Implementation of IT Tools as a Method of Improving Language and Communication Skills of Bi- and Trilingual Students

Abstract

This article gives some examples of students’ systematic semi-autonomous work in the multimedia master’s seminar, which enhances their language competencies as well as strictly technical skills. The theoretical background, based on the results of research carried out by the author in 2005–2019, demonstrates how knowledge of learners’ first and second languages is advantageous during the acquisition of a third language. Seeing that this process is individual (every learner has his or her different “linguistic biography”), it is difficult take this fact into account in the coursebooks. E-learning courses, which allow students to work in semi-autonomy, become helpful in this situation. Accommodating the needs of bi- and trilingual students, prospective foreign-language teachers and translators create their own multimedia resources that fill gaps in the didactic offerings. Moreover, the unusual forms of learning by teaching (LdL – from the German phrase Lernen durch Lehren) improve the quality of the learning process, helping students achieve the desired language and communication skills.

Keywords: language and communication skills, learning by teaching, e-learning
Introduction

The paper describes the implementation of the results of research on language interference in bi- and trilingual students. The experiential cases show how IT technologies can be used in university language courses in order to reduce the number of interferential mistakes.

The author was actively involved in developing and implementing digital materials for distance learning, as well as developing the Distance Learning Platform at the University of Silesia in Katowice (as a supervisor of MA theses). During MA seminars, future foreign-language teachers or translators create their own multimedia resources, improving language and communication skills, which then fill gaps in the didactic offerings. The seminar prepares students to write master’s theses covering the theoretical portions of their subjects – the problematic part focused on enhancing language skills – and the implementation portion, consisting of the preparation of materials using e-learning techniques and methods. The adopted solutions allow the students to become specialists in very narrow areas.

Theoretical Background

The theoretical approach of the seminar is based on the results of research conducted by the author between 2005 and 2019 (cf. Widła, 2007, 2009, 2011, 2012, 2014, 2016, 2017) analysing the phenomena that accompany trilingualism to Polish students with language competence in English at the B1/B2 levels and in French at the A1 level, learning French through the communicative method during regular classes. The student body compiled for this study consisted of works collected from 438 persons. The research materials illustrate the state after three comparable phases of learning (comprised of 100 hours each), concerning particular fields and competences. The research proved that it cannot be predicted if and when the interferential mistakes can be expected, so it is not possible to develop a general effective method of preventing them – an individualised correction becomes necessary, which greatly complicates the therapy of a mistake (cf. Debyser, 1970; Gabryś-Barker, 2005; Kucharczyk, 2018). From the point of view of linguistic analyses, at the very beginning of the learning process, it is possible to observe the following: code switching, various forms of transfer (of kind, direction, or intensity), differences between acquiring particular language, psycholinguistic phenomena such as motivation, or different learning strategies. These skills have not been taken into account in the available didactic materials. These studies show that
the most interesting differences appear in the moment of stabilization, after about 300 hours of learning, when the students acquire proficiency, which enables them to communicate in the foreign language rather efficiently. Such progress is, of course, possible due to the competencies in the second language (especially the similarities in vocabulary, because all the gaps are compensated by the students’ creativity on a larger scale). Moreover, the communicative approach, which has been dominating in teaching foreign languages for years, has weakened the language users’ complexes. As a result, we experience specific hybrids, which can be properly decoded. Achieving the communicative goal is undoubtedly the most important success. However, it is hardly satisfactory for the teachers who encounter a flood of incorrect structures at every possible level. Individualized corrections become necessary. While in the case of bilingual speakers, some general tendencies could be identified, in the case of the group examined, the number of possible variables practically excluded the possibility of such identification and greatly complicated the probability of a mistake. It was also important to compare the effects of developing of some linguistic competences with the results of persons who learn second languages after their mother tongues. This was possible, thanks to the observations of experienced teachers and the materials gathered by the author in the previous years. The “trilingual” participants pass the tests better, are much more eloquent and, most importantly, much more creative, which is exceptionally visible in translations. Although statistically they make more mistakes, they always achieve the communicative goals. In this aspect, they are similar to uneducated, bilingual immigrants who fill the gaps with another known lexeme or structure and often modify them according to the rules of the language, thus making a specific neologism (Widła, 2007, p. 275).

The research participants who aspire to trilingualism turned out to be unique and different from the bilingual students. In particular comparisons of systems, the learners choose their mother tongues or their second languages (their first foreign languages) after deciding which of them, in their opinion, is more helpful in learning the new linguistic material. Even the most competent teachers, with groups of people at different levels of competence, could not possibly cope with this problem. It is a wonderful occasion to start a supplementary, yet individual learning path; this is supported by e-learning, which is a dedicated option for a wide group of people. Every form of learning that allows the students to work semi-autonomously appears to be a perfect solution. In the current situation, when most of the teachers use a foreign offer addressed to a wide range of customers, such an individualised approach is rather improbable (cf. Widła, 2007, p. 276).
That is why – after choosing the subject of the e-learning module included in their MA theses – the participants of seminars should decide which exercise can make the users aware of the danger of interferential mistakes. No type of interference should have been favoured or underestimated, either related to grammar or vocabulary. Moreover, phonetic exercises must be included, especially in the initial phases of the learning process. The chosen method of teaching was LdL – from the German phrase Lernen durch Lehren, which means “learning by teaching.” LdL is a method of teaching in which a student adopts the role of the teacher. This method was described and implemented successfully by Jean-Pol Martin in the 1980s. LdL found imitators among teachers of various subjects. The question is whether and how well the method will work in language teaching. German linguist Joachim Grzega, a supporter of LdL as a didactic model, emphasises that in Martin’s system, the students were enabled to train grammatical as well as communicative competence and to acquire “hard skills” as well as “soft skills” (i.e. the ability to work in a team, complex thinking, the competence to seek and find information, explorative behavior, project competence, internet competence, generating knowledge as well as disciplinary virtues like punctuality, reliability, patience, presentation skills, discussion skills). Actually, learning a foreign language means both acquiring a “hard skill” and a “soft skill,” since you learn to speak about a language as well as in a language (about various topics). But LdL means even more: LdL encourages and demands creativity, independence, and self-confidence. LdL can be used for every subject and at any level (Grzega, 2006, pp. 1–2).

Fiorella and Mayer’s findings point to the fact that “when students actually teach the content of a lesson, they develop a deeper and more persistent understanding of the material than from solely preparing to teach” (Fiorella & Mayer, 2013, p. 281).

The arguments adduced above, which align with the objectives of the syllabus of the seminar, determined the choice of LdL as a method of working with students.

Description of Activities

Work Plan during the First Semester

In the first semester, each student chooses the subject of interest in terms of completing the most acute gap in the area of knowledge of the studied language and through two years of work. This is done not only to overcome the gap, but also to become an expert on the previously undeveloped field. This semester is
also devoted to the selection of IT tools (websites, platforms, and so on), used to carry out the planned work and discussion of the principles of this operation. The number of disciplines indicated by the seminarians, within which projects are created, shows how different needs are revealed within the same specialty: from such typical issues as history, geography and tourism, law, work, the Internet, language teaching, sport, music, kitchen, and cosmetics, to very narrow issues, such as the car industry, energy, jewellery, pharmaceutics, natural disasters, comics, sublanguages, and many more.

**Work Plan during the Second Semester**

The second semester is dominated by work on theoretical chapters focused on teaching or learning methods. Students present not only the overview of language (English, French) for specific purposes but also analyse various linguistics approaches to the topic. The aim is to show why a chosen branch of language may be defined as a “language for specific purposes” in terms of teaching. Moreover, they propose different perspectives from which “language for specific purposes” may be analysed.

**Work Plan in the Third Semester**

In the third semester, students discuss the theoretical problems of interest to them in terms of the future use of the theory. On this basis, they prepare, under the supervision of a tutor, project(s) offering(s) for people using the network who, for various reasons, are interested in the proposed subject matter in a foreign language (employed in enterprises, cultural or educational institutions, students, autodidacts, and every person who is passionate about its specific subject or about learning languages).

**Work Plan in the Fourth Semester: Master Thesis**

Each master thesis is divided into three parts: the theoretical portion (divided into chapters concerned with different issues), the course itself, and the description of the module. The first part focuses on technical language and its characteristics. It also matches three main aims: content and language integrated learning, or CLIL (Coyle, Hood, & Marsh, 2010); language for specific purposes, or LSP (Kubiak, 2002; Sawicka, 2010; Trace, Hudson, & Brown, 2015); and learning by teaching, or LbT (Martin, 2004, Grzega, 2006).
Examples of Subjects

In order to approximate the content of the students’ theses, I present a few characteristic examples below:

1. Idioms as a Linguistic Tool to Express Feelings: Idiomatic Expressions in English and French.
2. Teaching Vocabulary Concerned with the Automobile.
7. Problems Related to Audio-visual Translation in a Translator’s Work.
8. Specialized Online Language Course: Sandomierz Town Guide as the Source of Knowledge of the Region.
9. Specialized Online Language Course for Engineers and Students of the Universities of Technology Based on the Machine Description – Numerically Controlled Tool.

Figure 1. Innovation online tools as a form of enhancing foreign languages teaching and learning (created by Monika Nowak in 2019, supervised by Halina Widla).
11. The French Language and Its Pronunciation in Terms of Teaching Third Languages.
12. Multimedia Educational Tools for Teaching Information Technology in French for Primary and High Schools.
15. Teaching Specialized Languages: An Example of an Online French Course for Professional Lorry Drivers.
16. Language as the Mirror Reflecting Culture – Cultural and Lexical Aspects in Teaching French and English on the Basis of an Online Course Concerning Contemporary Women’s Fashion.
17. Content and Language Integrated Learning Based on the Description of Education Systems in the Chosen Anglophone and Francophone Countries and in Poland.

**Structure of Courses**

The theoretical framework described in the first parts of the theses constitutes a foundation that is necessary for the presentation of the practical side of the papers. The courses have a uniform internal structure, which makes them more transparent for students. The online course is divided into lessons, each of them presenting a different range of educational materials. It can be a source of new information for learners, but also a source of inspiration for teachers who wish to introduce something new to their teaching routines.

**Example 1: Phonetic Courses**

The exercises created by students are of various types and have different structures. They concern the spelling aspects but involve verbal repetition as well. In the case of phonetic courses of French language, their authors (the students) addressed two problems: avoiding having the same people recording fragments of the chosen exercises and avoiding interference from English. The recordings contain isolated words as well as entire sentences pronounced by different female and male French speakers of various ages who are not only from France but also from other French-speaking countries. The learner can find several recordings there. Thus, in the case of a pronunciation course, the variety of voices and accents better prepares the users for real-life situations; otherwise, it is highly probable that the learner will be only able to recognise the sounds produced by one specific person. Using recordings from different native speakers is also an advantage in the case of learners who have problems in pronouncing vowels that have no equivalents in the languages they know. An important point is that by creating courses, the authors are basing the content not only on knowledge derived from the literature of the subject but also on their own experiences as trilingual learners.
Example 2: Vocabulary Courses

These courses, through the problems addressed, must allow for an effective linguistic immersion. Since, in principle, the subjects chosen by the students receive non-linguistic content, the majority of the courses are also part of CLIL practices (cf. Coyle, Hood, & Marsh, 2010). This solution is considered by future graduates as an additional preparation for the comparison of their skills with those required by their future professions.
The courses abound in propositions of various dictionary exercises. The authors consider the problems encountered by trilingual learners who face exactly the same language difficulties, trying to teach as they would have liked to have been taught when they themselves were beginners.

In total, over the last decade, 91 works related to the deepening of specialised vocabulary knowledge have been created.

Table 1.
The master’s theses by issues, from 2009 to 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>literature</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>linguistics</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>didactics</td>
<td>2</td>
<td>1</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>sublanguage</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>culture</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ecology</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>geography</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>industry</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>sport</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>music</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>technologies</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>11</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>1</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>91</td>
</tr>
</tbody>
</table>

Example 3: Grammar Classes

In the theoretical portion concerning grammar, students’ courses provide the learner with some cues concerning the comparison of English and French language systems, which may facilitate the learning process. Students choose the subjects of grammar exercises to show how these two languages can be similar, or vice versa – how they are different from each other. The problem is that it cannot be predicted whether and when the interferential mistakes can be expected, so it is impossible to develop an effective method of preventing them. Research has shown how much this process is individual, and every learner has a different “linguistic biography.” Data from surveys completed by teachers and learners confirm that “intersystemic chaos” is weakening at the B1 level. This does not mean that the interferential errors disappear, but they decrease in a statistically insignificant number. On the other hand, those appearing are so spectacular that they give false impression of statistical importance (Widła, 2007, p. 153–154). Thus, MA students are guided in these cases by intuition, without realising how much their own experiences may differ from what the prospective users of their courses will experience. Possible interferences, especially between English and French, are often taken into account.
However, even if a possible interference error has not been properly diagnosed, it does not lessen the value of the exercise. The structure is presented and practised independently of the possible added value that is the avoidance of interference.

Figure 4. National stereotypes. Acquisition of English idioms related to nationalities and ethnicity: online course on the Moodle platform (created by Magdalena Zawilska in 2019, supervised by Halina Widla).

Example 4: Civilisation Courses

The culture and civilisation of French-speaking and/or English-speaking countries are often chosen topics. The need for a deeper knowledge of foreign cultures by philological students is apparent in the context of effective professional translations. The discovery of the gap in education at the first stages of job descriptions is an unpleasant surprise for many interpreters.

These tests reveal the lack of general cultural preparation (cf. Widla, Półtorak, & Krajka, 2014). A great deal of ignorance or lack of knowledge can be seen, especially in movie translations. Incorrect captions appear in them at every step. Future translators do not know Polish equivalents of city names or first names, not to mention the differences in the less widely known areas, such as positions in administration or police, legal systems, or military ranks. On the basic communication level, the interpretation of implicit content also leaves much to be desired.
Students’ Favourite Tools

Students can use simple tools that require little IT preparation. What counts are their own ideas, creativity, choice of language content, and didactic strategies. A distance-education platform such as Moodle offers all the necessary tools, and the venture deserves to be attempted. It is not possible to use ready-made solutions available online, as the student creates a tailor-made course with a previously agreed-upon list of words and phrases, often compared to other languages. Students’ favourite tools are as follows:

• Lesson module. This is a series of web pages upon which the teacher can present certain content to the students. There is also a possibility of adding a question page to the content within the lesson. The impact on the order of work is an especially valued property of this function. The implementation of a labyrinth activity consumes a significant amount of time, but, on the other hand, in terms of learning the language, the results meet expectations (cf. Rézeau, 2008). The relatively long time spent by the students in creating their labyrinths, the consultation of external resources, the consultation of the glossary, and, finally, the discussions during the seminar’s think tanks lead to the assumed goal: they help the authors to fill language gaps.

• Prezi presentations. These are considered to be more transparent than the other types of presentation on the network that can be used. Having acquired the knowledge presented in either a Prezi presentation or a lesson module, the learners are presented with a certain number of activities that are designed to consolidate their knowledge and dispel any potential doubts.

• Quizzes. The functionality of “exercises” in Moodle offers various types of the quizzes; their choice depends on the conception and strategy adopted by the teacher. The purpose of the exercises is to evaluate the level of knowledge acquired by the learner (cf. Półtorak, 2015). The exercises are verified automatically by the system based on the answer key, which is prepared in advance by the author. The most commonly used ways to practice language skills are exercises such as these: matching with translations, matching words, multiple choice, “fill-in-the-blank” questions, and a packet of sudoku games, hangman games, or crossword puzzles.

• Glossary. By creating a normal local glossary, a student can generate automatic links throughout the entire course. Furthermore, students make much more use of glossary entries by using them in different kinds of quizzes.

• Audiovisual materials. The audiovisual aids created by students not only improve the attractiveness of the course, but, most of all, they illustrate the concepts or situations presented. Additionally, their own photos or videos testify to the authorship of the course and are proof that the author personally experienced the events described.
Final Remarks

The creation of a seminar such as the one described in this study must begin with a precise description of the different stages and interests of the formative evaluation:

- detailed knowledge of the programmes planned during the four semesters of work;
- indication of future stages of learning processes in consecutive semesters;
- clarification of the objectives of improving learning in a chosen field;
- elaboration of the criteria used to evaluate the work of the students, emphasising the progress toward the mastery of the linguistic competences rather than the validation of particular tasks.

Additionally, the climate of trust and mutual motivation established by the supervisor should encourage students to share the partial results of their projects and work even harder. This work obviously combines with the requirements of summative evaluations, which complement the purpose of the work as naturally predictable.

The platform’s content is rich and extensive, so the completion of the whole course can vary in time. The objective here is not to finish the course as quickly as possible but to achieve the aims that the author intended. There are several goals; the most important of them is obviously mastering all skills covered by the course.
What is of vital importance is the adaptation of teaching methods to individual needs of a particular group of learners. Courses are directed mainly to the same types of learners as their creators: native Polish speakers who acquired English language, started learning French, and experienced certain difficulties concerning its grammar, vocabulary, or pronunciation and also experienced the overlapping of these three different systems.

A group of people described with these characteristics would be the main target audience of the course; however, the exercises can be executed by any person who would like to improve his or her French. The main language of the courses is French; however, there are some English portions as well. Consequently, it is required for the learner to understand English and also to have some basic knowledge of French in order to understand the instructions for the tasks and carry them out properly.

As measures of support, English and French glossaries are provided with the definitions and translations of more difficult words and terms. The courses give some theoretical knowledge; however, their main focus is practising exercises, familiarising the learner with the LSP chosen by the authors.

As there is growing demand for employees with knowledge of LSP (e.g., business French), students take it into account when they choose the topics of their courses. The seminar described in the paper takes into consideration the holistic nature of individual student learning and the most effective practices for helping them develop into autonomous and responsible learners.

With regard to the evaluation of master’s students, evaluators focus on the quality of dissertations; each constitutes one-fourth of the final mark of the diploma. The second half – the average grade – is calculated by the Dean’s office. Taking this fact into account, the student often assumes that the primary objective of his or her participation in the seminar is the final grade awarded by a defence panel. Consequently, the problem often encountered by the tutors is that of the regular completion of the successive parts of theses. The question therefore arises of how to convince students of the benefits of work in a formative context before submitting to a summative evaluation. A work system that takes into account the implementation of a project – whose added value is the enhancement of language skills – additionally convinces and motivates students. Students also see that, thanks to the implementation of the courses on the faculty’s online platform, the prospective learners could improve their comprehension skills and widen their vocabularies. If they devote enough time to complete all the modules and they do it scrupulously and attentively, they are likely to achieve the aim that the student-authors diligently worked on themselves.


References


Moodle Platform of the University of Silesia used for online language courses supervised by the author, created by MA students. Retrieved from: http://el.us.edu.pl/wf/, http://el.us.edu.pl/demo/.


Implementation of IT Tools as a Method of Improving Language… 47

Halina Widła

**Wprowadzanie narzędzi technologii informacyjnej jako metoda poprawy umiejętności językowych i komunikacyjnych studentów dwu- i trójjęzycznych**

**Streszczenie**


**Słowa kluczowe:** umiejętności językowe i komunikacyjne, uczenie się przez nauczanie, e-learning

---

Halina Widła

**Внедрение ИТ-инструментов как метод улучшения языковых и коммуникативных навыков у студентов, обучающихся на двух языках**

**Аннотация**

В этой статье приводятся примеры систематической полуавтономной работы студентов на мастер-классе по мультимедиа, которая повышает их языковые навыки, а также навыки технического характера. Теоретическое обоснование, основанное на результатах исследований, проведенных автором в 2005–2019 годах, демонстрирует, насколько полезно знание первого и второго языков учащимися при изучении третьего языка. Этот процесс индивидуален (каждый учащийся имеет свою «лингвистическую биографию»), поэтому трудно учить данный факт в учебниках. В этой ситуации полезны курсы электронного обучения, которые позволяют студентам работать в полуавтономном режиме. Удовлетворяя потребности студентов, обучающихся на двух и трех языках, будущие учителя и переводчики иностранных языков создают свои собственные мультимедийные ресурсы, которые заполняют пробелы в дидактических предложениях. Более того, необычные формы обучения с помощью преподавания (LdL – от немецкой фразы Lernen durch Lehren) улучшают качество учебного процесса, помогая студентам достичь желаемых языковых и коммуникативных навыков.

**Ключевые слова:** языковые и коммуникативные навыки, обучение с помощью преподавания, электронное обучение
Implementación de herramientas informáticas como método para mejorar las habilidades de lenguaje y comunicación de estudiantes bilingües y trilingües

Resumen

Este artículo ofrece algunos ejemplos del trabajo semiautónomo sistemático de los estudiantes en el seminario de maestría multimedia, que mejora sus competencias lingüísticas y sus habilidades estrictamente técnicas. Los antecedentes teóricos, basados en los resultados de la investigación realizada por el autor en 2005–2019, demuestran cómo el conocimiento del primer y segundo idioma de los alumnos es ventajoso durante la adquisición de un tercer idioma. Al ver que este proceso es individual (cada alumno tiene su “biografía lingüística” diferente), es difícil tener esto en cuenta en los libros de texto. Los cursos de aprendizaje electrónico, que permiten a los estudiantes trabajar en semi-autonomía, se vuelven útiles en esta situación. Para satisfacer las necesidades de los estudiantes bilingües y trilingües, los futuros profesores y traductores de idiomas extranjeros crean sus propios recursos multimedia que llenan los vacíos en las ofertas didácticas. Además, las formas inusuales de aprendizaje mediante la enseñanza (LdL – de la frase alemana Lernen durch Lehren) mejoran la calidad del proceso de aprendizaje, ayudando a los estudiantes a alcanzar las habilidades deseadas de lenguaje y comunicación.

Palabras clave: habilidades de lenguaje y comunicación, aprendizaje por enseñanza, e-learning