Around the Worlds - Testing the SVECTAT Method

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Abstract: In this paper, we present a plan for parallel testing of the SVECTAT (Shared Virtual Environment Complementing Task Achievement Training) method in different countries and with different target languages. The method is mission-oriented and is focused on the immediate application of language learning content from classroom exercises in actual communicative activities using the medium of Second Life. It provides a path from strong scaffolding toward open-ended, self-directed experiential learning. The proposed test will gather data regarding the broad applicability of the method and provide indications regarding its management and implementation.

Keywords: Language learning, language teaching, mission-oriented learning, experiential learning, applied learning, scaffolding, self-directed learning, Second Life, SVECTAT

Introduction

Language learning and language teaching, across different locales and different languages, face certain common challenges and limitations. Two of these are the daunting gap between classroom activities and real world independent, authentic communications, and the finite resources available in formal teaching situations, particularly those of time and individual attention.

The SVECTAT (Shared Virtual Environment Complementing Task Achievement Training) method has shown value in addressing these challenges and limitations. In multiple tests, practicing and 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. Of particular significance is the learner-reported value of being able to practice content in a classroom exercise, and then immediately enter the virtual environment of Second Life to apply that content in independent communication with authentic users of the target language (English).[1]

Testing to date, however, has been in a single institution, with one set of instructors and one target language. Testing groups have been small, and testing time brief. Here, we present a plan for testing the SVECTAT method more extensively, to evaluate its broad feasibility, applicability, and effectiveness. We will achieve this by arranging parallel tests in different countries, carried out by different teams, teaching different target languages.

This paper will summarize the background, theory, and testing results to date of the SVECTAT method, explain the planned parallel test methodology, and discuss specific areas of interest and concern, followed by a conclusion and references.

2. Background, Theory, and Testing to Date

a. Background

As previously reported[2], the SVECTAT method was conceived at a graduate school of science and technology in Japan to address the particular needs and challenges faced in the teaching and learning of English there. Particularly notable among these were, for students, lack of opportunity for independent authentic use of English and of time for classroom study, and, for teaching staff, availability of equipment and space, as well as individual time with learners.

b. Theory

The SVECTAT method draws on theories of situated learning[3], experiential learning[4], mission-based learning[5], and flow[6], in which learners complement focused classroom based, instructor led activities with more open ended, learner directed experiences gained via the medium of Second Life. Utilizing this immersive shared virtual environment provides an enjoyable opportunity for learners to approach and interact with speakers of English in a public social venue.
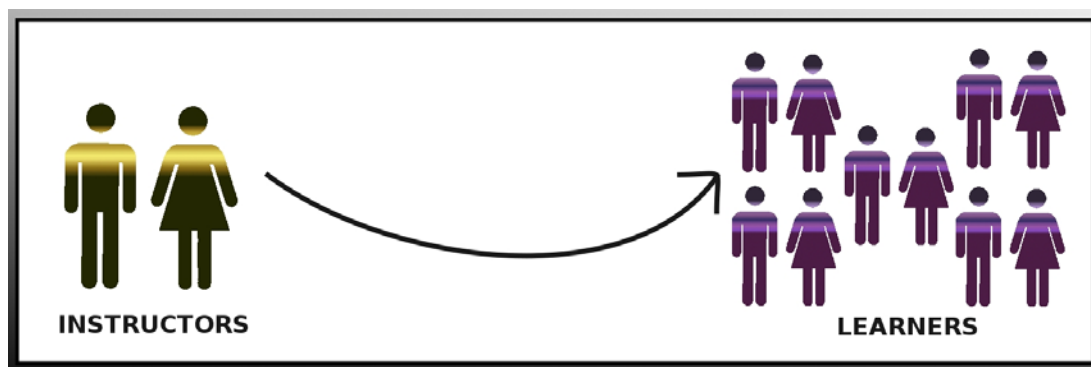

Figure 1a. First Phase – Explanation and Modeling

In Figure 1a., two instructors provide explanation and modeling of a target communication task to a class of (e.g.) ten students, face to face in the shared physical environment of the classroom.
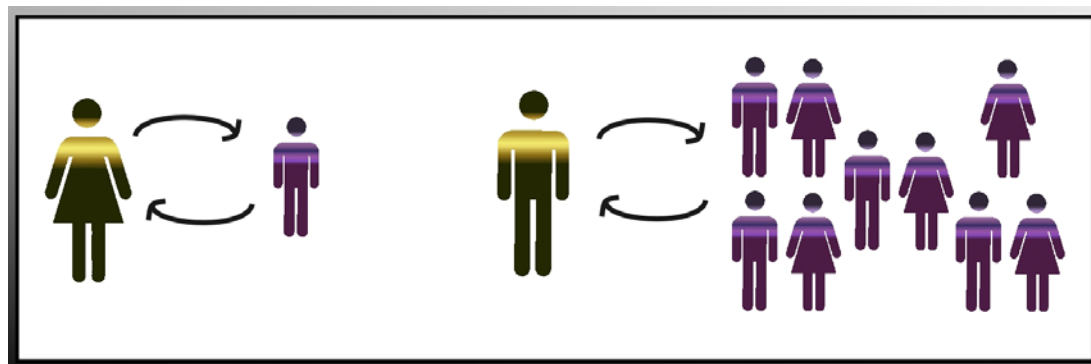

Figure 1b. Second Phase – Role Playing

In Figure 1b., one instructor supports students in practicing the target communication task with one another in the shared physical environment (classroom), while the other instructor engages students one at a time, in a separate room, in role playing of the task.
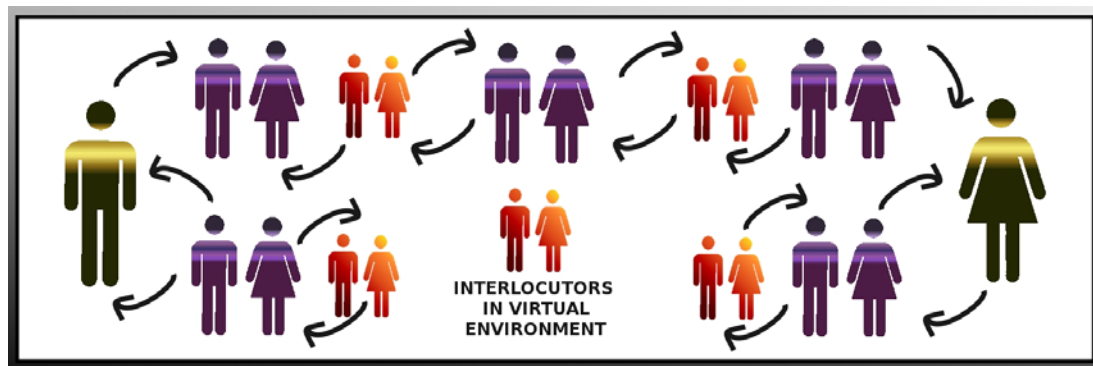

Figure 1c. Third Phase – Application in authentic communications

In Figure 1c., the two instructors support all the students in simultaneously utilizing Second Life to enter public social venues to apply their new learning in carrying out the target communication task in authentic interactions with unknown interlocutors in the shared virtual environment.

While role-playing communicative tasks one-on-one with instructors is important and valuable, it is also time and effort intensive for both parties. Complementing this serial activity with the parallel one of all learners simultaneously carrying out the same tasks in Second Life is highly time and effort efficient for both parties. To replicate the individual application opportunity afforded by Second Life with face to face communications would require the recruitment of a number of persons equal to the number of students to act as interlocutors in the shared physical environment. Since this is simply not feasible in most language teaching situations, the significance of the SVECTAT method is considerable.

c. Testing Results to Date

We first conducted a controlled test in February of 2009, in which twelve subjects, divided into three groups, participated in a three-hour workshop, evaluating their own self-assessed ability in a list of communication tasks using a pre- and post-test instrument. The control group received modeling, instructions, and task achievement exercises solely in the classroom. A second group received modeling and instructions in the classroom, and carried out the tasks first in classroom role-playing, then in Second Life. The third group both received modeling and instructions, and carried out the tasks in Second Life.

The result of this first test showed that while the third group achieved far lower results than the control, the second group, complementing classroom activities with virtual-world application, achieved the same learning results as the control but in half the instructional time.[2]

The second test, held in March 2010, following the indications of the first, involved a single group of twelve subjects, who received modeling and instruction, and then face-to-face role-playing practice, in the classroom, then carried out the same tasks in Second Life. The testing period was twelve hours over two consecutive days, and was followed by a two-hour presentation and discussion among participants, instructors, and guests.

The result of the second test showed improvement similar to the first in self-assessed ability to carry out communicative tasks with tangible results, adjusted for time.

In the post-exercise discussion, participants explicitly expressed their sense that the educational value they experienced lay in being able to immediately apply what they had learned in the classroom to authentic communications "in the real world" (i.e., with strangers in a public venue using the medium of Second Life).[1]

A third test was held in June and July of 2010. This was intended to gather data on the improvement in self-assessed ability gained during more instructional hours held over a longer period of time, specifically, in eight weekly ninety-minute sessions. Logistical difficulties presented serious challenges, such as unreliable computer and network performance, low subject numbers (only four), and unsuitable arrangement of space and furniture. Learners were physically unable to comfortably share a single psychological space with one another. Assessments and reported results indicated that immersion and flow were not sufficiently established.

3.   Planned Methodology and Areas of Interest & Concern

Methodology

3.1   Instructional Activities

Three instructional phases are involved in the SVECTAT method:

- First, instructors explain and model content, emphasizing the mission orientation and objective result to be achieved in a given task
- Second, one learner at a time leaves the classroom to carry out a specified task in face to face role playing with an instructor, while the remaining learners practice the task in face to face role playing with one another
- Third, learners who have completed individual face to face role playing enter the virtual environment of Second Life at a public social venue, and attempt to carry out the same task in authentic communication with a stranger

3.2 Evaluation & Assessment

The method is structured to allow evaluation compared with other teaching activities, using a self-assessment instrument given to learners before and after an activity. These assessments are then compared to evaluate and assess the learning achieved.

The instrument consists of a list of ten communication tasks, each with a tangible, objective result (e.g., receiving contact information from a stranger, making an appointment, receiving an item, etc). Subjects assess their own ability to successfully carry each task out, according to the ratings and criteria in Table 1.

Table 1. Evaluation Matrix for Self-Assessment Instrument

Rating	Criterion
0 - NA ("Not Able")	Cannot succeed even with guidance
1 - Competent	Can succeed with guidance
2 - Confident	Can succeed without guidance
3 - Independent	Able to provide guidance to others

3.3 Testing Partnerships

We have received agreement from professors at three tertiary institutions, one each in Australia, Taiwan, and Turkey, to carry out testing of the SVECTAT method in collaboration with our team in Japan. The target language in Taiwan and Turkey will be English, while in Australia the target language will be Japanese. Subjects will be students of the respective languages in the relevant departments.

We intend to develop the specific arrangements and logistics of the tests in discussion and collaboration with the teams at the partner institutions, to achieve a consistent parallel structure that also fits the needs and limitations of the different locations.

d. Areas of Interest & Concern

We will be interested to see whether and how quantitative results and reported subjective assessments vary when the method is used by different instructors, in different countries, with different students, and for different target languages. We anticipate receiving valuable feedback for refining and improving the theory, structure, and presentation of the method.

We anticipate that, while the method offers, in theory, a significant savings of classroom time used by learners and instructors, there will be challenges, some shared with our own early tests, others specific to the various locales, teams, and students. One example is provision of one Second Life capable computer and network connection per learner for the third phase. Another is the comfort and confidence of the instructors in using Second Life, and in familiarizing their students with its use. Likewise, instructor comfort and confidence using role playing and task-based language teaching will be a challenge.

4.   Conclusion

We have presented a plan for testing the SVECTAT method of language learning in different countries, carried out by different teams, teaching different target languages. This paper has summarized the background, theory, and testing results to date of the SVECTAT method, explained the planned parallel test methodology, and discussed specific areas of interest and concern.

The results of the proposed testing will measure the method's value in overcoming the learner's gap between relatively comfortable classroom activities and authentic, independent communication experiences in the target language. We anticipate that the method will increase the effectiveness of a given amount of teaching time and instructor-learner interaction. We look forward to carrying out the plan presented here, and reporting on the results.

Acknowledgements

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