A Response to Calls for Moving Away from Language Learning Strategy Research

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Abstract

Language learning strategy (LLS) research is very prolific and much has been written and discussed the LLS types and the correlation between strategy use and successful language learning across different learning contexts. In recent years, however, research interest in LLSs has been on the decline, and this decline is mainly due to growing criticisms of the theoretical inconsistencies and conceptual ambiguities concerning the construct of LLS (Dörnyei, 2005, 2009; Macaro, 2006) and the contradictory and questionable results obtained from the excessive use of survey methods as instruments to measure the use of LLSs (LoCastro, 1994; Tseng et al, 2006; Woodrow, 2005). No empirical data were collected for this paper; instead, the paper aims to respond to calls for replacing the construct of LLS with the 'more versatile concept' of self-regulation. It also shows the salience of taking up a more qualitative and context-sensitive approach, which views language learners' strategy use as dynamic and varying across contexts.

Key Words: *Language learning strategies (LLSs), good language learners (GLLs), cognitive psychology approaches, sociocultural theory, self-regulation*

1. Introduction

The unsatisfactory results from a focus on the methods and products of language teaching led some language learning researchers in the 1970s (e.g. Cohen, 1977; Naiman et al., 1978; Rubin, 1975; Stern, 1975) to explore the characteristics of the 'good language learner' (GLL) (Griffiths, 2008, 2013; White, 2008). These researchers believed that an identification of the traits and strategies deployed by GLLs could then be taught to their less successful counterparts and this would enable the latter to find their own means to success (ibid). As Gu (1996, p.1) vividly puts it, LLS research 'started off with the Robin Hoodian good will of breaking the secret behavioural codes of successful language learners and sharing them with the unsuccessful ones'. Rubin (1975), for instance, identified some characteristics, which, she claimed, GLLSs share. According to Rubin (1975, p.4-5), GLLSs are willing and accurate guessers, are attentive to both form and meaning, are extroverted and uninhibited about mistakes, are willing to practise and spend time monitoring their own speech and that of others. Commenting on the previous GLL empirical studies, both Parks and Raymond (2004, p.375) suggest that almost all of these studies were based on cognitive psychology theories, and regarded success at language learning as 'a matter of individual initiative, notably in terms of strategy use and personal motivation'. In this sense, LLSs are '*teachable'* (Oxford and Nyikos, 1989, 291, authors' emphasis), and learners can benefit from coaching in LLSs to accelerate or aid their second language learning. Although LLS research is in its fourth decade of rigorous work, this field of research may still be considered as 'quite an immature field' (Grenfell and Macaro, 2007, p.28). As Dörnyei (2005, p.162) suggests, 'nothing is clear-cut' in LLS research and some key issues regarding 'definitional fuzziness' and inaccurate uses of research instruments still need further investigations. In the coming sections of this paper, both the claims raised by the opponents of LLS research and our responses to them, in particular the proposal of using the construct of self-regulation in place of LLS will be discussed.

2. Language Learning Strategy Research: Criticisms and Insights

Some researchers utilising a LLS framework (e.g. Dörnyei, 2005, 2006; Ellis, 1994; Macaro, 2006; Tseng et al., 2006) have suggested that the research into LLSs has essentially suffered from two central weaknesses, which stem from the different conceptualisations of the term LLS and the methodological approaches usually followed in LLS research.

2.1 Definitional Issues Regarding the Construct of 'Language Learning Strategies'

According to Gu (2012), there have been unsuccessful attempts at clarifying the construct of LLS because of 'the elusive nature of the term [strategy]' (Ellis, 1994: 529) and the lack of its theoretical soundness. The theoretical inconsistencies and conceptual ambiguities concerning the concept of LLS were first noted by Wenden (1991) and then have been explored by other researchers utilising a LLS framework (e.g. Cohen, 2011a; Cohen and Oxford, 1992; Dörnyei and Skehan, 2003; Ellis, 1994; Grenfell and Macaro, 2007; White, 2008). Looking for a definition pattern, Table 1 contains some definitions of the term LLS suggested by some prominent researchers in educational psychology. The original wording in these definitions is kept as closely as possible, but broken down into two columns.

Table 1 A Sample of Definitions of Language Learning Strategies

Source	What are LLSs?	What are LLSs for?
Bialystok (1978, p.71)	are optimal methods for exploiting available information and may be consciously employed by language learners	to improve competence in a second language
Oxford (1989, p.235)	behaviours or actions used consciously by learners	to make language learning more successful, self-directed and enjoyable
O'Malley and Chamot (1990, p.1)	the special thoughts or behaviours that learners consciously employ	to help them comprehend, learn, or retain new information
Weinstein and Hume (1998, p.12)	any thoughts, behaviours, beliefs, or emotions a learner involved in during learning	to facilitate the acquisition, integration, storage in memory, or availability for future use of new knowledge and skills.
Cohen (2011b, p.682)	thoughts and actions, consciously selected by learners	to assist them in learning and using language in general, and in the completion of specific language tasks
Griffiths (2013, p.15)	activities chosen by learners	to regulate their own language learning

The above table depicts differences in defining the construct of LLS, and these differences, as described by Takać (2008, p.50), might be attributed to the fact that most researchers tend to define the construct of LLS in accordance with the focus of their own research. Addressing this issue, Macaro (2006) identifies three main problems pertaining to the theoretical foundations of LLS. These problems are as follows:

(1) The first problem relates to the nature of the LLSs through questioning whether they should be viewed as either unobservable mental operations such as selective

attention, or observable behaviour such as observing someone taking notes in a lecture or both. Both Grenfell and Macaro (2007, p.18) contend that it seems difficult and 'atheoretical' to suggest that the inner cognitive operation and the overt behaviour are condensed within one concept i.e. LLS. Considering the definitions of LLS exemplified above, many researchers adopting a cognitive psychology framework in their LLS studies (e.g. Cohen, 2011b; Griffiths, 2013; O'Malley and Chamot, 1990) tend to locate LLSs in two domains, namely observable behaviours and mental processes. However, the concern of Oxford's (1989) definition was with the overt behaviours practised by the learners. Bearing this in mind, some researchers have attempted to overcome the problematic issue of the interrelationship between observable behaviours and mental thoughts through replacing the specific words 'behaviours and thoughts' with more general words such as 'methods' (Bialystok, 1978, p.71) and approaches' (O'Malley and Chamot, 1994, p.7).

(2) The second problem of the concept of LLS is how conscious of and attentive to their language activities learners should be in order to consider the activities as strategies. Guided by Krashen's (1976) Monitor Hypothesis, Bialystok (1978, p.71), as shown in Table 1, notes that it is not necessary that language learners be always conscious of their choice of LLSs, especially in the strategies relevant to the speaking or listening skill where a learner does not have sufficient time to monitor the correctness of utterances. Conversely, both Cohen (2011a, p.11) and Ellis (1994, p.531-32) suggest that if a learning activity is carried out by a learner automatically such as skimming the keywords in an academic article to recognise its relevance to the topic research, it should be regarded as a 'process' rather than a 'strategy' because this activity cannot be described through verbal report and thus lose its implication as a strategy. If the learner, however, is conscious (even peripherally) of the reason of checking first the keywords, then the move would be termed a 'strategy'. In line with Cohen (2011a) and Ellis (1994), Oxford (2011, p.51) affirms that '*when the strategy has become automatic through extensive practice, it is no longer a strategy but has instead been transformed into…an unconscious habit*' (author's italics). Dörnyei (2005, p.164-65), in turn, questions the difference between the terms 'strategy' and 'motivation' simply because the typical characteristics of strategic learning, e.g. 'effortful', 'goal-oriented' and 'intentionally evoked' can apply to 'hard and focused learning'. Therefore, Dörnyei (2005) supports the idea that a learning activity can

become strategic when it is 'particularly *appropriate* for the individual learner' (author's italics).

(3) The third problem pertains to learners' motivation for using LLSs i.e. what LLSs are for. The definitions of LLS listed in Table 1 describe that most researchers have adopted a cognitive psychology viewpoint, which sees language learning as mental processes (e.g. perceiving, analysing, classifying, storing and retrieving) whereby learners deal with input and output (Gao, 2010, p.11) and their use of LLSs that activate mental processes can have a focal role in improving their language proficiency. However, some language learning researchers endorsing socially oriented theoretical perspectives (e.g. Gao, 2010; Norton and Toohey, 2001; Parks and Raymond, 2004) argue that the purpose of using LLSs should not be restricted to linguistic objectives, on the grounds that LLSs can be deployed to gain access to specific learning community. This point will be returned to later in this paper.

2.2 The Use of Strategy Inventory Questionnaires in LLS Research

Gao (2010, p.11-12) states that the development of strategy taxonomies by some language learning researchers (e.g. Cohen, 2011; Dörnyei, 2005; O'Malley and Chamot, 1990; Oxford, 1990) has actually played a key role in the wide use of questionnaires in the LLS research community. Oxford (1990), for instance, produces 'the most comprehensive, detailed and systematic taxonomy of strategies' (Radwan, 2011, p.119), through drawing a distinction between direct and indirect LLSs, which are further subdivided into six subcategories:

Table 2: Oxford's (1990, p.18-21) framework for Strategy Inventory for Language Learning

Direct strategies	Indirect strategies
Memory strategies are used for remembering and retrieving information (e.g., applying images and sounds, creating mental linkages)	Metacognitive strategies are used to control one's own cognition (e.g., coordinating the planning, organising, and evaluation of the learning process.)
Cognitive strategies are employed for understanding and producing the	Affective strategies refer to the methods that help learners regulate their feelings

language such as use (e.g., summarising, analysing, note-taking, listening to radio/CDs)	and learning circumstances (e.g., reducing anxiety, encouraging one's self)
Compensation strategies are used for overcoming deficiencies in knowledge of the language (e.g., using gestures and synonyms to convey meaning, guessing meanings from context)	Social strategies include interaction with others through the target language (e.g., asking questions, cooperating with native speakers, learning about social or cultural norms)

However, the excessive use of survey methods as instruments to measure the use of LLSs has been subject to considerable criticism (e.g. Dörnyei, 2005; Gao, 2004; LoCastro, 1994; White et al, 2007; Rose, 2012; Woodrow, 2005) for four main reasons:

- Strategy questionnaires tend to minimise the impact of contextual variations on learners' strategy use through attempting to use a particular strategy questionnaire in different sociocultural settings. LoCastro's (1994) study, for instance, revealed that Oxford's (1990) Strategy Inventory for Language Learning (SILL) was context-insensitive simply because the most frequent LLSs employed by the participants were the memory strategies although SILL implied that these strategies should be rarely used by learners.
- The items of the written questionnaires can be interpreted differently by the participants. For example, learners may become confused when responding to the following item in Oxford's (1990) SILL 'I pay attention when someone is speaking English' because they might be unable to decide who is 'someone'.
- Most strategy questionnaires focus primarily on the frequency of learners' strategy use rather than on their attitude and efficiency. That is, learners are often invited to respond to a frequency scale, ranging from 'never or almost never' to 'always or almost always' without giving them the opportunity to explain if they use specific LLSs in a particular learning context but not in others.
- Most strategy questionnaires tend to portray learners' expressed strategy preferences rather than their actual and dynamic use of the LLSs in accordance with the specific learning settings and learners' goals.

The above theoretical and methodological weaknesses related to the field of LLSs have led the decline in significance of the LLS theoretical base. Dörnyei and Skehan (2003, p.610), for instance, have supported the idea of abandoning the construct of LLS altogether in research studies. They go further and recommend the adoption of the 'more versatile' concept of self-regulation', which represents 'the degree to which individuals are active participants in their own learning' (ibid, 611). The notion of 'self-regulation' for the detractors of LLS research (e.g., Dörnyei, 2005; Ortega 2009; Tseng et al 2006) is a more dynamic concept than LLS because it describes learners' strategic efforts in managing their personal learning processes, especially how to plan, monitor, focus on and evaluate their own learning. Accordingly, language learners' self-regulatory capacity and their cognitive processes can be captured. In this sense, Ortega (2009, p.2011) encourages researchers in the field of language learning to take up the self-regulatory approach as a theoretical framework to understand language learners' '*creative* and *conscious* efforts' employed to control their own learning processes rather than to focus on sheer frequency of learners' strategy use, which dominates the bulk of LLS research (author's italics).

3. A Response to Major Criticisms of LLS Research

The enthusiastic attempts made by some opponents of LLS research (e.g. Dörnyei, 2005, 2009; Ortega, 2009; Tseng et al, 2006) to move to abandon the construct of LLS in research studies through exploring learners' strategic learning in accordance with their self-regulatory capacity have been challenged by some LLS researchers (e.g. Cohen, 2011, Gao, 2007, Gu, 2012; Rose, 2011, 2012). Gao (2007) in an illuminating paper, for example, critically addresses Tseng et al.'s (2006) proposal to replace the construct of LLS with the notion of self-regulation through examining whether the marginalisation of LLS research is a prerequisite for introducing self-regulation into research on learners' strategic learning. Gao (2007), in effect, agreed with Tseng et al.'s (2006) view that a myriad of LLS research studies have been apparently depicted the trait aspect of learners' strategy use through relying greatly on task-free strategy questionnaires, which essentially address learners' strategy preferences independently of the situation or task at hand. Nonetheless, Gao (2007), like some other LLS researchers (e.g. Cohen, 2011; Huang and Andrews, 2010; Phakiti, 2003, 2006), believes that there are two facets of language learners' LLS use,

which are LLS as a *trait* and LLS as a *state*. The former represents language learners' general tendency to use particular patterns of LLSs 'free from a particular context' (Phakiti, 2006, p.26), whereas states of learners' strategy use symbolise 'their actual deployment of strategies in different learning settings or contexts' (Gao, 2007, p.616). Put it another way, LLS as a trait may appear to identify learners' strategy preferences more than actual strategy use contrary to LLS as a state which depicts the dynamism of learners' actual use of LLSs according to particular situations or tasks.

Gao (2007) concludes his paper by suggesting a sociocultural framework to explore language learners' strategic behaviour because such a framework, using qualitative or multi-method approaches, can capture the complex interplay between learners' actual LLS use and its underlying processes in particular contexts. From this sociocultural stance, language learners act on the world with the assistance of both some social agents (e.g., family members, friends or neighbours) and a host of material tools (e.g., textbooks, travel brochures or technology) and symbolic artefacts (e.g., language, gestures) (Kuure, 2011; Lantolf, 2013). For example, the analysis of the learners' experiential narratives in Gao's (2006) study showed that the participants' LLS use was congruent to their changing contextual needs. That is, the Chinese learners of the study mainly used repetition, note-taking and rote memorisation strategies in their Chinese learning context because these strategies enhanced them to pass the exam and address both their teachers' recommendations and their cultural beliefs which imply that 'a person can memorize a word if s/he repeats exposure to it [particularly visually] seven times' (ibid, p.63). However, the intensity of the strategies applied by most of these Chinese learners in China was decreased when they moved to the UK because the assessment method of learners' language proficiency shifted from 'authoritative' standard exams followed in China into 'coursework assessment' through the medium of English in the UK (ibid). Consequently, the learners employed LLSs up to the demands of their coursework such as retaining only vocabularies that appear many times in their coursework rather than relying heavily on a dictionary. Gao (2006, p.64) concluded that the choice of learners' strategy use was the result of not only their personal motivation and mental processes but also the social context of learning and 'the mediating agents, including teachers, learning experts, and family members'. Based on that, a more qualitative and contextualised approach in investigating learners' LLS use can be favoured because SILL and other strategy

questionnaires are likely to examine merely learners' frequency of strategy use, and underestimate the importance of both contextual variations and task influence.

Like Gao (2007), Rose (2011, p.1) challenges the proposal of using the construct of self-regulation instead of LLS and sees it as 'a matter of throwing the baby out with the bathwater' simply because the term 'self-regulation', similar to LLS, suffers from 'definitional fuzziness'. To put it more clearly, the construct of 'self-regulation' has been used more or less synonymously with different technical terms such as 'self-management' (Rubin 2001, 2005; Dörnyei 2005); 'autonomy' (Oxford, 2011), 'self-direction' (Pemberton, 2011). For this reason, the attempt of replacing the term LLS with self-regulation is 'not a healthy sign' (Gu, 2012, p.330). To support this point, Gu (2012) indicates that

> …conceptual fuzziness should not be a problem serious enough to overthrow forty years of research on language learning strategies. The argument is clear and straightforward: if not being able to agree on the definition of a Planet until 2006 does not in any way discredit the scientific nature of astronomy, or necessitate the removal of the concept of "planet" altogether, why should we throw away a whole line of research on language learning strategies? In fact, the proposed alternative term "self-regulation" or even a more general and key term "learning" fall into the same fuzziness trap. (Gu, 2012, p.331)

Based on the aforementioned discussion and guided by a sociocultural standpoint, we will attempt to suggest a comprehensive definition of the construct of LLS as:

> *a process related to the dynamic interaction between learners' exercise of agency and social structure in order to understand their strategic language learning efforts.*

In this definition, learners' strategy use is not merely restricted to cognitive and metacognitive processes but extends to acknowledge the key role of contextual conditions (e.g. material resources, learning discourses and social agents) in mediating the choice and use of LLSs.

4. Conclusion

As can be seen from the review of criticisms directed at LLS research, the bulk of LLS empirical studies have been underpinned by a cognitive psychology standpoint

and employed survey methods, especially Oxford's (1990) SILL, to examine the trait and static aspect of learners' strategy use. There is still much research that needs to be completed to obtain a more holistic picture of the pivotal role of LLSs in the process of language teaching and learning. This can be done through shifting the focus from the notion of quantity to that of quality through adopting a more qualitative and context-sensitive approach. We, therefore, hope that we can see more empirical LLS studies that are underpinned by sociocultural theory in order to disclose the dynamic and actual use of language learners' strategy use scaffolded by different social conditions.

References

Bialystok, E. 1978. 'A theoretical model of second language learning'. *Language Learning*, 28(1), 69-83.

Cohen, A. 1977. Successful second-language speakers: A review of research literature. *Balshanut Shim*ushit, 1(1), 3-23.

Cohen, A. 2011a. *Strategies in Learning and Using a Second Language* (2nd ed.). London: Longman.

Cohen, A. 2011b. L2 Learning Strategies (Ch. 41). In E. Hinkel (ed.), *Handbook of research in second language teaching and learning,* Vol. II - Part V. Methods and instruction in second language teaching (pp. 681-698). Abingdon, England: Routledge

Dörnyei, Z. 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, N.J.: L. Erlbaum Associates.

Dörnyei, Z. 2006. 'Individual differences in second language acquisition'. *AILA Review, 19*(1), 42-68.

Dörnyei, Z. 2009. *The Psychology of Second Language Acquisition*. Oxford, UK: Oxford University Press.

Dörnyei, Z., and Skehan, P. 2003. Individual differences in second language learning. In Doughty, C.J., & Long, M.H.(eds.) *The handbook of second language acquisition* (pp. 589-630). Malden, Mass: Blackwell.

Ellis, R. 1994. *The Study of Second Language Acquisition*. Oxford, UK: Oxford University Press.

Gao, X. 2006. 'Understanding changes in Chinese students' uses of learning strategies in China and Britain: A socio-cultural re-interpretation'. *System, 34* (1), 55-67.

Gao, X. 2007. 'Has language learning strategy research come to an end? A response to Tseng et al. (2006)'. *Applied Linguistics*, 28(4), 615-620.

Gao, X. 2010. *Strategic language learning: The roles of agency and context.* Bristol: Multilingual Matters.

Grenfell, M. and Macaro, E. 2007. Claims and critiques. In Cohen, A. D. and Macaro, E. (eds.) *Language Learner Strategies: Thirty Years of Research and Practice.* Oxford: Oxford University Press.

Griffiths, C. (ed.). 2008. *Lessons from Good Language Learners.* Cambridge: Cambridge University Press.

Griffiths, C. (ed). 2013. *The Strategy Factor in Successful Language Learning.* London: Multilingual Matters.

Gu, P. 1996. 'Robin Hood in SLA: What has the learning strategy researcher taught us?' *Asian Journal of English Language Teaching*, 6(1): 1-29.

Gu, P. 2012. 'Learning Strategies: Prototypical Core and Dimensions of Variation'. *Self-Access Learning Journal*, 3(4), 330-356.

Krashen, S. 1976. 'Formal and informal linguistic environments in language acquisition and language learning'. *TESOL Quarterly*, 10, 157-168.

Kuure, L. 2011. 'Places for Learning: Technology-mediated language learning practices beyond the classroom'. In *Beyond the Language Classroom. The Theory and Practice of Informal Language Learning and Teaching, edited by Phil Benson and Hayo Reinders, 35-47.* Basingstoke: Palgrave Macmillan.

Lantolf, J. 2013. Sociocultural Theory and the dialectics of L2 learner autonomy/agency. In *The Applied Linguistic Individual: Sociocultural Approaches to Identity, Agency and Autonomy,* edited by Phil Benson and Lucy Cooker, 17-32. Lancaster: Equinox Publishing Ltd.

LoCastro, V. 1994. Learning strategies and learning environments. TESOL Quartely, 28(2), 409-414.

Macaro, E. 2006. 'Strategies for language learning and for language use: Revising the theoretical framework'. *The Modern Language Journal, 90*(3), 320-337.

Naiman, N., FrÖhlich, M., Stern, H. H. and Todesco, A. 1978. *The Good Language Learner.* Clevedon: Multilingual Matters.

Norton, B., and Toohey, K. 2001. 'Changing perspectives on good language learners'. *TESOL Quarterly, 35*, 307-321.

O'Malley, J. M., and Chamot, A. U. 1990. *Learning strategies in Second Language Acquisition*. New York: Cambridge University Press.

Chamot, A.U. and O'Malley, J.M. (1994). *The CALLA Handbook: Implementing the Cognitive Language Learning Approach*. Reading, MA: Addison Wesley.

Ortega, L. 2009. *Understanding Second language and Acquisition*. London: Hodder Education.

Oxford, R. 1989. 'Use of language learning strategies: A synthesis of studies with implications for strategy training'. *System, 17,* 235-247.

Oxford, R. 1990. *Language learning strategies: what every teacher should know*. New York: Newbury House/Harper and Row.

Oxford, R. and Cohen, A. 1992. Language learning strategies: Crucial issues of concept and classification. Applied language learning, 3(12), 1-35.

Pemberton, R. 2011. Self-access: Starting off. In *Autonomy in Language Learning: Opening a can of Worms,* edited by C., Everhard, and J., Mynard, and Smith, R., 124-127. Canterbury, UK: IATEFL.

Parks, S., and Raymond, P.M. 2004. 'Strategy use by non-native English speaking students in an MBA program: Not business as usual'. *The Modern Language Journal*, *88*(3), 374-389.

Phakiti, A. 2003. 'A closer look at gender and strategy use in L2 reading'. *Language Learning, 53*(4), 649-702.

Phakiti, A. 2006. 'Construct validation of Bachman and Palmer's (1996) strategic competence model over time in EFL reading tests'. *Language Testing*.

Radwan, A. 2011. 'Effect of L2 proficiency and gender on choice of language learning strategies by university students majoring English'. *The Asian EFL Journal Quarterly*, 13(1), 114-162.

Rose, H. 2011. 'Reconceptualizing strategic learning in the face of self-regulation: Throwing language learning strategies out with the bathwater'. Applied Linguistics, 1(1), 1-8.

Rose, H. (2012). 'Language learning strategy research: Where do we go from here?'. *Studies in Self-Access Learning Journal,* 3(2), 137-148.

Rubin, J. 1975. What the 'good language learner' can teach us. *TESOL Quarterly,* 9(1), 41-51.

Rubin, J. 2001: 'Language Learner Self-management'. *Journal of Asia Pacific Communication.* 11.1: 25-37.

Rubin, J. 2005. 'The Expert Language: a Review of Good Language'. In K. Johnson (Ed.), *Expertise in Second Language Learning and Teaching* (pp.37-63). Basingstoke, Hants, England: Palgrave MacMillan.

Stern, H.H. 1975. 'What can we learn from the good language learner?'. Canadian Modern Language Review, 3(1): 304-318.

Takać, V.P. 2008. *Vocabulary Learning Strategies and Foreign Language Acquisition*. Clevedon: Multilingual Matters.

Tseng, W., Dörnyei, Z., and Schmitt, N. 2006. A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics, 27*(1), 78-102.

Weinstein, C. E., and Hume, L. M. 1998. *Study Strategies for Lifelong Learning.* Washington, DC: American Psychological Association.

Wenden, A. 1991. *Learner Strategies for Learner Autonomy: Planning and Implementing Learner Training for Language Learning*. Englewood Cliffs, NJ: Prentice Hall.

White, C. 2008. Language learning strategies in independent language learning: An overview. In S. Hurd. and T. Lewis (eds.), Language Learning Strategies in Independent Settings.

White, C., Schramm, K., and Chamot, A.U. 2007. In A. Cohen. and E. Macaro (eds.), *Language Learner Strategies: Thirty Years of Research and Practice*. Oxford: Oxford University Press.

Woodrow, L. 2005. 'The challenge of measuring language learning strategies'. *Foreign Language Annals,* 38: 90–100.

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