UNIVERSITY OF GOTHENBURG

VOCABULARY LEARNING STRATEGY USE IN THE SWEDISH SECOND LANGUAGE LEARNING CONTEXT

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Brief Outline

- Project Background
- Key concepts & Previous work
- Aim & Research Question(s)
- Methods
- Results
- Key Findings & Interpretations
- Next Steps

Project Background

- Doctoral research performed between 2014-2018
- Adult, immigrant Swedish L2 vocabulary learning (note: not SFI)
- Learners in Sweden, Studying Swedish at institutes of higher education

Phase	Article	Method	Data	Analyses
Instrumentation	I: Initial VLS List	Interview & Learning Task	Transcriptions, Observation Notes	Content-Analysis
	II: Statistical Evaluation of SVLSS	SVLSS 1.2	Questionnaire response	EFA, Text Analysis, Readability, Reliability
	III: Theoretical Evaluation of SVLSS	VLS List Comparative Review	Stoffer, 1995; Gu & Johnson, 1996; Schmitt, 1997; Fan, 2003	VLS Questionnaire Meta-analysis
Exploring the Demographic/ Context	IV: Vocabulary Knowledge Beliefs	Open-ended Question	Written response	Content-Analysis
Exploratory study re: VLS Use by Demographic / in Context	Report I: Reported VLS Use and Patterns	SVLSS 2.0	Questionnaire response, Demographic Information	Analysis of variance, Cluster Analysis

L2 Word Knowledge

Nation's Word Knowledge Taxonomy (2013, p. 49)			
		Receptive	Productive
FORM	Spoken	What does the word sound like?	How is the word pronounced?
	Written	What does the word look like?	How is the word written and spelled?
	Word Parts	What parts are recognizable in this word?	What word parts are needed to express the meaning?
MEANING	Form and meaning	What meaning does this word form signal?	What word form can be used to express this meaning?
	Concepts and Referents	What is included in the concept?	What items can the concept refer to?
	Associations	What other words does this make us think of?	What other words could we use instead of this one?
USE	Grammatical Functions	In what patterns does the word occur?	In what patterns must we use this word?
	Collocations	What words or types of words occur with this one?	What words or types of words must we use with this one?
	Constraints on use	Where, when, and how often would we expect to meet this word?	Where, when and how often can we use this word?

Vocabulary Learning Strategies (VLS)

- ”… teachable, dynamic thoughts and behaviors that learners consciously select and employ in specific contexts to improve their self-regulated, autonomous L2 vocabualry development” (Oxford, 2017: 17)

- Two purposes for the use of VLS for learning word knowledge (Gu, 2003):
  - 1. Knowing things about words
  - 2. Being able to use word knowledge productively

Vocabulary Learning Strategies (VLS)

- Correlation between higher VLS use frequency and higher levels of language proficiency
  (Stoffer, 1995; Fan, 2003; Loucky, 2003; Chang Tsai & Chang, 2009; etc.)
- VLS use influences/influenced by:
  - Age (Stoffer, 1995)
  - Vocabualry Learning Achievement (Ahmed, 1989; Sanaoui, 1995; Kojic-Sabo & Lightbown, 1999)
  - Education background?
  - Time spent studying a language?
  - Extent of other languages known/studied?
  - Various steps of ’beginner’ proficiency?
  - Various adult age groups?

Vocabulary Learning Strategies (VLS)

- Four key studies that sought to establish VLS taxonomies which were realized through Likert-scale questionnaire tools:

  – Stoffer, 1995 (VOLSI)
  – Gu & Johnson, 1996 (VLQ)
  – Schmitt, 1997
  – Fan, 2003 (VLSQ)

  +

  Nation's VLS Taxonomy (2013)

Vocabulary Learning Strategies

(LaBontee, forthcoming)

VOLSI (Stoffer, 1995)	VLQ (Gu & Johnson, 1996)	(Schmitt, 1997)	VLSQ (Fan, 2003)	(Nation, 2013)	
	Memory Strategies: Rehearsal	Memory Strategies Cognitive Strategies	Repetition Strategies	Processes: Noticing, Retrieving, Generating	Skill in use: Enriching Knowledge
Create Mental Linkages Visual/Auditory Physical Action Organize words	Memory Strategies: Encoding		Association Strategies Grouping Strategies Analysis Strategies		
			Known Word Strategies		
Authentic Language Use Creative Activities	Activation Strategies	Social Strategies			
	Dictionary Strategies Note-taking Strategies	Determination Strategies Social Strategies	Source Strategies Dictionary Strategies	Sources: Finding information about words	
	Using Background knowledge/wider context Using Linguistic Cues / Immediate Context		Guessing Strategies		
Self-motivation Overcome Anxiety	Selective Attention Self-Initiation	Metacognitive Strategies	Management Strategies	Planning: What to focus on and when	
	Beliefs about Vocabulary Learning				

SVLSS 2.0 Structure

(LaBontee, forthcoming)

SVLSS 1.0	SVLSS 2.0	VOLSI	VLQ (v.5)	(Schmitt)
Memorization Strategies	**IMPROVE WORD KNOWLEDGE (Memorization/Rehearsal)**		Memory Strategies: Rehearsal	Memory Strategies Cognitive Strategies
(Lexical information strategies) (Context and Association Strategies)	**IMPROVE WORD KNOWLEDGE (Encoding/Association)**	Create Mental Linkages Visual/Auditory Physical Action Organize words	Memory Strategies: Encoding	
Depth Increasing Strategies (via Use)	**PRODUCTIVE ACTIVATION**	Authentic Language Use Creative Activities	Activation Strategies	Social Strategies
Depth Increasing Strategies (via Sources)	**ESTABLISH WORD KNOWLEDGE (Determination/Sources)**		Dictionary Strategies Note-taking Strategies	Determination Strategies Social Strategies
	ESTABLISH WORD KNOWLEDGE (Guessing/Background/Context)		Using Background knowledge/wider context Using linguistic cue/immediate context	
Self-regulation and Reflection	**STRATEGIC SELF-REGULATION**	Self-motivation Overcome Anxiety	Selective Attention Self-Initiation	Metacognitive Strategies
			Beliefs about vocabulary learning	

SVLSS 2.0 Structure

SVLSS 2.0 VLS CLASSIFICATIONS	# of items	Foci of Strategy Use
ESTABLISH WORD KNOWLEDGE (Determination/Sources)	13	Media Texts Dictionary Note-taking Social
ESTABLISH WORD KNOWLEDGE (Guessing/Background/Context)	7	Background knowledge Wider context Immediate context Linguistic cue
IMPROVE WORD KNOWLEDGE (Rehearsal)	9	Memorizing Rehearsing often Interval
IMPROVE WORD KNOWLEDGE (Encoding)	24	Association Audio Visual Physical Techniques (keyword, loci, peg) Lexico-grammatical Semantic
PRODUCTIVE ACTIVATION	8	Written Oral Creative-Productive
STRATEGIC SELF-REGULATION	8	Planning learning Affective regulation Motivation Avoidance

TOTAL: 69

Aim & Research Question(s)

AIM: To establish an exploratory foothold for research into VLS use by adult, Swedish L2 learners in Sweden.

1. What VLS do adult Swedish L2 learners report using to learn Swedish vocabulary in Sweden? (Questionnaire; SVLSS)

    1a. Do any VLS classifications appear more/less reported used? (Descriptive statistics)

    1b. Do any demographic groups exhibit differences in VLS use? (ANOVA)

    1c. Do any learner profiles emerge in terms of reported VLS use? (Cluster Analysis)

Method

- Distribution of (digital, online) SLVSS 2.0 to Swedish L2 programs across Sweden.
- Google forms platform
- Participants (N=401):
  - Aged 18+
  - Non-Scandinavian L1
  - Enrolled as Swedish language students
  - Identify as ’beginner’ learners, having studied under 1 year.

Participant Data

Highest Degree		Prof. Level		Languages 'known' (not Swedish)		Age		Time Spent Studying	
High school	134	**None**	102	**'Monolingual'**	17	**18-21**	115	**0-1 month**	147
Associates	21	**A1-A2**	241	**2 langauges**	19	**22-25**	152	**2-3 month**	101
Bachelor's	161	**B1**	53	**3 languages**	152	**26-30**	39	**4-6 month**	51
Master's	51			**4 languages**	187	**31-39**	51	**6-12 month**	61
Doctoral	31			**5+ languages**	26	**40+**	44		

+ Diversity of L1's (majority Germanic & Romance langauges)

RESULTS – RQ 1A

Do any VLS classifications appear more/less reported used?

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Table 5 VLS Categories	N	Mean	SD	Variance
Improve Knowledge - Rehearsal	401	2.7231	0.6472	0.419
Improve Knowledge - Encoding	401	2.9357	0.55691	0.31
Productive Activation	401	3.1178	0.67171	0.451
New Knowledge - Sources	400	3.376	0.691	0.477
New Knowledge - Context	398	3.6388	0.78822	0.621
Self-Regulating Planning	400	3.1717	0.58824	0.346

RESULTS – RQ 1B (ANOVA, TUKEY)

Do any demographic groups exhibit differences in VLS use?

Results (RQ1a): Whole Sample Comparisons AGE

GROUPS:
Age 18-21
Age 22-25
Age 26-30
Age 31-39
Age 40+

Table 6 Age Factor ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Factor 01: Improve Knowledge - Rehearsal	Between Groups	2.374	4	0.594	1.423	0.226
	Within Groups	165.172	396	0.417		
	Total	167.546	400			
Factor 02: Improve Knowledge - Encoding	Between Groups	0.762	4	0.19	0.612	0.654
	Within Groups	123.297	396	0.311		
	Total	124.059	400			
Factor 03: Activation	Between Groups	5.534	4	1.383	3.132	**0.015**
	Within Groups	174.944	396	0.442		
	Total	180.478	400			
Factor 04: New Knowledge - Sources	Between Groups	5.471	4	1.368	2.92	**0.021**
	Within Groups	185.024	395	0.468		
	Total	190.495	399			
Factor 05: New Knowledge - Context	Between Groups	8.203	4	2.051	3.38	**0.01**
	Within Groups	238.452	393	0.607		
	Total	246.656	397			
Factor 06: Self-Regulating Planning	Between Groups	0.128	4	0.032	0.092	0.985
	Within Groups	137.938	395	0.349		
	Total	138.066	399			

Results (RQ1a): Whole Sample Comparisons EDUCATION

GROUPS:
High School
Some Uni
Bachelor
Master
PhD

Table 7 Education Factor ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Factor 01: Improve Knowledge - Rehearsal	Between Groups	1.392	6	0.232	0.555	0.766
	Within Groups	163.476	391	0.418		
	Total	164.868	397			
Factor 02: Improve Knowledge - Encoding	Between Groups	1.072	6	0.179	0.577	0.749
	Within Groups	121.08	391	0.31		
	Total	122.151	397			
Factor 03: Activation	Between Groups	4.859	6	0.81	1.809	0.096
	Within Groups	175.051	391	0.448		
	Total	179.91	397			
Factor 04: New Knowledge - Sources	Between Groups	3.164	6	0.527	1.108	0.357
	Within Groups	185.608	390	0.476		
	Total	188.772	396			
Factor 05: New Knowledge - Context	Between Groups	7.882	6	1.314	2.14	**0.048**
	Within Groups	238.149	388	0.614		
	Total	246.031	394			
Factor 06: Self-Regulating Planning	Between Groups	0.697	6	0.116	0.331	0.921
	Within Groups	137.006	390	0.351		
	Total	137.703	396			

Results (RQ1a): Whole Sample Comparisons PROFICIENCY

GROUPS:
'None' (Pre-A1)
Beginner (A1-A2)
Intermediate (B1)

Table 8 Swedish Proficiency Factor ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Factor 01: Improve Knowledge - Rehearsal	Between Groups	0.667	2	0.333	0.788	0.455
	Within Groups	166.191	393	0.423		
	Total	166.858	395			
Factor 02: Improve Knowledge - Encoding	Between Groups	0.116	2	0.058	0.185	0.831
	Within Groups	122.615	393	0.312		
	Total	122.73	395			
Factor 03: Activation	Between Groups	5.68	2	2.84	6.514	**0.002**
	Within Groups	171.356	393	0.436		
	Total	177.036	395			
Factor 04: New Knowledge - Sources	Between Groups	4.584	2	2.292	4.962	**0.007**
	Within Groups	181.075	392	0.462		
	Total	185.659	394			
Factor 05: New Knowledge - Context	Between Groups	5.406	2	2.703	4.452	**0.012**
	Within Groups	236.771	390	0.607		
	Total	242.178	392			
Factor 06: Self-Regulating Planning	Between Groups	0.958	2	0.479	1.379	0.253
	Within Groups	136.218	392	0.347		
	Total	137.176	394			

Results (RQ1a): Whole Sample Comparisons TIME SPENT STUDYING

GROUPS:
0-1 month
2-3 month
4-6 month
6+ month

Table 9
Time Spent Studying Swedish Factor ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Factor 01: Improve Knowledge - Rehearsal	Between Groups	2.274	3	0.758	1.811	0.145
	Within Groups	149.027	356	0.419		
	Total	151.301	359			
Factor 02: Improve Knowledge - Encoding	Between Groups	0.979	3	0.326	1.081	0.357
	Within Groups	107.477	356	0.302		
	Total	108.456	359			
Factor 03: Activation	Between Groups	7.163	3	2.388	5.451	**0.001**
	Within Groups	155.932	356	0.438		
	Total	163.095	359			
Factor 04: New Knowledge - Sources	Between Groups	3.834	3	1.278	2.619	0.051
	Within Groups	173.726	356	0.488		
	Total	177.56	359			
Factor 05: New Knowledge - Context	Between Groups	9.685	3	3.228	5.351	**0.001**
	Within Groups	213.573	354	0.603		
	Total	223.259	357			
Factor 06: Self-Regulating Planning	Between Groups	0.452	3	0.151	0.427	0.734
	Within Groups	125.298	355	0.353		
	Total	125.75	358			

RESULTS – RQ 1C (CLUSTER ANALYSIS)

Do any learner profiles emerge in terms of reported VLS use?

Results – Hierarchical Cluster Analysis

Factors:

Age
Education
Multi-lingualism,
Swedish prof.
Time studying

Table 10
Cluster Distribution

		N	% of Combined	% of Total
Cluster	1	77	21.80%	19.00%
	2	274	77.60%	67.50%
	Outlier (-1)	2	0.60%	0.50%
	Combined	353	100.00%	86.90%
Excluded Cases		53		13.10%
Total		406		100.00%

Results – Cluster Analysis

Table 11
Cluster Analysis Centroids

	VLS Classification Groups		Cluster Group 1	Cluster Group 2	Outlier (1-)	Combined
	Improve Knowledge: Rehearsal	Mean	2.7675	2.7182	2.3889	2.7271
		Std. Deviation	0.69153	0.64186	0.70711	0.65212
	Improve Knowledge: Encoding	Mean	2.8857	2.9417	1.8958	2.9236
		Std. Deviation	0.4966	0.55439	1.0312	0.54882
**	Activation	Mean	2.8919	3.1898	2.875	3.123
		Std. Deviation	0.7403	0.62038	2.65165	0.67253
*	Establish Knowledge: Sources	Mean	3.26	3.431	2.769	3.39
		Std. Deviation	0.5957	0.708	2.5021	0.7003
**	Establish Knowledge: Contexts	Mean	3.4545	3.7218	2.7857	3.6582
		Std. Deviation	0.73017	0.77995	2.52538	0.7884
*	Self-Regulation Planning	Mean	3.0349	3.2047	2	3.1608
		Std. Deviation	0.64969	0.56154	1.41421	0.59497

T-test mean dif.
* = $p < .05$
** = $p < .01$

Interpretation of Results - Profiles

Table 12 Profiles	Group 1	Group 2
N	77	274
Demographic Description	- Almost no Swedish proficiency - Less time spent learning Swedish - Less exposure to Swedish - Younger Learners	- Beginner Swedish proficiency - More time spent learning Swedish - Diversity of age groups
Significant Differences in Strategy Use	- Fewer Activation - Fewer Establishing Knowledge (Sources) - Fewer Establishing Knowledge (Contexts) - Fewer Self-regulation - More Rehearsal - Overall less strategy use	- More of all Strategy Classes excluding Improving Knowledge through Rehearsal - Overall greater strategy use

Preliminary Interpretation of Findings

- Less experience in Swedish L2 learning (group 1) may serve as a barrier to the use of more sophisticated and effortful VLS (self-regulatory, productive activation)
- This may result in reliance on rehearsal and encoding strategies to first concretize a baseline of vocabulary knowledge before accessing strategies intended to expand vocabulary knowledge (e.g., strategies for establishing word knowledge).
  (e.g., Oxford & Nyikos, 1989)
- Even at early, granular stages of vocabulary learning (as seen here), increased TL proficiency correlates to the use of more straetgies overall
  (e.g., Chang Tsai & Chang, 2009; Fan, 2003; Kung & Chen, 2004; Nemati, 2008; Stoffer, 1995)
- Surprisingly, degree of learners' multilingualism had no observed influence on use of strategies in this study.

Future Steps

- More work to be done on adult populations regarding their strategic vocabulary learning practices and linking this to actual teaching practices in Swedish L2 classrooms.
- Exploration of the differences in VLS use across learner groups at the granular level (e.g., VLS use across a year of learning)
- Exploration of other tools than Likert-scale Questionnaires? Need for surveys that contextually-embed VLS use?
  (e.g., Cohen & Wang, 2018)
- Reporting of instrumentation processes, and the use of data collection instruments that are adapted/valid for a specific context and demographic

Thank you!

Questions, Comments, References:

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