

Effects of Teaching Summary Writing Skills on Students' Learning Process in IT field

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Abstract: *Summary writing task is a demanding activity as it foreshadows several other cognitive skills. This paper aims to present the potential effects of the summary writing teaching practice on students' learning process and development. The paper also provides a detailed description of a step-by-step procedure of summary writing skills. The analysis of the teaching practice shows how it affects students' learning process and contributes to students' development, mostly evidenced in the linguistic features of their texts. Summary writing is a part of the course English Language for Information Technology 2 taught in the first year of IT study module at the Faculty of Technical Sciences Čačak.*

Keywords: *summary writing, ESP, writing skills, language learning, linguistic use, grammar features, writing style.*

1. INTRODUCTION

Writing designates a complex activity which not only implies linguistics and semiotics, but also deeply portrays the social and educational level of the writing subject. Some factors which nowadays considerably affect conventional writing are "increasing globalisation, the development of new communication technologies, new approaches to language learning" and multimedia [1].

In general, writing activity in English as a Second Language implies demonstrating students' learning and comprehension of the specific subject. It is also an extremely difficult challenge due to the fact that students are not versed in the requirements of professional writing, and their previous writing experience is usually scarce [2].

As for students an academic context implies "greater formality, impersonality, nominalization, and incongruence of these discourses" [3], a failure to achieve these conditions is more frequent than success. Therefore, writing is designated as "the crucial process by which students make sense not only of the subject knowledge they encounter through their studies", but as a way "how they can make it mean something for themselves" [3].

Having in mind all these factors, the concept of summary writing presents even more demanding activity, as it includes both the skills for understanding the assigned text, and the writing skills, or skills for devising the text based on the read one [4]. Thus, the inferred or background activities in the process of summary writing are reading comprehension, and writing as an outcome of learning. Summary writing can be regarded as a

transferable skill which can help students "move across different assignments" [3]. In this paper, we shall try to present a students' activity of summary writing in an IT profession and explain the process of teaching the writing skill. This paper aims to present teaching content, conducted procedure and the results in the course English Language for Information Technology 2 at Information Technology bachelor studies at University of Kragujevac, Faculty of Technical Sciences Čačak, Serbia in the school year 2019/20. It will also provide an insight into the impacts of the teaching process onto the overall students' development mainly manifested in the linguistic use in their texts.

2. THEORETICAL BACKGROUND: Summary Writing in ESP

In ESP, writing is perceived as "assisting students towards competence in particular target genres" [3], whereat students are taught specific kinds of writing skills required in particular professional contexts.

Since the language is primarily used for achieving specific purposes, text as a written form of communication is a source of the writer's intentions, the structure of organized information, and "a repertoire of linguistic responses" [3] used for communicating in specific situations.

As evidenced in the research in ESP, learning professional writing presupposes both the linguistic features of a specific professional genre, and the professional values and practices [5]. Written texts are distinguished by the use of the rhetorical

conventions, specific tone of narration, grammatical features and structure of arguments [3]. On the other hand, ESP texts designate language forms acting as a means to accomplish specific purposes. Rather than focussing on parts of language "distanced from both teacher and learner and imposing on them external rules and requirements" [3], ESP practice foregrounds the demands for communication [3] and study of the texts needed for the future target contexts.

Students' native language and prior experience significantly affect ways of structuring ideas and arguments when writing in English [3]. In order to access readers' understanding, texts should be systematically structured, and only then they can be regarded as professional, characterized by its "expert character, its specialized goal orientation, and its conventionalized form" [3].

The assignment to write a summary of a research article and analyze different, sometimes opposing ideas in it seems very demanding for university students. The commonly received feedback is general points of the text expressed through personal observations and attitudes towards the subject [3]. Therefore, the teacher's task is not only to spot grammar errors and improve the style [3], but to help students acquire skills for mastering a wide variety of contexts and practices.

Margaret Hill [2] proposes three key issues related to summary writing. The first one presupposes the definition of summary writing as a "short statement that condenses formation and reflects the gist of discourse" [2]. The second issue addressed relates to the variables implicit in the task of summary writing. The variables are as follows: text complexity and organization, degree of comprehension, text availability, audience, intended purpose, type of summary required, genre, and text length [2]. Finally, the third issue suggests the way of overcoming difficulties with summary writing. As already mentioned, summary writing is very demanding as it "requires the ability to abstract" [2].

Writing summaries usually helps students to comprehend reading materials, organize their writing, develop vocabulary, promote critical reading, and improve learning in general [2].

The type of summaries especially appropriate for content areas are reader-based summaries which are polished, short, concise, and written for an external audience [6].

Summary writing is more demanding than other forms of written discourse as it presupposes several cognitive activities [4], such as distinguishing the main idea of the text, eliminating the less important data, and finally reorganizing the selected information [2] [6].

For summary writing in ESP, common instructions include a few steps [7]. The first step includes differentiating main ideas from irrelevant information [2]. This can be achieved either by

using a "linear time pattern" (narrative structure) or by developing "a structural organization from the mapping" [2]. The second step implies the conversion of these ideas into a written discourse [2]. This enables students to proceed towards a more complex and abstract composition such as "cause-effect, compare-contrast, problem-solution" [2]. The final step infers restating in their own words the elicited main ideas.

Some authors suggest that the strongest step-by-step guidance for a successful summary results is the GRASP procedure (Guided Reading And Summarizing Procedure) [8]. In this paper, we shall try to provide a detailed procedure we employ in the classroom in order to help students learn the skills of summarizing.

3. TEACHING SUMMARY WRITING AT THE FACULTY OF TECHNICAL SCIENCES ČAČAK

The aim of including the summary writing activity in the course *English Language for Information Technology 2* is not only to provide support to learning ESP, but also, to a lesser degree, to students' general knowledge of technical sciences.

The study was performed at the Faculty of Technical Sciences Čačak, University of Kragujevac. The study programme within which the research was conducted was Information Technology. The study programme of Information Technology at the Faculty involves four English language courses: English Language for Information Technology 1, English Language for Information Technology 2, English Language for Information Technology 3, and English Language for Information Technology 4. The course covered by this research is English Language for Information Technology 2 which is in the first year summer term. The course covers the required literacy, of which the activity of summary writing plays a vital role. At the end of the course students are expected to be able to summarize academic articles taken from their professional context.

Most students have already gone through the course English Language for Information Technology 1, and acquired knowledge in general English in a specific field of IT. The aim of this course is to introduce students to the basic skills necessary for reading and understanding texts in their professional environment. At the end of the course entitled English Language for Information Technology1, students should acquire intermediate knowledge in English grammar (B2), and learn how to use tenses, passive voice, conditionals, as well as adjectives and adverbs correctly. In the following course, English Language for Information Technology 2, students are expected to develop writing skills in a specific field of IT, as well as skills for successful presentation which they demonstrate orally. The aim of this course is to expand students lexical and grammatical corpus, and develop written and oral communication skills in IT context.

At the end of the course, students are expected not only to produce a summary writing to document their learned skills and understanding of the text, but also to deliver a successful presentation.

Given that the rough process of summary writing has already been mentioned in Section 2, in this section we shall focus on the techniques employed in teaching summary writing at the Faculty of Technical Sciences Čačak.

The guided procedure for summary writing task starts with the reading activity. As the study was

carried out during regular ESP classes at the faculty, it was, as usual, preceded by a few questions related to the topic of the class. The assigned text was a text on Maglev trains (shown in Example 1.), and students were asked on their background knowledge on the subject, e.g. what the term Maglev stands for, and how the conventional trains differ from the Maglev trains. This activity introduces students to the topic. The students were asked to skim the article in order to find general information in the text.

Example 1. *Text of the article for summary writing*

Maglev (derived from *magnetic levitation*) is a public transportation technology that uses magnetic levitation to move vehicles without making contact with the ground or an electrical pickup. Maglev competes with high speed rail and airlines. A Maglev train does not run along a track in the normal way. Instead, magnetic fields lift it above the track, so that the train “floats” along

In itself, Maglev technology does away with moving parts, allowing vehicles to move more smoothly and more quietly than wheeled transport. Because they have no wheels, axles, suspension, dampers, or brakes, Maglev vehicles are light and compact. They are also pollution free, as no fuel is burned, and cheap to maintain. A vehicle travels along a guideway provided with magnets to control in-flight stability and create propulsion and lift, eliminating the mechanical constraints of dry friction. In the case of conventional high speed trains, wear and tear of wheels on rails and on the electrical pickup limit highest speeds.

Maglev vehicles hold the speed record for trains (603 km/h). In practice, as with all high speed transport, time for acceleration and deceleration allows fewer stops if higher top speeds are to be effectively utilized. In the case of Maglev, acceleration and deceleration are essentially limited by the wellbeing and safety of the passengers.

The world's first commercial Maglev system was a low-speed maglev shuttle that ran between the airport terminal of Birmingham International Airport and the nearby Birmingham International railway station between 1984 and 1995. Its track length was 600 m (2,000 ft), and trains levitated at an altitude of 15 mm, levitated by electromagnets, and propelled with linear induction motors. All the electrical equipment which powered the cars was situated under the floors or the seats. Each car could take 32 passengers and their luggage, up to a weight of 3 tonnes. The train travelled at the maximum speed of 42 km/h. It operated for 11 years and was initially very popular with passengers, but obsolescence problems with the electronic systems made it progressively unreliable as years passed, leading to its closure in 1995.

The train is lifted from the track by magnetic attraction. This is the force by which two opposite magnetic poles attract each other (just as two of the same poles repel each other). Powerful electromagnets at each corner of the train exert a pulling force which lifts the train upwards so that it floats 15mm above the track. As people get on and off, the weight of the train varies. It may drop closer to the track than the required 15mm, or rise further from it. To keep it at an even distance from the track, the force is varied by a microprocessor.

Each train is driven by an electric motor called a linear induction motor. Electromagnetic windings, or coils, on the train generate a magnetic field in which the magnetic poles shift along the train. The field induces electric current in the track, which in turn generates its own magnetic field. The two fields in the track and the train interact so that the shifting field pulls the floating train along the track.

Maglev systems have been much more expensive to construct than conventional train systems, although the simpler construction of Maglev vehicles makes them cheaper to manufacture and maintain. Despite over a century of research and development, Maglev transport systems are in operation in just three countries (Japan, South Korea and China). The incremental benefits of Maglev technology have often been hard to justify against cost and risk, especially where there is an existing or proposed conventional high speed train line, as in continental Europe, the UK and Japan.

‘Inside out: Magnetic levitation train’, Education Guardian (abridged excerpt)

When the students have read the text, they are asked to share the remembered details from the text, and write them down in their notebooks. The fragmented information will only later attain its full contextual meaning [8]. The next step is to ask the students to read the text again for specific information. At this stage, the students are ready to complete reading comprehension activity in which they should elicit the advantages and disadvantages of Maglev trains. In notes, the students write down the advantages (no pollution,

faster than conventional trains, no maintenance cost, light, compact, able to develop high speed), and disadvantages (expensive to build, variable weight to carry). If some of the information previously written was incorrect, students will now be able to correct it. As suggested by the authors in [8], this step of correcting the gathered information is significant for achieving “accurate, critical reading competence” [8]. Example 2. presents the notes and details remembered and jotted down from the article.

Example 2. Details noted down from the article

- | | |
|--|---|
| <ul style="list-style-type: none"> - Maglev is a public transportation technology - does not run along a track - uses magnetic levitation to move vehicles without touching the ground <hr/> <ul style="list-style-type: none"> - Maglev technology allows vehicles to move smoothly - vehicles are light and compact, pollution free, and cheap to maintain - vehicles are provided with magnets for in-flight stability control - magnets generate propulsion and lift <hr/> <ul style="list-style-type: none"> - high speed of the vehicles - time for acceleration and deceleration causes fewer stops <hr/> <ul style="list-style-type: none"> - first Maglev system ran between 1984 and 1995 - first Maglev could take 32 passengers and their luggage <hr/> | <ul style="list-style-type: none"> - the train is lifted by the force generated by two opposite magnetic poles - weight of the train varies as people get on and off <hr/> <ul style="list-style-type: none"> - each train is driven by a linear induction motor - coils on the train generate a magnetic field - the field induces electric current which generates its own magnetic field <hr/> <ul style="list-style-type: none"> - two fields interact and the shifting field pulls the floating train along the track - Maglev trains are expensive to build compared to conventional trains - Maglev transport systems are in operation in just three countries <hr/> |
|--|---|

At this point students are taught that although every paragraph in the text serves the main idea, it could be regarded as a single section of the text which usually deals with a single theme. Extracting the main idea of each paragraph can be facilitated by the teacher's suggestion that the most important sentence of a paragraph is usually the first one. Around the main idea, there are always major and minor details, thus collapsing the paragraph into the main idea and major and minor details contributes to a clear identification of the text. The following step is the clustering of the information. At this stage, the draft is not perfectly set and structured, but the information is close to being appropriately transformed and organized. As the control over text is gained, and each piece of information is set in the belonging group, the next step of the summary writing maps out the "polishing strategy" [6] which develops through selecting the relevant data, compressing the information, and maintaining the coherence of the entire text [8]. The strategy of compressing the information is only presented to the students, who are then instructed through examples that combining the information is typically conducted by linking sentences using 'linking words' or 'sentence connectors', commonly referred to as discourse markers. As discourse markers bind together pieces of text and contribute to the overall text coherence, the teacher suggests different types of discourse markers that students can use for their summary writing. Discourse markers can be used for emphasising contrast, showing similarity, structuring, adding, generalizing, giving examples,

logical consequence or summing up [9]. Moreover, the teacher emphasises that when used appropriately, discourse markers elevate the text and make it seem logically constructed, thereby raising the students' awareness of using discourse markers correctly. The conversion of active into passive sentences contributes to the formality of style which therefore becomes impersonal and concise. As direct instructions seem to be most effective for this type of assignments [2], before instructing the students to use their own words and complete the summarizing, the teacher calls students' attention to the fact that the final text of the summary should be concise, without personal ideas expressed in it, neutral, with quotation marks used. The teacher additionally highlights the rule that the summary should not be a copy of the original, pointing up the brevity requirement of the summary and the essential use of discourse markers.

4. THE METHODS

The sample was constituted by summaries written by a group of 44 students enrolled in the first year of IT study program at the Faculty of Technical Sciences Čačak. As mentioned above, the grammar variables examined in the submitted summaries were: use of personal pronouns, use of tenses, use of passives, use of gerund/infinite, use of articles and use of modals, while the style variables were: sentence clarity, text condenseness, text conciseness, text impersonality and discourse markers (to name but a few: with reference to,

regarding, as for, on the one hand, on the other hand, while, whereas, however, nevertheless, nonetheless, yet, still, in spite of, despite, similarly, in the same way, just as, on the contrary, first(ly), second(ly), lastly, finally, to begin/start with, in the first/second/third place, moreover, furthermore, in

addition, besides, on the whole, in general, in most/all/many/some cases, broadly speaking, to a great extent, to some extent, apart from, except for, for instance, in particular, therefore, as a result, consequently, so, then, in conclusion, to sum up, etc.).

Example 3. Submitted summary 1 written by S1 with inserted corrections and teacher's comments

Maglev Train-Summary writing

When we talk about the public transport, there is a Maglev train. This Maglev trains isn't moving are not like the same way as classic trains, but as it's moving without they don't touch the ground contacts with land. Maglev train vehicles are simpler and less noisy eless than classic vehicles, because they do not operate n't have anything as a classic-ears in the same way. On the contrary, they don't neither pollute the environment, nor moreover they don't use fuel to start the engine, as they are. Maglev train starts operated ing by with electromagnets and linear induction engine which and that helps enable him it to move faster and easier.

The speed of 603 km/h which this train amounts can develop ,in regarding of trains is the record speed in comparison to conventional trains.

For example In past, the first Maglev train has a first shape, was called "Maglev shuttle", but and it worked for only just 11 years. Strip length was 600 m long, and while the train hovered on 15 mm above the ground with the help of due to electromagnets. This one vehicle could take maximum 32 travelers maximum and their 3 tons of luggage of maximum 3 tonnes. On the whole, maximum speed of this shape of the Maglev train was 42 km/h, and he it was closed in 1995 because due to of electronic systems problems.

To sum up, my opinion is that even though Maglev trains could be are a perfect example of modern solution to traveling, the cost of constructing them is very high.

Can be better. Pay attention to grammar, pronouns, sentence clarity, style.
Both the first and the last sentence of your summary are inappropriate, as you are to summarize an article, and you should not put your own opinion.

The instruments of the study were students' summaries. The qualitative method we employed is case study research, and the analysis included grammar and the stylistic features of the students' texts. The method employed in the research covered textual analysis of students' summary writing. In order to attain a representation of language use in the summaries of Maglev train text, we included one of the submitted summaries in this paper. Example 3 shows a submitted summary with additions and corrections inserted by the teachers. The author of the summary is an IT student at the Faculty of Technical Sciences Čačak.

The submitted summary is the evidence of the original student's text which contained two personal sentences with the first person pronouns used, several grammar mistakes and generally

unclear sentences. However, the student in question was able to distinguish the main idea of the assigned text and omit the irrelevant information, so he was assessed as Can be better.

During the course students were assigned to write three summary writing tasks. As forty four students constituted our group, the corpus of 44 written summaries were submitted for this specific task. The students wrote their summaries under the guidance of teachers, and their achievement was evidenced through evaluation of the submitted summaries, and assessed as being "well done", "could be better", "can be better", or "failed". The summaries submitted by the students who were not able to summarize the original text but only copied sentences from the original text were assessed as Failed. Can be better implied another

assessment level whereat students were able to abstract the original text, but their summaries showed the incorrect use of the grammar features such as: tenses, personal pronouns, passive forms, gerund/infinitive, modal verbs and articles, and usually were void of style features such as discourse markers so their texts were not clear, concise and impersonal. Style impersonality was an important variable, as summary writing presupposes the avoidance of personal text. Could be better indicated higher level of skills than can be better, and students' texts assessed as Could be better were overall grammatically correct, but mostly contained incorrect use of articles and some stylistic errors such as incorrect use of discourse markers. Well done presupposed the best assessment level which stood for the correct use of all grammar and the previously mentioned style features. The summaries were evaluated by two ESP teachers at the Faculty of Technical Sciences Čačak.

During the course, through language features of the submitted summaries, we also evidenced the extent of development of the language used by IT students. The analysis of the students' texts and the teacher's feedback shows the students' learning process and contributes to students' progress in their professional environment.

5. TEACHING RESULTS

The analysis shows that more than half of the students progressed through stages as they wrote summaries. We observed students' development by comparing their assessments in each summary writing assignment. More than half of the students with better assessment at the end of the course were able to abstract the original text. The student who progressed from Failed to Can be better was able to summarize the assigned text, but his/her summary showed the incorrect use of the grammar features, while the style features were weakly used: no discourse markers, and the text was not clear, concise and impersonal. The students who progressed to Could be better were able to write grammatically correct texts, with the exception of the incorrect use of articles and some stylistic errors such as the incorrect use of discourse markers. The students who progressed to Well done assessment level were able to write summaries showing the correct use of all grammar and the previously mentioned style features. Initial versions of the students' summaries generally appeared rough, however, it was only later when the style of the writing became concise, impersonal, and refined. The students' assessment during the course is shown in Chart 1.

As evident in Chart 1, not all the students progressed during the course. Yet, the students

whose writing skills improved made less grammar mistakes related to tenses, personal pronouns, passive forms, gerund/infinitive, modal verbs and articles, while the analysed style features also confirmed progress, as the texts were clearer more concise and less personal. A number of 18 students achieved better assessment level, another 18 students maintained the same assessment level, whereas 8 students showed lower assessment level in Summary 2 than in Summary 1. However, enhanced students' development was evident by comparing the assessment levels achieved in Summary 1 and Summary 3, since 26 students obtained better results, and 18 students maintained the same assessment level.

The analysis shows that the writing behaviour of 26, out of 44 students, progressed during the course, as shown in Chart 1 (next page). By comparing the initial and the final summary assessments, it is evident that a number of 14 students progressed from Can be better to Could be better, 5 students progressed from Failed to Could be better, 4 students progressed from Could be better to Well done, 2 students progressed from Can be better to Well done, and 1 student progressed from Failed to Can be better. The change in writing behaviour was evident as the students who progressed to Could be better did not make mistakes with the tenses, passive forms, personal pronouns, gerund/infinitive, and modal verbs, while those who progressed to Well done did not make mistakes with the articles, and they used discourse markers as style determiners. In case of students who maintained the assessment level during the course, a number of 10 students were assessed as Could be better, 7 students were assessed as Well done, and 1 student maintained the assessment level as Can be better.

Furthermore, at the end of the course, most students learned how to avoid personal style and were able to write a professional, impersonal and concise summary. As the course progressed, 26 out of 44 students, have developed skills for summary writing through the teacher-student written communication which included texts of the students' summaries and teacher's feedback. Responding to the language use in the summaries, teachers inserted corrections and wrote comments on the content of the summaries.

We also observed that besides strong contribution to the impersonality of the style, the use of the passive forms caused further inevitable linguistic change in the text, such as omitting the use of the first person pronouns from the text, to mention but a few. Thereby, towards the end of the course, students' texts became clearer, more condensed and concise.

Chart 1. Students' assessment during the course

Name	I summary	II summary	III summary
S1	Can be better	Well done	Well done
S2	Could be better	Well done	Well done
S3	Can be better	Could be better	Could be better
S4	Could be better	Can be better	Could be better
S5	Could be better	Could be better	Well done
S6	Could be better	Could be better	Could be better
S7	Can be better	Could be better	Could be better
S8	Could be better	Can be better	Well done
S9	Can be better	Could be better	Well done
S10	Can be better	Could be better	Could be better
S11	Well done	Well done	Well done
S12	Could be better	Could be better	Could be better
S13	Well done	Well done	Well done
S14	Well done	Well done	Well done
S15	Could be better	Could be better	Could be better
S16	Can be better	Can be better	Could be better
S17	Can be better	Can be better	Can be better
S18	Can be better	Well done	Could be better
S19	Could be better	Can be better	Could be better
S20	Can be better	Can be better	Could be better
S21	Can be better	Can be better	Could be better
S22	Could be better	Can be better	Could be better
S23	Well done	Well done	Well done
S24	Can be better	failed	Could be better
S25	Well done	Well done	Well done
S26	Could be better	failed	Could be better
S27	Can be better	Can be better	Could be better
S28	Could be better	Well done	Well done
S29	Could be better	Could be better	Could be better
S30	Well done	Well done	Well done
S31	Could be better	Can be better	Could be better
S32	Can be better	Could be better	Could be better
S33	Can be better	Could be better	Could be better
S34	failed	Can be better	Could be better
S35	Could be better	Could be better	Could be better
S36	Can be better	Could be better	Could be better
S37	failed	Can be better	Could be better
S38	failed	Could be better	Could be better
S39	failed	Could be better	Could be better
S40	failed	Can be better	Could be better
S41	Can be better	Well done	Could be better
S42	Can be better	Can be better	Could be better
S43	Well done	Could be better	Well done
S44	failed	Can be better	Can be better

6. CONCLUSION

This paper presents how IT students at the Faculty of Technical Sciences Čačak summarize an assigned text in their context target field. The aim of the paper is to explore the effects of the summary writing on the students' learning process. Having described the teaching process of summary writing, we analysed the effects of teaching such skills on students' learning process, and noted slow and gradual progress in the language and style of the text of summaries submitted after the students acquired summary writing instructions during the course. We also observed that in summary writing students learned how to opt for the appropriate linguistic combinations affecting the meaning of text. Our results in the research of the summaries written by IT students show that during the course, IT students tend to advance from a personal to a more concise and impersonal style. Also, during the course, summaries are found to evolve through

steps from chronology to logical arrangements, while changes in style are observed to take the most time to develop usually occurring at the end of the course.

Few experimental studies covering the developing of summary writing skills have been carried out in the past several years. Marzec-Stawiarska is the author of the quasi-experimental study investigating the effect of "summary writing on the development of reading skills in a foreign language" [10]. The results of the study show that summary writing was highly beneficial for weaker students to their development of reading skills. However, the research results related to the progress in quality of the written summaries, which was insignificant compared to the progress in reading skills [10], oppose the results obtained in the present study. The results of the present study show that the summary writing teaching practice significantly affects not only students' development in reading

skills, but in writing skills as well. Wichadee performed a quasi-experimental study investigating the effect of transactional strategies on undergraduate students' reading and writing abilities [11]. Summary writing was one of the research instruments. The study results show that transactional strategies enhance the development of reading and (summary) writing skills [11]. The results of the study by Wichadee confirm the effect of teaching skills through instructions on development of both reading and writing, which was also shown in the results of the present study. Moreover, both of the studies were conducted among undergraduate students. Another study which explored the effect of summary writing on the reading comprehension of English foreign language learners is written by Shokrpour, Sadeghi and Seddigh [12]. The authors employed pedagogical approach which covered the use of "higher order thinking skills" [12]. The study analysed the effects of summary writing in the field of ESL/EFL on students' reading comprehension ability [12]. The study results show that the summary writing significantly influences the improvement of reading comprehension [12]. As the study focus is only on the reading comprehension ability, it is different from the present study in which the main result observed is the learning development evidenced in the students' texts.

The present study shows the impact of teaching summary writing skills on the students' learning process in a specific field of information technology. Even though summary writing task goes "beyond grammar and vocabulary" [3], our research results show that direct and clear instructions and the subsequent grammar and stylistic corrections inevitably influence students' learning development, and create a solid basis for the professional experiences anticipated in the future.

As ESP teachers working in the information technology context, we would like to point out that providing direct instructions during the teaching process results in successful learning outcomes. The instructions should be provided initially, at the beginning of the course, as they can serve as a model for further stylistic and grammatical choices. The present research of the summary writing suggests that the writing of students is a painstaking process with a slow and gradual advance towards the writing of professionals.

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