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Exploring the flipped model in the CLIL geology classroom

Extended summary

The flipped classroom model is a teaching method stemming from the flipped learning approach which focuses on student autonomy and independence in the process of learning. Numerous studies indicate that the type of teaching where a teacher, and not a student, plays a central role is not in line with contemporary foreign language teaching. Therefore, the flipped classroom model is one of the possible innovations of traditional teaching which could introduce new dynamics into the classroom and provide the students with the necessary skills for acquiring academic competencies. The flipped classroom is all the more useful because it is additionally supported by the CLIL method which gradually and systematically replaces the traditional teaching model.

The aim of our research was to determine the impact of the flipped classroom model relative to the traditional teaching method. The research was conducted at the Faculty of Geology and Mining of the University of Belgrade. The sample comprised 30 first- and second-year students and the research was carried out in the second semester of the academic year 2023/2024. The results of the students of different levels of the English language knowledge were monitored, on three tests of knowledge, from the areas selected on the basis of the syllabus for the given semester at geology studies.

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Two hypotheses were set at the beginning of the research. The first hypothesis looks at the possibility of using the flipped classroom model successfully in a mixed-ability language classroom. The second hypothesis postulates that the initial application of the flipped classroom model will yield satisfactory results if partially combined with the traditional method of teaching.

The research confirmed both hypotheses. When it comes to the first hypothesis, we proved that the flipped classroom model can be applied in a mixed-ability class, which is supported by the test results. Relative to traditional teaching, the flipped classroom model yielded the result which is less than 10% lower, whereas the combination of the methods provided the result which is closer to the traditional model. The results clearly indicate that the flipped classroom model can be successfully applied in the mixed-ability classroom.

The second hypothesis was also confirmed and supported by the students' test results. руга хипотеза је такође доказана и поткрепљена резултатима студената на тестовима. As mentioned earlier, traditional teaching yielded the highest result, but in the case of combining the traditional method with the flipped classroom model, the drop in points was less than 3%. The results clearly indicate that the application of the flipped classroom model is indeed possible, but that it should be introduced by the gradual transition from the traditional to the innovative CLIL method.

We believe that our research has useful implications for practical application. The paper proves that the flipped classroom model can be applied at higher-education level and the results indicate a potential for further development of this form of teaching.

Keywords: flipped model, CLIL, traditional method, geology, English

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