

Full Length Research Paper

Remembering differently: Use of memory strategies among net-generation ESL learners

Shakarami, Alireza*, Mardziah, H. Abdullah, Faiz, S. Abdullah and Tan Bee Hoon

English Department, Faculty of Modern Languages and Communication, University Putra Malaysia. P. O. Box 43400, Selangor, Malaysia.

Accepted 1 April, 2011

Net-generation learners are growing up in an era when much of the learning, communication, socializing and ways of working take place through digital means. Living in this digital era may result in different ways of thinking, ways of approaching learning, strategies, and priorities. The Net-Geners therefore, need new skills and new strategies to perform successfully as learners and workers. This study used a mixed-methods approach to identify whether one such strategy, that is, memorization strategy may have changed for the Net-Generation language learners. The researchers, first obtained quantitative data from 107 ESL tertiary language learners about their strategy use based on Oxford's (1989) widely used Strategy Inventory for Language Learning (SILL), currently considered the most comprehensive inventory. Data on strategy use was then procured using qualitative methods such as semi-structured interviews, Open-ended questionnaires, and texts of the respondents' online interaction in a language task. This latter set of data was analysed (i) to compare the qualitative data with the SILL data, and (ii) to identify possible emergent memory strategies among Net-Geners. The study found that memory strategies have not faded from repertoire of strategies for Net-Genres language learners, rather a set of modifications have emerged in terms of storage place, methods of storing information, retrieval system, and use of memory strategies for successful language learning.

Key words: Net-Geners, trends, memory, language learning strategies.

INTRODUCTION

Over the last two decades, the dominant context for language learning strategy research has been the conventional classroom environment (White, 1995). Within such a context, the investigation of language learning strategies has to-date attempted to promote our understanding of the processes learners use to develop their skills in a second or foreign language. This research has also observed that language learning strategies differ relative to learner factors such as the respondents' level of proficiency (Chamot and Kupper, 1989) and gender (Ehrman and Oxford, 1989). More recently, however, with the advent of the digital learning environment in education, learner strategies would appear to be subject

to even greater differences.

Net-Generation (Oblinger and Oblinger, 2005: 1) learners are growing up in an era when much of the learning, communication, socializing and ways of working take place through digital means. Living in this digital era may result in different ways of thinking, ways of approaching learning, strategies, and priorities. The Net-Geners therefore, need new skills and new strategies to perform successfully as learners and workers.

Language learning in the Net-Generation

The Net-Generation language learners, faced with the requirements for and opportunities of a more self-directed environment, need to develop an awareness of the process of language learning and an understanding of their role in the shared learning spaces. Hauck (2005)

*Corresponding author. E-mail: shahkarami_alireza@yahoo.com. Tel: +60172732819.

points out that “online language learning makes learners aware of themselves, their attitudes, aptitudes and beliefs- and of the affordances of the learning environment and the degree to which they demonstrate flexibility and control” (p.70). They can also determine the types and arrangement of tasks they work on and ignore tasks or sections of the materials they do not consider useful for the development of their target language abilities.

Language learning strategies (LLS)

Learners use language learning strategies with the often explicit goal of improving their knowledge and understanding of a target language and their competence in it. These strategies have been defined as the conscious thoughts and behaviors used by students to facilitate the accomplishment of language learning tasks and to personalize the language learning process (O'Malley and Chamot, 1990). As for the elements of language learning strategies, scholars explain them as: “techniques, approaches or deliberate actions” (Chamot, 1987: 71 in O'Malley and Chamot, 1990: 17), “special thoughts or behaviors” (O'Malley and Chamot, 1990: 1), and “specific actions” (Oxford, 1990: 8). Hence, research in the field concentrates on the ways language learning strategies are utilized by Net-Generation learners to memorize language items, and retrieve them for later use, and on isolating possible differences from the memorization strategies used by the pre-internet language learners.

Role of memory in language learning

In the 1950s when behaviorism was the most prominent school in psychology, memorization was considered as an indispensable part of learning. For example, Audio-lingualism emphasized mimicry and memorization based on mechanical compiling of information in the brain as the result of habit formation processes (Brown, 2000). Later on, through the influence of cognitivism, the role of memorization was revised. In cognitive theory, learners select and organize informational input, relate the input to their prior knowledge, retain what is important, and reflect on the outcomes of their learning efforts (Chamot and O'Malley, 1993).

Learners, then, attempt to make sense of new material by using prior knowledge and deliberately try to rethink their ideas in the presence of new information. Consequently, understanding the input goes beyond the simple compilation of new material into long term memory and beyond simple integration, through which new material is incorporated with prior knowledge already stored in long term memory. Instead, it involves deliberate use of new material to modify and update pre-existing beliefs and ideas (Wenden, 1991). Still other theories like cognitivism (Bandura, 1989) and social constructivism (Vygotsky,

1978) build on individual learners and their interaction with their culture, mind, and environment for effective learning and later retention of the material.

Contribution of strategies to memory

The role and importance of memory in Cohen's (1998) terms falls into the use of rather than the learning of strategies category in his differentiation between second language learning strategies and second language use strategies, both of which together constitute second language “learner strategies”. He emphasizes “retrieval” strategies as those strategies used for retrieving language forms and “rehearsal” strategies for practicing the target language structures (Cohen, 1998).

While Cohen focuses on retrieval strategies in his distinction between strategy types, Oxford talks about “memory” strategies as an “aid in entering information into long-term memory and retrieving information when needed for communication” (Oxford, 1990: 38). She includes in this category, strategies such as “creating mental linkage, applying images and sounds, reviewing, and employing action” (ibid.) to assist learners internalize language information.

Considering the important role of mind and cognition for internalizing and retrieving information on the one hand, and ease of access to oceans of Net-based information available for the Net-Generation language learners on the other, we looked at memory strategies used by the Net-Geners as ESL language learners to identify if memory strategies are really downgraded, as they repeatedly reported “feeling less need to memorize” in the interview process of this study, and to understand how they managed to deal with already existing memory strategies. Attempt was also made to identify how they dealt with large amount of information on the Net, and to see if they had specific or different strategies to retain and retrieve language information.

In spite of the increasingly important role that the computer and the Net play as associated mediums of instruction and communication in many teaching classes and courses, including those that focus on language, all over the world, the strategies that learners develop and use in online environments with new tech-affordances and shared learning spaces, through social networking for learning foreign or second language skills have received little attention.

The students learning in this new context have to participate in new interactive tasks, construct meaning differently compared to pre-internet generations, and interact through computers by means of a new kind of discourse which has potential for learning in general and language learning in particular (Mohan and Luo, 2005). This new form of socialization, through social networking, and new tech-based affordances, seem to bring about changes in the language learning strategies and especially in memory strategies among the Net-Generation

language learners.

In the light of the foregoing literature with respect to establishing the differences that may exist between the pre-internet generations of language learners and the Net-Generation learners, we sought to answer the following research questions in the study:

1. Do Net-Generation language learners employ the same memory strategies as the pre-net generations in their online language learning?
2. Does online language learning impacts the Net-Generers' memory strategy use?
3. Are there emerging trends in memory strategies that are not addressed in the SILL but are practiced by Net-Generation ESL learners?

MATERIALS AND METHODS

We studied 107 undergraduate Net-Generation students from a language faculty in a Malaysian university to determine their language learning strategies, and subsequently, to isolate possible differences in their memory use. These results were then compared with those obtained from pre-internet language ESL learners. The Net-Generers had to interact online to complete their group assignments as part of their language learning process.

The study employed a mixed-methods approach. Quantitative data was obtained using Oxford's SILL (1989) questionnaire, currently considered the most comprehensive inventory, to identify the participants' memory strategy use and preferences. Data on strategy use was also procured using qualitative methods: semi-structured interviews (20 students), journal entries (collected from 17 students over a period of 12 weeks), open-ended questionnaires (the whole group), and texts of the respondents' online interactions in a language task, which were obtained from five groups of 4 students in each group. The various types of data were analysed (i) to compare the qualitative data with SILL data, and (ii) to identify possible emergent memory strategies among the Net-Generers.

RESULTS

Oxford's (1989) classification system for strategies was employed to identify the Net-Generers language learning strategy preferences, and the SILL results were compared with the data obtained from other qualitative measures used in the study. It should be noted that according to Oxford's (1990) explanation, the strategy use is considered high if its mean value (M) is from 3.5 to 5.0. The strategy use falls at medium level for mean values from 2.5 to 3.4, and low level from 1.0 to 2.4. The Statistical Package for Social Sciences (SPSS) Version 17 was used in the computations.

Excerpts from interview transcripts and online interactions texts comprise the qualitative data that was used to assist comparison with quantitative outcomes and also to track any emerging trend in strategy use among the participants. All the names mentioned in the study are pseudonyms and the reported students' excerpts are reproduced verbatim except where indicated.

Memory strategies

Creating mental linkage

Grouping is explained as "classifying or reclassifying what is heard or read into meaningful groups to reduce the number of unrelated elements" (Oxford, 1990: 40). No explicit data or verbal report from Net-Generers regarding this strategy use was observed in the SILL results as it seemed not to have been explicitly addressed in the SILL items. However, the online interaction data show that the present Net-Generers' do indeed use the strategy. For example, Asra, one of the study informants, posted the following:

"Byte is the binary digits Gaya... It's like the 0 and 1 no. like a bit of information. lets say 4 GB or 16 GB... i'm quiet sure that it means like the pen drive bytes..I will double check and let you know ok 😊 (Online interaction text # 1, verbatim)".

She tried to use the strategy by grouping similar concepts, such as 'byte, binary digits, bit' and storage places such as 'pen drive'.

Associating new language information with familiar concepts already in memory

Our informants indicated the highest priority for memory strategies that correspond with SILL item #1: "I think of relationships between what I already know and new things I learn in English" (Oxford, 1990: 294) as a highly used strategy with a mean value of (M= 3.5889). Data from semi-structured interviews appear to confirm the informants' preference for such strategy use. For example, Aftim, a Persian speaker, used her mother tongue equivalent for 'cow', that is, 'gaw', to learn the word 'cowboy'. She made an association between a boy who looks after the 'gaw' to learn 'cowboy' (Interview excerpt #1).

In another instance, Hong Chi, reported that she used her knowledge about 'physics' and associated it with 'meta' that reminded her of 'metal', so she made a kind of association between metal (strong) and physics and inferred that 'meta physic' is something more than physical entities (Interview excerpt #2).

In spite of the differences observed in the strategy employment in online activities and socialisation, which offer more chances of encountering new information and associating them with already known materials, the strategy is still highly used by Net-Generers when compared to pre-Net generations of learners.

Using newly learned words in context

Using newly encountered and learned words or

structures in the context is reported as being the second highly used strategy by the study informants as seen in the SILL data (Item #2, $M=3.5222$). Data from interviews also confirm the strategy use by Net-Geners. For example, Pam said:

"I use the new words in my sentences in daily conversation, either written or spoken to see if it is ok" (Interview excerpt #3).

Students used the newly learned words and structures in their written and spoken interactions. In the event that they were not certain about the use of a certain word, they waited for their interlocutor's feedback. If they received some kind of confirmation about the use of the intended word, they continued with its use provided the interlocutor was an authority or a more proficient language user; otherwise, the use of the word might have been revised or completely abandoned.

Some support is found in the qualitative data for this strategy use among Net-Generation learners who seem to use the strategy with a kind of modification. They use the words not only in their daily oral and written communication, but also in their electronic and online interactions and weblogs which in turn can provide more feedback from others regarding the practiced words or structures used. For instance, Sam said:

"I use big words that I come across, in my weblog" (Interview excerpt #4).

Through using the word(s) in the weblogs and social networking posts, learners are putting their knowledge into practice and actually asking their interlocutors to share their knowledge and information regarding the word(s), language, and concepts with them via their feedback. When a word is put into practice in electronic communication, an image of the word is created in the minds of both interlocutors, which in turn requires appropriate feedback either simultaneously or in later posts. Feedback then encourages learners to use or abandon the word, thus improving learning. This is somewhat different from writing in ordinary situations, in which feedback is either absent or delayed. During speaking words may go unnoticed or be ignored due to a mispronunciation, accent, or use of jargons, therefore causing the speaker to quit trying to track the word, and he or she receives no feedback from the interlocutor. This waiting for and providing quick feedback in an online environment, such as online social networking can be considered an additional facet of the strategy used by the Net-Generation language learners.

The concept, although not new, takes a new representation in that it involves spontaneous online communication, asking for and providing immediate feedback in synchronous digital interactions. It also provides the learners with more chances to use and

actually practice their newly learned words in their social networking and blogs, thereby giving them more chances to learn and use language elements. Net-Geners like to use and practice newly evolved technology-related words, such as Ram, File, Bite, Bit, and Cookie, in the right contexts in order to learn the words and also to show their familiarity with technology.

Visualizing

Visualization strategy is defined as "relating new language information to concepts in memory by means of meaningful visual imagery, either in mind or in an actual drawing" (Oxford, 1990: 41). Data from the SILL show medium-level use of this strategy with a mean value of (Item #4, $M=3.3778$). The strategy priority is ranked fourth in the memory strategies list and the strategy use is supported by the qualitative data.

Interview excerpts, on the other hand, indicate various types of associating and imagining words with outside happenings when encountering the words. For example, Shan used the strategy to visualize the word(s) and related them to some outside happening when he was learning them:

"Sometimes I imagine and associate the word with something that happened at the time of learning the word" (Interview excerpt #5).

Associating a hand-written word with a corner of a page in a paper notebook page was reported by another student, Ahen, when she said:

"I imagine the word at some part of my paper notebook" (Interview excerpt #6).

Visualization seems to be used with a slight difference by the respondents of the study compared to their previous cohorts. Net-Generation learners have the chance of social networking by which they can make new forms of association between newly encountered words and concepts with the electronic place at which they encountered the words, such as in Facebook, Twitter, My Space, and weblogs. For example, Cafren reported:

"When I am facebooking, I may come across a word. I check online to get the meaning, I will remember where I encountered the word, what I was saying, what my friend was saying on Facebook, I remember that" (Interview excerpt #7, verbatim).

She reported imagining the digital space, what was said and the problem encountered. The next time she encountered that very problem, she remembered and used her already familiar imagery as a strategy to resolve the problem.

This later reference to visualization seems to differ from

other varieties of the strategy in that she was pointing to a quality not addressed in the SILL. Visualizing electronically made images and sounds on the screen can be considered as a new variation of strategy possibly driven from the students' over-familiarity with the screens and social networking affordances (they use network for entertainment, research, study, and communication purposes). Visual social networking affordances make it possible for Net-Geners to remember the image of the association. In reality visual imagery strategy will very likely become increasingly important.

Using rhyme for learning and remembering new English words

The strategy is defined as using rhyme to make a kind of sound grouping between new words for learning (for example; fame, shame, tame). Data from the SILL tell us that strategy use in this sense is at a medium-level (Item #5, $M=2.7111$), but does not seem to be supported by the qualitative data. However, many respondents expressed their love of music and used music-lyric harmony of their favorite songs as a powerful tool to remember words in different languages. For example, Hong Chi said:

"I associate music, songs and lyrics to remember them" (Interview excerpt #8, verbatim).

The Net-Generation language learners, as music fans used this strategy to learn new words from the songs. It seems that this modified form of the strategy could easily be used for learning words and even structures in any language. While there seems to be a kind of unnecessary emphasis on English language in the SILL, it appears that this modified form of the strategy can easily be used for learning words, and even structures, in any language. It possibly asks for a revision of the SILL item #5, because of affordances provided by the network and the ease of communication, global socialisation, and the familiarity of people all over the world with music, songs, and their lyrics in languages other than their own.

Semantic mapping

Drawing a diagram with the key concept (word) linked to related concepts via arrows or lines (grouping, using imagery, and associating), explained by Oxford (1990) as a memory aid, was neither explicitly observed in the SILL items, nor reported by the study respondents. However, a kind of semantic connecting of related words was observed in the online communication texts. For example, Sani posted:

"Google is undeniably convenient onto [sic] providing this glossary~I actually never thought that blackboard or bus

is[sic]actually an ict term!" (Online communication text #2, verbatim except for the researcher's substitutions).

Sani connected the words that were semantically related such as: Google, Blackboard, Bus, and the super ordinate ICT category to help her remember them better. Another student, Hakim, connected the ICT terms 'virus, notebook, blog, bug, and laptop cooler pad' in his post to his group mates to help them improve their understanding of 'ICT' terms, thus improving their learning and memory later.

The strategy in the sense put forward by Oxford (1990) does not seem to be used by Net-Geners (no explicit evidence indicating that they link the words with lines and arrows), but association and grouping of the words and concepts is highly used in online communications.

Using keywords

This strategy combines a sound with an image in the second language to enable learners to remember that word. The SILL data indicate medium-level use of the strategy (Item #3, $M=3.3889$). However, instances of the strategy use were frequently observed in the interviews. For example, Fatim said:

"I connected the sound of word 'goal' from my mother tongue (meaning flower and also goal in football) to learn and remember 'goalie' in English" (Interview excerpt #9).

In another instance, Hong Chi, reported thinking about 'superman' at the time she was learning the word 'superficial'.

The strategy, in this sense, was highly used by the study Net-Generation respondents as online communication and social networking logically provide them with more socialisation that brings about more chances of encountering new material and increased instances of associating them with already known materials.

Representing sounds in memory

Linking new words with familiar words or sounds from any familiar language as a memory aid was moderately observed in the study. For example, Atnif said:

It is time for makanang (Online interaction text #3, verbatim) to remind her friend of the lunch break (combining the Malay word 'Makan' for 'food', with an English suffix).

In another example, Aftim a Persian speaker used her mother tongue sound "kam" (little) to learn "Camcorder". She linked the sound "kam" meaning, 'little' with "corder" that reminded her of "recorder", therefore connecting them to understand "camcorder" by imagining a small

recording camera and linking that with the actual object and word.

The strategy use does not seem to be different for Net-Geners as compared to pre-net learners.

Reviewing

Reviewing the material in a systematic manner, as recommended by Oxford's (1990) principles for effective language learning and remembering, seemed to be less practiced by our informants. For example, Joe maintained:

*"I rarely go over my notes, in fact review them just if an exam is around the corne"*r (Interview excerpt #10)

The excerpt indicates rare instances of reviewing notes as a language learning activity. Only when pressure of tests and exams was felt did she refer to her hand-written notes and there was no explicit instance of systematic reviewing. The strategy as Oxford puts it "reviewing at different intervals, at first close together and then increasingly far apart" (Oxford, 1990: 42) was not reported by any of the respondents of study.

Data from the SILL tell us the strategy use is at medium-level (Item #8, M=3.2889) and ranked fourth in the memory strategies list. However, the nature of reviewing the language-related materials was different for Net-Geners with their electronic and online materials.

Reviewing for the Net-Generation language learners includes going over the 'saved' materials that they had once found interesting and important and liked to store them for later use as well as their hand-written notes (if any). Reviewing written materials requires flipping pages of notes and scanning the whole document to find specific information, and obviously is different from reviewing saved materials. For example, Nasir, remarked:

"If I feel something is important, maybe I just save it and go through it again later" (Interview excerpt #11, verbatim).

Nasir pointed to saving important digital materials and reviewing the digitally saved materials in case, he felt they were important. No explicit evidence of making hand-written notes or regular reviewing of the saved materials was observed by the researcher or reported by the informants.

Another student, Abtin, talked about "going over the materials she had saved" in her interview. Going over the materials saved in a computer's hard disc requires some computer literacy to search for the right key terms in order to instantly access the intended information. The difference observed here is in the way that they looked for their 'jotted-down' and 'saved' materials and the

speed of access to the intended information. They used key term search function to look for 'saved materials' rather than flipping and scanning hundred pages of texts to look for the intended 'jotted-down' materials. It is interesting to note that they reported less instances of using memory strategies while choosing appropriate key terms and the search process itself requires triggering memory.

On the other hand, accessing saved material is done with lightning speed while it takes time to scan to hunt for the jotted-down notes. Moreover, reviewing the saved materials enables learners to access the larger language chunks or the whole piece of material saved, while reviewing hand-written notes in the conventional form exposes the learners to broken, isolated, and incomplete pieces of information due to the limitations of note-making procedure. In reality, it may be the nature, speed, amount, and form of memory strategies that seem different.

Employing action

Employing action as a memory strategy for Net-Geners seems to manifest itself mostly through digital games rather than physical actions. For example, Sani said:

"You know actually you can learn many things through your performance in digital games online" (Interview excerpt #12, verbatim).

Digital games tend to provide a kind of immersive environment in which Net-Generation members are totally absorbed as participants or observers. Tapscott (2009) argues that games make learners more attentive as they have to attend many things at the same time thus making their brain develop a mechanism of paying more attention and reflecting to visual and audio cues. As for our informants, games seemed to help them to be better language learners by exposing them to enhanced aspects of creative thinking and practice such as competing, repeating, taking risks freely, and considering everything on a trial and error process, including language uses and still consider it fun. Game players can track more than one object at one time, and are better at processing a rapid stream of information. They enjoy the "fun of engaging attention" (Tapscott, 2009, p. 114) both on the action and the language used. This kind of virtual performance was highly favored by Net-Generation learners, and made them more visually centered and attentive to virtual and electronic spaces that seem to be a new facet of the strategy emerging from the study.

Using mechanical technique

"Using flash cards for learning new words or new

combinations in later stages" (Oxford, 1990: 43) as a memory strategy for language learning was reported as a low-level use strategy ($M=2.1333$) on the SILL. The use of classic flash cards with a word printed on one side and the shape or pronunciation transcription on the other side was seldom reported. However, the existence of electronic forms of flash cards on the net, available also on iPhones and hand Phones, played a more serious role in the language learning process of Net-Generation learners. For example, Saras reported that:

"You could freely download electronic flashcards on your hand phone, it helps language learning. It's fun" (Interview excerpt #13, verbatim).

Net-Generation students can easily use electronic flashcards such as Super Memory (SuperMemo) or Barron flashcard (BFC) on their mobile phones which display pictures, words, and their pronunciations. The use of electronic flash cards seems to be interesting to the Net-Geners. BFC enables learners to easily make their own categories and check their performances. With its word reference counter function, it can count the number of times that students refer to a word. When words are learned satisfactorily, they can be deleted from the categories.

DISCUSSION

Contradictory to the Net-Geners' feeling of less need for memorization expressed in the interviews, data from the SILL show that mean for memory strategies is still high enough ($M=3.1321$). Similarly, Tapscott (2009: 113) quoting Kutchers (2007) argues that exposure to new technologies possibly push Net-Geners brain to break classical 'capacity limitation' and that they may be able to perform some kinds of perceptual task more rapidly. Net-Geners must remember many applications, access many sites that require IDs and passwords and have to keep track of many of them. They have to organize the information and remember how to access it (Tapscott, 2009).

There is still evidence of the use of memory strategies as defined by Oxford, however the space for the storage of information bulk, seem to have changed from human mind to electronic spaces to a large extent. The role of memory strategies in the Net-Geners learning do not seem necessarily fading, rather there seems to be a need for reconceptualizing the notion of memory strategies in the SILL to cope with the needs and requirements of today's language learners, whose minds according to Oblinger and Oblinger (2005) are digitally wired and are immersed under large amount of information, thereby they have to develop a kind of filter to manage incoming information.

As for the Net-Geners memory strategies, the place,

speed, amount, and manner of storing material as well as their retrieval system seem to have undergone changes that consequently affect the Net-Geners learning methods and styles in general and language learning in particular. They feel no actual memorizing of long pieces of information is necessary, as the result of technology and wide access to online information in nano-seconds and the possibility of saving the interesting materials by just a few clicks. On the other hand, the materials stored in the digital spaces are not subject to pruning or forgetting and actually are persistent, unless intentionally or accidentally deleted. The Net-Geners could access and review the saved materials quickly. This could leave greater effect in their brain especially if the information is simulated or digitally animated.

The saved information magnitude also seems to have increased to larger chunks as learners did not try to store materials in their mind, rather used electronic spaces such as blogs and hard drives to store information.

Retrieval system of reference to 'memorized parts' and 'saved materials' is certainly of a different nature as the first requires reference to memory, while referring to 'saved materials' requires a kind of computer skill to search the right key term to access the intended material and almost takes no time. On the other hand, reviewing the saved material gives learners the chance of accessing the whole document easily rather than struggling to find jotted-down notes and information in the books and notebooks.

CONCLUDING REMARKS

Although memory strategies were ranked fourth in the strategies list reported by the SILL data and nearly 65% of the respondents of the study reported "feeling of less need to memorization techniques and strategies" discussed by Oxford in their Open-ended questionnaires through their wide access to information on the Net, the qualitative data show memory strategies to have been revised and highly used by the study informants. In fact the place for storing information seems to have moved mainly from human mind to electronic and digital spaces, which in turn require a different retrieval system. The amount, speed, and manner of storing information accordingly seem to have changed for the Net-Generation language learners.

The Net-Generation learners feel no reason for piling their minds with unnecessary materials as a consequence of wide access to online affordances that enables them to hunt for needed information in lightning speed. Learning, in effect, seems not to be based on the compilation of information in their mind. The focal point for learning seems to be on the learners through online searching, exploring, and sharing the knowledge with their peers rather than memorizing long pieces of information. They use the Net and social networking to

share their knowledge, cooperate with their peers and learn from the interactive virtual spaces. This latter quality of Net-based interaction and its advantages for Net-Generation language learners could be used as an instructional aide by the academy and curriculum writers enlightening their ongoing and prospective plans for more efficient and effective language learning programs.

REFERENCES

- Bandura A (1989). Social cognitive theory. *Annals of child development*. 6(1): 1-60.
- Brown HD (2000). *Principles of Language Learning And Teaching* (Vol. 4th). New York: Pearson Education Company.
- Chamot AU, Kupper L (1989). Learning Strategies in Foreign Language Instruction. *Foreign Lang. Annals*. 22(1): 13-24.
- Chamot AU, O'Malley JM (1993). Teaching for strategic learning: theory and practice. In J. E. Alatis (Ed.), (Vol. 1, pp. 36-51). Washington, D.C.: Georgetown university press.
- Cohen AD (1998). *Strategies in learning and using a second language* (Vol. first). London: Longman.
- Ehrman ME, Oxford RL (1989). Effects of sex differences, career choice, and psychological type on adults' language learning strategies. *Modern Lang. J.*, 73(1): 1-13.
- Hauck M (2005). Metacognitive knowledge, metacognitive strategies, and CALL. In J. L. Egbert & G. M. Perti (Eds.), *CALL Research Perspectives 1*: 65-86. New Jersey, U.S.A: Lawrence Erlbaum Associates, Inc.
- Kutcher S, Kutcher M (2007). Understanding differences of a cognitive and neurological kind: digital technology and human brain development. Syndicated research project. nGenera, June 2007, www.ngenera.com
- Mohan B, Luo L (2005). A Systemic Functional Linguistics Perspective on CALL. In J. L. Egbert & G. M. Perti (Eds.), *CALL Research Perspectives 1*: 87-96. New Jersey. U.S.A: Lawrence Erlbaum Associates, Inc.
- O'Malley JM, Chamot AU (1990). *Learning Strategies in Second Language Acquisition* (Vol. 1). Australia: Cambridge University Press.
- Oblinger D, Oblinger J (2005). Is It Age or IT: First Steps Toward Understanding the Net Generation. *Educause*(Journal Article).
- Oxford (1989). Use of language learning strategies: a synthesis of studies with implications for strategy training. *System*, 17(2): 235-247.
- Oxford RL (1990). *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House.
- Vygotsky LS (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wenden A (1991). *Learner Strategies for Learner Autonomy: Planning and implementing learner training for language learners* (Vol. first). New York: Prentice Hall International Ltd.
- White C (1995). Autonomy and Strategy Use in Distance Foreign Language Learning: Research Findings. *System*, 23(2): 207-221.