

Review Article

TECHNOLOGY ADOPTION IN SELF- ACCESS LANGUAGE LEARNING: A REVIEW

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Abstract

Technology provides ample resources and authentic materials in developing English language skills for over a decade. The present paper examines the theoretical background of self-access language learning (SALL) and the evolution of these theories and models, in relation to technology adoption (TA). It also lays down the research question such as how far the adoption of technology supports self-access language learning and how well the effectiveness of technology has been utilized. The answers are sought through literature review which is relevant to this subject and is dynamic enough to fetch proper explanation for the aforementioned questions.

Key words: English language, technology, self-access language learning, technology adoption model.

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INTRODUCTION:

The intent of the study is to survey the literature on the adoption of technology in Self- Access Language Learning. The concept of the adoption of technology is applied to self-access language learning where learners are offered with plenty of resources and tools that can be easily accessible for them [4, 26]. Benson and Chik (2010) suggest that evolving online network spaces offer new openings for language learning to happen autonomously in everyday literary practices of the learners.

The concept of SALL is very widespread and given great priority in the field of English Language Teaching (ELT). Self-access learning centers (SALC) have been initiated throughout the world in enhancing language proficiency. In SALC learners' self-study is emphasized to greater extent. The learners are encouraged to take responsibility for their own learning. According to the practice of SALL, technology-based instruction and learning has helped in promoting learner autonomy (LA) in and out of the classroom. The adoption of technology in SALL offers wide range resources and language learning materials which constitute the backbone of SALC. Since everything depends upon the decision making of the learner, TA provides learners the platform to choose the material according to their need and requirement. In absence of teacher, the students can decide their tasks and activities which are indeed achieved by the integration of technology. The ultimate goal ends up in developing the independent learning instead of promoting target language efficiency of the students. Benavides.J(2000) puts forth that, "In a self-access situation, CALL should be presented as a flexible and supplementary classroom aid, at an early stage in the process of helping students to reach autonomous learning and independence."

Most of the studies on the technology based SALL reinforces the development of self-regulation, self-efficacy and autonomy. Many have failed to show that in what ways the technology integration or diffusion facilitates language learning. Thus the present paper puts forth the research questions such as how far the adoption of technology in self-access learning scaffolds the development of English language learning and how well the effectiveness of technology has been utilized. The answers are sought through literature review which is relevant to this transformation of the individual from language learner to language user." They tried to relate self-access learning to "social semiotics" in the notion of considering "self-access as

subject and is dynamic enough to fetch proper explanation for the aforementioned questions.

SELF-ACCESS LANGUAGE LEARNING:

The first Self-Access Learning Centre was established in the late 1960s and early 1970s. SALC emerged as a result of increase sense of discontent towards language laboratories which suffered poor negligence. This sense of discontent paved way for the introduction of self-access language centers. SALC was started sprouting up in most of the universities of western countries which later extended its penetration into majority of the Asian countries. Numerous self-learning centers sprung up in South East Asia, among them Independent Learning Centre of the Chinese University located in Hong Kong utilized sophisticated available technology [26, 14].

SAC, which is designed to promote student learning, is least biased, accommodating learners of mixed ability with different goals and interests, comprises of plenty of resources ranging from paper-based task to computer software [25]. Self-access is defined by Sheerin (1989) as learners' selection of materials in reinforcing the traditional classroom led by teachers. Self-access Centre is considered as an aid to promote language learning by providing students the opportunity of individual accessibility to teachers [10, 14]. Learning which is self-direct and autonomy is what called as Self-Access Language Learning (SALL).

Theoretical background of SALL:

Self-access language learning is defined as one's ability to take responsibility of one's learning. This basic description was developed by Holec in "Autonomy and Foreign Language Learning". A Self-access Centre, as mentioned earlier offers learning space and plenty of resources for the learners. Gardner and Miller opines that the main objective of a self-access theory is to describe how the regulation of learning setting and resources commune with the learning process of learners. They both proposed a theoretical framework for SALL based on social context. In language learning settings, Gardner and Miller defined autonomy as a "social

information system constituted by act of communication." According to constructive theory, learning is a process in which

people try to construct meaning. Construction of knowledge about the world happens through 'experience and reflection of those experiences.' Moreover, the task of constructing knowledge can be accomplished through an inquiry-based thinking, exploration and assessing which form the basis of self-access learning. Another theoretical perspective is Deci's theory of self-regulation in which he lays emphasizes on 'competence, autonomy, and psychological relatedness.' He relates autonomy to self-regulation which indeed creates impact on goal directedness and persistence.

TECHNOLOGY ADOPTION:

Adoption theory deals with the acceptance or rejection of any innovation which is based on the individual's choice. In certain

Rogers's Innovation Diffusion Theory:

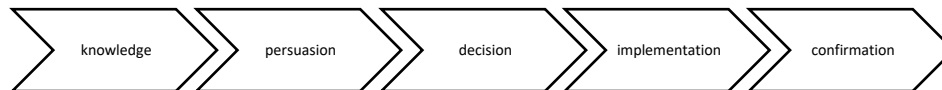


Figure1: Rogers's Innovation Diffusion Theory

Everett Roger developed a theory termed 'the Diffusion of Innovation Theory' in 1960. There are four important elements in this theory they are "innovation, communication channels, time and social system." Moreover, there are five stages in the

TAM2 model extended by Venkatesh and Davis (2000):

Venkatesh and Davis added some elements into TAM and developed a new one TAM2. The added elements involved are social influence processes and cognitive instrumental processes.

Unified theory of acceptance and use of technology (UTAUT) by Venkatesh (2003):

UTAUT is generally applied in wide range of technological applications. It contains four key constructs namely Technology adoption model is commonly used in studies that deal with the intervention of technology. "Perceived usefulness" and "Perceived ease of use" are the two important construct on which the forte of the adoption model lies. These two constructs are derivation of Bandura's Self-Efficacy Theory

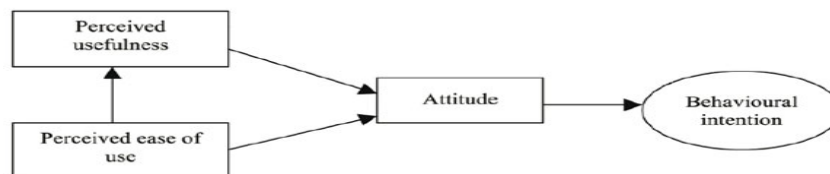


Figure2: Fred D Davis' Technical Adoption Model

RESEARCH METHODOLOGY:

The research was undertaken in three different phases. The first phase is search of relevant articles through databases and academic journals. The second phase is the analysis of the In the first phase, the search was conducted to find publications related to technology adoption in self-access language learning. The published articles that dealt with integration of technology restriction in the search was to the time period between 2006 and 2016 which covered a decade period of time within the field of SALL.

The articles were searched in the electronic databases includes:

- Science Direct database by Elsevier
- Taylor and Francis
- Sage publications
- Google and Google Scholar
- Bibliography database of Scopus-indexed journal
- ERIC

The keywords used for the search were (technology, self-access language learning, technology adoption, self - access language learning and technology adoption). In the second phase the

cases, adoption not only means the choice to adopt technology alone but it extends itself to the level of integration into the context of learning. Adoption theory stands for the word 'change' that takes place in pieces that make up full. Adoption theory is what called as 'micro perspective' while the diffusion theory is known as 'macro perspective' which means that the change happens from whole to pieces. Carr (1999) elucidates technology adoption as a point of choosing a technology by an organization or an individual. Technology adoption is a multifaceted process involving not only technology but also attitude and personae of the users (Venkatesh et al., 2012; Sharma and Mishra, 2014). Many theories and models were evolved in the field TA, to mention few,

process that includes 'knowledge, persuasion, decision, implementation, and confirmation.' The users are divided into six groups, they are 'innovators, early adopters, early majority, late majority, laggards and the leapfroggers.'

"performance expectancy, effort expectancy, social influence and facilitating conditions." Moreover, this theory is compilation of all the theories and four main construct were chosen total of seven as the most important elements of intention. Many treats UTAUT as more superior model than any other, based on its ability, it explains 70%of the variance while other model cannot provide explanation equivalent to this model.

Fred D Davis' Technical Adoption Model (1989):

TAM has become a validated model because of the reliable result it produce when employed in ant adoptive studies. TAM emerged as most 'powerful, robust, and parsimonious model for predicting user acceptance.'

collected data which then followed by third phase that includes the systematization of data.

and SALL were only considered for selection process. Articles that had general notion about the subject were disregarded for selection. There was also

selection of articles was processed based on the following criteria:

- General information of the article like name of the author and year of publication
- Implementation of technology in self-access language learning
- Technology tools used
- Effective use of Technology in terms of promoting SALL
- Statistical data that shows technology did promote SALL

RESULTS:

The search resulted in 67 articles from above mentioned database and in that only 12 articles were chosen for analysis

based on the criteria which have already mentioned. The remaining 56 articles were rejected on the basis,

1. Lack of implementation of technology in SALL
2. Lack of clarity in promoting self-access language learning

Table 1: shows the result of the database search

1. Mutlu,A & Erozu-Tuga,B.(2013) - The study aims to promote autonomous learning by utilizing technology based learning setting. *Technology used* - Web-Based Instruction, uses computer and internet.
2. Joachim Castellano, Jo Mynard, and Troy Rubesch (2011) - The paper Examines how the users in SALC make use of technology outside the classroom and how well they contemplate the use of TLLT in the future. *Technology used* - The study combines both print materials and multimedia tools like audio, video and software materials.
3. Karina Collentine (2011) - The study analyzes autonomous learning in a 'task-based 3D CALL environment.' Dam's conception of 'choice' is utilized for examining autonomy. *Technology used* - User-tracking technologies, TB-SCMC in a 3D world.
4. Christoph A. Hafner Lindsay Miller d (2011) - The study estimated the effectiveness of technology based learning environment to promote learner autonomy. *Technology used* - Integration of new technological tools and Web 2.0 platforms that include blogs like Edublogs and YouTube.
5. Lina Lee (2011) - The study combines asynchronous computer-mediated communication (CMC) through blogs and face-to-face (FTF) interaction using ethnographic interviews to support autonomy in terms of reflective and social system. *Technology used* - Computer- Mediated Communication (CMC) and Face-to-Face (FTF).
6. Airil Haimi Mohd Adnan & Zarlina Mohd Zamari (2012) - The study substantiates the potential of the CASA-LL framework on the basis of both professional online course developers' and learning managers' experiences. *Technology used* - 5- point computer-aided self-access language learning (or CASA-LL).
7. Lina Lee (2016) - The study surveys the efficacy of task-based instruction (TBI) on learner autonomy through the medium of digital tools involving data collection from two online courses. *Technology used* - The tools utilized are synchronous and asynchronous CMC tools, electronic workbook and e-text.
8. Yu-Fen Yang (2015) - To develop the autonomy of vocational college students the study integrates on-site workshops with an online learning community. *Technology used* - Activities were designed using online system in order to promote autonomy of the students in ESP self-directed learning.
9. Hayo Reinders & Noemí Lázaro (2007) - The article investigated forty five self-access centers around the world and they found out that only ten centers were effectively made use of technology to enhance self-access learning. The article further described the variety of digital tools that had been utilized by these centers. E-mail, Chat, Discussion boards/forums, E-mail lists, Online courses, Internet resources, LMS, Electronic portfolio, etc.,
10. Dan Lu (2010) - The study integrated self-access language learning into ESL course and the sample were asked to do a SALL project which may develop curiosity towards computer-based learning and eventually helps them to enrich their learner autonomy. It also records students' responses to the integration. *Technology used* - The technological tool utilized in this study is SALL based on language laboratory. This lab is equipped with 35 kinds of language learning software which cover all facets of English learning that includes LSRW skills, grammar and vocabulary.
11. Mutsumi Kondo, et.al. (2012) - The main objective of the article was to explore whether Mobile assisted language learning (MALL) would promote self-study, self-regulated learning (SRL). *Technology used* - Nintendo DS mobile.
12. Chun Lai & Mingyue Gu (2011) - The article examined use of technological devices of students outside the classroom to foster self-regulated language learning in Hong Kong University. *Technology used* - Web 2.0 technologies.

CONCLUSION:

This review paper is an answer for the question on how far technology adoption in self-access language learning enhances or fosters autonomous learning. Through literature review conducted over many academic journals database 12 relevant papers were selected out of 56 articles. The study on technology adoption in SALL proved very limited in promoting learner autonomy. Most of the studies discuss about in developing appropriate well-equipped self-access centers and the attention of many practitioners falls on improving the factors that motivates the students' participation in SACs. They also tried to integrate SALL as learning component into curriculum making it compulsory for students to get involved into autonomous learning. SALL usually aims at making the students to acquire the knowledge of learning strategies and encourages them to put those strategies for usage towards language acquisition. Thus this study tried to throw light into budding field in which how technology intervention can facilitate Self-Access Language Learning.

REFERENCES:

1. Adnan, A. H. M., & Zamari, Z. M. (2012). Computer-Aided Self-Access Language Learning: Views of Indonesian, Malaysian & New Zealand Practitioners. *Procedia-Social and Behavioral Sciences*, 67, 49-60.
2. Bharathi,p. (2014). Self -directed Learning and Learner Autonomy in English Language Teacher Education: Emerging Trends. Retrieved from <http://eltvoices.in/Volume4/Issue 1/EVI 41 1 Bharathi.pdf>
3. Benavides, J. E. (2000). CALL, self-access, and autonomous learning. *HOW*, 5(1), 116-118.
4. Benson, P. (2001). *Teaching and researching autonomy in language learning*. London: Longman.
5. Benson, P., & Chik, A. (2010). *Chapter Four New Literacies and Autonomy in Foreign Language Learning. Digital genres, new literacies and autonomy in language learning*, 63
6. Carr Jr, V. H. (1999). Technology adoption and diffusion. The Learning Center for Interactive Technology.
7. Castellano, J., Mynard, J., & Rubesch, T. (2011). ACTION Research Student Technology Use in A Self-Access Center. *Language Learning & Technology*, 15(3), 12-27.
8. Collentine, K. (2011). Learner autonomy in a task-based 3D world and production. *Language Learning & Technology*, 15(3), 50-67.
9. Cotterall,S,& Reinders, H.(2001). Fortress or Bridge? Learners' Perceptions and Practice in Self Access Language Learning. *Tesolanz* 8, 23-38
10. Davies, S. (1991). An Investigation of a Timetabled Self-Access Session in a General English Programme. *Edinburgh Working Papers in Linguistics*, 2, 37-50.
11. Deci, E. L., Hodges, R., Pierson, L., & Tomassone, J. (1992). Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps. *Journal of learning disabilities*, 25(7), 457-471.
12. Gardner, D., & Miller, L. (Eds.). (1994). *Directions in self-access language learning* (Vol. 1). Hong Kong University Press.
13. Garrison, D.R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48, 18-33.
14. Gremmo, M. J., & Riley, P. (1995). Autonomy, self-direction and self-access in language teaching and learning: The history of an idea. *System*, 23(2), 151-164.
15. Gillies, H. (2010). Listening to the Learner: A Qualitative Investigation of Motivation for Embracing or Avoiding the

- Use of Self-Access Centres. *Studies in Self-Access Learning Journal*, 1 (3), 189-211.
16. Hafner, C. A., & Miller, L. (2011). Fostering learner autonomy in English for science: A collaborative digital video project in a technological learning environment. *Language Learning & Technology*, 15(3), 68-86.
 17. Kondo, M., Ishikawa, Y., Smith, C., Sakamoto, K., Shimomura, H., & Wada, N. (2012). Mobile assisted language learning in university EFL courses in Japan: Developing attitudes and skills for self-regulated learning. *ReCALL*, 24(02), 169-187.
 18. Kop, R., & Fournier, H. (2011). New dimension of self-directed learning in an open-networked Learning environment. *International Journal of Self-Directed Learning*, 7(2), 1-20.
 19. Lai, C., & Gu, M. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*, 24(4), 317-335.
 20. Lai, C. (2013). A framework of developing self-directed technology use for language learning. *Language Learning & Technology*, 17(2), 100-122.
 21. La'zaro, N., & Reinders, H. (2006). Technology in self-access: an evaluative framework. *PacCALL Journal*, 1(2), 21 - 30.
 22. Lee, L. (2011). Blogging: Promoting learner autonomy and intercultural competence through study abroad. *Language Learning & Technology*, 15(3), 87-109.
 23. Lee, L. (2016). Autonomous learning through task-based instruction in fully online language courses. *Language Learning & Technology*, 20(2), 81-97.
 24. Lu, D. (2010). A salutary lesson from a computer-based self-access language learning project. *Computer Assisted Language Learning*, 23(4), 343-359.
 25. Lu, X., & Zhang, J. (2012). College Students' Use of the Computer and Network-based Self- Access Centre and Their English Learning Achievement. *IERI Procedia*, 2, 149-154.
 26. Miller, L. (1992). *Self-access Centres in SE Asia*. City Polytechnic of Hong Kong.
 27. Motteram, G. (1997). Learner autonomy and the web. *Educational technology in language learning: Theoretical considerations and practical applications*, 17-24.
 28. Mutlu, A., & Eroztuga, B. (2013). The role of computer-assisted language learning (CALL) in promoting learner autonomy. *Eurasian Journal of Educational Research*, 51, 107-122.
 29. Sharma, R., & Mishra, R. A Review of Evolution of Theories and Models of Technology Adoption. *Editorial Team*, 17.
 30. Sheerin, S. 1989. *Self-access*. Oxford: Oxford University Press
 31. Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology.
 32. Zheng, A., & Wang, B. (2009, December). Constructing Self-Access English Learning Centre to Develop Students' Study Autonomy with Digitalized Information Technology in Universities. In *Innovative Computing, Information and Control (ICICIC), 2009 Fourth International Conference on* (pp. 1324-1330). IEEE.
 33. Kaur H, Saini S, Peer S, Singh J. "Current Therapies and Novel Targets in Treatment of Breast Cancer." *Systematic Reviews in Pharmacy* 1.1 (2010), 40-49. Print doi:10.4103/0975-8453.59511
 34. Saini, R., Saini, S., Sharma, S. Potential of probiotics in controlling cardiovascular diseases (2010) *Journal of Cardiovascular Disease Research*, 1 (4), pp. 213-214. DOI: 10.4103/0975-3583.74267