The Cognitive Components of Autonomous Learning in Postgraduate Interpreter Training

ILDIKÓ HORVÁTH, ELTE University, Interpreter and Translator Training Centre, Budapest, Hungary

ABSTRACT Autonomous learning is a complex and multi-faceted construct. It can be defined as the learners’ capacity to self-direct their own learning, which means taking responsibility for the decisions concerning the different aspects of the learning process. In self-directed learning, learners’ choices remain mainly on the learning management level, i.e. behavioral level of learning, and it relates to the practical side of learning such as selecting learning materials, methods, the place and time of learning, the partners, and so forth. However, there is more to autonomous learning than its purely management aspect. Autonomous learning, first of all, means critical thinking, planning and evaluating learning, and reflection, a conscious effort on the part of the learner to continuously monitor the learning process from beginning to end. This is the cognitive side of autonomous learning. In my paper, I will discuss the findings of the empirical research I conducted as part of my doctoral dissertation at the Interpreter and Translator Training Centre (ITTC) of ELTE University of Budapest, Hungary. ITTC offers postgraduate translator and interpreting training. My research focused on the cognitive level of autonomous learning and the main aim was to explore the most important cognitive components of autonomous learning in would-be interpreters as well as the interrelationship of those components. For this part of the study, students’ diaries served as the instrument of data collection. Keywords: learner autonomy, reflection, evaluation, metacognitive knowledge, self-motivational thinking.

I did not go to school today. I did not sleep too well last night, my private student upset me in the morning, I was in a bad mood, and I am experienced enough to know that this could not lead to any good. Instead, I stayed at home and did some individual practice. (Journal entry by an interpreter trainee)

Introduction

Autonomy, in a general sense, means liberty and the right to self-government. In education, autonomy is associated with a certain form of freedom characterizing the learning process and the teacher–student relationship. Autonomy in education is also related to the notions of negotiation, participation in classroom decision making, reflection and choice, independence, self-evaluation and cooperation, among others.
Autonomous learning is manifested at two levels: the level of behavior, i.e. the learning management and the cognitive level, i.e. the level of thought. An autonomous learner is not necessarily the one who can be considered to be the ‘ideal learner in the classroom’ or the ‘teacher’s pet’, or the student who always does his/her homework and never misses a class. As it can be seen from the motto, which is an excerpt form one of the diaries I have analyzed, an autonomous learner is aware of the reasons and implications of his/her actions as a learner.

In my paper, I will first describe the personal and institutional background to the empirical research I conducted in the field of postgraduate interpreter training as part of my PhD thesis. Second, I will introduce the research elements and aims, data collection, analysis and results. Before concluding, I will discuss the findings of my research and their implication for the general study of autonomous learning.

Research Background

My interest in the subject of autonomous learning in interpreter training has a personal background as I myself am a graduate of ITTC. Right after graduation I joined the teaching staff and started my freelance career as a conference interpreter with Hungarian, English and French in my language combination. So I am in a privileged position insofar as I can examine my subject from different perspectives and rely on three types of personal experience in the field of autonomous learning and interpreting.

ITTC was established in 1973, and as such, it is the oldest interpreter and translator training institution in Hungary. Its programs, all of them fully accredited by the state, are offered to holders of any degree who, in addition to their mother tongue, have excellent mastery of at least one foreign language. During its more than thirty years of history, ITTC has trained over a thousand postgraduate students within the context of its one-year combined Translator and Consecutive Interpreter Training program, the European Masters in Conference Interpreting program and the Translation with European Union Specialization program. In 2003, ITTC launched its PhD program as part of ELTE’s PhD School.

Autonomous Learning and Interpreting

In addition to interpreting skills, as Cammaert (1988) put it, interpreters must keep learning throughout their professional life in order to be able to do high quality interpreting (p. 313). Permanent learning, together with good listening comprehension and language skills is also a professional requirement.

One of the prerequisites of permanent learning is that would-be interpreters learn how to learn and acquire the necessary learning strategies that make it possible for them to meet professional requirements. For this, they must become autonomous learners and be able to direct their learning cognitively: They must know how to plan, monitor and evaluate. In addition to the concrete interpreting skills, an interpreter training course should also lay emphasis on the development of autonomous learning.

The Research

My research concerned students enrolled in the European Masters in Conference Interpreting (EMCI) program at ITTC in the 2002/2003 academic year. The research was deductive in nature and attempted to identify the most important cognitive components of autonomous learning in the case of would-be interpreters as well as the interrelationship of those components. For this part of the study, students’ diaries served as the instrument of data collection.

The students who kept the diaries had already graduated from ITTC’s Combined Translator and Consecutive Interpreter program the previous academic year. For this reason, they can be considered as qualified translators and interpreters even if they did not have substantial field experience in translation/interpreting at that time. Their aim in enrolling in the EMCI program was to further improve their consecutive interpreting skills, take on simultaneous interpreting, and become conference interpreters for the EU institutions.

In one sense, the first part of my research already took place during the 2001/2002 academic year when I had the diary-keeping students in one of my interpreting classes, and I was also in charge of supervising the individual practice sessions at ITTC. During this time, I could observe the students’ in-class and out-of-class individual
practice as well. Based on the observed behavior of the students and my discussions with them about their learning, I could conclude that they were, in fact, autonomous learners. It was only further justified by the fact that they chose to do another training program.

During the first week of the 2002/2003 academic year, I asked four students to keep diaries about their learning process during the year. To my surprise, all four students handed in very useful material: two students kept their diaries for one semester and two for two semesters. This might be due to the friendly and informal relation that I had formerly managed to establish with them.

The reason for my choice to use students’ diaries as the instrument of data collection was that, as Nunan (1997) points out, diaries, together with other introspective research methods like think-aloud protocols, enable the researcher to focus “more on the cognitive processes underlying human performance and ability” (p. 115). Diaries provide a natural context to introspective, longer-term critical thinking and this way help the researcher to explore “the mental processes underlying observable behavior” (p. 115), as well as ‘to collect data on the subjects’ experiences as students” (Seliger & Shohamy, 1990, p. 161). I assumed that the format and content of the diaries would reflect the non-behavioral characteristics of the learning process such as the problems, doubts, emotions, self-discipline and joy encountered by the learners during learning.

When I asked the students to keep diaries, I also explained their task to them in detail and handed out written guidelines. I made the aims clear namely that I was trying to get some insights into how interpreter trainees think about their learning and learning in general. I did not mention autonomous learning on purpose because I did not want to bias them in any way. I also avoided asking them whether they felt they were autonomous learners for the same reason. But I emphasized that they would not only help me with my doctoral thesis, but regular and organized reflection on their learning process would also enhance their own performance as learners and as interpreters. I asked them to describe any issue they felt worth mentioning in their diary, and to give reasons why they chose to write about them. I also told them that the only disadvantage I saw in keeping up with their diary writing was that it was time consuming. At the end of the first semester I organized an informal meeting with the students when we talked about the experience and I collected the diaries, which I read afterwards and discussed with them as we all wanted to be sure that the diaries contained the right sort of data for the research project, and that I did not misinterpret any comment of great importance.

Data Analysis

The data collected was analyzed in a qualitative way in order to find “commonalities, regularities, or patterns across the various data texts” (Seliger & Shohamy, 1990. p. 205). When I set out to analyze the data obtained from the diaries, I did not have ‘an ordering system of categories’ in mind, and I used the technique that consists of “deriving a set of categories for dealing with the text segments from the text itself” (Tesch, as cited in Seliger & Shohamy, 1990, p. 205). Therefore, the data analysis procedure I adopted was inductive in nature, as I did not use predetermined categories or patterns.

First, I conducted the formal analysis of the diaries. The main aspects here were the frequency and length of the diary entries as well as the style and language use. The analysis of the diary formats led to the conclusion that all four students took the task seriously and kept their diaries on a regular basis. After an initial period of about three weeks, the length of the diary entries grew with time from very short, two- or three-line-entries to several-page-long ones, which seems to indicate that the students were getting more and more comfortable with the task. The formal characteristics suggest that the students behaved and thought in an autonomous way.

For the content analysis, I prepared a three-column table, which served as a framework to identify, select and organize the data. This enabled me to interpret the data content, and to identify the emerging patterns and events. The first column of the table contained the date of the entry, the second the actual citations, that is, the text segments from the diaries and the third my notes concerning the citations. The length of the text segments varied from short sentences, which usually contained simple statements, to longer, several sentence-long chunks that carried more complex arguments and reasoning.

According to Nunan (1997), in the case of student diary studies “it is probably a good idea to avoid analyzing and interpreting the data until a substantial amount of material has been collected” (p. 120) because otherwise the researcher may come to “premature and inaccurate conclusions”, as very often “in early stages the entries do not
make a great deal of sense, and patterns emerge only in the longer term” (p. 120–121). For this reason, I chose not to read the diaries at all before the first semester ended, and even then only with the aim of giving feedback to students on the entry content. I did not start the analysis until after all the four diaries had been completed, that is, before the end of the second semester, when I could make sure that sufficient and good quality material had been collected.

As for the validation of the study, I assessed intra-rater reliability by returning to the data after a two-month period of time in order to examine the degree of agreement of the categories and patterns between the first and the second analyses. I reread and classified half of the diaries and found that a high agreement could be obtained between the analyses.

As for the results of the content analysis, it has revealed that the students shared the same working methods: all four tape-recorded their in-class and out-of-class performances, and analyzed them afterwards along more or less the same lines.

A typical diary entry is connected to an interpreting task. It can be in-class interpreting practice, outside class individual practice, own performance during real-life interpreting assignments or observed simultaneous interpreting at conferences the students the visited as part of their training. In general, the starting point for this typical entry is the objective description of the event: the topic, time, place, participants, languages, direction and mode of interpreting, aims, partners, and so forth. The objective description is followed by the subjective analysis of the interpreting event. First, the students give their overall opinion. Second, they provide a detailed analysis of the interpreting event. Usually, the criteria applied in this part are relevant to linguistic performance, content and interpreting techniques. A typical entry is concluded by a more general part containing some lessons to learn, future tasks, aims.

The content analysis of the diaries has also shed light on the thinking of the writers as learners, and reinforced the results of the formal analysis, according to which the diary-keeping students are autonomous learners not only from the behavioral, but also from the cognitive point of view: They reflect in a regular and conscious way on their environment and on themselves as well. They think critically and evaluate their learning environment and themselves as learners in a complex manner.

The content analysis has also revealed the common cognitive components of the diary writers’ thinking. The four main cognitive components of learner autonomy in the case of interpreter trainees that emerged from the data during the content analysis procedure are reflection, self-reflection, evaluation and self-evaluation.

**Reflection**

Reflection, i.e. conscious thinking about the learning process, is a main characteristic of autonomous learners. Effective learning management is based on the learners’ regular reflection on their behavior. Autonomous learners, during the management of the learning process, must make decisions about organization (where, when, with whom), content (what, why), implementing learning strategies, evaluation, planning for the future. These decisions and choices can only be effective if they are the fruit of reflective thinking.

The diaries are characterized by reflection. The four diary writers reflect on the different aspects of their learning process in each entry. Each diary is abundant with reflection on:

1. **Learning in general** -- “The stuff I do outside class is much tougher, but I know that that’s the required standard and I think it’s always easier to get back to easy stuff once you’ve had a taste of the real thing. I need to practice loads, though.”

2. **Interpreting** -- “You must be on the ball at a conference, so many unexpected things may happen, and I’m not thinking of speeches etc., accents, speeches read out, people mumble, you’ve got to listen, read & speak at the same time.”

3. **Feedback received from peers and teachers** -- “X said she can feel I want to do it too much and that’s what makes me tense and nervous and that comes across in the performance. Yes, that’s right.”

4. The students try to find the reasons for learning problems -- “Tired ? made silly mistakes.”

5. Look for solutions, set new learning aims, tasks -- “Country names: that’s the target for this week.”
6. Create new learning strategies -- “New strategy: Read out a speech fairly slowly? record? do sight [translation] of the same text while playing the recording simultaneously. ? It forces you to keep up, no messing around + recorded text may be done as simo [simultaneous] later.”

Self-Reflection

Self-reflection during the learning process means that learners make a conscious effort and think about themselves as learners. Autonomous learners are capable of analyzing themselves in the learner role critically. Such analysis is based on self-observation, and its aim is to give answers to certain aspects of the learning process in order to optimize it like in the excerpt below:

To perform to the best of my abilities at school, I need to do a lot of physical exercise in order to blow off steam. For this purpose the most suitable sports for me are basketball and swimming. But due to lack of time, nowadays I rarely have the chance to practice these. Instead, I go running or exercise at home.

Evaluation

Besides reflection and self-reflection, realistic and complex evaluation is another prerequisite of successful learning. Learners set objectives, find the reasons for their learning problems (and successes), set new tasks and find new learning strategies more effectively if after implementation, they are able to evaluate the different aspects of the learning process in a realistic and complex way. Reliable and situation-relevant evaluation is the basis for further development.

In their diaries, the students give continuous and complex evaluation of:

1. The training -- “I felt practice WASN’T enough, course so far quite badly organized. Lots of home practice needed.”
2. The learning tasks -- “We spent too much time doing it, I didn’t have a sense of achievement.”
3. The texts to be interpreted -- “Really dense speech, fast, no redundancies, most of it read out. This is the kind of speech I find most demanding.”
4. The speakers -- “[The English speaker] had a clear accent, but muttered a lot + had not structured his speech well.”
5. Study visits abroad -- “We had an excellent time, but I am not sure that from a professional point of view it was effective. One thing is certain: it was very motivating for me. Excellent working conditions [at the EU institutions], I like their professionalism, and the real cosmopolitan atmosphere.”
6. The exams -- “I was awarded a 4 [second best mark in Hungary], I felt it was fair, more emphasis has to be laid on consec E? HU.”
7. Real interpreting assignments -- “It was extremely long. There were 2x 10 min breaks in between but I was absolutely exhausted. The guy could understand English, but couldn’t speak it. So I mostly did HU? E. The guy was a bit of a mess, I think he had no clear idea of what he wanted to do. What he said was full of bla bla, often he had long and complicated sentence structures with the verb at the very end of a long sentence. He also often mentioned something casually eg. a ‘council’ and I had no idea what ‘council’ he meant (he talked about 3 councils’. My performance was ok …. I had made a glossary that I had on me [at the EU institutions], but I could not make much use of it.”
8. Expert interpreters’ performance --
   “She’s quick but extremely calm.”
   “Sounds as though she was giving a speech.”
   “Complete sentences, brilliant style, broad range of vocab used naturally”
   “She analyzes, structures, understands what she is talking about.”
   “Calm voice, perhaps a bit weak”
   “You believe her. She doesn’t lose heart when faces difficulties.”
   “She leaves an alarmingly large décalage. I was scared, she never lost it though.”
   “When she misses sg, she can wrap up a sentence intelligently.”
   “She’s got phrases & expressions in all situations and contexts.”
Self-Evaluation

Regular and systematic self-evaluation on the part of the learners is also a prerequisite for successful learning. Realistic self-evaluation like realistic evaluation helps improve learner performance by providing a starting point for further learning.

Self-evaluation is also present throughout the four diaries: each entry contains self-evaluating remarks. Students evaluate:

1. Their own **linguistic performance** -- “I have also noticed that I often can’t put the parts of sentences together. Suffixes don’t match.”

2. Their own **interpreting techniques** -- “There were bits I didn’t catch, I was just guessing. I have to do something about that. Sometimes I say the opposite of what’s being said.”

3. Their own **interpreting performance** -- “My performance was horrible. My note-taking atrocious. Sometimes I say the opposite of what’s being said.”

4. Their own **general development** -- “I seem to have improved a lot in EHU simo.”

Self-Motivational Thinking

In one of the diaries, a fifth cognitive component can be detected: self-encouragement, self-motivation, which plays an active role with respect to her autonomous learning.

Self-motivational thinking here often refers to interpreting: “I just want to do this & be a real pro.”

Self-encouragement in this diary is often aimed at gaining more self-confidence: “I think I’m quite quick now. Just try to keep up the good work!” or “Great day, I just need to gain confidence & keep going.”

This student needs positive feedback very much, which she sometimes feels she does not get. In such cases, she encourages herself to work even harder: “I felt I was doing well. I was expecting encouragement or appreciation which I didn’t get. That upset me a little bit but I think I’ll just carry on doing what I’m supposed to do.”

It is also characteristic of this diary-writer that religious faith plays an important role in her self-motivation: “I will fight the good fight through. I won’t dismay. The rest is up to God.”

Discussion

Each diary entry contains the above-mentioned four elements: the students continuously and regularly reflect on the learning process and themselves as learners, and evaluate the process and themselves. Reflection, self-reflection, evaluation and self-evaluation help the learners exercise the cognitive control over their learning process. All four are reflective activities, that is, they presuppose a conscious thinking effort on the part of the learners. They are to be interpreted in the context of, and as part of the learning process. They are also goal-oriented activities, as they enable learners to enhance the effectiveness and the success of their learning.

The main topics of reflection and evaluation, and the interrelationship of the four cognitive elements are contained in Figure 1.

As it can be seen from the table, reflection, self-reflection, evaluation and self-evaluation mutually influence one another. Each component has an influence on the other and is the basis for the other, and often cannot be clearly separated from one another. For this reason, it is often the context of the text segments taken from the diaries and the way they are interpreted that determine whether they are to be considered as reflection or self-reflection, for example. There is no reflection without self-reflection and vice versa, as there is no evaluation without self-evaluation and vice versa. It also seems to be clear from the diary studies that there is no reflection/self-reflection without evaluation/self-evaluation.

The four components are continuous and cyclic activities that evolve constantly: They deconstruct what has been thought to have been achieved and then start reconstructing it again at another level, sometimes higher but sometimes lower. In the latter case, the learner returns to previous learning events or problems to re-examine them once more, which is not to be considered regression. This cyclic character, together with the reciprocity of
the four components, is proper to the cognitive side of the autonomous learning revealed by the content analysis of the diaries.

Figure 2 illustrates how the permanent functioning and reciprocity of the four components support the learners in carrying out decisions, managing their learning and themselves as learners, in realizing their plans, selecting learning materials and partners, and so forth.

Reflection, self-reflection, evaluation and self-evaluation best support effective learning if their results are relevant to the learning process. Thus their success depends to a large extent on the students’ metacognitive knowledge, that is, the knowledge possessed by the students about themselves as learners and the learning process. Wenden (1998) lists three types of metacognitive knowledge: personal, strategic and task knowledge (p. 185). To this I have added a fourth type, the knowledge of subject matter. It is indispensable for the students to possess the most possible information of the subject they are learning in order to do realistic cognitive work concerning their learning. The interrelationship of metacognitive learning and the four main cognitive components of autonomous learning in interpreter training are illustrated in Figure 3.

In one of the diaries, a fifth cognitive component could be depicted: self-motivational thinking. As self-motivational thinking could not be detected in the other three diaries, it does not figure among the common cognitive components of autonomous learning in interpreter training revealed by the present research. It, however, does not mean that motivational thinking is absent in the remaining three students. It only means that evidence for such thinking is not present in their diaries probably because it is not such an important feature for them. Ushioda (1996) “ascribes to motivation an active functional role” in autonomous learning where self-motivation is “a capacity of effective motivational thinking” (p. 2-3). Motivation is without doubt a key aspect of autonomous learning, which is underlined by the fact that one of the diaries has a significant amount of evidence for self-motivational thinking. This is why it should not be ignored when we examine the cognitive components of autonomous learning. The reciprocal relationship of self-motivational thinking and the other cognitive component is illustrated in Figure 4.

To consolidate the different aspects relating to the cognitive side of autonomous learning in interpreter trainees, I have set up a model which summarizes and conceptualizes our knowledge relating to autonomous learning, the thinking and behavior of autonomous interpreter trainees. As it can be seen in Figure 5, autonomous learning has two sides: the behavioral aspects and its underlying cognitive aspects.

At the same time, Figure 5 illustrates the cognitive components of autonomous learning and their interrelationship. It leads us closer to a better understanding of the cognitive level of autonomous learning, that is, how autonomous learners think. Furthermore, the model elucidates the areas that play a predominant role in the creation and development of autonomous learning.

Although Figure 5 is based on a research project conducted in the field of interpreter training, I think my findings might have a more general scope. At least, it provides us with a good starting point for extending the research agenda to other fields as well.

Conclusion

In my paper, I have described the empirical research I conducted in the field of postgraduate interpreter training, where permanent learning is a professional requirement. I have also discussed the findings of my research, whose aim was to establish the most important cognitive components of autonomous learning manifested in the student diaries. These components are reflection, self-reflection, evaluation and self-evaluation. All four are reflective activities that are permanently evolving. They are also cyclic activities, which means that they constantly deconstruct what has been achieved and then reconstruct it. The permanent functioning and the reciprocity of the four cognitive components detected in the diaries support the learners in the management of their learning. In one of the diaries a fifth cognitive component could be detected: self-motivational thinking, which also plays an active role in autonomous learning. Further research will have to be carried out in order to establish the causal mechanisms and the exact interrelationship of these components.
References


Figure Caption

Figure 1. The cognitive components of learner autonomy in interpreter trainees and their interrelationship.
Figure 2. The relation between the autonomous learner behaviour of interpreter trainees and reflection / self-reflection / evaluation / self-evaluation.
Figure 3. The interrelationship of the four cognitive components and metacognitive knowledge.
Figure 4. The interrelationship of self-motivational thinking, the four cognitive components and metacognitive knowledge.
Figure 5. Autonomous learning in interpreter trainees.
**Figure 1.** The cognitive components of learner autonomy in interpreter trainees and their interrelationship.
**Figure 2.** The relation between the autonomous learner behaviour of interpreter trainees and reflection / self-reflection / evaluation / self-evaluation.

<table>
<thead>
<tr>
<th>autonomous learner behaviour of interpreter trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>implementing learner strategies, learning management, self-management, selecting practice speeches and partners setting the place and time for individual practice, selecting technical appliances for practice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>reflection / self-reflection / evaluation / self-evaluation</th>
</tr>
</thead>
</table>
Figure 3. The interrelationship of the four cognitive components and metacognitive knowledge.

autonomous learner behaviour of interpreter trainees
implementing learner strategies, learning management, self-management, selecting practice speeches and partners setting the place and time for individual practice, selecting technical appliances for practice

reflection / self-reflection / evaluation / self-evaluation

Metacognitive knowledge
1. personal
2. strategic
3. task
4. subject

I. Horváth 12

ISSN 1176-7480 Manukau Institute of Technology, Auckland, September 2005
autonomous learner behaviour of interpreter trainees
implementing learner strategies, learning management, self-management, selecting practice speeches and partners setting the place and time for individual practice, selecting technical appliances for practice

Figure 4. The interrelationship of self-motivational thinking, the four cognitive components and metacognitive knowledge.
autonomous learner behaviour of interpreter trainees

implementing learner strategies, learning management, self-management, selecting practice speeches and partners setting the place and time for individual practice, selecting technical appliances for practice

reflection / self-reflection / evaluation / self-evaluation

Figure 5. Autonomous learning in interpreter trainees.