

## Managing Students’ Attention and Dealing with Cognitive Fatigue during Online Business Communication Courses

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### Abstract

*Given the unprecedented circumstances of the global pandemic, emergency remote teaching was adopted in universities around Romania and around the world, this unique perspective created numerous investigating opportunities for academics around the world, adopting and adapting systems, methods, strategies at an unimaginable scale and testing solutions, designing and issuing new methods were routine activities. All educational systems were challenged to turn into giant didactic laboratories with billions of subjects. In this context, our present study aims to investigate at a small scale the behavioral engagement of students in the online environment in terms of their motivation to continue their studies, attention and cognitive fatigue, personal involvement, as well as their unique personal experiences and personal responses that they are willing to share.*

**Key words:** business communication teaching, cognitive fatigue, ESP teaching, motivation, strategies

**J.E.L. classification:** Z13

### 1. Introduction

Our present study investigates the impact of online education during an unprecedented context, we consider that introducing this context would offer a better understanding of its findings and its conclusions. The outbreak of the COVID-19 apart from its medical, social, economic and political challenges, brought an even longer impact (than initially foreseen) on educational systems. According to United Nations, (2020, , 94% of the world's student population, (meaning 1.6 billion learners were affected) and sent almost overnight, in some cases, from a traditional face-to-face learning system to online learning. Mastering and developing an adequate response to this unexpected situation was not an option, it was mandatory. This new form of teaching was first associated (and even called for a while) blended learning, it is true that distance education existed before, as well as blended forms of distance learning, however, in a short period of time, educators realized that these new contexts required more than placing educational content on various platforms and supervising synchronous and asynchronous forms of learning, it was about continuing and enhancing the previous face-to-face educational efforts, maintaining and strengthening students’ motivation and keeping them alert. Obviously a refined and complex form of education which in most cases required considerable efforts and new forms of adaptation, planning and lengthy preparation- emergency remote teaching (ERT)- as the new concept was coined, is meant to offer an alternative way for providing quick and temporary resources for educational purposes during an emergency or a crisis.

The conceptual framework sounds easier and better than reality, as according to UNESCO (2020, pg. 2) - 50% of the learners lacked a personal computer and 43% lacked an internet connection. Proper technological resources and a physical place to study represented a problem not only for students coming from disadvantaged families but also for students coming from multiple-children families. This was not the only facet of the problem, instructors were also forced to develop online teaching skills or at least to improvise/mime them overnight, in an unrealistic timeframe, and even more, they were transformed into their own course designers and tutors of online content.

Synchronous forms of education on ZOOM, WebEx, Microsoft Teams or other similar platforms were offered. Asynchronous forms were also developed on Google Classroom, Moodle Canvas. In numerous cases synchronous and asynchronous forms were blended in order to maintain students' engagement and interest in the learning process. Institutions around the world invested into and found various solutions with different outcomes. Was it a success? Was it a failure? Only time will tell...

Online education with its two main components - online teaching and online learning is not a new concept. It has decades of study and development behind and therefore, various studies proposed models, standard methods and course design suggestions. Careful planning and considerations on the impact of design and methods being used are a key to the quality of the instruction. An important feature of emergency remote teaching is represented by the decision on the design options the instructor makes meaning whether, how, what and when to teach (Barbara Means, 2014).

Students' motivation to accomplish their goals is tightly connected to their future success in professional life. In many circumstances, as we all know, learning tends to become more of a "compulsion" than an intrinsic drive, this situation leading to a lack of mental presence and involvement in the course. The learning process should be correlated with students' willingness and need which derive from their internal motivation mechanisms.

## 2. Literature review

Motivation theory basically differentiates two types of motivation- intrinsic and extrinsic. Intrinsic motivation is activated by internal mechanisms and disinterested in external rewards (such as prizes, acclaim, admiration or any form of external gain). Internal rewards such as happiness, intellectual interest and positive emotions in general give a sense of individual progress. In "Making Learning Fun: a Taxonomy of Intrinsic Motivation for Learning", Thomas Malone and Mark Leeper (2005, pp.230-231) discuss different ways in which learning environments can be perceived by students as intrinsically rewarding. The activities should be perceived as interesting, captivating, fun, enjoyable, in order to trigger intrinsic motivation of learners. Intrinsic motivational factors include being challenged to pursue a personal goal, helping others, feeling included in a group, cooperating and competing with other members of the group, possessing the ability to compare their outcomes to that of other fellows, sensory cognitive curiosity also plays an important role, as well as the feeling of having a personal intellectual accomplishment appreciated by others.

If external rewards are granted as "motivational" factors for an activity the entire intrinsic result of the process can be compromised triggering the so-called over justification effect. The intrinsic enjoyment or intrinsic enjoyment should be considered as a sufficient fuel for the entire behavior, while adding the extra extrinsic factors. The tendency of a person is to perceive the task as overjustified, (Richard A. Griggs, 2019, p. 231).

The period of online courses has been dominated by asynchronous learning tasks, which coupled with synchronous learning tasks led to a certain fatigue and, in students' views to an overwhelming intellectual effort of adaptation. This effort can be ultimately translated in a mental or cognitive tiredness which turns into a barrier against successful learning. In time, as the level of tiredness increases it leads to a decrease in cognitive and physical performance, a perpetual dissatisfaction and impacts on, sometimes dramatically, students' motivation to pursue their educational goals.

In terms of fatigue two types can be differentiated- mental and physical. The physical aspect is described as the incapacity of a muscle to optimally perform a given task, while the mental aspect is a more complex and subtle combination between psychological and biological factors which lead to a loss of mental performance. Mental fatigue is determined by several factors as: sleep deprivation, a depletion of internal resources and a lack of desire to perform- a fatigue motivation (Grillon C., Quispe-Escudero D., Mathur A., Ernst M., 2015, pp. 383-389)

Behavioral engagement in the online environment is concerned with the tasks students perform in their learning activities and it is in a tight correlation with another concept vital to learning outcomes- cognitive engagement, which assesses the degree of involvement that students activate in their learning efforts, it triggers deep learning strategies and the regulation of cognitive processes involved in learning. An accurate assessment of this would provide a more comprehensive image of the educational processes and issue more adequate responses from tutors. Student engagement is of

vital importance and it represents an indicator in persistence, performance and even in the retention of students enrolled in higher education.

Numerous theories on emotion and its role in learning come to offer a diverse and complex field of research, it is worth mentioning that in this case the investigations cross the traditional academic field of research, conducting it into more subtle layers of personal life and deep affective internal structures. A more comprehensive view on the role of the affective dimension in higher education would probably provide a further step to be investigated.

Creating a learning community supposes the development of human relationships that are function based on the principles of reciprocity. Instructor’s positive attitude triggers a positive productive learning environment and encourages students’ socialization, positive attitude being based on genuine communication, respect, trust and support. Communication is in many cases easier to be enunciated than performed and even harder to be defined, as it is a multi-faceted and multi-leveled concept, encompassing not only the verbal but also the non-verbal message to be transmitted. Poor communication leads to a difficult class management, anxiety, confusion, misunderstandings, and disruptive behavior. Based on our personal observations, we rooted our present study on a number of assumptions- clear and concise structures and procedures need to be developed on a routine bases in order to avoid organizational stress and to meet students’ as well as instructors’ expectations. A set of rules to follow all along the course would be of great help and would enable students regain their focus. It would also provide a framework easy to anticipate and to follow, as mental structures depend on rehearsal and on routines. Visual representations are more captivating and illustrate better the theoretical concepts. Involving students into the discussion more often than in face-to-face environments and including humorous remarks, word games adapted to their linguistic preoccupations can grab their attention and dynamise the entire interactive process. Mini breaks are also a good useful tool in relaxing the body and the mind and in allowing the group to function as a group (as some students need longer periods to reflect or to perform a task than others, as their learning rhythm is different). A strategy which can bring a serious engagement even during the small breaks proposed above is to open a discussion topic based and to ask them to reflect on or search more information during the break and continue the discussion after.

### **3. Research methodology**

In order to investigate students’ views the present study adopted a quantitative descriptive design based on an online questionnaire, conducted at the end of the second semester of the academic year 2020-2021. The online survey comprised a number of 63 undergraduate students enrolled in the 1st year at the Faculty of Economic Sciences, “Ovidius” University of Constanța, with a componence of 9.2% male students and 90.8%female students. Their average age was 20. They were 1<sup>st</sup> year and 2<sup>nd</sup> year students majoring in Business Administration (5.2%), Banking and Finance (82.3%) and Marketing (12.5%). The online questionnaire was given to students during online activities and it was meant to measure undergraduate students’ motivation to pursue their learning goals during online courses. All answers were anonymous and students were offered the possibility to avoid answering uncomfortable questions in the survey. The average time to complete the 10 questions included in the questionnaire was 7:06 minutes. The questionnaire contained scales from strongly agree to strongly disagree, as well as closed and open questions. The open questions are meant to offer a deeper insight into students’ personal perceptions and allow them an increased degree of freedom of opinion.

### **4. Findings**

When asked about the capacity to concentrate during online courses, the survey results indicated that a number of 17 respondents found it easier to focus during online courses, 25 opted for “No”, while 21 students were indecisive and opted for “Maybe”.

The second question asked about the difficulties encountered during remote learning, in this case most of them indicated that more time had to be allotted to study and 35% of them complained about having encountered frequent technical issues which prevented them from being as active as they would have liked. It is worth noticing the fact that only 10% of them complained about the lack of

appropriate technical equipment and 3% about not being able to understand the instructions they received.

Figure no. 1 Remote learning difficulties encountered

2. Difficulties encountered during remote learning:

[More Details](#)



Source: Generated on Microsoft Forms, based on students' responses

A demotivation is an important internal factor with subtle mechanisms which determines a decrease in the learning involvement of students, in a direct relationship with their attention and at the same time a direct cause of a learning fatigue, coupled with a more general factor affecting larger masses of people, a pandemic fatigue (affecting more than half of the world's population, according to statistics). When asked about feeling tired and demotivated during online courses - 5% chose "Always", 21 opted for "Often", 59% indicated that this "Sometimes" affected them, while only 13% said that this "Never happened".

Figure no. 2 Students' answers on feeling tired and demotivated during online courses

4. I felt tired and demotivated during online courses

[More Details](#)



Source: Generated on Microsoft Forms, based on students' responses

The questionnaire included open questions, one of them being dedicated to the best method/methods they have experienced for ESP learning. The predominant type of activities indicated interactive communication (coupled with listening, watching, playing games, debates etc.) as top of the range, an interesting comment, which is worth investigating, indicated the Pomodoro method as being ideal, some other answers even suggested smaller test to be given more often. An introvert student suggested individual work or study, as he/she felt intimidated and inhibited by group activity. These answers which indicate interactive communication as a preferred method anticipated another question included in our investigation: "Doing communicative activities is the best way to learn English more accurately?", in this case 83% of the respondents agreed, 16% opted for "Maybe", while only 2% chose "No".

The question which investigated the worst methods for learning ESP revealed that most students weren't able to point any by saying "I didn't experience any...", while those who elaborated an answer indicated- online classes, memorizing grammar rules, lengthy exercises, reading activities, or the fact that there is no bad method and that after all it only depends on the person being taught and his/her mental structures, skills or personal preferences.

Considering the fact that mistakes are a source of understanding and improvement, since we all learn from our mistakes and we are motivated by the fear of not making any mistakes to pay more attention and to enrich our knowledge, we chose to investigate whether students consider the opportunity to find and correct their mistakes immediately after they were made and the activity is completed as having a positive impact on their motivation or not – "I find it helpful when the

professor corrects my mistakes after an activity is completed” - 61 students (97% of the respondents) opted for “Yes”, while 2 (3%) for “No”.

When asked if they consider that online learning is appropriate for a foreign language course, students’ options were mainly divided between “Strongly agree” (13%) and “Agree” (51%) on the one hand and “Disagree” (32%) and “Strongly disagree” (5%) on the other.

## 5. Conclusions

Considering the results of the finding section of our present research, would like to bring into discussion a number of ideas which could help improve the online educational process and the understanding of students’ needs in terms of motivation and attention. A careful planning of the timing, the content and the amount of information is necessary. Smaller slots of times, compared to face-to-face activities, should be dedicated to proposed activities, in order to avoid cognitive fatigue and boredom. A bigger variety of activities should be designed and included, alternating with theoretical presentations of the concepts under discussion. As suggested by our students, more stress should be placed on communicational activities (listening, speaking, free talks, case study discussions, free talks, individual and group presentations, role play etc.) and on digital games, testing under the form of digital competitions. If possible, the activities proposed should take less time, they should be more dynamic and more entertaining than during face-to-face courses. More stress should also be placed on the positive attitude of the instructor. Socio-emotional factors should also be carefully investigated in order to be able to improve students learning and more practical advice on learning techniques and individual guidance should be offered when required. A key to preserving students’ motivation and attention all along their educational experience resides in the adaptability of instructors to a large student population emotional needs and the capacity to foresee their lifelong learning needs in the context of perpetually changing employability requirements.

More in-depth views on the role of the affective dimension in motivating and retaining students enrolled in higher education would be worth investigating in future studies. Given the fact that special social circumstances require special adaptive techniques, instructors should be able to recognize and carefully exploit the boundary between academic and personal life in the benefit of their students.

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