 to March 2015. The total number of participants for the four workshops was 46. Participants were asked to fill out a questionnaire about their attitudes towards their experience in the workshops. The results indicated a high participant satisfaction rate. These initial findings, which were collected from the questionnaire and feedback sessions during the workshops, point to the fact that a larger study is warranted and may be beneficial in contributing to the scholarly investigation of whether or not this type of learning should become common place in Japanese medical schools and institutions.

Key words: Medical English Education, International Simulated Patients, Japan

Introduction-

Currently there is a push across Japan for better quality English training in medical universities¹⁾. This trend is due in part to globalization²⁾, which is reflected in the US Educational Commission for Foreign Medical Graduates' (ECFMG) announcement in September 2010 that, "only applications from graduates of medical schools that have been accredited in accordance with global standards will be accepted after 2023." As a result, Japan was encouraged to

establish an internationally acceptable system of medical training in order to meet global standards³⁾. Despite the various factors that are driving the nation towards more internationalization, English language education in Japan remains notoriously ineffective⁴⁾. This may be due to the fact that teaching tends to focus on preparing for standardized tests like TOEFL and IELTS, which may leave gaps in communicative language training. When considering medical accreditation and competency exams like OSCE, where communication is one of the core competencies being tested, it

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is clear that more effective training for clinical English needs to be implemented in medical schools across Japan if Japanese medical professionals hope to remain globally competitive. One way to address this issue may be through the use of international simulated patients (ISP) in medical English classes.

The use of simulated patients (SP) began with Dr. Howard Barrows, who introduced the first SP in 1963 at the University of Southern California⁵⁾. SPs are regular people who have been carefully trained to accurately simulate specific symptoms of a disease or ailment⁶⁾. SPs have been widely used in Japan and around the world as a way of giving medical learners an opportunity to experience clinical communication and diagnosis through hands-on interaction. However, use of ISP for clinical English communication has not been so widely implemented. A search through Google Scholar, ProQuest or PubMed revealed virtually no academic papers written on the subject in English. A search for literature written in Japanese via Japan Medical Abstracts Society revealed only a small number of papers written on the use of ISP for clinical English training. While there are a few known programs in existence that do utilize ISP for English clinical communication, they are, by far, the exception and not the norm.

I. Thesis question:

Can the use of ISP in clinical English training improve learning outcomes in students?

For the sake of this study learning outcomes are defined as positive learner attitudes, increased motivation and deeper learner engagement.

II. Theoretical framework:

The notion of using ISP in clinical English training is based on David Kolb's Experiential Learning theory. Kolb describes his theory as "Learning in which the learner is directly in touch with the realities being studied. It is contrasted with the learner who only reads about, hears about, talks about, or writes about these realities but never comes into contact with them as part of the learning process"⁷⁾. In the context of the medical English classroom, the experience of working with ISP may play a key role in helping students to process and understand information in a more meaningful way. By acclimating themselves through realistic communication practice in English, it is believed that medical students and professionals can better prepare for real life clinical communication.

Four basic tenants, which describe the process of learning through experience, can be distilled from Kolb's theory and have been used to build the framework of the ISP workshops being assessed by this study. They are "do", "reflect", "think", and "plan". "Do" refers to experiencing the event. "Reflection" is the process of remembering the experience. "Thinking" involves analyzing the meaning and value of the experience. "Planning" pertains to steps taken to repeat the experience or incorporate those experiences into other experiences⁷⁾. This study specifically examines the reflection and thinking phases in order to determine the impact of the experience on the learning outcomes mentioned above.

Kolb himself stated that the Experiential Learning theory is not concerned with learning outcomes but rather focuses on the process and experience of learning. He further wrote "The emphasis on the process of learning as opposed to the behavioral outcomes distinguishes Experiential Learning from the idealist approaches of traditional education"⁷⁾. Unlike Kolb, however, this study is very much concerned with learning outcomes and how they may be effected by the experience of training with ISP. This research therefore moves forward in the spirit of Experiential Learning, where learning is greatly facilitated by experience. However, the study will diverge from Kolb's theory by examining the participants' motivation, overall attitudes, and engagement when training with ISP.

Materials and methods

In order to observe the impact of ISP on medical professionals interested in improving their English clinical communication skills, a four-part workshop entitled Experiential English for Medical Professionals (the workshop) was held at Yokohama City University Medical Center from June 2014 to March 2015. The workshop was designed on Kolb's 4 tenants of Experiential Learning, which are described in the section above.

The participants were doctors, nurses, and pharmacists. Their levels of English widely varied from advanced to beginner. Each of the participants volunteered to take part in the workshop. They found out about it through posters, flyers or word of mouth. After signing up for the program, they were sent a packet of information by email to help them practice the vocabulary and core concepts that would be covered. On the day of the workshops, each participant paid a small entrance fee. The money that was collected was used to offset the costs involved with hiring the ISP. There were 5 to 6 ISP at each session.



Figure 1 : Improvised Role Play

This photo shows two ISP demonstrating an improvised scene that shows active listening skills being used by a doctor when talking to a patient.

Each workshop was 2.5 hours long and consisted of warm-up activities, an introduction to the target language related to the session's theme, as well as drama school type improvisational activities to facilitate imagination and communication about the day's theme. Each workshop also consisted of role-play activities and a final review and feedback to encourage thoughts and personal analysis on the day's activities. The topics covered were as follows:

- 1 . assessing pain
- 2 . active listening
- 3 . taking patient's history
- 4 . breaking bad news

The topics were chosen because they represented communicative situations that are both common and crucial in the clinical setting. These topics also allowed participants the greatest opportunity to practice patient centered communication. For the ISP, these topics were also easily trainable so that each ISP could act out their role with realism.

The time spent during the workshop was broken up into sections. First each session began with traditional warm-up activities. The objective of these activities was to help participants become familiar with each other, laugh, move their bodies, use their voices, and relax so that they could be comfortable speaking English. Next, improvisation activities were done to stimulate the participants' imagination and foster self-expression. For example, ISP were given a key clinical word or phrase and were told to act out the condition (Figure 1). Workshop participants watched the improvised



Figure 2 : Interaction with ISP

This photo shows foreign ISP working directly with medical professionals in small groups of two to three per ISP. The white arrow indicates the ISP. The white triangle indicates one of the workshop facilitators, who is offering additional feedback and advice to the participants.

performances and asked questions or offered statements about what they were witnessing (See figure 1). After the improvisation session, participants were divided into smaller groups of 2 to 3 participants each. Each group had one or two ISP (Figure 2). The groups then did activities that introduced them to the language needed for communicating about the workshop theme. This was followed by intensive role-play, where participants practiced English clinical communication with ISP. Role-play was followed up by feedback, discussion and conclusion.

Finally, participants were asked to fill out a questionnaire about their experience in the workshop. The questionnaire contained six five-point scale questions and four write-in questions. Regarding the scoring of the scaled questions, 1 correlated to strongly agree and 5 correlated to strongly disagree. The participants were also asked to write additional comments or questions.

All participants were informed of the research and gave their permission to publish the results of the questionnaire and discussion. This study was approved by the ethics committee of Yokohama City University.

Results:

The total number of participants for the four workshops was 46. The average number of participants at each workshop was 12. The professions of the participants could be divided into three categories: doctor, pharmacist and nurse. In total there were 25 doctors, 11 pharmacists and 10 nurses whose careers

Table 1 : Questionnaire Items

Question	Score
	Mean \pm SE (Standard Error) (1 = strongly agree; 5 = strongly disagree)
Did you feel the workshop level was too high?	2.7 \pm 1.1
Could you actively participate in the workshop?	2.2 \pm 0.9
Could you get help to resolve any difficulty with communicating in English?	2.0 \pm 0.6
Did you enjoy speaking in English during the workshop?	1.8 \pm 0.7
Could you understand the instructor's objectives?	1.7 \pm 0.7
Did you think the workshop was fruitful?	1.4 \pm 0.6

The table above shows the Likert scale questionnaire items that were given to each of the participants. The scores shown in the chart reflect the average for the entire group. 1 corresponds to strongly agree and 5 to strongly disagree.

Table 2 : Responses to “Why did you decide to attend this workshop?”

Response	Number of People
Had few chances to speak English in general	34
Felt it was cool to be able to communicate with native English speakers	26
Had difficult experiences because of an inability to speak English spontaneously	24
Interest in Experiential Learning	23
Hope to continue learning English in the style of these workshops	13
Want to be a global communicator	7
Preparing for the Tokyo Olympics	2

The table above shows the response to the questionnaire item that asks the participants why they decided to join the workshop.

Table 3 : Responses to additional open ended questions

What did you think about the workshops?	No. of People
It was practical and useful.	14
It was enjoyable.	9
It was challenging.	7
I want more.	4
Increased my motivation.	2
The staff was nice.	1
What requests do you have?	No. of People
Please continue.	12
Various	11

The table above shows the response to the questionnaire item that asks the participants how they felt about the workshop and if they had any specific requests. The answers given were distilled into the categories shown in the table.

spanned an average of 13.3, 12.9, and 18.8 years respectively. All of the participants were satisfied with the workshop. The average score given by the group on whether or not the workshop was fruitful was 1.4. The group also strongly agreed that the workshops were enjoyable, which was indicated by an average score of 1.8. These scores corresponded to a high positive attitude despite the fact that the group felt a little less strongly about the easiness of the workshop. This was indicated by an average score of 2.7 for whether or not the level was too high.

In the open ended questions 34 (74%) of the total participants cited a desire to have a chance to speak English as the reason they were motivated to participate in the workshops. 26 (57%) said it was cool speaking with foreigners and 24 (52%) said they were motivated by previous problems communicating in the past. When asked what they thought of the workshop, 37 participants responded. Of those 14 (38%) stated the workshop was useful, 9 (24%) stated the workshop was enjoyable, 7 (19%) said that the workshop was challenging. When asked if they had any requests, 23 participants responded. Of those 12 (52%) requested that the workshop continue. For a complete list of Likert scale and open ended responses see Table 1., Table 2. and Table 3.

During the feedback and discussion at the end of the workshop participants reiterated their unanimous satisfaction with their experience. Some comments were “the workshop was challenging but fun”, “we never had an opportunity to learn clinical communication skills in school so I was happy to get new knowledge”, “I feel like I want to challenge myself more”. One participant said she was inspired by her experience enough to visit MD Anderson Cancer Center in the United States.

Some negative comments received during feedback were “I felt really nervous talking to foreigners in English” “I don’t think my English was good enough to participate well”. In the first workshop participants were not given handouts till the end of the workshop, for review at home. During feedback many participants expressed that they would have felt more comfortable with handouts they could reference during the workshop.

Discussion

Based on the results described above and in Table 1 and Table 2 it can be seen that working with ISP did have a positive effect on the participants’ learning outcomes. When looking at the participants’ perception of meaningfulness we

can see in the results that the group strongly believed the workshop was meaningful. Many participants said they felt that the English classes they took in high school and college did not seem meaningful. They went on to explain that this was why many of them were not so keen on studying English. They commented that the workshop was a different experience for them and that they would like to learn more in this way.

From the participants’ responses during feedback it can be seen that not only meaningfulness but also motivation was positively affected by the experience of working with ISP. One participant, who was very shy and quite in the beginning said that she was inspired by the workshop to challenge herself more. As a result, she traveled to the US to visit the MD Anderson Cancer Center. During the feedback session she said “Although I was nervous at first, working with the actors really encouraged me to try harder to speak in English. It is still difficult but I want to practice more.” In fact, many of the participants expressed their joy at having the opportunity to work with ISP. Some comments given during the feedback were “It was nice to work so closely with the actors. I really felt I could get a lot of practice”, “I never have the chance to speak to foreigners like this whenever I do I get nervous. This was really good for helping me get over my nervousness so I can talk. I want to come again.”

Fostering a desire to engage in English classes and actively participate is an important key to effective learning. Although many students are required to take a large number of English classes, again, some participants indicated during the feedback session that those classes were boring or did not inspire them to want to learn more. However, when they compared the experience of the ISP workshop to their previous English training experiences they responded that the workshop was “fun”, “interesting”, and “attractive”. We can see in the survey results that nearly all participants strongly agreed that the workshops were fruitful.

Participants also indicated that they appreciated the diversity of the ISP, who were from various countries, age groups, and ethnic backgrounds. This variation in accents and attitudes allowed the participants to experience a wider range of personality types. The participants believed that varied interaction made them more ready for the day when they would have to interact with international patients. The other benefit of working with a diverse group of ISP was that it helped students and medical professionals overcome stigmas that may be associated with nationality or race so that they can interact with patients from more of a humanistic vantage point.

During the feedback sessions, workshop participants

indicated that they were happy to be able to have the chance to communicate with ISP. It should be noted here that the warm-up and improvisation sections of the workshop were included as a way of easing participants into the workshop. Some stated during feedback that they felt nervous before the workshop started because they were “not used to speaking with foreigners”. Participants indicated later, during feedback, that the warm-up helped many of them “calm down” so that they could enjoy working with the ISP.

This research is meant to be a preliminary study into the viability of implementing an ISP program into the regular medical English curriculum for medical students or as part of a continuing education program for medical professionals. It was hoped that the workshop described above would allow participants to get more meaningful training by giving them the opportunity to experience interaction with simulated patients. Through this experience, participants could also practice their clinical communication skills in an environment that allowed them to face their individual anxieties about speaking English to international patients and overcome these without risk. It is reasonable to assume that students cannot be expected to effectively interact with patients in an actual clinical setting if they have not had prior experience doing so. Universities like Jikei University have already begun to explore the possibility of using ISP for more affective English training⁸⁾. They have been joined by Juntendo University, Nippon Medical School, and a few others.

This research aims to contribute to those efforts through the collection of data that illustrates how this sort of program impacts the learner. So far, the findings of this study suggest that working directly with ISP can have some positive effect on learner attitudes. This study also shows that ISP based clinical English training may be a very effective tool for helping Japanese medical students and medical professionals prepare for work abroad or for meeting English speaking patients for the first time by giving them a simulated experience in a controlled environment. Evidence of this can be seen by the fact that all participants of this study were able to overcome their personal challenges in order to get the most out of their experience.

Conclusion

Although the study yielded very positive results it was only

meant to be a preliminary investigation into whether or not working with ISP could indeed improve learning outcomes. The data generated from this study indicates that positive learner attitudes, increased motivation and deeper learner engagement can be achieved through this type of training. Although the small sample size was not large enough to produce statistically significant data, these initial findings point to the fact that a larger study is warranted and may be beneficial in contributing to the scholarly investigation of whether or not this type of learning should become common place in Japanese medical schools and institutions.

References

- 1) Ono N: Development and pilot testing of a blended-learning program for medical English. *Arab World English Journal*, **2** : 22 – 37, 2015.
- 2) The Japan Society for Medical English Education: Second announcement: the 18th Annual conference of the japan society for medical English education. *J Med Eng Educ*, **14**: 2, 2015.
- 3) Japan Accreditation Council for Medical Education: Japan Accreditation Council for Medical Education: About JACME. <https://www.jacme.or.jp/en/about/index.php>. [Accessed 21 October 2016].
- 4) Sakamoto M: Moving towards effective English language teaching in Japan: issues and challenges. *J Multiling Multicult Dev*, **33**: 409 – 420, 2012.
- 5) May W: Training standardized patients for a high-stakes clinical performance examination in the California consortium for the assessment of clinical competence. *Kaohsiung J Med Sci*, **12**: 640 – 645, 2008.
- 6) Barrows H: An overview of the uses of standardized patients for teaching and evaluating clinical skills. *Acad Med*, **68**: 451 – 453, 1993.
- 7) Kolb DA: *Experiential learning: Experience as the source of learning and development*, Second ed. Pearson Education Inc, New Jersey, 2015.
- 8) Kittaka LG: Simulated patients pitch Japan’s medical students cultural curve balls. <http://www.japantimes.co.jp/community/2016/01/27/issues/simulated-patients-pitch-japans-medical-students-cultural-curve-balls/#.V-YMoWWkxwBw>. [Accessed 23 September 2016].