УДК 811.112

THE INTERSECTION OF TECHNOLOGY, DEMOGRAPHICS, AND GLOBALIZATION: A CASE FOR SECOND LANGUAGE ACQUISITION VIA DISTANCE EDUCATION

Bradbury, Boyd L., Minnesota State University Moorhead, USA
bradbury@mnstate.edu
Golikova, Anna, Belarusian National Technical University, Belarus,
a.golikova@bk.ru

Abstract

Within the belief that migration and globalization have accelerated the need for second language acquisition (SLA), this case study examines the impact of technology on SLA with Russian-speaking students who are learning English via multiple means, including digital platforms. Through the utilization of the American Council on the Teaching of Foreign Languages (ACTFL) standards, the Common European Framework for Language Competence (CEFR) English proficiency scales, surveys, and participant observation, the effectiveness of technology-related approaches, such as prepared lessons, a learner management system, and virtual conversations between a native-English speaker and second language learners facilitated by bilingual (Russian/English) Belarusian instructors, researchers evaluated the impact of various aspects of SLA via technology on English Learners who reside in Belarus is under evaluation. This case study involved eight English learners between the autumn of 2018 and the spring of 2021.

Purpose

This research involved an analysis of English language learning via technology. Technology is both pervasive and ubiquitous, and it manifests itself in most aspects of our lives, including education. According to Bradbury (2021, p. 25), "If there were a force more disruptive than technology to societies worldwide, one would be hard pressed to find it." Bradbury exhorted,

"Educators and entities associated with education must understand the importance of technology in the twenty-first century. Educators

should no longer believe that teaching and learning is the exclusive domain of teachers. No longer should educators believe that learning should only occur within the traditional walls of a classroom. No longer should educators resist technology. Instead, educators must understand the importance of technology in regard to learning, and as a result, educators must integrate technology in ways that benefit student learning. The question is no longer whether technology should play a role in education, but rather which roles technology should play to ensure student learning. (pp. 25–26).

In 2017, faculty member from Minnesota State University Moorhead (MSUM) and one from Belarusian National Technical University (BNTU) had a serendipitous encounter as the result of attendance at the same conference. Through that chance meeting, ongoing communication, visiting lecturer exchanges, and a sustained online English learning course have been realized. For a period of two and a half years, MSUM and BNTU faculty members have met with students on an average of two times per month for English learning sessions that run from 60 to 120 minutes.

The purpose of this research is to evaluate the impact of various aspects of second language acquisition (SLA) via technology on eight English learners over a period of two and a half years in light of increased demand for second language acquisition, especially English. According to Bradbury et al. (2018).

There has been a development of alternative ways of learning, including those that have emerged through technology, such as online learning. The last couple of decades have resulted in rapid growth within the area of technology-assisted learning. Many companies and start-ups have created programs, applications and services for training and educational process management within organizations. Product development has been sufficient in coping with the automation of routine processes of knowledge transfer in the field of theoretical training. However, in practical skills training, including language training, there has been little progress for a number of reasons. For example, complex interdisciplinary developments require coordinated work of specialists in various branches of knowledge and the use of different terminology, methodologies and models within the subject fields. This coordination makes it challenging to work together, which results in outdated methods within established systems that utilize technology. Simply put, teachers are not

using the technological capacities of modern systems to the extent possible in light of improved discoveries and developments. (p. 768).

In the interest of discovering which aspects of technology facilitated SLA for the English learners in this study, the researchers employed various tools to gather information regarding the effectiveness of teaching and learning components of online SLA experiences.

Theoretical Framework

The researchers utilized an approach by Chapelle (2007), which describes three areas of intersection; those are, information, communication technology, and SLA. This SLA approach demonstrates the development of tasks through technology by expanding characteristics of the learning tasks that researchers can design for learners. In addition, it makes clear the utilization of research tasks for gathering learner performance data. Finally, this approach provides a pedagogical and research overview of SLA in regard to computer-assisted language learning.

In addition to Chapelle (2007), this study utilized the American Council on the Teaching of Foreign Languages (ACTFL) proficiency guidelines (2012) and World Readiness Standards (n.d.) and the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2021) English levels to assess English learner proficiency.

Methods, Techniques, Modes of Inquiry, Data Sources

The researchers employed case study methodology, which involves a thorough analysis of items (e.g., events, people, experiences, relationships) connected by a common element. In this study, the common element is the distance learning experienced by English learners via regular class sessions with MSUM and BNTU faculty. Case study often involves data collection methods from varied sources. According to Gray (2018),

The case study method can be used for a wide variety of issues, including the evaluation of training programmes [sic], a common subject, organizational performance, project design and implementation, policy analysis, and relationships between different sectors of an organization or between organizations. (p. 262)

This particular research focused on the evaluation of a training program; that is, English learner SLA though distance learning opportunities.

Data sources included surveys, proficiency measurement comparisons utilizing ACTFL proficiency guidelines (2012) and CEFR language levels (2021), and participant observation. Surveys were administered twice via Qualtrics, in 2019 and 2021, to collect statistics regarding the effectiveness of distance learning components associated with class sessions. In addition, the instructors scored student proficiency changes between the onset of the class sessions in 2018 and a year later in 2019. Throughout a period of thirty months, instructors have participated actively with students and noted observations.

Results/Substantiated Conclusions

The researchers assessed eight individuals in 2018 via ACTFL and CEFR rating scales (see Table 1).

Table 1 English Learner Proficiency Levels

ACTFL and CEFR Rankings for Speaking and Listening: October 2018

Name	Speaking	Speaking	Listening	Listening	CEFR
V	Novice-mid	Novice-high	Novice-low	Novice-high	S-A2/L-A2
D	Novice-mid	Novice-high	Novice-mid	Novice-high	S-A2/L-A2
I	Novice-mid	Novice-high	Novice-low	Novice-mid	S-A2/L-A2
An	Intermediate-mid	Intermediate-Mid	Intermediate-low	Intermediate-mid	S-A2+B1/ L-A2+B1
Ly	Intermediate-mid	Intermediate-High	Intermediate-low	Intermediate-high	S-B1/L-B1
N	Intermediate-mid	Intermediate-High	Intermediate-low	Intermediate-high	S-B1/L-B1
Ar	Advanced-low	Intermediate-High	Advanced-mid	Advanced-low	S-B1/L-B1
Li	Advanced-high	Intermediate-High	Advanced-low	Advanced-low	S-B1/L-B1

Note: MSUM and BNTU faculty members evaluated English learners at the beginning of SLA sessions to establish base proficiency for the learners involved. Two instructors rated each learner, which resulted in two ratings per learner.

The researchers then focused on two individuals in 2019 who had attended English learner sessions with fidelity for nearly a year (see Table 2). The researchers reassessed listening and speaking skills of these two learners with the same or slightly modified questions from the origi-

nal interview assessment. As with the first interviews of eight individuals, the interviews with these two English learners were recorded so as to provide researchers the opportunity to review and re-review the recordings in the interest of establishing accurate proficiency ratings.

The researchers concluded that although both learners increased English listening and speaking proficiency, the individual with the higher initial proficiency rating advanced fewer steps than the one with an initial lower proficiency rating. More specifically, the English learner with the lower initial proficiency rating moved two to three steps with English speaking proficiency, but the learner with higher initial proficiency moved only one step with English speaking proficiency. Even more pronounced was the movement with listening skills. The English learner with the lower initial proficiency moved five steps, but the English learner with higher initial proficiency moved only one step.

Table 2 English Learner Proficiency Levels for Select SLA Session Participants

Demonstrated Changes in ACTFL Ranking

Name	Speaking October 2018	Speaking August 2019	Listening October 2018	Listening August 2019
An	Intermediate-mid	Advanced low/mid	Intermediate-low	Advanced High
Ar	Advanced-low	Advanced low/mid	Advanced-mid	Advanced High

Note: MSUM and BNTU faculty members evaluated two English learners after one year of SLA sessions. These individuals were selected since they attended all or nearly all of the sessions between October 2018 and August 2019. This table focuses on ACTFL levels and speaking and listening skills.

In regard to participant observation, the MSUM and BNTU faculty members noted two items. First, an unleveled group of learners made for challenging learning in regard to lesson design and class sessions. The difference between a beginning second language learner and an advanced one is considerable. It was difficult to design lessons that would accommodate the beginning learner without boring the more advanced learners. Conversely, lessons more appropriate for advanced learners caused angst and difficulty for the beginning learners with SLA. A leveled group would allow for greater success with session activities, assessments, outcomes, and overall SLA. If learner groups are varied in regard to proficiency levels, instructors and learners must be patient.

Surveys were administered in October of 2018 and March of 2021. The 2018 survey consisted of 17 questions, and the 2021 survey involved 20 questions. Questions did vary somewhat from one survey to the next, but all questions were focused on SLA in one way or another. The 2021 survey sought greater specificity regarding lessons since there had been considerably more opportunities for leaning in 2021 than in 2018. Nine English learners completed surveys. The surveys resulted in descriptive statistics, which provided implications for SLA teaching and learning.

Although this paper cannot accommodate a full report regarding survey results, figures, and analysis, in consideration of both surveys, several findings should be noted.

1. Learners found speaking skills, followed by listening skills, and grammar to be the three most difficult skills associated with SLA.

2. Learners found speaking skills, followed by listening skills, to be the most important skills associated with conversations in a second language.

3. All learners found technology helpful with SLA.

4. In ranking their thoughts in frequency of responses regarding session conversations with native English speakers, learners reported the following beliefs in order: interesting, exciting, and/or amusing; bound to improve speaking skills; bound to improve listening skills and productive and efficient.

5. All learners felt conversations with a native speaker were helpful or very helpful in SLA.

6. Learner found conversations with the instructors as the most important aspect in helping them improve second language proficiency within an online platform.

7. Learners found that the online platform improved their speaking and listening skills more than writing skills.

8. Learners reported online resources, such as Padlet and Quizlet, helpful in learning a second language.

9. Learners found vocabulary exercises, grammar exercises, text reading, and answering questions as the most helpful aspects of SLA within the online venue.

10. Students prefer four learners as the optimal number for SLA via online learning.

11. Students prefer 60-minute online sessions for optimal learning.

Scholarly Significance

Within the belief that migration and globalization have accelerated the need for second language acquisition (SLA), this case study examined the impact of technology on SLA with Russian-speaking students who are learning English via multiple means, including digital platforms. Although this study cannot be generalized, this study can serve as a template or springboard for similar studies on a more localized basis. Moreover, this study provides a number of pedagogical findings that would support technology utilization as a means by which SLA can be realized. In particular, this study provides specific areas of learner preference and belief regarding those pedagogical and technological aspects that provide the greatest help with SLA. This research has informed the teaching and learning within the MSUM/BNTU English learning sessions, and these findings will result in both improvement and continuation of English learners associated with this case study, and it provides direction for others interested in pursuing SLA via technology.

References:

1. Bradbury, B. L. (2021). The nexus of teaching and demographics: Context and connections from colonial times to today. Lexington.

2. Bradbury, B. L., Tahini, I. H., & Dadykin, A. K. (2018). Fundamentals of new effective system to accelerate language acquisition using

visual approach. International Journal of Education and Information Technology. 8(11), 768 – 772. doi:10.18178/ ijiet.2018.8.11.1137

3. American Council on the Teaching of Foreign Languages (2012). ACTFL proficiency guidelines 2012. https://www. actfl.org/sites/default/files/guidelines/ACTFLProficiencyGuidelines2012 .pdf

4. American Council on the Teaching of Foreign Languages (n.d.). World readiness standards for language learners. https://www.actfl.org/sites/default/files/publications/standards/World-ReadinessStandardsforLearningLanguages.pdf

5. Chapelle, C. (2007). Technology and second language acquisition. Annual Review of Applied Linguistics 27, 98 – 114. doi:10.1017/S0267190508070050

6. Council of Europe (2021). The CEFR levels. https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions

7. Gray, D. E. (2018). Doing research in the real world. (4th ed.). Sage Publications.