

“My Goal Is to Talk Like a Native”: Emergent Bilingual Students’ Use of Language Learning Strategies

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Abstract—This paper investigates emergent bilingual students’ (Finnish and Swedish) use of language learning strategies (LLS). The focus is on the frequency of LLS use, the difference between Swedish and Finnish speaking students’ use of LLS and the effect on use of LLS to improve the students’ weaker language. The data consisted of students’ self-reports concerning the use of LLS and their proficiency in their L2 on a seven-point Likert scale online survey. The survey also included an opportunity to comment on the answers. The data were gathered in 2019/2020. The instrument was influenced by the SILL (Strategy Inventory for Language Learning) (Oxford 1990) but adapted to the current research context on the basis of the researchers’ expertise and previous interviews with students. The measured and analysed LLS were metacognitive, social, cognitive and compensation strategies. The response rate was approximately 30% (N=184). The results indicated clear differences between Swedish-speaking and Finnish-speaking students regarding the use of different types of LLS. Finnish speaking students made significantly more use of metacognitive strategies while Swedish-speaking students made significantly more use of compensation strategies. Regarding the students’ use of social strategies, it was obvious that some Finnish-speaking students associate the use of Swedish in real-life communication situations with stress and anxiety. Moreover, the students’ use of LLS significantly predicts their progress in the weaker language. We suggest that the students should be offered language strategy instruction for them to understand and more effectively apply language learning strategies, to improve their weaker language at all levels.

Index Terms—language learning strategies, bilingual education, content-based approaches to language learning, higher education

I. INTRODUCTION

There has been extensive development of language teaching approaches at all education levels, including higher education. In particular, versions of content-based approaches to language learning like Content and Language Integrated Learning (CLIL), Content-based Instruction (CBI) and English as a Medium of Instruction (EMI) stand out as successful language learning approaches (Dalton-Puffer & Smit, 2013; Kong, 2009; Soruç & Griffiths, 2018). One common idea in these models is the use of students’ additional language to teach content with the aim of achieving both content learning and additional language learning. These approaches are growing exponentially in the increasing need for efficient teaching and learning methods and due to their adaptability to a variety of cultures and linguistic contexts (Juan-Garau & Salazar-Noguera, 2014). In tandem with this development, the University of Helsinki introduced the concept of bilingual bachelor’s degrees in the mid-2010s. The idea of this degree, called Tvex¹, is that students become bilingual experts in their field by attending one-third of their (substance) courses in Finnish, one third in Swedish, and one third in a language of their choice. The Tvex teachers teach in their own native language. The students also receive language support from the Language Centre. However, no explicit language learning model is applied in teaching within Tvex programs. The idea behind Tvex is that language skills “are accumulated” when the students actively use their second language when studying (Vänskäll & Mickwitz, 2021).

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¹ Tvex is short for Swedish “tvåspråkig examen”= bilingual bachelor’s degree.

The advantages of content-based approaches are that they provide real-life language situations, in which the foreign language is put to practical use (Dalton-Puffer, 2007). However, these methods have also been criticised for being implemented without adequate teacher preparation and curriculum planning (Hüttner, Dalton-Puffer & Smit, 2013). Indeed, language learning skills are not developed from nowhere. In fact, research suggests that students' learning of subject content should be facilitated by explicit teaching of lexis, grammar, and discourse structure within genres (Dalton-Puffer et al., 2018; Kong, 2009). Subject teachers need to be aware of the challenges studying in a weaker language can cause for students (Mickwitz et al., 2021). If these aspects are left unnoticed, the responsibility for the language learning process will depend mainly on the students.

One approach for effective and self-directed learning of a language is by using a range of language learning strategies (LLS) (Oxford, 1990, 2016). There has been an explosion of interest in language learning strategies since the 1970s. Even if various aspects of LLS have been strongly criticised (e.g., Dörnyei, 2005), research on LLS is an essential contributor to how we understand the behavior students engage in when learning a second language (Pawlak, 2021). Research has mostly been conducted in English in a lingua franca-setting (ELF) (Mall-Amiri & Fekrazad, 2015; Balci & Uguten, 2018; Aja, 2020; Griffiths & Oxford, 2014; Oxford, 2011; Plonsky, 2011; Pawlak, 2011; Masoomah & Kaur Jagdish, 2018; Rao, 2016; Lai 2009).

Some studies have been conducted on the employment of LLS in other languages, but very scarcely concerning the employment of LLS in learning Finnish (Naif & Saad, 2017) or Swedish (Shaswar & Wedin, 2019). However, the context of these studies is adult immigrants' use of LLS. Since, to our knowledge, there is no research on Swedish-speaking or Finnish-speaking university students' use of LLS when learning these languages, this study fills this research gap by focusing on emergent bilingual students' use of LLS in a higher education context.

Aim and Research Questions

This study explores both the Tvex students' general LLS use, and the differences between Swedish-speaking and Finnish-speaking students' use of LLS and their self-reported improvement in their second language. Additionally, we investigated how students' use of LLS is related to their self-reported improved skills in their weaker language.

RQ1. What is the overall frequency of Tvex students' self-reported LLS use?

RQ2. What are the quantitative and qualitative differences between Swedish and Finnish speaking Tvex students, in terms of their self-reported use of LLS?

RQ3. What is the effect of Tvex students' use of LLS on their self-reported improved skills in their weaker language?

II. LANGUAGE LEARNING STRATEGIES – DEFINITION AND PREVIOUS RESEARCH

In the scholarly debate, the definition of LLS, and how to distinguish this concept from others, has been going on until recently (Macaro, 2006; Oxford, 2016; Griffiths, 2018). Oxford's (2016, p. 48) Qualitative analysis of 33 definitions of LLS resulted in a detailed and encompassing definition, which stresses the learners' active and conscious use of strategies, but also the fact that the learners regulates their learning in a number of ways. However, Griffiths (2018, p. 88) presents a more straightforward and pertinent definition, according to which LLS are "actions chosen by learners for the purpose of language learning".

The most used taxonomy for investigating the relationship between language learners' strategy use is Oxford's (1990) Strategy Inventory for Language Learning (SILL). In this taxonomy, strategies fall into six categories: memory, cognitive, compensation, metacognitive, affective, and social. Both the theory of LLS and the strategy inventory and categorisation of LLS have been harshly criticised. Scholars have argued that the concept of LLS is too general and incoherent and that the taxonomies (particularly the SILL taxonomy) created to measure LLS are unreliable and overlapping (Dörnyei, 2005; Woodrow, 2005). Nonetheless, LLS researchers have managed to respond successfully to this criticism during recent years (Griffiths, 2018; Oxford, 2016). Further, the extensive research in the field agrees that a higher use of strategies by the language learner is associated with higher competence in the second language (Ardasheva, 2010; Habák & Magyar, 2017; Oxford & Burry-Stock, 1995; Su, 2005; Taheri et al., 2020).

As stated earlier, some research on aspects of LLS other than English as a second language has been conducted. Pawlak and Kiermasz's (2018) study on LLS use among learners of an additional language (L3) reported that university students' strategy use in L2 was higher than in L3, which was attributed to motivational aspects since the participants were majoring in L2. Studies on Arabic learners' use of LLS when learning Swedish or Finnish found that a lack of literacy was reported as a challenge that impeded their language learning and use of LLS (Naif & Saad, 2017; Shaswar & Wedin, 2019). This shows the importance of taking the social context and students' identities into account in research of language learning (Hajar, 2017), as well as in strategy instruction. Oflaz (2019) studied how shyness and anxiety among Turkish students affected their foreign language learning in German and found a significant negative relationship between the students' foreign language learning anxiety and academic achievement as well as between foreign language anxiety and students' speaking scores.

Overall, when looking closer at the advantages of LLS, research has shown that successful language learners engage in more purposeful language learning, they use strategies appropriate to their own learning level, age, and personality (Hong-Nam & Leavell, 2006). Further, high-level language learners often make use of other strategies compared to beginners, for example social strategies, such as talking to other students in their L2 (cf. Griffiths, 2007). As regards

university students, research indicates that they primarily engage in metacognitive strategies (Shi, 2018; Habók & Magyar, 2017; Bessai, 2018).

Most importantly in terms of students' academic achievement, research indicates that using LLS, the learner participates in their own language learning process, and he or she is seen as a self-governed L2 user who is able to choose language learner strategies for their best learning fitness (Özğür & Griffiths, 2013). Although learners' competencies in using LLS have been associated with self-regulated learning (Dörnyei, 2005), teachers are important for students' application of LLS. Research has shown that teachers should guide the students to become self-directed and to develop their ability to evaluate their own learning processes. They also need to identify how students use LLS to be able to adapt their teaching and provide them support (Bessai, 2018).

III. RESEARCH CONTEXT

Finnish and Swedish are the national languages of Finland² and in principle, they have equal status at the University of Helsinki. In practice, Finnish is the main and high-status language (Lindström, 2012). Swedish is the language of instruction and examination at all levels, but to a limited extent. To ensure maintenance of the status of the Swedish language at the university, some units are monolingually Swedish; the students have the right to take exams in Swedish, and instruction in Swedish is offered in some fields and exclusively in some education programs. Further, the university stresses its trilingual function, as the languages Finnish, Swedish and English should be used in the university's basic communication: e.g., on web sites and in other publications (Lindström, 2012). For most Swedish-speaking students, Finnish is an every-day language, used in several contexts of their life, while Finnish-speaking students might have to search for opportunities to use Swedish. This fact has had a strong effect on the students.

The bilingual bachelor's degree was initiated in the mid 2010s by Swedish Affairs - an administrative organisation of the University of Helsinki responsible for the support and development of Swedish-Finnish bilingualism. In 2007, Swedish Affairs established an expert group with the task to create a concept for bilingual degrees. This was also well in sync with the paragraph in the Strategic plan for the University of Helsinki 2010-2012 (2009, p. 50), that stressed the promotion of a multi-language environment for the students. The concept of Tvex is based on a model of bilingual degrees that was set into practice at the University of Freiburg in Germany. In 2008, the first principles for initiating this new degree were established, and pilot studies were carried out in 2010.

The official purpose of Tvex is to educate bilingual experts in a range of fields to ensure that there will be enough Swedish speaking expertise in the Finnish society. However, because it is also an important linguistic policy issue, Tvex is considered to be a way to increase the number of students in Swedish speaking bachelor's programs and thus to assure the status of Swedish as an academic language at the University of Helsinki (Saarinen, 2020).

With this said, it is a fact that instruction given by Tvex teachers are different, depending on if the teaching is happening in a Swedish speaking or a Finnish-speaking setting. Since Finnish is the majority and default language at the university (Lindström, 2012), all students are assumed to have at least relatively good skills in Finnish by the teachers. Consequently, issues concerning a student's language skills in Finnish at Finnish speaking content courses are rarely discussed, and Finnish speaking teachers are not always aware that there are Swedish-speaking students in their classes. As opposed to this, the Swedish speaking Tvex courses are in general organised to support Finnish-speaking students' skills in Swedish and the teachers are aware that the student groups are linguistically asymmetric (Mickwitz et al., 2021).

IV. PARTICIPANTS

A total of 184 Finnish- and Swedish-speaking students studying for a bilingual degree responded to an online survey (E-form) during the 2019/2020 academic year. The survey was distributed by e-mail to all students who were registered to study for a bilingual degree in the years 2011–2018 (N=542). In addition, data were collected by attending authentic lessons with Tvex students, where they were requested to complete the survey. The response rate was 34%. Participant information is displayed in Table 1.

² The Swedish-speaking minority represented 5.2 % of Finland's population in 2019 (Official Statistics of Finland, 2019).

TABLE 1
PARTICIPANT INFORMATION (N=184)

PARTICIPANT INFORMATION		N	%
Bachelor's program	Biology	18	9.8
	Physics	4	2.2
	Chemistry	11	6.0
	Environment and food economy	4	2.2
	Environmental science	18	9.8
	Molecular life science	8	4.3
	Law	121	66.0
Gender	Female	122	66.3
	Male	56	30.4
	Don't want to say	6	3.3
School language	Swedish	94	51.1
	Finnish	90	48.9

The distribution of students in terms of school language was even: 94 (51.1%) students had Swedish and 90 (48.9%) had Finnish as their school language. Most of the participants were female (66.3 %, N=122), about one-third (30.4%, N=56) were male, and 3.3% of the respondents (N=6) did not want to report gender.

Most of the respondents were law students (66%, N=121), 9.8% (N=18) studied biology, 9.8% (N=18) environmental science, 6.0% (N=11) chemistry, 4.3% (N=8) molecular life science, 2.2% (N=4) physics and 2.2% (N=4) studied environment and food economy.

An important factor to consider is the students' language background. Because of the circumstances described above, the language backgrounds of the students were heterogeneous, and did not only concern their language skills in Swedish and Finnish. Most of the students (N=78) with Swedish as their school language, also considered Swedish to be their strongest language (Figure 1). Their second strongest languages were Finnish (60 students), English (16), and Swedish (14). The absolute majority (75 students) considered their third strongest language to be English, while a smaller number (15 students) considered Finnish to be their third language.

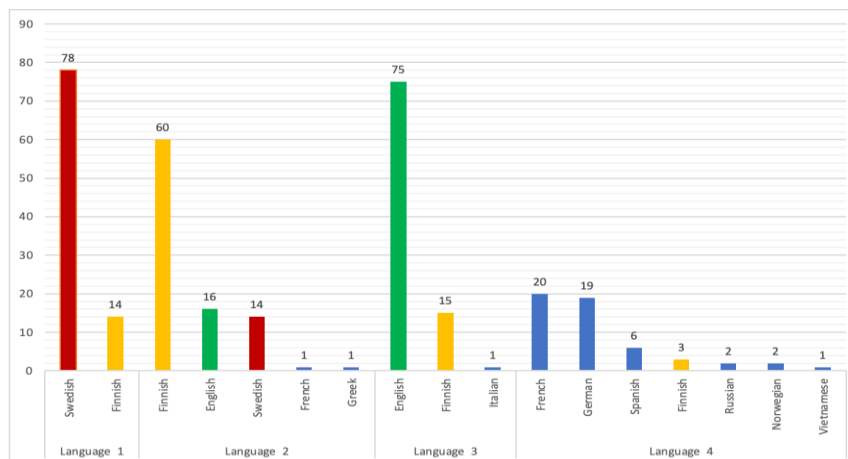


Figure 1. Tvex Students With Swedish as Their School Language; Their Strongest Languages (Language 1 = the Strongest, Language 2 = the Second Strongest etc.) in Number of Students. N=94

Almost all the students with Finnish as their school language also considered Finnish to be their strongest language (Figure 2.) The second strongest language for most of these students was English (73 students). Only 16 students considered Swedish to be their second strongest language. For a majority (65 students), Swedish was their third strongest language. Figure 2 also reveals the diversity concerning skills in various languages that the students possess.

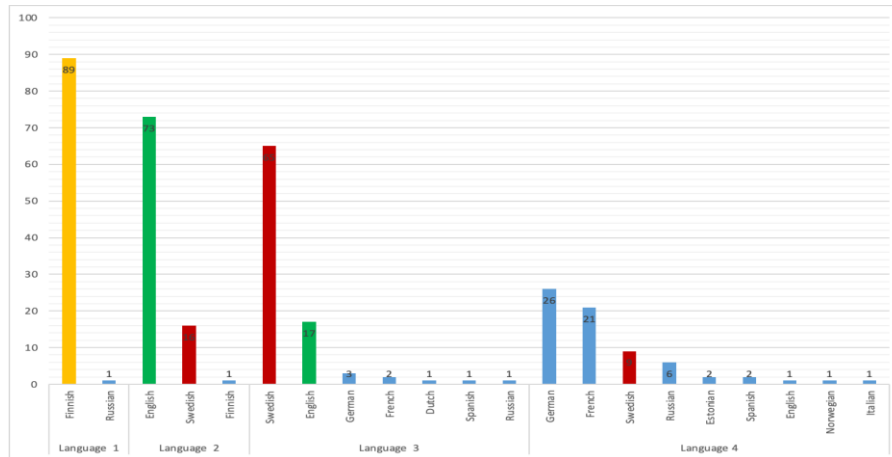


Figure 2. Tvex Students With Finnish as Their School Language; Their Strongest Languages (Language 1 = the Strongest, Language 2 = the Second Strongest etc.) in Number of Students. N=90

V. MEASURES AND DATA

The base for the instrument used in this study was Oxford's Strategy Inventory of Language Learning (SILL) (1990), since it is comprehensive, detailed, and systematic (Vidal, 2002), and was easy to adjust to the purpose to this study. The instrument is designed to elicit students' self-reported strategy use. That is, they were asked to evaluate how frequently they employed a certain language learning strategy by responding to a 7-point Likert scale. We used a 7-point scale (1= strongly disagree to 7= strongly agree), since a 5-point scale has a greater likelihood of central tendency error, and a 7-point scale will offer a better range (McIntire & Miller, 2007).

Several items were excluded from the SILL instrument mainly because they were considered to be irrelevant to the Tvex students. Instead, more relevant items that measured other aspects of language learning, were included. The construction of these items was based on researchers' expertise and interviews with Tvex students. For example, the item *I try to talk like native English speakers* in Oxford's 7th SILL inventory (Oxford, 1990) was replaced with the item *I practice my weaker language with native speakers*. Moreover, the items *I deliberately develop my writing skills in my weaker language*, and *I work hard to develop my skills in my weaker language* were constructed exclusively for this study. The data were imported and analysed in SPSS.

The data were analysed quantitatively, but qualitative data were also obtained from the survey. First, a descriptive statistical analysis was conducted to find out the frequency of the students' overall use of LLS. Thereafter, an independent-samples t-test was conducted to compare Swedish-speaking and Finnish-speaking students' use of different LLS and the degree to which the students have experienced improvement in their weaker language while studying. The analysis of the qualitative data was conducted on the open-ended comments given by the students on each item. The comments were categorised both according to the index variables, and according to the school language of the students. Finally, to estimate the effect of students' use of LLS on their self-reported improvement in their weaker language, a linear regression analysis was conducted. The analysis was conducted with the index variable *Language learning strategies* (all four LLS indexes combined) as the independent variable (predictor) and with the index variable *Improved skills in weaker language* as the dependent variable.

VI. RESULTS

The results are reported in four steps. First, we report descriptive statistics and scores for Cronbach's Alpha. Thereafter, we report overall strategy use and the strategies most used by the Tvex students. Then, we report the independent sample test measurement of the difference between the Swedish-speaking and the Finnish-speaking students' use of LLS and their improvement in skills in their weaker language. In this section, we also included an analysis of the qualitative data. Last, we report the effect of students' use of language learning strategies on the improvement in their weaker language, which was measured with a linear regression analysis.

A. Descriptive Statistics and Scores for Cronbach's Alpha

Since the SILL instrument was heavily transformed to fit the Tvex students' language learning reality and our purposes with this study, a factor analysis was conducted to explore the underlying dimensions of the data (Yong et al., 2013). The categories of items that emerged from the factor analysis were tested for Cronbach's Alpha, and the items with low reliability were excluded. The number of final LLS-items was ten, measuring four different subscales of LLS. The reliability coefficients (Cronbach's alpha) for each subscale were measured (cf. Table 2).

The subscales were metacognitive strategies (two items, $\alpha=0.69$), social strategies (three items, $\alpha=.72$), cognitive strategies (two items, $\alpha=.61$), and compensation strategies (three items ($\alpha=.72$). Cronbach's alpha was acceptable for

social strategies and for compensation strategies, and questionable for metacognitive and cognitive strategies. Cronbach's Alpha for overall LLS use was 0.65. The students' improvement in their weaker language was measured with one item: "My language competence in my weaker language has improved while I have been studying".

Metacognitive strategies include knowledge and regulation of cognition, such as consciously directing one's own attention to the learning task. *Social strategies* include asking questions and collaborating with others verbally. *Compensatory strategies* comprise guessing from the context or making up or compensating for missing knowledge. *Cognitive strategies* involved applying a specific technique to a particular task, for example analysing or reasoning (Oxford, 1990).

TABLE 2
DESCRIPTIVE STATISTICS FOR INDIVIDUAL ITEMS AND SCORES FOR CRONBACH'S ALPHA. LANGUAGE LEARNING STRATEGIES. N=184

Item	Strategy sub-items	Mean	Mean summary	SD	α
Metacognitive strategies	I deliberately develop my writing skills in my weaker language	4.71	5.12	1.64	0.69
	I work hard to develop my skills in my weaker language	5.52		1.37	
Social strategies	I participate in discussions in my weaker language when I have the opportunity.	5.22	4.97	1.55	0.73
	I practice my weaker language with native speakers	4.52		2.01	
	I encourage myself to speak my weaker language in different situations	5.18		1.58	
Cognitive strategies	I intentionally try to pronounce my weaker language like a native speaker.	4.15	4.46	2.06	0.62
	I try to speak my weaker language like a native speaker.	4.77		1.87	
Compensation strategies	If I can't think of a word in my weaker language, I use a word or phrase that means the same.	5.73	5.79	1.28	0.72
	If I don't recall a word in my weaker language, I use a synonym.	5.65		1.25	
	I read in my weaker language without looking up every new word.	6.01		1.28	
	Summary: All strategies		5.10	.94	0.65

B. Reported Frequency of Overall Use of LLS

The descriptive statistics displayed in Table 3 show the students' overall use of LLS in all categories. The means fall within the range of 4.46-5.79, with compensation strategies (M=5.79) as the most used category of strategies and metacognitive strategies (M=5.12) as the second most used. Cognitive strategies were the least used category of strategies (M=4.46).

TABLE 3
STUDENTS' OVERALL USE OF LLS

LLS	Mean	SD
Metacognitive strategies	5.12	1.32
Social strategies	4.97	1.38
Cognitive strategies	4.46	1.67
Compensation strategies	5.79	1.01
Summary: All strategies	5.10	.94

C. Tveç Students' Use of LLS - Independent Sample T-Test

The results of the independent-samples t-test, displayed in Table 4, indicate that Swedish-speaking students use social strategies (M=5.11, SD1.35) and compensation strategies (M=5.94, SD=1.00) to a greater extent than Finnish-speaking students. Moreover, Finnish-speaking students used cognitive strategies (M=4.51, SD=1.49) and metacognitive strategies (M=5.34, SD=1.24) to a greater degree than Swedish-speaking students.

As presented in Table 5, the independent sample T-test shows significant differences in the scores for metacognitive strategies: $t(178)=-2.21$, $p=.03$ between the two language groups, with Finnish-speaking students making more use of them than Swedish-speaking students. That is, Finnish-speaking students reported that they developed their skills in their weaker language to a higher degree, compared to Swedish-speaking students.

In terms of compensation strategies, the differences between Swedish-speaking and Finnish speaking students are nearly statistically significant: $t(178)=1.96$, $p=.05$, with Swedish-speaking students making more use of them. Thus,

Swedish-speaking students seem to have a higher capacity to use synonyms or rewording in their weaker language, compared to Finnish-speaking students. Table 5 also shows a significant difference between the groups in terms of the improvement of language skills in the weaker language: $t(179) = -3.99$, $p < .01$, which indicates that Finnish-speaking students have improved their skills in Swedish to a more considerable extent than Swedish-speaking students have improved their skills in Finnish.

Moreover, there are no significant differences between Swedish-speaking and Finnish-speaking students' total use of LLS (All strategies). Instead, the frequency of LLS use is close to similar between the two groups ($t(175) = 0.19$, $p = .86$).

TABLE 4
TVEX STUDENTS' SELF-REPORTED USE OF LLS AND IMPROVEMENT IN THE WEAKER LANGUAGE. GROUPING VARIABLE: SCHOOL LANGUAGE (FINNISH/SWEDISH). MEAN. N=184

	School language	Mean	SD
Metacognitive strategies	Swedish	4.91	1.37
	Finnish	5.34	1.24
Social strategies	Swedish	5.11	1.35
	Finnish	4.83	1.41
Cognitive strategies	Swedish	4.42	1.84
	Finnish	4.51	1.49
Compensation strategies	Swedish	5.94	1.00
	Finnish	5.64	1.01
All strategies	Swedish	5.11	0.99
	Finnish	5.09	0.89
My language competence in my weaker language has improved while I have been studying.	Swedish	5.37	1.59
	Finnish	6.20	1.21

TABLE 5
INDEPENDENT SAMPLE T-TEST FOR LLS, SELF-REPORTED IMPROVEMENT IN THE WEAKER LANGUAGE. GROUPING VARIABLE: SCHOOL LANGUAGE (FINNISH/SWEDISH)

Independent Samples Test						
		Levene's Test for Equality of Variances		T-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Metacognitive strategies	Equal variances assumed	.76	.38	-2.21	178	.03
	Equal variances not assumed			-2.21	177.854	.03
Social strategies	Equal variances assumed	.42	.52	1.37	178	.17
	Equal variances not assumed			1.37	177.253	.17
Cognitive strategies	Equal variances assumed	3.11	.08	-.35	180	.73
	Equal variances not assumed			-.35	175.332	.73
Compensation strategies	Equal variances assumed	.08	.78	1.96	178	.05
	Equal variances not assumed			1.96	177.560	.05
All strategies	Equal variances assumed	.70	.42	0.19	175	.86
	Equal variances not assumed			0.19	174.387	.86
My language competence in my weaker language has improved while I have been studying.	Equal variances assumed	11.27	.00	-3.99	180	.00
	Equal variances not assumed			-4.01	171.435	.00

D. Tvex Students' Use of LLS – a Qualitative Focus

In this section, we report on the qualitative data consisting of students' comments on the items regarding their use of LLS and how these data relate to the quantitative data. It was not mandatory for the students to make an open-ended comment on the items, which resulted in a small number of comments (every item was commented on by 8-20 respondents). However, the comments illustrate and deepen the quantitative data.

The index variable metacognitive strategies included two items (Table 1). The results of the independent sample test indicate a significant difference between the Swedish-speaking and Finnish-speaking students regarding use of metacognitive strategies. Consequently, the qualitative data reveal a substantial difference between these two groups. Finnish-speaking students' comments reveal that they are conscious of how to improve their skills in Swedish, and that they aim for improvement: *I always work hard [to improve my skills] when I can, alongside other course work* (Finnish-speaking student). The comments from the Swedish-speaking students indicate that they mostly found the item to be irrelevant, because they consider themselves to be bilingual: *My skills in both languages are equally good* (Swedish-speaking student).

The index variable compensation strategies included three items (cf. Table 1). Compensation strategies are used by the students to compensate for a gap in the vocabulary, in both the weaker and the native language: *I easily fill in with words in other languages when I speak* (Swedish-speaking student), *I just say the word in Finnish (if I don't know the word in my weaker language)* (Finnish-speaking student). Especially the Swedish-speaking students' comments reveal

that they possess language skills to compensate for not recalling a word or a phrase - in both languages. This language behaviour can be associated with how Swedish-speaking students use social strategies, as well.

The index variable social strategies included the three items (cf. Table 1). The comments from Swedish-speaking students indicated that they possessed language skills that enabled them to use both languages freely in any social situation. Data reveal that at least some Swedish-speaking students clearly do not deliberately use Finnish to learn in, but only for communication purposes: *I don't know if I "practise" my language, it sounds too intentional. I use Finnish all the time, without any intention of practising it* (Swedish-speaking student). In contrast to this, some Finnish-speaking students feel anxious concerning the oral use of Swedish. Several students report that speaking Swedish causes stress or that they lack the courage to speak Swedish, especially around native speakers: *Speaking in Swedish in the company of native speakers is stressful* (Finnish-speaking student).

The index variable cognitive strategies included two items (cf. Table 1). The comments show a general need for Finnish-speaking students to imitate native speakers' use of Swedish. The reason might be low proficiency in Swedish for some Finnish speakers. Moreover, this might also be the reason for Finnish-speaking students' more extensive use of these strategies (cf. Table 4). The following quote shows a similar desire to sound like a native: *My goal is to talk like a native. However, I am not sure if it's possible at this point anymore* (Finnish-speaking student). Some Finnish-speaking students indicated that it is more important to be understood in Swedish, than to have no accent: *I have given up on the thought that I can't have a Finnish accent. It's more important to be understood!* (Finnish-speaking student). Swedish-speaking students, on the other hand, indicated that pronunciation creates no problem for them: *My pronunciation [in Finnish] is at the native level* (Swedish-speaking student).

Students were also asked to comment on the item: *My language competence in my weaker language has improved while I have been studying*. According to Tables 4 and 5, Finnish-speaking students reported a significantly higher improvement in language competence in Swedish compared to Swedish-speaking students' improvement in Finnish. This item regenerated many responses of a different kind and in many ways reflected the actual language situation at the University of Helsinki, where Finnish is the default language (cf. Lindström, 2012). The comments from the Finnish-speaking students reflected how they had improved their skills in Swedish, as expected: *I have developed [my Swedish skills] a lot, especially writing and reading skills* (Finnish-speaking student).

However, some Swedish-speaking students reported that their skills in Swedish had weakened during the period when they were studying: *Actually, I think my skills in Swedish have degenerated* (Swedish-speaking student) and *Finnish has passed Swedish as my stronger language* (Swedish-speaking student). This comes as no surprise, since most of the literature, especially in law, is in Finnish, as well as the study environment and a big part of the social life outside the classroom. Nevertheless, some Swedish-speaking students admit that they have extended their vocabulary in Finnish, even if their Finnish is strong: *[I have developed my skills] concerning the specific content, for example concepts in Chemistry* (Swedish-speaking student).

E. The Effect on Self-Reported Use of LLS on Students' Improvement in the Weaker Language

As stated previously, the linear regression analysis was conducted with the index variable *Language learning strategies* (all four LLS indexes combined) as the independent variable (predictor) and with the index variable *Improved skills in weaker language* as the dependent variable. The results of the analysis are displayed in Table 6.

TABLE 6
LINEAR REGRESSION ANALYSIS OF THE EFFECT OF STUDENTS' USE OF LLS (PREDICTOR) ON THEIR PROGRESS IN THEIR WEAKER LANGUAGE N=184

Predictor: Strategy use	Unstandardised coefficients		Standardised coefficients		R2	F	Sig.
	B	SE	Beta	p			
Improvement in weaker language	.539	.107	0.36	<.001	.127	25.350	<.001

The results of the regression analysis indicated that the predictor explained 12.7% of the variance of students' progress in their weaker language ($R^2=.127$, $F=25.35$, $p<0.01$). However, the F-value indicates that the regression model is a good fit for the analysis. The general results indicated that students' use of LLS significantly predicts their progress in the weaker language ($b=.36$, $p<.001$). That is, the more the students use LLS, the more their skills in their weaker language improve.

VII. DISCUSSION AND IMPLICATION OF THE STUDY

The aim of this study was to investigate the frequency of and differences in LLS use concerning Finnish and Swedish speaking students striving for a bilingual bachelor's degree (Tvex). Additionally, we undertook an analysis to see if frequent use of LLS is associated with the students' self-reported improvement in their weaker language. The data were both quantitative (7-likert scale questionnaire) and qualitative (students' open-ended comments on each item).

A. Methodological Reflections

We considered the combination of quantitative and qualitative data and the unique data to be substantial strengths of our research. Despite these strengths, the present research is limited in some respects. First, the results rely only on self-reports. While this is the usual practice, especially for quantitative studies, there are concerns about the validity of self-report tools for assessing LLS (Pekrun, 2020). Second, the number of respondents was sufficient, but a larger

sample would provide more reliable statistical results. Third, the context and respondents of the study were unique, and more research in a variety of similar contexts would be necessary to increase the validity of the instruments.

B. Discussion of Results

In RQ1 we explored the overall frequency of Tvex students' LLS use. In RQ2 we investigated the quantitative and qualitative difference between Swedish- and Finnish-speaking Tvex students, in terms of students' self-reported use of LLS. In RQ3 we investigated the effect of Tvex students' use of LLS on their self-reported improved skills in their weaker language.

First, the results of this study showed that emergent bilingual students use LLS to a high degree, and that compensation strategies were the most used. This indicates that the students in general easily replace a word or a phrase they don't know or remember with a synonym or with a word in their stronger language.

Second, there were some clear differences between the two language groups. The Swedish-speaking students made more use of LLS in general, as well as more use of compensation strategies than the Finnish-speaking students. This study showed that Swedish-speaking students are able to use their linguistic resources in various ways, not only for enhancing learning, to a greater extent compared to Finnish-speaking students. This is a natural language practice for bilinguals, as they use their different language resources in everyday life (Wei, 2018). Swedish-speaking students seem to have an ability to move seamlessly between the social and linguistic barriers of Finnish and Swedish. This result is in line with previous research that argues that multilinguals are more flexible and able to adjust their learning strategies to the requirements of the task (Nayak et al., 1990). In contrast, both the quantitative and the qualitative results show that the Finnish-speaking students focus strongly on developing both oral and writing skills in Swedish. This is relevant for them as their skills in Swedish are generally low (Mickwitz et al., 2021). Swedish speaking students, however, see no reason to improve their skills in Finnish because they have equal skills in Swedish and Finnish.

Another important result from the data was the students' use of social strategies. Finnish-speaking students associate the use of Swedish in real-life communication situations (especially with native speakers) with negative stress and even anxiety - which in turn hampers their communication in Swedish. Previous studies have highlighted the negative effects of students' anxiety in the language learning process, claiming that it impairs learners' language achievement (MacIntyre, 2017) or use of LLS (Oflaz, 2019; Pawlak, 2011). This kind of social anxiety associated with language use is less frequent for Swedish-speaking students, since they more effortlessly use their linguistic resources with both language groups.

Third, the difference between the two groups regarding improvement in the weaker language was statistically significant ($p < .01$), with Finnish-speaking students having improved their language skills in Swedish to a greater extent than Swedish-speaking students having improved their Finnish. This is an obvious and expected result since the Finnish-speaking students had to improve their language skills in Swedish to succeed in their studying.

Fourth, the results show that Tvex students' use of LLS significantly predicts their progress in the weaker language. That is, the more the students use LLS, the more their skills in their weaker language improve. This result supports previous research indicating a strong association between L2 proficiency and use of LLS (Bruen, 2001; Habák & Magyar, 2017; Hong-Nam & Leavell, 2006; Wharton, 2000; Taheri, 2020). This result calls for more investment in how to improve students' language learning strategies in the bilingual bachelor program, which will be discussed below.

C. Conclusions and Pedagogical Implications

Our study confirmed previous results from research on the use of language learning strategies as well as various aspects of language learning in general. However, we would like to make a few suggestions in terms of how teachers could support students' use of LLS in content-based approaches to language learning.

First, a detailed strategy of systematic pedagogical support should be implemented, particularly concerning language learning. The students and the teachers should be offered a customised content-based approach as a theoretical and methodological reference to work with. The particular focus would be on how teachers could use language strategy instruction to help students understand and apply language learning strategies.

Second, substance teachers should create opportunities for students to use their L2 in safe learning settings in which they are allowed to make mistakes (Bessai, 2018; Plonsky, 2011; Fandiño Parra, 2010). Making extensive use of social strategies would especially help students with low proficiency in their second language to control their emotions and attitudes in that language, which would help them to lower their anxiety levels and increase their motivation (Abu Radwan, 2011).

Third, a crucial prerequisite in the language learning process is the learners' need to appropriate a sense of social belonging when they learn a new language. Students need to become legitimate users of a language; a speaker has a right to decide when and how to use it and possess sufficient skills for doing so – irrespective of their proficiency level in the language (c.f. Rampton, 1990). The teachers and the community of students of each language can support the students in becoming owners of their weaker language.

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