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Article-Title: Conceptual issues in strategy research: Examining the roles of teachers and students in formal education settings

Conceptual issues in strategy research: Examining the roles of teachers and students in formal education settings

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Abstract: This article provides an overview of the field of language learning strategies, focusing on definitional and conceptual issues as they relate to strategy use in formal education settings. The article first provides evidence of the conflation of language learning strategies with concepts related to self-directedness. It provides evidence via a corpus-based analysis of published papers over time to illustrate that the field has moved away from instructed settings and towards a view of learner agency and self-regulation. We argue that this is a dangerous trend for language education researchers, as current definitions minimize the role of the teacher and classroom contexts in influencing strategic behavior in their students. A conceptualization and subsequent definition that does not stigmatize or exclude learners who are not self-directed, for whatever reason(s), is crucial to advance the field. As a solution, we propose that self-regulation be defined as a dynamic characteristic of learning strategies in order to allow for other-regulated strategies in research. Theorizing the interplay of the *self* and strategies on a continuum helps to emphasize the dynamic processes of strategic development, and the role teachers and students in instructed settings can play in this process.

Keywords: language learning strategies, self-/other-regulation, self-directedness

1 Introduction

For years, practitioners have tried to find the best strategies, combinations of strategies, and ways to encourage strategic behavior to aid their students in learning more effectively. As a field of study, language learning strategies rose in popularity after Rubin's (1975) and Stern's (1975) publications on "good language learners", which focused primarily on what learners *did*. Later work (e.g. O'Malley et al. 1985), emphasized more cognitive aspects of strategic behavior, making links to cognitive theory. This focus was superseded by a return to wider definitions of strategies which embraced the metacognitive, affective, social, and usage-based dimensions of learning alongside the

cognitive (see Oxford 1990). Over time, the field has evolved with definitions often incorporating other concepts such as self-regulation, agency, and autonomy, which we represent collectively under a banner of *self-directedness*. While these concepts are typically theorized as being ideal characteristics of successful language learners, this focus on an ideal product often ignores the process of strategic development, including the sometimes inevitable stabilization of regulation in a very much *other*-determined state (AUTHOR AND CO-AUTHOR). In addition, a singular, generalized view of students as self-regulatory, agentive, and autonomous assumes a lot of them: that they are, are able to, and/or want to be self-directed; that they learn best under similar conditions (e.g. contexts where autonomy is expected); and that their individual differences can be easily mitigated in formal language education. The field has yet to agree on a definition that could be generally applied and universally accepted.

In an attempt to bring a sense of order to conceptual inconsistencies, Oxford (2017) conducted a content analysis of 33 existing definitions relating to language learning strategies and similar concepts. She compiled the most frequently occurring features of these previous definitions and used the findings to provide a new, comprehensive, and highly-inclusive definition. In attempting to incorporate additional concepts as they have been introduced over time (e.g. Oxford 1989, Oxford 1990, Oxford 2011), Oxford's definition has grown to the following:

L2 learning strategies are complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves (such as cognitive, emotional, and social) for the purpose of (a) accomplishing language tasks; (b) improving language performance or use; and/or (c) enhancing long-term proficiency. Strategies are mentally guided but may also have physical and therefore observable manifestations. Learners often use strategies flexibly and creatively; combine them in various ways, such as strategy clusters or strategy chains; and orchestrate them to meet learning needs. Strategies are teachable. Learners in their contexts decide which strategies to use. Appropriateness of strategies depends on multiple personal and contextual factors. (Oxford 2017: 48)

In AUTHOR and CO-AUTHOR (2019), we claimed that Oxford's definition is the best we have at present, because it, along with the resulting discussion of its core concepts in her 2017 monograph, helps to tease apart some of the central issues in our field. Nevertheless, from a pragmatic view, we believe that it is quite complex to be a usable definition, and everything after "long-term proficiency" has little to do with defining strategies, but ties in with their use and qualities. Cohen (2018: 32) states that strategy definitions "should clarify, not obfuscate. It helps move the action along into the realm of practice to use definitions that lay language learners can understand", a statement that Oxford herself has cited supportively (see Oxford 2017: 11).

We also drew attention to the fact that most early definitions are neutral in terms of a need for learner agency, while many later definitions include traces of assumed self-directedness. We commented that this shift in focus often fails to recognize the role of the teacher as a potentially influential factor in classroom settings, half of the student/teacher equation. Well-trained teachers, therefore, can play a role in the transformative process of moving learners from a possible initial state of other-regulation to self-regulation over time, especially in formal education contexts where their presence is not only expected, but required. We argued that conceptualizing strategies on a continuum according to their source of regulation better relays to teachers how to guide student trajectories towards self-regulation, while still acknowledging that other-regulation is a likely, albeit non-essential, point of departure for many learners. Moreover, some students may never reach the self-regulated side of the continuum but may still be considered successful in language learning and strategy usage. Others may be extremely self-directed and yet find themselves unsuccessful in their language learning due to a host of cognitive and non-cognitive individual differences and, of course, the strategies they use.

We posit that effective instruction, scaffolding, monitoring, and assessment of strategic learning by an adequately trained teacher can help to mitigate potentially problematic issues and enable the learning process to advance. A conceptualization and subsequent definition that recognizes this and does not stigmatize or exclude learners who are not self-directed, for whatever reason(s), is crucial to advance the field. This is also seen as a return to older conceptualizations that consider the teacher and explicit strategy instruction as vital components within the research paradigm.

Oxford's (2017) definition, and the underlying aspects of its constituent parts, is important to analyze critically, as it has been described in published reviews as "ground-breaking"; its construction "the most extensive and accurate analysis of existing definitions of language learning strategies available" (Giovanna Tassinari 2018: 339); and "undoubtedly the most comprehensive concept of LLS so far" which could "set a new direction in research into strategies" (Kałdonek-Crnjaković 2018: 351). Oxford's influence is undeniable. For example, Lei and Liu's (2019) bibliometric analysis of trends in the journal *System*, found that Oxford is the most cited author in the 1990s & 2000s and the third most cited author in the 2010s, "including a substantial number of citations in some of the [other] leading journals in our field" (Lei and Liu 2019: 7). Such accolades are worthy of equal scrutiny, since her influence is likely to continue in the years to come.

A major concern of ours is whether the field has focused so intensively on ideal learners—under the assumption that they are, are able to, and/or want to be self-regulatory, agentive, and autonomous—that less-than-ideal students and teachers in general may have been removed from the frame. We have reported on this change in a small number of explicit definitions of language learning strategies in AUTHOR and CO-AUTHOR (2019), but are also aware that implicit conceptualizations may differ. Writers may define a concept

explicitly in one way but their discourse may portray it in another—their implicit conceptualization differing from the explicit definition they provide, if they provide one at all. This is a major issue in research. Therefore, the first aim of this paper is to determine how researchers conceptualize learning strategies implicitly in their writing. We do this by reporting on a corpus-based analysis of the 33 full papers Oxford extracted definitions from to construct her own recent and assuredly influential definition (see Appendix 1 and Appendix 2 for the list texts). As AUTHOR and CO-AUTHOR (2019) only provided an interpretive look at surface-level definitions, we felt a more systematic mode of analysis was needed, exploring the role of teachers and students in strategy research over time. The second aim is to propose our own definition and use our analysis as a springboard to discuss future directions for research.

2 A Corpus-Based Analysis

Keyword analysis is a data-driven method for extracting important information from texts. This method has been used in a number of studies where important concepts in texts are key concerns (e.g. AUTHOR 2016). It is a corpus-based technique which extracts significantly high frequency words or concepts in one corpus when compared to another corpus, which is used as a benchmark (Scott 1997). Keywords can be generated automatically using a log-likelihood statistic that reports whether the words are identified as keywords by chance or because of authorial choices (AUTHOR and CO-AUTHOR 2018). Therefore, this method can highlight words or concepts which are particularly salient in a given corpus. Doing keyword analysis requires a target corpus (the corpus of interest) and another corpus to be used as a benchmark.

In this keyword analysis we aimed to explore the following questions:

1. What concepts are different between older and newer implicit conceptualizations of language learning strategies?
2. How, if at all, have the stated roles of students and teachers changed?

2.1 Corpora

To test whether keyword analysis might provide insights into implicit conceptualizations of language learning strategies, we decided to conduct a preliminary analysis of the 33 full articles and book chapters that Oxford (2017) analyzed when creating her new definition. We used these as sources because in AUTHOR and CO-AUTHOR (2019), we highlighted that, in general, most definitions pre-1997 are neutral in the origin of strategy usage, while many of those appearing post-1997 include metatheoretical presuppositions about the element of self-directedness in learners, particularly agency, in selecting

strategies. Of the 33 definitions, Cohen's (1998) was the first to introduce this element. Therefore, the two corpora used in this trial were the corpora of pre-1997 texts and post-1997 texts (hereafter, PRE and POST, respectively); there were no texts in this set published in 1997. Most book chapters and research articles were collected as PDF files and as scanned PDF files in case electronic versions of those texts were not available. The PRE corpus consisted of 13 texts (86,432 words) and the POST corpus consisted of 20 texts (184,202 words), after they were prepared (cleaned up and compiled) for analysis (see Appendix 1 for PRE corpus texts and Appendix 2 for POST corpus texts).

2.2 Procedures for generating keyword lists and identifying keywords

Two keyword lists of the PRE and POST corpora ranked by a log-likelihood keyness statistic were automatically generated by AntConc (Anthony 2014). The keyword lists extracted important concepts which were significantly more frequent in PRE compared to POST, and then POST compared to PRE. To help focus on the keywords that potentially reflected trends of language learning strategies and self-directedness, possible keywords in the two keyword lists are those which occur at least five times in the target corpus and are ranked in the top 100 words in each of the lists.

2.3 Data analysis

The top 100 keywords of each list were examined to determine whether they reflect concepts of language learning strategies and self-directedness, operationalized as self-regulation, agency, and/or autonomy. Details of the use of some interesting keywords in contexts were further examined through corpus-based techniques (e.g. frequencies of words, collocates, and concordances).

2.4 Findings

2.4.1 PRE and POST list comparison

Keywords in both the PRE and POST text lists could be categorized into four main categories related to language learning strategies, including: 1) words indicating general concerns of language learning; 2) words indicating actors/agents in language learning; 3) words indicating learning processes/activities which might also indicate style, behavior, and use of strategies in context. The analysis also yielded many proper nouns suggesting the key literature or authors in the area, which were excluded from further analysis. Selected results are presented in Table 1.

Table 1: Emergent keywords in the PRE and POST corpus associated with differences in strategy research

	Keywords in the PRE-corpus, compared to POST corpus	Keywords in the POST-corpus, compared to PRE corpus
words indicating general concerns of language learning	<i>comprehension, strategies, techniques, inferencing, recall, memory, elaboration, implicit, explicit, solving, monitoring, guessing, notetaking, inferences</i>	<i>regulation, regulated, autonomy, style, styles, sociocultural, self, independent, identity, behavior, control, meta, metastrategies</i>
words indicating actors/agents in language learning	<i>students, readers, child, children, teacher, teachers</i>	<i>learners</i>
words indicating learning processes/activities	<i>teaching, training, taught, trained, direct, practice, presented, reading, described, identifying, instruction</i>	<i>interaction, interactive</i>

In the two lists, we observe some key changes in words surrounding general concepts of strategic behavior, moving from cognitively-oriented words such as *recall, memory, elaboration, implicit*, and *monitoring*, to behavioral concerns post-1997 such as *metastrategies, behavior, control*, and *sociocultural*. We also see a clear introduction of terms associated with self-directedness, such as *regulation, regulated, autonomy* and *self*. There is also a difference in keywords indicating actors and the activities in which they are engaged. Of interest are a switch from *students* to *learners*, and the greater prominence of *teacher, teachers, teaching, training*, and *instruction* in pre-1997 research. For researchers interested in the role of strategies in instructed language learning and teaching, the shift is somewhat alarming, and in need of further fine-grained analysis.

Roles of learners and students

Since the word *students* occurred with high frequency in the PRE corpus, the roles of students were examined through its co-occurrences with collocates, most commonly with

the verbs *could* and *were*. Many concordances with this co-occurrence suggested that students are passive agents who are *taught* and *trained* to use language learning strategies, such as suggestions that students *could: be taught to classify; be taught to use a variety; be taught to use many more; benefit from training*. Meanwhile, the collocate *students were* was followed by phrases such as: *instructed to repeat; asked to copy; asked to perform; asked to take notes; given sets; taught to recognize; then asked to imagine; asked to visualize; taught to use learning strategies; taught in the natural language*. Thus, while students were positioned as agents of strategic behavior, their role was often positioned in a classroom context as receivers of knowledge and action from others, usually the teacher or researcher. The use of *were* in mostly passive grammatical constructions removed much agency from them.

In the POST corpus, only the word *learners* was found as a keyword representing an agent in strategy research. The frequency of occurrence of the term *students* in the newer texts decreased by 43%. Newer texts referred to *learners*, thus removing the connotation of an instructed educational setting; while *students* is associated with instruction, *learners* is context neutral. According to Hunston (2002), items with an MI (Mutual Information—which suggests strength of collocations) of 3 or higher are considered strong collocates. By looking at 1R collocates of *learners* (words next to *learners* on the right) with $MI \geq 3$, the results reveal that learners *think, acquire, engage, and choose*. In further analysis of the most frequent collocates, contexts of *learners are* (f=58), *learners may* (f=32), *learners can* (f=28), and *learners will* (f=15), we found a few concordances which mentioned learners in roles of supported learning, such as, *learners are taught in* and *learners are taught to*. However, most concordances implied that learners regulated or directed their own learning, such as: *learners are able to cope; learners may strategize; learners can identify, and learners will obviously select*. Thus, *learners* frequently co-occurred with verbs which provided them agency and control over learning.

Roles of ‘teacher’ and ‘teachers’

Concordances of the two keywords of *teacher* and *teachers* suggest that teachers in pre-1997 research played important roles in language learning strategy literature. Excerpts from the right side of the concordances following the word *teachers* indicated such associations as *teachers: can assess; can help students; can promote strategy use; can prompt to notice; can provide their students; could profitably direct students; employed a variety of methodologies; implement strategy instruction; need to decide which additional strategies; should continually encourage; should continually remind; should make clear at every opportunity; should plan for immediate practice; should plan to recycle strategies; should watch those good students carefully*, among many other examples. In the PRE corpus, teachers were clearly given great agency for students’ strategic development in the classroom.

This association was further suggested in keywords which reflected language learning activities in the PRE corpus and include *teaching, taught, training, and trained*. Examination of the concordances of these words suggested a view that strategies could be taught by teachers and that students could be trained (e.g. *most students could be taught to use many more strategies* and *learners can be trained to apply strategies*). Although there were some examples where students were responsible for their own learning in the PRE corpus, teachers were more often positioned in roles of resource providers—not just facilitators and supporters. In the POST corpus keyword list, teachers, teaching, and training had become notably less apparent.

Self

From the analysis of collocates of *self* with the minimum frequency of co-occurrence at 5 and $MI \geq 3$, *self* was used in the PRE corpus in collocates such as *self-monitoring, self-evaluation, self-management, self-direction, and self-directed*. A follow-up analysis of some of these terms in the PRE corpus showed the concept of self-directedness as an ultimate goal for language learning, as can be seen from the excerpts below, taken from concordance data:

- to make language learning more successful, *self-directed*, and enjoyable
- Allow learners to become more *self-directed*
- a variety of strategies to become more *self-directed* and improve their performance

This is in contrast to concepts of *self* in the POST corpus, in which the same collocates of *self* with $MI \geq 3$ suggests that the concept of self-regulation is emphasized to a much greater extent, as in *self-regulation* (f=147, $MI=8.3$), *self-regulated* (f=68, $MI=8.4$), *self-regulatory* (f=27, $MI=8.1$), *self-management* (f=19, $MI=6.4$), *self-directed* (f=12, $MI=7.5$), *self-regulate* (f=12, $MI=6.5$), *self-determination* (f=11, $MI=8.2$), and *self-regulating* (f=6, $MI=6.8$), all with relatively high frequencies of co-occurrences. The shift towards *self* as associated with a characteristic of the learner, rather than the goal of strategy instruction, becomes clear in these examples.

These findings provide further evidence of the conflation of language learning strategies with concepts related to self-directedness over time. This evidence goes beyond surface-level definitions and is generally more prevalent in recent conceptualizations than earlier ones, both implicitly and explicitly. We have also revealed an implicit movement away from the concept of students and teachers at the core of strategy research, essentially leaving formal educational contexts behind at a conceptual and definitional level. In AUTHOR and CO-AUTHOR (2019) we took self-regulation out of our conceptualization so that it could be used as an adjective to describe certain types of strategies (e.g. *self-regulated strategies, other-regulated strategies, etc.*). Perhaps one way to push this

further is to remove other aspects and also use them as strategy descriptors. We believe, then, that Oxford's (2017) definition could be simplified and propose our own definition as: "thoughts and actions used by learners with some degree of consciousness for purposes associated with language learning". These strategies may be self-regulated, other-regulated, or fall somewhere in between, as we proposed in our *Regulated Language Learning Strategies Continuum* (AUTHOR and CO-AUTHOR, 2019).

3 New directions for strategy research

It is our conviction that while self-regulation and language learning strategies are related, the association should not be at the detriment of excluding other-regulated behaviors from definitions of strategic learning. It is important that researchers test whether such a conceptualization is viable, as we strongly believe that strategic learners can be, often are, and may even benefit from being other-regulated under certain circumstances. Regulation could be viewed alongside and as a source of strategic behavior rather than its defining characteristic. In viewing the relationship in this way, it allows for better positioning of agents of change other than the *self* (such as teachers and peers) in the development of students' use of language learning strategies. Viewing regulation in this way also facilitates a return to more research exploring the effects of strategy training—once at the core of the field, but now pushed to the periphery.

In the same year as Dornyei's (2005) call for the abandonment of strategy research in favor of self-regulation, a comprehensive systematic review of strategy *instruction* research (Hassan, Macaro, Mason, Nye, Smith, & Vanderplank 2005) revealed "sufficient research evidence to support claims that training language learners to use strategies is effective" (p. 4). The review also revealed a number of areas of much needed future investigation. However, of the studies included in a recent review of research at the nexus of self-regulation and language learning strategy research, only two of the studies included in the in-depth review involved strategy instruction (see AUTHOR et al. 2018). Perhaps future research could aim to operationalize the Regulated Language Learning Strategies Continuum in order to understand how instruction can, if at all, move learners along a continuum to become self-regulated strategic learners. Such calls echo Oxford's (2017) earlier appeal for more research to show how the use of strategies can feed into and propel learners' overall process of self-regulation.

Research could also explore the source of regulation of learners in instructed and autonomous settings to substantiate our claims that other-regulated strategic learners can be successful in their learning endeavors. If successful other-regulated learners exist, it would be useful to explore the sources of, and influences on, their regulation, especially in classroom contexts where teachers play a pivotal role in providing instruction to their

students. Studies could also explore the effectiveness of self- versus other-regulated strategy usage, and include teachers' perspectives as well-situated judges of what strategies they deem most effective for their students. Pawlak and Oxford (2018: 527) state that a "potentially fruitful line of inquiry is the investigation of the dynamic nature of strategy use", and we believe the Regulated Language Learning Strategies continuum is one of the many dimensions of strategic behavior in which change can be explored.

Complex dynamic systems theory is an area of growing interest in language learning research, as more researchers accept that learning cannot be isolated into discrete constructs, nor can individuals be isolated from their contexts and groups. AUTHOR (2015) argues that "a researcher must embrace this complexity when setting up a study to ensure findings are situated in the context being studied" (p. 424). This theoretical development is also supported by Oxford (2017) and Oxford, Lavine, and Amerstorfer (2018).

Recent work in the area of individual differences has further highlighted a need to account for different learning trajectories of broadly similar learners over time, showing that group studies and individual case studies within these groups are needed to fully understand the process of individual learners' non-linear development:

Group studies give us valuable information about the relative weight of individual factors that may play a role in L2 development. However, the researcher must keep in mind that the findings may not be representative for a longer period of time and cannot predict much about any individual's behavior at any point in time. To understand development at the individual level, we need the time dimension. Longitudinal case studies of L2 development are useful methods to provide complementary information about the process of development. (Lowie and Verspoor 2018: 20)

In this study, the researchers showed distinctly individual patterns of development of individuals within groups of highly similar learners. Future researchers could adopt this methodology, with a focus on strategic development of individual cases within group-bounded instructed classes.

Classroom settings are an ideal context to find opportunities for group-bounded individual case studies of learners who can be matched according to many criteria relevant to language learning. For example, school-aged learners share similar contextual experiences; they are often of a comparable socio-economic status, having been broadly educated in similar classroom settings under the same curriculum and often with the same teacher. Streamlined classes, which exist in many language programs, may already be matched according to variables such as proficiency and learning aptitude. Likewise, elective language classes might attract similarly motivated learners. A movement in research, such as that outlined in Lowie and Verspoor (2018), sees group similarities as

opportunities to conduct complementary research on dynamic changes in strategic development of individuals. Such research repositions classroom settings as a possible rich source of future strategy research by placing dynamism at the center of a future research agenda, exploring agency of both students and teachers as potential actors of change. This approach to research also highlights the need for in-depth and highly contextualized replication research to understand whether patterns of learning are maintained across groups. We believe this might be a way to reclaim the value of teacher-researchers as possible key players in future strategy research. However, given the fact that many practitioners are not provided with institutional support to conduct their own studies, we cannot rely on them to do the work of linguists and researchers. Therefore, it behooves researchers to seek out opportunities to work with teachers, situating studies in diverse instructed settings if research findings are to be extrapolated to classroom practice.

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Appendix 1: Texts included in the PRE corpus

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Appendix 2: Texts included in the POST corpus

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