Sauce for the Goose? Testing SVECTAT in Japan and Taiwan

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Abstract: Shared Virtual Environment Complementing Task Achievement Training (SVECTAT) uses authentic task-based communication in Second Life to provide practicum for classroom language learning. SVECTAT has been found effective and efficient in improving functional ability and confidence. Here we present the results of parallel experimental sessions using SVECTAT for English language learners in two different countries, Japan and Taiwan, with the purpose of identifying differences in results and possible reasons for them. We find implications for broader use of this type of language learning method.

Keywords: English as a foreign language, task-based language learning, technology enhanced language learning, Second Life, shared virtual environment

1. Introduction

Language learning and language teaching face a daunting gap between classroom activities and independent authentic communications. Compounding this, in most cases, learners are not located in a target language environment. Another profound challenge lies in the limited resources available in formal teaching situations, particularly those of time and individual attention.

Task-based language learning (Prabhu, 1987) focuses on authentic language use in the achievement of meaningful tasks. It targets self-efficacy taking place in context (Lan, 2014; Lan et al. 2013). This method is found to be effective in developing fluency and confidence (Ellis, 2003). Shared Virtual Environment Complementing Task Achievement Training (SVECTAT) implements task-based language learning using the online service Second Life as a medium for learners to apply classroom learning to independent communications in an authentic target-language community based on achievement of meaningful tasks (Elwell et al., 2009).

In multiple tests, carrying out communication tasks through the medium of Second Life has lowered the learner's sense of stress and risk, while increasing the learning value of the instructional time (Cook et al., 2010). Those tests, however, were conducted by a single research team at a single institution, and indicated a need for broader testing to evaluate the value of the method (Elwell et al., 2010).

Here we report on a test of SVECTAT for task-based situated language learning. We conducted parallel experimental sessions in two different countries and teams with graduate students learning English as a foreign language, with the purpose of identifying differences in results and possible reasons for them.

This paper will summarize the method and previous results of SVECTAT. Next, we will present the methodology and results of our parallel experimental sessions in Japan and Taiwan. Then, we will discuss differences in the performance of the different groups of subjects, and possible reasons for them. Finally, we give a conclusion and references.

2. The SVECTAT Method

The SVECTAT method consists of classroom exercises based on achievement of meaningful communication tasks, complemented by authentic achievement of those tasks using the medium of the shared virtual environment of Second Life to meet and interact with actual users of English in an open social situation.

Instructors or facilitators first introduce the exercise to a group of learners and present a list of communication tasks, such as "Make a date or appointment" or "Pass a message". They then model sample tasks, and both language content and strategies for achieving them.

Next, the learners practice the sample tasks with the instructors or facilitators, and with each other. Scaffolding changes form and even strengthens, but prepares learners for when it is removed.

Finally, the learners enter a public social venue in Second Life and interact with users to achieve tasks from the list provided. These Second Life user-interlocutors are logged in from all over the world, but use English as a medium of communication. This practicum provides authentic interactions for task achievement.

In three tests at a graduate institute in Japan, SVECTAT was found to achieve the same level of language learning in half the instructional time compared with individual role-play of the same tasks with a model speaker (Cook et al., 2010; Elwell et al., 2009). Learners mentioned in particular the value of being able to take what they had learned in the classroom and immediately apply it in the "real world" (See Figure 1). This was observed as a "flow" experience (Czikszentmihalyi, 1990).



Figure 1. SVECTAT session in physical and virtual environments

3. Experiment

We held two parallel experimental sessions, one in Japan and one in Taiwan, in April 2014. Twelve master's students participated in each location, all learners of English as a foreign language. The Japan session was led by model speakers experienced with SVECTAT; the Taiwan facilitators was led by researchers and graduate students, including a model speaker, all new to using SVECTAT.

Each three-hour session began with an introduction of the learning activity by the instructors or facilitators and individual completion of two evaluation instruments by the subjects as a pre-test. One instrument was a multiple-choice test consisting of 10 communication tasks, for each of which the learners selected the most appropriate of 3 phrases to use. The other was a self-assessment on the same tasks, for each of which the learners selected "NA – not able", "Competent", "Confident", or "Independent" as their own ability to achieve the task in an authentic interaction.

After the pre-tests, each session conducted modeling and practice with the full group of 12 learners. Instructors or facilitators modeled sample tasks and provided guidance and support for the learners to practice task achievement with one another.

Half of the total time of the sessions was used for the main exercise. Control groups continued to practice and discuss task achievement while leaving the classroom one by one to attempt individual task achievement with a model speaker. Experimental groups spent 1/3 of this time period becoming familiar with the use of Second Life, and the remainder engaging in interactions with other users to attempt task achievement.

The final period of the sessions focused on individual completion of the two evaluation instruments (multiple-choice and self-assessment) as a post-test.

The arrangement and flow of the experimental sessions is shown in Table 1.

<u>Table 1: Experimental Flow</u>

30 minutes	introductionpre-testsdemonstration[all subjects]			
30 minutes	Guided and supported group task achievement practice [all subjects]			
90 minutes	Individual task achievement training (face to face with model speaker) [control group]	Individual task achievement training (in Second Life with authentic speakers) [experimental group]		
30 minutes	post-testsdebriefingdiscussion [all subjects]			

4. Results and Analysis

As seen in Table 2 below, all groups showed measurable improvement in performance on the multiple-choice test after the learning exercise. This experiment did not target what part of this improvement resulted from, e.g., classroom practice, individual task-achievement, or the opportunity for reflection in taking the test a second time.

Table 2: Multiple-Choice Test Scores

	Test Scores				
	Japan		Taiwan		
Mean	Classroom	Second Life	Classroom	Second Life	
Pre-test	4.8	5.67	8.5	7	
Post-test	6.67	6.3	9.67	8.5	
Post - Pre	1.87	0.63	1.2	1.5	

Of note is that both Taiwan groups scored significantly higher on both the pre-test and the post-test than the Japan groups. This raises the question of how much room for improvement existed, and therefore whether the method has similar value for learners of different prior ability. It also raises the question of whether learners' abilities and attitudes vary based on factors such as features of culture and education systems in difference countries.

As seen in Table 3, below, both groups in Japan showed clear improvement on the self-assessment after the learning exercise, while the groups in Taiwan showed minimal positive improvement (control) or actual negative improvement (experimental). This divergence will receive attention in the Discussion section.

Table 3: Self-Assessment Results

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	Communication Task Achievement Self-Assessment						
	Japan		Taiwan				
Mean	Classroom	Second Life	Classroom	Second Life			
Pre-test	0.92	0.92	1.78	1.98			
Post-test	1.46	1.63	1.87	1.75			
Post - Pre	0.54	0.71	0.09	-0.23			

Note: We did not receive two participants' self-assessments from the Taiwan experimental group; data for that group is therefore based on four participants.

5. Discussion

5.1 Bases and Questions for Discussion

We base our discussion on the logistics of the sessions, the results of the multiple-choice tests and self-assessments, and the observations and opinions of the instructors and facilitators, as obtained through interviews using a questionnaire. From these, we derived three differences requiring attention:

- •Subjects in Taiwan scored and self-assessed higher than subjects in Japan
- •Subjects in Japan but not in Taiwan showed significant self-assessed improvement
- •Conduct of the two sessions had differences related to instructor and facilitator experience

Note: instructors and facilitators are identified by location and number, e.g., JI2 and TF4.

5.2 Country-based Gap in English Ability

Subjects in Taiwan scored and self-assessed higher than subjects in Japan. In the multiple-choice pretest, the subjects in Japan had a mean score of 5.23, while those in Taiwan had a mean score of 7.75, a difference of 2.52 out of 10; in the multiple-choice post-test, the difference was 2.6. In the self-assessments, the differences were 0.96 in the pre-test, and 0.27 in the post-test.

While both country groups were composed of master's students, the institution in Japan was a science and technology research institute, while the one in Taiwan was an education university. In Japan, students in science and mathematics tracks and schools at the high school level and beyond receive significantly less English instruction than those studying humanities. This tends to compound the already serious gap between Japan and other Asian countries in performance on tests such as TOEFL and the SAT. It seems likely that this contributed to the country-based gap in scores and self-assessments.

All the facilitators in the Taiwan session agreed with the reported observation that the communication tasks were too easy for the students there, "because they were all master's students". This observation demonstrates the country-based language ability gap strongly. Whereas all the subjects in our study volunteered for a learning exercise held in English, a majority of master's students at the institution in Japan where the session was held would be unable to participate at all, for lack of ability to function in an English-language classroom, let alone an authentic English-language communication environment.

5.3 Country-based Gap in Improvement

Subjects in Japan showed significantly more improvement in their self-assessed ability to achieve the listed communication tasks after the learning exercise than subjects in Taiwan. The mean improvement of the subjects in Japan (control and experimental) was 0.625, whereas that of the subjects in Taiwan was actually negative, at -0.07. This result in particular raises questions about what sorts of learners and learning situations are suitable for SVECTAT.

The students in the control group in Taiwan were nervous about interacting with the facilitators (based on TF3's report). Conversely, in the Taiwan experimental group, students showed low anxiety and high enjoyment of participating in the activities (TF5, TF1, TF6). Overall, the instructors found the students in Japan to be nervous about communicating in English, though much moreso face to face than using the shared virtual environment.

The experimental sessions, as in previous SVECTAT tests, worked better for introverts. As one of the facilitators mentioned, "Let's say for introverts, they don't want to show their faces. They don't want to talk face-to-face. They can do the typing." Since science and technology students in Japan are widely seen to tend to be introverts, this may also be relevant to the country-based gap in results.

Much of the feedback and opinion in the instructor and facilitator interviews was related to the gap in experience with the SVECTAT method between the instructors in Japan and the facilitators in Taiwan, and its possible influence on the learning experience and the experimental session results.

The instructors in Japan, experienced English language teachers, had conducted exercises and controlled experimental sessions with SVECTAT three times before. In addition, they were the original developers of the method. Conversely, the facilitators in Taiwan, researchers and graduate students, had received explanations and guidance related to SVECTAT and to the planned experimental session only in two online meetings, and had not themselves experienced a SVECTAT activity either as facilitator or learner.

All the facilitators in the Taiwan control group (TF2, TF3, TF4) consistently reported that the participants were nervous during the activities because they (the participants) were not clear about what they needed to do and what their final goal in the activity was. These facilitators, and those in the experimental group (TF5, TF1, TF6) all further reported that they themselves did not have a clear picture of their role and tasks before conducting the experiment. In the Japan session, the instructors and participants found no such difficulties.

6. Conclusion

We tested the feasibility, applicability, and effectiveness of Shared Virtual Environment Complementing Task Achievement Training (SVECTAT) for task-based language learning. We conducted parallel experimental sessions in two different countries, carried out by different teams of facilitators, with graduate students learning English as a foreign language.

We found significant differences in the results in the two sessions. Subjects in Taiwan scored and self-assessed higher than subjects in Japan, showing a gap in English language education and cultural attitudes toward English language learning. Subjects in Japan but not in Taiwan showed significant self-assessed improvement, likely due to differences in the conduct of the two sessions related to instructor and facilitator experience, and simply to greater room for improvement.

This test has shown us that, while the SVECTAT method can be effectively tested and used in different countries and with different teams of facilitators, care and affordances are required to ensure results that will justify its use, both for learners and for facilitators. Specifically, attention must be paid to the starting abilities of the intended learners, and both written materials and experiential training need to be provided to prospective facilitators; further, assessment and feedback methods must include open-ended, reflective instruments for both learners and facilitators. We consider these to be indications for future work in research and development of SVECTAT.

References

- Cook, S., Elwell, M. & Leigh, M. (2010). Classroom Learning, Virtual World Application Developing the SVECTAT Method. In Joint Proceedings of the Work-in-Progress Poster and Invited Young Researcher Symposium at the 18th International Conference on Computers in Education.
- Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. New York: Harper and Row. ISBN 0-06-092043-2.
- Ellis, Rod (2003). Task-based Language Learning and Teaching. Oxford, New York: Oxford Applied Linguistics. ISBN 0-19-442159-7.
- Elwell, M., Cook, S., Leigh, M., & Terrillon, J. C. (2009). Shared Virtual Environment Complementing Task Achievement Training. In Proceedings of the 17th International Conference on Computers in Education, Hong Kong.
- Elwell, M., Cook, S., Leigh, M., & Elwell, M. (2010). Around the Worlds-Testing the SVECTAT Method. In Workshop Proceedings of the 18th International Conference on Computers in Education: ICCE2010.
- Lan, Y. J. (2014). Does Second Life improve Mandarin learning by overseas Chinese students? *Language Learning & Technology*, 18(2), 36–56.
- Lan, Y.-J., Kan, Y.-H., Hsiao, I. Y. T., Yang, S. J. H., & Chang, K.-E. (2013). Designing interaction tasks in Second Life for Chinese as a foreign language learners: A preliminary exploration. *Australasian Journal of Educational Technology*, 29(2), 184-202.
- Prabhu, N. S. (1987). Second Language Pedagogy. Oxford: Oxford University Press.