ONLINE COURSE FOR MARINE ENGINEERING – FEEDBACK

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Abstract: The article sums up the experience of piloting an English Academic Online Course for marine electrical engineering and the feedback given by the students after attending the course for one semester. For this online course some goals were established, the most important one was to make the students learn circadian and consciously in order to remember what they studied and to be able to apply it in the future job. Another goal was connected to the assessment of every progress of the student which was done by test papers for every part of the course, a final test for each course and an exam type test at the end of the semester. The issues appeared while rendering the course, the way the students reacted to that new type of learning and assessment and our opinion related to the online course make the body of our study.

Keywords: online course, feedback, marine, electrical engineering, EAP

Introduction

Last year we started a project of an Online Academic English Course for electrical engineering. The decision was taken based on some considerations related to the flexibility of the program that permits the students to work on assessments at their own pace in order to obtain the best results and they are at the same time "constrained" to learn consciously and/or memorize the specialty words, phrases, definitions and grammar structures. The whole process of designing the Course was described in a previous article called "Developing an online course for marine engineering" (Balagiu, Sandiuc 2020), including the structure of the course and the differences between the traditional face to face course and this type of teaching and learning.

The Online Course, consisting in ten distinct units, is structured into four learning parts: specialty text, vocabulary that is connected to the text, symbols for reading the electrical diagrams and grammar or lexical structures used in speaking. The Course has been piloted for one semester and implemented faster than we expected due to the unusual pandemic situation that compelled us to have online courses for our students. We are not taking into consideration the "emergency remote teaching (ERT)" (Hodges, Moore, Lockee, Trust and Bond, 2020) which is considered a not very efficient alternative to face to face learning, but it is an alternate type of teaching dictated by the pandemic crises. The feedback offered by the people implied in this project (professors and students) will be analyzed in this study.

Short description of the online course

The Online Academic English Course for electrical engineering is structured into ten units which cover one semester of study. It is the first semester of specialty study for the students of electrical engineering, so that the terminology learned in this first semester can be considered to be a milestone for the English knowledge and further study. For each unit the students have to read an English text upon a certain subject, study the glossary containing the terms they supposedly do not know, study the electrical symbols tables with pictures and

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definitions, and do two quizzes, one for the terminology and the other one for knowledge. Grammar or general English vocabulary and structures used for every day communication forms the last part of each unit. There is a theoretical part for every subject students are supposed to study and another quiz should be taken.

The terminology quiz comprising ten random questions is a type of memory test designed with pictures, images, diagrams to illustrate the terminology the students can find into the texts, and also abstract words and phrases with synonyms, antonyms and equivalent translation given in different types of items. The quiz is timed and it can be tried five times and the mark given is from the last attempt.

The knowledge quiz is made up of about ten random questions, 60-70% of them connected to the text, and the other 30-40% about the electrical symbols the students will find when reading the diagrams they are going to find at their future job places. The items of the quiz are mainly definitions from the text to be recognized or completed, and pictures or definitions of electrical symbols to be identified among others. The quiz is not timed and it can be tried five times and the final mark given is from the last attempt.

The grammar quiz is made up of about fifteen questions of different types in order to make the students practice grammar rules and structures until they can use them, hopefully without too many mistakes. The quiz is not timed and it can be tried five times and the final mark given is from the last attempt.

At the end of the unit there is a final test comprising questions from terminology, knowledge, symbols and grammar or structures. There are between 35 and 40 random items, half from the quizzes taken before and half unknown. The unit test is timed and there is only one attempt permitted.

There is also a final test called Semester Test, which has 100 questions out of which 60% are from the previous tests and 40% are new questions. The test is timed and there is only one attempt permitted using a password.

In order to practice speaking, due to the fact that we are teaching English as a foreign language, and communication is an important aspect of the future job of our students, another component was added, a PowerPoint presentation. The presentation was sent by the students by mail and presented online with video by groups of students. Each student should get a mark that is made up 40% from the complexity and structure of the PowerPoint and 60% from his own presentation meaning fluency, accuracy, grammar and structures used when speaking.

Course feedback

The feedback of Online Academic English Course for electrical engineering has, in our opinion at least three components. The first component is given by the way the students worked, reflected in the number of quizzes taken and the marks they received both from the program and from the professors involved in the project, and it will be abbreviated **SA** (**student achievement**). The second component is **students' written feedback** given at the end of the course abbreviated **SWF**. The third component of the course feedback is that offered by the professors who worked both in designing the course and in supervising the process of studying, and that will be abbreviated **PF**.

The feedback is based on the answers and study of 110 students who attended the Online Course and 2 professors conducting the project.

a. **Student achievement** can be taken from the program, and is formed by the number of quizzes taken for each part of each unit: terminology, knowledge and grammar, which can be connected to the grade per unit and the final grade given by the computer according to the quantity and quality of students' studying. If we take into consideration the first unit of the course we can noticed that the first quiz (terminology) was taken 222 times by 110 students that means two quizzes attempt for each student, if we do not take into

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consideration that there were 30 students who had no attempt, so that the real number of attempts for each student is about **three**. For the second quiz (knowledge) of the first unit the test was taken by 128 times by 76 students, which gives an average of 1.5 attempts that can be explained as half of the students attempting once and half twice. The last quiz (grammar) was taken 80 times by 76 students that mean an average of approximately one attempt. The unit final test was attempted by 102 students and the marks raged between 95.74 and 56.88, with 40 students having maks situated between 80 and 95.74.

The number of attempts for each of the quizzes for the other units remained about the same, and for the same number of students, who took all the quizzes and the tests and eventually obtained a final passing mark for the course. In comparison to the marks obtained by the students from other groups who did not attain this type of online course, our students' marks were a bit lower, but the percentage of 40 for students with marks between 8 and 10 was constant for the final tests and maintained at the semester test.

The PowerPoint presentations were sent by e-mail and presented by groups of four online with video. The students succeeded to connect so that the presentations went on in good conditions, giving the students the opportunity to practice speaking skills and communicate to other mates and professors too. The marks for the PowerPoint presentations followed about the same pattern as the marks for the quizzes and tests, about 40% got marks between 8 and 10, another 40% got marks between 5 and 8 and 20% of the students involved in this project either decided to give up the course or did all the study during summer and took the tests and speaking part in autumn.

b. **Students' written feedback (SWF)** is the second component of the feedback and perhaps the most important of all. Here are some of the students' opinions regarding the Online Course:

- A greater rate of involvment due to the interest in taking the quizzes and tests.
- Improve the marks by retaking the quizzes that can be repeated 4 or 5 times.
- The structure of the Course into several distinct parts as vocabulary, knowledge and electrical symbols has a positive impact upon the students' way of thinking related to engineering specialty.
- The most important advantage of the Online Course is given by the flexibility of solving the tests whenever the students have time to do that (as long as some students have to work).
- The comfort given by solving the tests from my own computer and in silence.
- Too much work for each unit.

The SWF contains both positive and negative notes, most students complaining about the hard work implying reading the texts several times and studying more than usual for an English class. Other students have negative feedback due to the great number of quizzes and tests.

Professors' feedback (PF)

People implied in designing and implementing this course have, as expected, a positive feedback about the Online Course. First of all the students study more in order to take the quizzes and the tests and this is a plus, although the students are not very pleased with this. Secondly, the students study and take quizzes and tests at their own pace, giving them the opportunity to give the best of their knowledge. Thirdly, the progress of the students can be checked each week or even each day, if necessary. A feedback from the students can be obtained every week as long as this does not imply wasting time during classes, and alterations to the course, quizzes and tests can be made accordingly.

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There are also some not very pleasant aspects that should be taken into consideration and these are the huge amount of work for each unit and the fact that the relation student-professor is very much reduced.

Conclusions

According to all the components of the feedback, the Online Academic English Course for electrical engineering is a positive endeavor, helping the process of learning, making students study longer than for a traditional course. The usefulness of the course is undeniable as long as we all have to give up the traditional classes and teach online due to the pandemics. There are also some shortcomings among which we can mention the time used to develop the course, the fact that not all the skills have the same percentage within the course, for example, the listening skill is present only when the students present their PowerPoint projects and their mates are listening, and the same reduced percentage is available for speaking. All the speaking components are be neglected in case students have only Online Courses, so we are in favor of alternating face to face courses with online ones, or leave the online courses for the third and the fourth years of study when our students are supposed to spend part of the time as cadets onboard ships where they have the opportunity to communicate. The writing skill has also a small percentage within the Online Course, being practiced only for the PowerPoint presentations.

BIBLIOGRAPHY

[1] Alqurashi, Emtinan, "Predicting student satisfaction and perceived learning within online learning environments", Pages 133-148 | Published online: 2018, *Journal Distance Education*, Volume 40, 2019 - Issue 1

[2] Alexander W. Astin, Anthony Lising Antonio "Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation" in *Higher Education*, 2012

[3] Caplan, D., Graham, R. "The Theory and Practice of Online Learning", - *Theory and practice of online learning*, 2004

[4] Cavanaugh, Joseph, "Teaching Online - A Time Comparison." *Online Journal of Distance Learning Administration*, Volume VIII, Number I, Spring 2005

[5] de Jong, Peter G. M, Pickering, James D., Hendriks, Renée A., Swinnerton, Bronwen J., Goshtasbpour, Fereshte, Reinders, Marlies E. J. "Twelve tips for integrating massive open online course content into classroom teaching", Published online: 12 Mar 2019 https://doi.org/10.1080/0142159X.2019.1571569 Journal

[6] Gaebel, Michael EUA Occasional Papers MOOCs Massive Open Online Courses by January 2013

[7] Hodges Charles, Moore Stephanie, Lockee Barb, Trust Torrey and Bond Aaron, "The Difference Between Emergency Remote Teaching and Online Learning" https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-andonline-learning, 2020

[8] Meyen, E., Lian, C.H.T., & Paul, T. "Developing online instruction, Focus on Autism and Other Developmental Disabilities", 12(3), (1997a). 159–165.

[9] Owston, R. "The world wide web: A technology to enhance teaching and learning." *Educational Researcher*, (March 1997). 27–33.

[10] Pérez-Foguet, Agustí, Lazzarini Boris, Giné Ricard, Velo Enrique, Boni Alejandra, Sierra Manuel, Zolezzi Guido, Trimingham Rhoda, "Promoting sustainable human development in engineering: Assessment of online courses

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within continuing professional development strategies", *Journal of Cleaner Production*, Volume 172, 20 January 2018, Pages 4286-4302

[11] Pollacia Lissa F., "Recommendations for Developing an Online Course" *Journal of Information Systems Education*, JISE > Vol. 12 (2001) Iss. 3

[12] Puzziferro, Maria; Shelton, Kaye, "A Model for Developing High-Quality Online Courses: Integrating a Systems Approach with Learning Theory", *Journal of Asynchronous Learning Networks*, v12 n3-4, Dec 2008, p119-136

[13] Struyven, Katrien, Dochy, Filip and Janssens, Steven "Students' perceptions about evaluation and assessment in higher education" *Assessment & Evaluation in Higher Education* Vol. 30, No. 4, August 2005, pp. 331–347

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