The effects of contextual factors on universitarian lecturer's performance

Enrique Rosales-Asensio [a]*, Department Technology, University de La Laguna (España), Spain

Abstract

The purpose of this paper is to identify the set of conditions of the instructional context that lecturers take into account in the design of university teaching. In the research, a questionnaire made by the researchers was used. Each item has five possible response categories: Rarely true in my case, sometimes true, about half the time; it is frequent, in my case and almost always true. The main results show the existence of six relevant instructional conditions, which we have named: (a) Content, subject, lecturers and students; (b) teaching innovation and educational resources; (c) course design; (d) attitude of students; (e) characteristics of students and (f) lecturer-subject relationship. We conclude by evaluating the contributions made by the paper to the available knowledge of the subject and pointing out some challenges for future research.

Keywords: Basic knowledge for teaching, conditions of teaching, instructional design

* ADDRESS FOR CORRESPONDENCE: Enrique Rosales-Asensio, Department Technology, Universite de La Laguna (España), Spain

E-mail address: enrique.rosales.uned@gmail.com

1. Introduction

The realisation of the desired behaviours determined to be brought to the student depends on the carrying out of classroom activities at every level of formal education. Within the education system, schools are special environments designed to bring educational goals to students. This special environment is an environment designed to facilitate the desired behaviours and an environment designed to eliminate unwanted behaviours.

Universities are the top educational institutions of a country. At the same time, raising qualified manpower needed by the country is among the most important reasons for the existence of higher education institutions. To compete with the modern world, it is necessary to produce information and transform this information into technology. Fulfilling this task is among the aims of academic education. It is among the duties of universities to solve country problems in a healthy and effective way. Although the university has been accepted as the natural place of science and higher education, it is recorded that people who are members of the institution, namely faculty members and students who accept their scientific authority, encounter and interact with intensive interaction spaces and the common mental environment resulting from this intense interaction is recorded. It should be considered as a social archive. It is possible for universities to perform the specified functions with qualified teaching staff. Teaching staff is one of the most important parts of the university system. Because the countries that have sufficient teaching staff in terms of quantity and quality can create a human resource with the qualities that think, research and produce universities (Oyetoro, Grace & Adesina, 2019; Yavuz & Kurt, 2019).

University lecturers have two basic duties as scientific research and teaching. The general perception about the duties of the university lecturers is mostly about 'research', whereas the teaching task is university teaching.

It is a task that should not be ignored for its staff. For many years, the teaching task of university lecturers was seen as a secondary function compared to doing research. However, recently, the teaching duties of faculty members have become more prominent due to reasons such as higher education becoming one of the normal education levels in all parts of the world, the possibility of completing this education level for the majority of the youth of the country and the entrance to the elite senior professions. It is understood from all this that one of the most important duties of the teaching staff is a 'teaching' task. Instructors are teaching in one way while performing course activities.

The tutorial can often encounter a learning group with its own learning style. The expectation from the tutorial here is that the learners in the opposite style group can also meet their needs, and they can also become their teachers somewhere (Feyisayo, Kareem & Oluwasegun, 2019). Perhaps the most difficult part of the teaching profession; the tutorial is that it can address people of all different styles equally, no matter what style it has. Undoubtedly, the tutor can reflect their own personality traits to the teaching process, provided that they depend on a healthy theoretical cause (Tasar, 2019; Keser & Semerci, 2019). For this reason, the teachers should be informed about teaching learning styles in their pre-service training that they receive about teaching. Thus, these people will be able to perform a more rational and more qualified teaching service in their teaching life. Furthermore, since the structure that directs our entire life is predominantly the brain, it has become imperative to know how it works and its functions to run all brain learning processes effectively. It will be possible to improve the teaching service both scientifically and artistically by getting to know this structure, of which we can discover a very small part (Bichi, Suleiman & Ali, 2019; Taspinar, 2019).

The set of factors that can influence the teaching design of university lecturers are very broad and can cover aspects that operate within the context of cultural or social context, university institutional context, work context or instructional context (Fanghanel, 2007; Feyisayo, Kareem & Oluwasegun, 2019; Keser & Semerci, 2019). At the level of the university institution, the teaching design of a lecturer can be influenced by the activity of the training institutes of the own universities, which promote the lecturer training to implement the evaluation by competences in the university, as demand of the Declaration of Bologna (National University of Ireland Galway, 2014). Or, to put another relevant example, lecturer teaching can also be affected by factors related to the way in which the teaching activity is evaluated, as well as to the format and results of the institutional evaluation of teaching (Henard & Leprince-Ringuet, 2008). In this paper, we focus solely on studying the factors that have to do with the instructional context of the lecturer. The instructional context is defined in this paper as a complex and dynamic framework of didactic variables that can interact with each other in different ways and that determine how a lecturer develops the pedagogical design of a course (Radcliffe, Wilson, Powell & Tibbetts, 2009; Milkias, 2020). The three main teaching variables are related to the lecturer himself, the students and the content that is object of teaching and learning. It is clear that instructional factors have a strong mediating influence on the lecturer's performance, intervening in decisions about his/her teaching activities (Coe, Aloisi, Higgins & Elliot, 2014; Ceker & Keser, 2019).

The perception of instructional context by lecturers can also be called conditional knowledge. The strategic knowledge of the lecturer may refer, among other possible factors, to the knowledge of himself or the knowledge of other participants in the educational situation (mainly other students), the educational institution where he teaches, curricular issues or circumstances that influence their teaching (e.g., space, time or material resources). The strategic knowledge of the university professor can influence different moments of the teaching of a professor (Weimer, 2008; Damy & Plascencia, 2020). The basic element of the education system is teachers, and the success of the system is closely related to the features that teachers have. Effective teachers are accepted as teachers who are sufficient in terms of general culture, have the necessary knowledge and skills in their fields and also equipped with the knowledge and skills of teaching profession. It is essential to have knowledge of the field for teaching profession. With the field domination, it is inevitable to have the qualifications that have raised itself in the general culture and that contribute to the students' upbringing in this direction. While students define effective teachers, they also place great value on the general teaching competencies of teachers. They evaluate using various teaching strategies and making good use of communication while doing these in effective teacher behaviour. The regulation of teaching situations by the teacher is important in terms of correct planning of how teaching objectives will be gained to students. When preparing students to learn, it is important to make the right decision about how to transfer information to the students about the behaviours desired to be acquired, using which method, strategy and tools (Bichi, Suleiman & Ali, 2019).

Time is constantly changing. What is expected from teachers in this wind of change is that they constantly renew themselves and adapt to the changing time because the 21st century is the age of using information. To use information, teachers whose job is to 'change behaviour' change themselves according to time, master their fields and develop their general culture, and share this with their students will be the main indicators affecting the quality of educational services. When the issue of showing or performing effective teaching features in terms of the opinions of the lecturers is evaluated, the lecturers state that they show the majority of the behaviours 'generally' or that they are 'quite sufficient' in these behaviours.

The purpose of this research is to identify the perception of the university professors of the conditions of the instructional context that exert more influence in the decision-making on the design of their teaching.

The specific objectives of this research are as follows:

1. To know what specific didactic aspects influence the decision-making of lecturers on the design of teaching.

2. To know the factors of the instructional context that the lecturers have more into account to design the teaching.

3. Identify possible significant differences in the evaluation of each factor in relation to gender, age, years of teaching experience and the level of studies where the lecturer teaches (degree, master or doctorate).

2. Methodology

The study carried out is descriptive and exploratory, and therefore, it is not necessary to seek representativeness in the sample. Taking into account the difficulty of obtaining representative samples in this and other segments of the teaching population, an incidental sample has been used, knowing the limitations that this represents to arrive at relevant conclusions. Although the results and conclusions cannot be generalizable to the population under study, contributions can be taken into account due to the total number of lecturers who have responded. The sample of this study is composed of lecturers that fundamentally impart their teaching in the studies Chemical Engineering at the University of La Laguna.

The data collection was done through a questionnaire specifically created for this study. This questionnaire was reviewed and completed by researchers taking into account the conditions of the instructional context identified.

The question that arose to the participants was:

'Indicate the extent to which you take into account each of the following aspects to make decisions about how to teach your classes'.

Each item has five possible response categories:

1) Rarely true in my case;

2) Sometimes true;

3) About half the time;

4) It is frequent, in my case; and

5) Almost always true.

The lecturers of the sample were contacted through the second author by sending a message to the personal mailbox of the email of the university of the participating Lecturers. In this message, he invited to participate in the research by filling an online questionnaire which was accessed through a link inserted in the message itself. The online version of the questionnaire has been answered anonymously by the lecturers of the sample between the months of September 2017 and October 2017. The online survey was created through a specific computer program (free access to: www.limesurvey.com).

3. Results

In this section, the findings of the research are given. Instructional aspects that influence in the making of educational decisions, factors of the instructional context that affect the design of teaching and differential characteristics in factor assessment are explained.

Instructional aspects that influence in the making of educational decisions

The two aspects that are most taken into account by lecturers are the self-precept of mastery and the taste for the subject.

They indicate three more aspects, two related to the type of content of the subject (conceptual, procedural or values, or theoretical or applied and professional) and one related to the experience of teaching a course.

The content of schools and educational practices carries stereotypes about gender roles in society to students through secret or open messages. These messages direct children to behaviours that comply with traditional gender roles, and define the criteria and limit of success for women and men. School students are shaped both through standardised learning situations and by means of codes of conduct, classroom arrangements and informal teaching methods applied by teachers. On the contrary, the aspect that lecturers declare to have less into account when deploying their teaching is the sex of the students.

Factors of the instructional context that affect the design of teaching

We have named these six factors as follows:

Factor 1: CONT. Content, subject, lecturer and students.

Factor 2: INN. Teaching innovation and educational resources.

Factor 3: DISE. Course design.

Factor 4: P_EST. Attitude of students.

Factor 5: C_EST. Characteristics of students.

Factor 6: PROF. Lecturer-subject relationship.

The results show that, by contrast, the PROF factor obtains an average of more than 4, which means that the average is taken into account by lecturers between 'frequently' and 'almost always'.

It follows the factors CONT, P_EST and DISE, which obtain means situated between 'half of the time' and 'often'.

Finally, the INN and C_EST factors score below 3, meaning 'less than half the time'.

Differential characteristics in factor assessment

The teaching and learning process is one of the most difficulties to examine in an educational program. In particular, a clear analysis of classroom interaction will allow many unsolvable problems in teaching and learning to be solved. The basic elements of the teaching and learning process are teachers and students. In fact, the whole process is based on the transfer or sharing of certain content in line with the predetermined goals. As a result, when a desired product is obtained, it is stated that teaching and learning process is effective. Perhaps, the most critical element in this process is knotted on the process. Good management of this process is possible by making the course design healthy. It is seen that the relationship between the proficiency level of the instructor and the course design is extremely important. The results show that the higher the level of lecturer qualification, the more attention is paid to the aspects of the course design (number of students per class, adequate classrooms and need to agree on teaching with other lecturers). It can be said that the rapid changes in information and technology cause the information gained by the individual educational institutions to lose its validity in a short time. In the information age, where knowledge is considered as the greatest capital and knowledge is considered as the greatest power, the need for learning is constantly increasing, and the need to add new skills to the acquired skills arises.

In the literature, it was emphasised that the higher education institutions are important in raising individuals with the necessary knowledge and skills for lifelong learning and that lifelong learning is an

integral part of higher education. It is possible to say that universities have an important role in acquiring lifelong learning skills. However, first of all, it is necessary to take measures to determine the lifelong learning competencies of the instructors and to eliminate their deficiencies. It is seen that in today's societies, where information is constantly changing, it is important to obtain information and to produce information; individuals with lifelong learning skills who can take responsibility for lifelong learning are needed. It can be said that factors affecting the teaching process such as the number of students per class, sufficient classes and agreement with other lecturers on teaching are among the problems of faculty members who have adopted lifelong learning.

4. Discussion and Conclusions

The information age we are in leads the societies to become information society. Information society requires knowledge production and qualified people. In the information age, it is the duty of universities to follow fast technological and scientific developments, to produce information and to assist the society in adapting to this rapid change. In universities, qualified lecturers are required to fulfil the functions of qualified teaching, research and knowledge generation. It is of great importance that faculty members are satisfied with their work and life in general.

As we have commented, this research has set out to achieve three objectives: (a) To know what specific didactic aspects influence the decision-making of lecturers on the design of teaching, (b) to know the factors of the instructional context that lecturers take into account the design of their teaching and (c) identify possible significant differences in the assessment of the lecturers of each sample according to the variables of gender, age, years of teaching experience, level of lecturer training and level of education in where he teaches (degree, master or doctorate).

The results obtained related to the first objective show that the great majority of the analysed aspects obtain a score higher than 3 (more than half the time), which means that university lecturers take into account a large number of conditions of the context when making decisions about their teaching. The fact that university professors can take into account six groups of different instructional factors when making decisions about their teaching is one more reason to justify the great complexity of teaching in higher education.

In addition, we emphasise the correspondence that can be established between the results obtained (items with higher average related to the lecturer, subject and students) and three of the teaching approaches that Prosser and Trigwell (2006) indicate that they can be adopted by university professors: Centred on the lecturer, focused on the acquisition of content and focused on the student's learning process. In relation to the second objective, the six factors identified draw a much more complete picture than was hitherto observed with respect to the conditions of the instructional context that had been treated in the previous studies. The identification of these six factors will be of great importance to obtain a more complete definition of the professional identity of the university lecturer.

Finally, we also find that the six conditions of the instructional context are taken into account by most of the sample of university professors with hardly any distinctions between subgroups. The results obtained would provide empirical evidence to a possible future research hypothesis, which would indicate that the lecturer's sex, educational level and educational level (degree, postgraduate or doctorate) where teaching is taught could be the three main factors that influence that a university lecturer change the usual didactic design.

We also want to indicate two relevant limitations of this work. In the first place, we stress once again that, despite the obvious interest of the results obtained, we have developed a descriptive and exploratory study, without representation in the sample, and therefore we cannot generalise our conclusions. And, second, we find that although focusing on the conditions of an instructional nature has allowed us to go much deeper into this specific aspect, there are other sets of factors that would

need to be taken into account in future work. We are referring to characteristics of culture, society or university institution that can also have a great influence on the way the lecturer designs his teaching. There are pending future challenges to address within the conceptual framework of the identity of the university professor and the didactic and instructional factors that may affect his teaching. We believe that in the short term the main challenge would be to know the influence of each of these factors in the decision-making of lecturers, which would mean knowing when each factor is taken into account, what educational decisions are affected, and what is the result of the decision process in the teaching of the lecturer when taking into account a contextual factor or another.

References

Bichi, A., Suleiman, A., & Ali, H. (2019). Students' achievement in mathematics: Analysing the influence of gender and school nature. *Contemporary Educational Researches Journal, 9*(3), 50-56. https://doi.org/10.18844/cerj.v9i3.4293

Bichi, A., Suleiman, A., & Ali, H. (2019). Students' achievement in mathematics: Analysing the influence of gender and school nature. *Contemporary Educational Researches Journal, 9*(3), 50-56. https://doi.org/10.18844/cerj.v9i3.4293

Ceker, E., & Keser, H. (2019). Research study trends in web-supported evaluation tools for assessing inspectors, teachers, and students. *Contemporary Educational Researches Journal, 9*(1), 38-55. https://doi.org/10.18844/cerj.v9i1.3736

Coe, R., Aloisi, C., Higgins, S., & Elliot, L. (2014). *What makes great teaching? Review of the underpinning research.* London: The Sutton Trust.

Damy, A., & Plascencia, M. G. L. (2020). Interdisciplinary block of learning challenges. Contemporary Educational Researches Journal, 10(1), 21-27. https://doi.org/10.18844/cerj.v10i1.4611

Fanghanel, J. (2007). *Investigating university lecturers' pedagogical constructs in the working context*. England: The Higher Education Academy.

Feyisayo, D., Kareem, A., & Oluwasegun, P. (2019). Effects of English and Yoruba interpreted biology picture label as an advanced organiser on students' learning outcomes in senior secondary schools in Ife East local government area. *Contemporary Educational Researches Journal, 9*(3), 57-65. https://doi.org/10.18844/cerj.v9i3.4285

Henard, F., & Leprince-Ringuet, S. (2008). *The path to quality teaching in higher education.* Paris: OECD.

Keser, H., & Semerci, A. (2019). Technology trends, Education 4.0 and beyond. *Contemporary Educational Researches Journal, 9*(3), 39-49. https://doi.org/10.18844/cerj.v9i3.4269

Milkias, E. (2020). Action research's instructional impacts: Article review. *Contemporary Educational Researches Journal, 10*(1), 1-6. https://doi.org/10.18844/cerj.v10i1.4608

National University of Ireland Galway. (2014). *Learning, teaching and assessment strategy*. Available from: http://www.nuigalway.ie/media/celt/files/revised-LTA-2012.pdf

Oyetoro, O., Grace, O., & Adesina, B. (2019). Interest and Learning Approaches as Discriminating Factors in the Performance of Senior Secondary School Students in Economics. *Contemporary Educational Researches Journal, 9(*1), 1-13. https://doi.org/10.18844/cerj.v9i1.3873

Prosser, M., & Trigwell, K. (2006). Confirmatory factor analysis of the approaches to teaching inventory. *British Journal of Educational Psychology*, 76, 405-419.

Radcliffe, D., Wilson, H., Powell, D., & Tibbetts B. (2009). *Learning spaces in higher education: Positive outcomes by design.* Brisbane: University of Queensland.

Tasar, H. (2019). Financing From Demand-Side in Education. *Contemporary Educational Researches Journal, 9*(1), 14-19. https://doi.org/10.18844/cerj.v9i1.4019

Enrique Rosales-Asensio (2020). The effects of contextual factors on universitaria lecturer's performance. *Contemporary Educational Researches Journal. 10*(2), 60-67. DOI: 10.18844/cerj.v%vi%i.4731

Taspinar, F. (2019). The An evaluation of school directors' and teachers' views about supervisors' communication skills. *Contemporary Educational Researches Journal, 9*(2), 21-38. https://doi.org/10.18844/cerj.v9i2.3970

Weimer, M. (2008). *Effective strategies for improving college teaching and learning.* Madison: Magna Publications.

Yavuz, F., & Kurt, F. (2019). Developing young learners' vocabulary retention through adapted Turkish educational games in EFL environment. *Contemporary Educational Researches Journal, 9*(3), 66-73. https://doi.org/10.18844/cerj.v9i3.4301