Evolving directions in language learning strategies: The interplay between self-regulation and learner strategies in teaching and research

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Content of today’s talk

- Evolving models
- Evolving definitions
- Evolving research
- Future evolution
Drawing on three projects

A study of kanji learning (Rose 2013; Rose & Harbon 2013, Rose, 2017)

Papers on research impact of self-regulation (Rose 2012, Rose et al., 2018)

A study on evolving definitions (Thomas & Rose, 2019; Thomas et al. 2019)
Part One

Evolving Models of Strategies: From ‘The Good Language Learner’ to the ‘Self-Regulated Learner’
LLS as an individual difference

A common observation is that not only are some language learners more successful than others, but also that good language learners sometimes do different things than poorer language learners. The term commonly used in second language acquisition literature to refer to what learners do that underlies these differences is learning strategies. (Gass and Selinker 2009: 439)
Seminal research by Joan Rubin

The differential **success** of second/foreign language learners suggests a need to examine in detail **what strategies successful language learners employ**. In addition to the need of research on this topic, it is suggested that **teachers** can already begin to help their less successful students to improve their performance by paying more attention to learner strategies already seen as productive (Rubin, 1975: 41).
Early work

• After Rubin’s (1975) examination of learning strategies, research began to investigate a wide range of different strategies for different aspects of language learning, such as overall strategies, vocabulary learning strategies, cognitive strategies and social strategies (see, for example, Bialystok, 1979; Hosenfeld, 1976; Naiman et al., 1975; Selinger, 1977).

• This work lead to the development of the first taxonomy of language learning strategies by Rubin (1981).

• Grenfell and Macaro (2007: 11) have since observed Rubin’s taxonomy was a list of “what might be termed academic or study skills.”
First theory-driven taxonomy?

- Research continued into the 1980s, with particular emphasis on cognitive strategies for ESL learning (see Chamot & Kupper, 1989; Chamot & O'Malley, 1987; O'Malley, et al., 1985)

- This led to the O’Malley and Chamot (1990) classification of language learning strategies, which was underpinned by Anderson’s work in cognitive psychology.
O’Malley & Chamot (1990)

Metacognitive strategies, which involved thinking about (or knowledge of) the learning process, planning for learning, monitoring learning while it is taking place, or self-evaluation of learning after the task had been completed.

Cognitive strategies, which invoked mental manipulation or transformation of materials or tasks, intended to enhance comprehension, acquisition, or retention.

“Affective strategies are of less interest in an analysis such as ours which attempts to portray strategies in a cognitive theory. For the purposes of discussion, however, we present a classification scheme that includes the full range of strategies identified in the literature” (O’Malley & Chamot, 1990: 44)
Rebecca Oxford (1989-2001)

Cognitive  Mnemonic  Metacognitive
Compensatory  Affective  Social
This taxonomy reigns supreme

• It created an explosion in the number of published papers on strategy research
• It is still by far the most widely used framework in strategy research, despite Oxford’s own theoretical updates in 2011 (Rose et al., 2018)
• It has somewhat overshadowed the many models developed for skill-specific language learning: reading, listening, vocabulary learning, kanji learning, etc
Critical perspectives on theory

1. The conceptualization of learning strategies is ‘rather inconsistent and elusive’ (Dörnyei & Skehan 2003, p. 608)
2. The ‘term has been used in far too broad a sense, including a number of different things that do not necessarily belong together’ (Dörnyei & Skehan 2003, p. 610)
3. Lack of consenus whether learner strategies consist of knowledge, intention, action, or all three (Macaro 2006)
4. Past studies have attempted to describe and quantify strategies rather than to incorporate them into a model of psycholinguistic processing (Ellis 1997)
Abandon strategy research?

• Dörnyei and his collaborators have been particularly vocal that the concept of strategies be abandoned in place of self-regulation, which they argue is a more stable field (Dörnyei 2005; Dörnyei & Skehan 2003; Tseng et al. 2006).

• Self-regulation is argued to examine underlying intentions that manifest in strategy use, rather than examining the actual strategies themselves.
What is self-regulation?

• The strategies used to control (regulate) behaviour
  – They can help in the pursuit of a long-term goal
  – They can help to monitor your response to obstacles, and stimuli
  – Have been used extensively in psychology (drug addiction, fitness etc)

• In language learning:
  – Self-regulation is the degree to which learners are active participants and are proactive in their pursuit of language learning (Dörnyei, 2005).
Delay of gratification

• The ability to forego immediate gratification for a larger, more important future goal.
Delay of Gratification: The Stanford Marshmallow Experiments (Mischel)
Delay of Gratification

When children were tracked later in life,

• Those who could delay gratification:
  – Had higher verbal and math SAT scores
  – Were better able to concentrate
  – Were better able to cope with frustration and stress
  – Had greater cognitive and social competence ratings
Self-regulation in language learning

- **Self-regulation** in language learning refers to the processes the learner uses to exercise control over learning.
- Dörnyei (2005) posits that self-regulation is “a multidimensional construct, including cognitive, metacognitive, motivational, behavioral, and environmental processes that learners can apply to enhance academic achievement” in different learning contexts (p. 101).
Self-regulation (Dornyei 2005: 113)

- **Commitment control strategies** for helping preserve or increase learner’s goal commitment.
- **Metacognitive control strategies** for monitoring and controlling concentration and for curtailing unnecessary procrastination.
- **Satiation control strategies** for eliminating boredom and adding extra attraction or interest to the task.
- **Emotion control strategies** for managing disruptive emotional states or moods and for generating emotions that are conducive to implementing one’s intentions.
- **Environmental control strategies** for the elimination of negative environmental influences by making an environment an ally in the pursuit of a difficult goal.
Criticisms do not mean the end of LLS

• LLS and self-regulation are looking at two different parts of the learning process (Gao, 2007)
Two compatible, not competing, paradigms

- Gao (2006) argued that self-regulation is looking at the initial driving forces, while learning strategies examine the outcome of these forces.
  - Weinstein, Acee and Jung, (2011, p. 47) describing self-regulation as “both the glue and the engine that helps student manage their strategic learning”
- Some researchers have integrated notions of self-regulation into existing paradigms of strategies (Oxford, 2011).
- It is possible to look at a learning task through both lenses: this is direction I took in 2007
アイルランド共和国（アイルランドきょうわこく、アイルランド語: Éire、英語: Ireland、またはアイルランドは、北大西洋のアイルランド島に存在する立憲共和制国家である。北東に英国北アイルランドと接する。首都はアイルランド島中東部の都市ダブリン。ナショナルカラーは緑。独立時の経緯によりアイルランド島の北東部北アイルランド六州は英国を構成するが、アイルランド共和国は1998年のベルファスト合意以前は全島の領有権を主張していた。2005年の英エコノミスト誌の調査では最も住みやすい国に選出されている。
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Literacy for the second language learner

- Kanji is a major obstacle for second language learners (Bourke, 1996)
- It is the cause of high drop out rates in Japanese language courses at universities (Kato, 2002)
- It takes three to four times as long to reach the same level of proficiency in Japanese than other European language languages, partly because of grammatical differences in language but largely because of kanji. (Everson, 2011)
- Literacy may never be achieved (large fluent, but illiterate foreign community in Japan)
Kanji: Fitting a square peg in a round hole

e.g. Kanji do not suit a language whose verbs and adjectives conjugate
Cognitive strategies → Encoding...

Blue / calm
<table>
<thead>
<tr>
<th>Case &amp; Gender</th>
<th>What is their proficiency?</th>
<th>What is their commitment to kanji learning?</th>
<th>Is meta-cognitive control a challenge?</th>
<th>Is satiation control a challenge?</th>
<th>Is emotional control a challenge?</th>
<th>Is environmental control a challenge?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holden (M)</td>
<td>Very High</td>
<td>High</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Joshua (M)</td>
<td>Very High</td>
<td>High</td>
<td>Somewhat</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Suda (F)</td>
<td>Very High</td>
<td>High</td>
<td>Somewhat</td>
<td>Yes</td>
<td>Yes</td>
<td>Somewhat</td>
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<tr>
<td>Kati (F)</td>
<td>Low</td>
<td>Mid-high</td>
<td>Yes</td>
<td>No</td>
<td>Somewhat</td>
<td>Somewhat</td>
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<tr>
<td>Paul (M)</td>
<td>Mid</td>
<td>Mid</td>
<td>No</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Somewhat</td>
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<tr>
<td>Maya (F)</td>
<td>Very Low</td>
<td>Low</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Colton (M)</td>
<td>Mid</td>
<td>Mid-low</td>
<td>Somewhat</td>
<td>No</td>
<td>No</td>
<td>Somewhat</td>
</tr>
<tr>
<td>Jeremy (M)</td>
<td>Mid</td>
<td>Low</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Alex (M)</td>
<td>High</td>
<td>Mid-High</td>
<td>Somewhat</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Zara (F)</td>
<td>Low</td>
<td>Mid-low</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tim (M)</td>
<td>Mid</td>
<td>Mid-high</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sam (M)</td>
<td>Low</td>
<td>Mid</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Self-regulation in kanji learning

Breakdown in commitment control (Goal setting)
- Lack of progress toward goals leads to negative affect
- Affect leads to re-assessment of believability of goals

Breakdown in emotional control (Stress, frustration, self-criticism)
- Lack of short-term goals leads to procrastination
- Procrastination leads to reassessment of achievability of goals
- Inability to control procrastination leads to negative affect

Breakdown in satiation control (Boredom)
- Boredom leads to reassessment of desirability of goals
- Magnitude and length of goals lead to boredom

Breakdown in metacognitive control (Procrastination)
- Boredom leads to procrastination
Some practical implications

• Highlights the importance of setting believable, achievable, conceivable and desirable goals (McCombs and Pope, 1994). Teachers can assist in
  – setting goals
  – testing previous knowledge
  – tracking progress

• Highlights the importance of self-evaluation and self-efficacy beliefs (Zimmerman, 2000).
Some theoretical implications?

Not one instance of environmental control was reported in the study where it was not being used to regulate another form of motivation control. Such results indicate environmental control may not be a separate category of control in itself, but a self-regulatory mechanism or strategy to control other forms of motivation.
Dual research not the only path: Three categories of research *(Rose et al., 2018)*

1. Embrace self-regulation theory in research
   - e.g. validation of self-regulation *(Mizumoto & Takeuchi, 2012)*
   - e.g. my own research (a 2-in-1 approach)

2. Utilize traditional language learner strategy constructs with acknowledgement of criticisms
   - e.g. Ardasheva and Tretter’s *(2013)* adaptation of the SILL

3. Hybrid research that explores both; or explores relationships between strategies and regulatory processes
   - e.g. *(Writing Items (strategies) within structures (the ‘glue and engine’) (Teng & Zhang, 2016)*
Part Two

Evolving Definitions: Movements Towards Learner Agency
Evolving definitions

The definition of language learning strategies has developed over the years since Rubin’s original investigation in the field.

• Rubin (1981: 42) defines language-learning strategies as “the techniques or devices that a learner may use to acquire language.”

• A further definition is “the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information” (O’Malley & Chamot, 1990: 1).
A widely adopted definition

*Language learning strategies* are “thoughts and actions, consciously chosen and operationalized by language learners, to assist them in carrying out a multiplicity of tasks from the very onset of learning to the most advanced levels of target-language performance” Cohen (2012, p. 136)
Issues?

• There is contention over definitions
• Strategies have been defined as special thoughts, behaviors, techniques and devices
  – Definitions of learning strategies are ‘ad hoc and atheoretical’ (Ellis 1994, p. 533)
• Strategies have been perceived as cognitive, metacognitive, psychological, affective, and social
  – There is has been no coherent agreement on the defining criteria for a language learning strategy, which is still the situation today (Tseng et al. 2006)
Criticism

Dornyei (2005) noted that:

- “In the absence of a tight definition, it is unclear what different researchers mean by the term language learning strategy (p. 188)”
Striving for Consensus

- Oxford (2017) conducted a content analysis of definitions for language learning strategies and semantically related words/phrases
- Thirty-three existing definitions were compiled, analyzed, and coded
- Using the findings, she proposed a new definition
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. (p. 48)
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. (p. 48)
Early definitions appear largely simplistic. They use phrases that do not imply an integration of self-directedness with language learning strategies:

- *which a learner may use* (Rubin, 1975);
- *employed by the language learner* (Stern, 1983);
- *that a learner engages in* (Weinstein & Mayer, 1986);
- *that students take* (Chamot, 1987);
- *used by the learner* (Chamot, et al., 1988);
- *which students use* (Chamot & Kipper, 1989);
- *which learners use* (Oxford, 1989);
- *that individuals use* (O’Malley & Chamot, 1990); and
Tracing the chronological trajectory (later)

Assumed self-directedness (self-regulation, agency, autonomy)

- *selected by the learner* (Cohen, 1998);
- *selected by learners* (Gao, 2003);
- *chosen by learners* (Griffiths, 2008; Griffiths & Oxford, 2014);
- *that learners choose* (Oxford, 2011);
- *chosen and operationalized by learners* (Cohen, 2011);
- *that can be employed autonomously* (Plonsky, 2011);
- *chosen by learners for the purpose of regulating* (Griffiths, 2013);
- *chosen by a language learner* (Gregersen & MacIntyre, 2014);
- *chosen by learners* (Griffiths, 2017); and
- *selected and used by learners* (Oxford, 2017)
Implicit Conceptualizations (Thomas et al, 2019)

- pre-1997 vs post-1997 (Cohen, 1998; the element of choice)
- PRE corpus - 13 texts (86,432 words)
- POST corpus - 20 texts (184,202 words)
- Two keyword lists of the PRE and POST corpora ranked by a log-likelihood keyness statistic were generated by AntConc (Anthony, 2014)
- The keyword lists extracted important concepts which were significantly more frequent in PRE compared to the POST, and the POST compared to the PRE (Thomas, Rose, Pojanapunya, forthcoming)
Emergent keywords in the PRE and POST corpus associated with differences in strategy research

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

(Thomas, Rose, Pojanapunya, 2019)
What does this mean?

• Not surprising
• A growing interest in self-regulated learning in educational psychology in the 1990s (e.g. Zimmerman, 1990)
• Criticisms increase, more concepts get pulled in:
  – self-regulation, agency, autonomy, self-efficacy, mindsets, resilience, hope, and internal attributions
Sits well with long held notions in strategy instruction: That is Instruction requires guided practice and teacher support before students can use strategies independently (see Gunning & Oxford, 2014).

“Many learners do not independently achieve self-regulation, and the presence of others in metacognitive decision-making appears to be indispensable. Others can bridge the process from other-regulation to co-regulation to self-regulation, and ultimately L2 internalization” (Takeuchi & Ikeda, 2018, p. 98) [*concluded from study of 132 Japanese university over 9 weeks*]
We need more research like this – in the classroom – which looks at the ability of ‘others’ to scaffold self-regulated learning strategies to help students move along the strategy continuum

• Mak and Wong (2018)
• Qualitative analysis of data collected over one academic year
• The effect of using portfolio assessment for nurturing self-regulation development among elementary students in Hong Kong
• “[T]he ability to self-regulate requires scaffolding” (p. 12)
• Learners may be unlikely to continue their learning “unless care were taken to facilitate the internalization of regulation through support of the learner’s autonomy, competence, and relatedness” (p. 57)
Part Three

EVOLVING RESEARCH: ENTERING AN IMPROVED ERA OF STRATEGY RESEARCH
Strategy Inventory for Language Learning

• Strategy Inventory of Language Learning (SILL) — a questionnaire that could be used by learners to measure their own strategy use and to increase their awareness of language learning strategies utilized by other language learners.

• SILL is “without doubt the most widely used instrument in language learner strategy research” (White et al., 2007: 95).
Cautions over questionnaires

• “the actual language learning strategy measures presented in the various studies tend not to have sufficient psychometric properties.”
  – The SILL scales are not cumulative and computing mean scores is not justifiable psychometrically (Dornyei 2006).
  – “the more the better is not always the case in strategy use” (Yamamori et al., 2003)
  – Need to distinguish ‘state aspects’ and ’trait-aspects’ of strategies in questionnaires (Mizumoto, 2018)
• BUT... As Amerstorfer (2019) contests: “The SILL has not expired yet, but perhaps needs a modern touch, for instance, in the form of adaptation or combination with other research methods”
  – See Ardasheva & Tretter (2013)
• Mizumoto (2018) agrees that “state-like” specific behaviours can be measured by questionnaires, but researchers need to be careful whether to treat them as single-item or multi-item scales:
  – Teachers are still drawn to measures that capture quantity of strategies available to learners
Other measures

• Motivated Strategies for Learning Questionnaire (MSLQ) was developed by a team of researchers (Pintrich et al. 1991). Used widely in educational psychology.
• Language Strategy Use Inventory (Cohen et al. 2006), sometimes referred to as the Language Strategy Use Survey, was developed to have a more practical focus.
• Survey of Reading Strategies (SORS) (Mokharti & Sheorey 2002): this survey is an example of an attempt to move away from a one-size-fits-all questionnaire
• Metacognitive Awareness Listening Questionnaire (MALQ): specifically measures strategies deployed in listening tasks
• Vocabulary Learning Questionnaire: developed by Gu and Johnson (1996)
Self regulation & vocabulary learning

(Tseng, Dornyei & Schmitt, 2006)

Self-regulation & vocabulary learning

• Instrument developed by Tseng et al. (2006)
  – SRCVoc

• Confirmed in a number of subsequent studies to be a robust instrument
  – Mizumoto & Takeuchi (2012)
  – Ziegler (2015)
<table>
<thead>
<tr>
<th>Item</th>
<th>Learning experience</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Partly agree</th>
<th>Slightly disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Once the novelty of learning vocabulary is gone, I easily become impatient with it.</td>
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<tr>
<td>2.</td>
<td>When I feel stressed about vocabulary learning, I know how to reduce this stress.</td>
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<td>3.</td>
<td>When I am studying vocabulary and the learning environment becomes unsuitable, I try to sort out the problem.</td>
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<td>4.</td>
<td>When learning vocabulary, I have special techniques to achieve my learning goals.</td>
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<td>5.</td>
<td>When learning vocabulary, I have special techniques to keep my concentration focused.</td>
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<td>6.</td>
<td>I feel satisfied with the methods I use to reduce the stress of vocabulary learning.</td>
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<td>7.</td>
<td>When learning vocabulary, I believe I can achieve my goals more quickly than expected.</td>
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<tr>
<td>8.</td>
<td>During the process of learning vocabulary, I feel satisfied with the ways I eliminate boredom.</td>
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<td>9.</td>
<td>When learning vocabulary, I think my methods of controlling my concentration are effective.</td>
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<tr>
<td>10.</td>
<td>When learning vocabulary, I persist until I reach the goals that I make for myself.</td>
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<tr>
<td>11.</td>
<td>When it comes to learning vocabulary, I have my special techniques to prevent procrastination.</td>
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<tr>
<td>12.</td>
<td>When I feel stressed about vocabulary learning, I simply want to give up.</td>
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<tr>
<td>13.</td>
<td>I believe I can overcome all the difficulties related to achieving my vocabulary learning goals.</td>
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</tbody>
</table>

A state-based focus need not be lost in multi-item scales: For example, Mizumoto (2018) praises Tseng and Schmitt’s (2008) questionnaire which explore mastery in vocabulary learning, shifting the scale item focus from quantity to quality, and using multiple items to explore the same construct...
APPENDIX B

Descriptive Statistics of the Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ) (40 items, $N=780$)

<table>
<thead>
<tr>
<th>Items</th>
<th>$M$</th>
<th>$SD$</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text Processing (TP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. When writing, I use some literary devices to make the composition more interesting.</td>
<td>3.39</td>
<td>1.58</td>
<td>0.29</td>
<td>-0.83</td>
</tr>
<tr>
<td>2. When writing, I check grammar mistakes.</td>
<td>5.05</td>
<td>1.59</td>
<td>-0.84</td>
<td>-0.01</td>
</tr>
<tr>
<td>3. When writing, I check spelling and punctuation.</td>
<td>4.32</td>
<td>1.65</td>
<td>-0.28</td>
<td>-0.97</td>
</tr>
<tr>
<td>4. When writing, I check the structure for logical coherence.</td>
<td>4.25</td>
<td>1.63</td>
<td>-0.28</td>
<td>-0.83</td>
</tr>
<tr>
<td>5. When writing, I check the cohesiveness or connection among sentences.</td>
<td>4.68</td>
<td>1.53</td>
<td>-0.58</td>
<td>-0.45</td>
</tr>
<tr>
<td>6. When writing, I check whether the topic and the content have been clearly expressed.</td>
<td>5.12</td>
<td>1.42</td>
<td>-0.86</td>
<td>0.21</td>
</tr>
<tr>
<td><strong>Course Memory (CM)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I write useful words and expressions taught in writing courses to help me remember them.</td>
<td>4.40</td>
<td>1.73</td>
<td>-0.28</td>
<td>-0.98</td>
</tr>
<tr>
<td>2. I speak out useful words and expressions taught in writing courses to help me remember them.</td>
<td>4.70</td>
<td>1.58</td>
<td>-0.54</td>
<td>-0.59</td>
</tr>
<tr>
<td>3. I read my class notes and the course material over and over again to help me remember them.</td>
<td>4.31</td>
<td>1.54</td>
<td>-0.21</td>
<td>-0.85</td>
</tr>
<tr>
<td><strong>Idea Planning (IP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Before writing, I read related articles to help me plan.</td>
<td>4.66</td>
<td>1.63</td>
<td>-0.58</td>
<td>-0.61</td>
</tr>
<tr>
<td>2. Before writing, I use the internet to search for related information to help me plan.</td>
<td>4.68</td>
<td>1.65</td>
<td>-0.60</td>
<td>-0.54</td>
</tr>
<tr>
<td>3. Before writing, I think about the core elements of a good...</td>
<td>4.50</td>
<td>1.54</td>
<td>0.30</td>
<td>0.68</td>
</tr>
<tr>
<td>Items</td>
<td>$M$</td>
<td>$SD$</td>
<td>Skewness</td>
<td>Kurtosis</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Motivational Self-Talk (MST)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I remind myself about how important it is to get good grades in writing courses.</td>
<td>4.88</td>
<td>1.59</td>
<td>-0.68</td>
<td>-0.30</td>
</tr>
<tr>
<td>2. I tell myself that it is important to practice writing to outperform my peers.</td>
<td>5.19</td>
<td>1.39</td>
<td>-0.86</td>
<td>0.28</td>
</tr>
<tr>
<td>3. I compete with other students and challenge myself to do better than them in writing courses.</td>
<td>4.94</td>
<td>1.40</td>
<td>-0.67</td>
<td>-0.14</td>
</tr>
<tr>
<td>4. I tell myself to practice writing to get good grades.</td>
<td>4.90</td>
<td>1.48</td>
<td>-0.64</td>
<td>-0.26</td>
</tr>
<tr>
<td>5. I tell myself that I need to keep studying to improve my writing competence.</td>
<td>4.78</td>
<td>1.49</td>
<td>-0.60</td>
<td>-0.27</td>
</tr>
<tr>
<td>6. I persuade myself to work hard in writing courses to improve my writing skills and knowledge.</td>
<td>4.97</td>
<td>1.39</td>
<td>-0.68</td>
<td>-0.13</td>
</tr>
<tr>
<td>7. I persuade myself to keep on learning in writing courses to find out how much I can learn.</td>
<td>4.78</td>
<td>1.37</td>
<td>-0.54</td>
<td>-0.20</td>
</tr>
<tr>
<td>8. I tell myself that I should keep on learning in writing courses to become good at writing.</td>
<td>5.34</td>
<td>1.31</td>
<td>-0.86</td>
<td>0.37</td>
</tr>
<tr>
<td>Emotional Control (EC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I tell myself not to worry when taking a writing test or answering questions in writing courses.</td>
<td>5.15</td>
<td>1.43</td>
<td>-0.85</td>
<td>0.36</td>
</tr>
<tr>
<td>2. I tell myself to keep on writing when I want to give it up.</td>
<td>5.04</td>
<td>1.37</td>
<td>-0.71</td>
<td>0.25</td>
</tr>
<tr>
<td>3. I find ways to regulate my mood when I want to give up writing.</td>
<td>5.33</td>
<td>1.20</td>
<td>-0.82</td>
<td>0.98</td>
</tr>
</tbody>
</table>
Is there a ‘problem’ with questionnaires?

• There may be a lack of reliability of studies using questionnaires, as they are not sample specific.

• A qualitative approach is recommended to measure language learning strategies more richly (Woodrow, 2005)
Think-alouds

• Gu (2014, p. 74) claims that it is ‘widely agreed that various versions of thinking aloud are the most direct and therefore best tools available in examining the on-going processes and intentions as and when learning happens’.

• Hyland (2010, p. 197) supports this notion in his assertion that think aloud techniques have been extremely productive in the investigation of the writing strategies that students deploy when composing, planning, and revising texts.
Retrospective interviews

- Takeuchi et al. (2007, p. 94) make the following observation: “As the field moves towards a deeper understanding of strategy use influenced by particular cultural, contextual, and individual factors, retrospective interviews re-emerge as an important tool providing opportunities for exploration and elaboration of aspects of strategy use.”
Stimulated recall

• Tseng et al. (2006), observe that stimulated recall is a highly promising but yet under-utilized data collection technique
  
  – I have found that, when used effectively, stimulated recall data are more revealing and more reliable than other self-report instruments, such as questionnaires and interview
Technological advances

• Eye-tracking is becoming increasingly popular in applied linguistics research to explore topics that were traditionally done via think aloud protocols (Conklin and Pellicer-Sánchez, 2017):
  – Eye-tracking technology can add new insight into strategic processes when learning reading

• Keystroke logging “logs and time stamps keystrokes, pauses, cutting, pasting, and deleting and mouse activity, allowing the researcher to reconstruct text production processes” (Hyland, 2016: 118-119):
  – Keystroke logging can add new insight into strategic behavioural practices when writing
Systematic review (Rose et al., 2018)

- 18 predominately quantitative (11 exclusively so)
  - Ardasheva (2016) used tests, achievement scores, a strategy, motivation and background questionnaire

- 6 exclusively qualitative
  - Lam’s (2015) study of Hong Kongese learners used stimulated recall, interviews, learner histories and text analysis

- Questionnaires the most prevalent data collection:
  - the SILL in 11 studies, MSLQ in 4 studies, and SRCVoc in 3 studies

- Qualitative data were more varied but often not reported systematically
Part Four

FUTURE EVOLUTION: IMPLICATIONS FOR TEACHING AND RESEARCH
1. Opportunities for theoretical development

• Very few researchers have looked at skill-specific self-regulation beyond vocabulary learning, despite evidence that this is a fruitful endeavor
• Very few researchers have explored self-regulation from other theoretical standpoints
Dörnyei and colleagues have proposed a volitional, trait-based model, which they position as a necessary antecedent to the creative search for and use of individualized learning mechanisms, and which they suggest could allow us to circumvent the problematic study of such mechanisms themselves. My counter argument is that such a model will be insufficient for explaining phenomena of primary interest to L2 strategy researchers, in contrast to models that view self-regulation as an adaptive process and allow learners’ specific strategic choices, as well as other important individual-difference factors, to be contextualized and related to each other.

(pp. 372–373)
<table>
<thead>
<tr>
<th>Theories of self-regulated learning</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operant</td>
<td>Operant theories explore the ways in which delayed gratification can regulate learning.</td>
</tr>
<tr>
<td>Phenomenological</td>
<td>These theories regard self-regulated learning in terms of self-identities and how they affect the shaping of goals and approaches to learning.</td>
</tr>
<tr>
<td>Information processing</td>
<td>Information-processing theories describe self-regulation in terms of feedback loops and self-monitoring.</td>
</tr>
<tr>
<td>Social cognitive</td>
<td>These theories consider self-regulation in connection to goal setting, expectancies, and self-efficacy.</td>
</tr>
<tr>
<td>Volitional</td>
<td>Volitional theories see self-regulation in terms persistence and maintaining attention in the face of distractions.</td>
</tr>
<tr>
<td>Vygotskian</td>
<td>Vygotskian theories view self-regulation through the lens of sociocultural theory.</td>
</tr>
<tr>
<td>Constructivist</td>
<td>These theories construe self-regulation as a function of the various strategies and theories learners construct in order to tackle learning challenges.</td>
</tr>
</tbody>
</table>

Source: Dornyei & Ryan, 2015
2. Resolving (?) definitional issues

Gu (2012) contends: “The definition quibble is going beyond the advancement of knowledge in delineating conceptual boundaries.” (Gu, 2012)

- Like any field, it may be up to researchers to adopt definitions that suit their needs:
  - SLA researchers may prefer SR-like constructs
  - TESOL researchers may prefer product-like constructs

- We cannot dismiss the importance of teachers and students desire for teachable/learnable ‘strategies’
Bringing back space for the classroom

• As a TESOL researcher, I prefer to keep my definition ‘basic’ for now to allow for breadth in explorations of dynamic change in strategy use:
  – ‘thoughts and actions used by learners with some degree of consciousness for purposes associated with language learning’ (Thomas & Rose 2019)
3. Opportunities for methodological innovation

- Of the 556 articles published on LLS, 16 per cent met rigorous research criteria (Hadwin and Winne, 1996: 711)
  - Rose et al. (2018) didn’t look at all studies, but exclusion process paints a similar picture
  - Need more systematic reviews and meta-analyses to make strong recommendations of methodology

- Eye-tracking in strategy research has not been utilized as much as in other areas of SLA

- We still need a body of good qualitative research (despite calls for over 15 years for this)

- Maturation in the field of advanced quantitative data analysis opens up avenues to explore strategies in relation to other key constructs and also as a dynamic construct itself (see calls by Plonsky; Mizumoto)
Where to now?

(1) continue vis-à-vis historical methods — this does not harness the advancements in the field driven by criticism
(2) abandon language learner strategy research in favour of self-regulation — loss of research base; loss of cognitive strategies; loss of teachable strategies as ‘products’
(3) acknowledge self-regulation within conceptualizations of language learner strategies re-conceptualize language learner strategy
(4) continue language learner strategy research with sensitivity to criticisms
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Thank you... if you want to read more...

www.heathrose.net

or find me on ResearchGate