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## A PROPOSAL TO IMPROVE YOUR EVALUATION SKILLS

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In this third year of our Journal JOTSE our main challenge is to publish experiences related to evaluation of competences and new strategies within the university classroom. As we have mentioned in the past, we understand competences as the combination of knowledge, skills and attitudes necessary to perform a task efficiently. One of the key skills for the professional world of engineers is ethics. In general, professional ethics instruction is introduced to students (around the world) using a case study approach. That is why in our next issue, the first article focus on how ethics can be taught through the use of cases studies. ETHICS IN ENGINEERING: STUDENT PERCEPTIONS AND THEIR PROFESSIONAL IDENTITY DEVELOPMENT by Brad Stappenbelt.

The author/s used student surveys and focus groups to examine the personal ethical perceptions of engineering students. Their findings seem to indicate that students generally gain their professional identity from relatives and colleagues. Thus, they claim that their professional ethics tend to be mostly an extension of their personal ethics. However, they also found that exposing learners to graphical presentations of spectacular failures and the sobering stories of their repercussions, in the context of the solid framework provided by the tenets of a code of ethics, may leave a lasting impression on them. As a result, ethics instruction is seen as a teaching device that can only reinforce students' inclination to act ethically and can provide them with encouragement to act on their beliefs.

The second article of this edition ENHANCEMENT IN EVALUATING SMALL GROUP WORK IN COURSES WITH LARGE NUMBER OF STUDENTS. MACHINE THEORY AT INDUSTRIAL ENGINEERING DEGREES by Lluïsa Jordi Nebot, Rosa Pàmies-Vilà, Pau Català Calderón and Joan Puig-Ortiz proposes a new mentoring evaluation approach. These new approach has been developed to support the work of teaching staff and to include students in the evaluation process. These new way to evaluate was introduced by the author/s in response to the significant increase on student numbers in their classes. The results of the pilot test results used in their study showed high levels of student and teacher satisfaction, as well as that they met the proposed educational objectives of their course.

How to help learners to develop autonomous learning competence in the context of teaching "Continuum Mechanics" is also discussed in one of the papers included in this issue, <u>SELF-ASSESSMENT EXERCISES IN CONTINUUM MECHANICS WITH AUTONOMOUS LEARNING by Jordi Marce-Nogue, Lluis Gil, Marco A. Pérez and Montserrat Sánchez</u>. The article documents how a set of exercises can be generated to improve the autonomous learning through the effective use of a virtual platform, learning activities with a student "self-assessment" component, and the strategic use of clear assessment criteria included in the rubrics developed by teachers.

Moreover, another article THE ACCEPTANCE OF MICROBLOGGING IN THE LEARNING PROCESS: THE MBAM MODEL by Francisco Rejón-Guardia, Juan Sánchez-Fernández and Francisco Muñoz-Leiva advocates that Microblogging social networks (µBSNs) provides the opportunity to communicate worldwide while using a small number of characters. However, this is described as an apparent limitation that forces users to share only essential information when linking to the world with which they interact. The author/s argue that these platforms can serve to motivate students by narrowing the physical and psychological distances separating teachers and students, thus increasing their confidence and engagement in the learning process. That is why JOTSE stands for the incorporation of new technologies in the classroom, as the use of them, as documented in this issue, can support the development of different learning skills in interesting and innovative ways. Further on, it has the potential to narrow the distance between teachers and students, and to bring them together into

the same educational paradigm.

In the last article of this issue, <u>THE STUDENTS' PROCEDURAL FLUENCY AND WRITTEN-MATHEMATICAL EXPLANATION ON CONSTRUCTED RESPONSE TASKS IN PHYSICS by Romiro Gordo Bautista</u>, the author proposes an innovative model to analyze the procedural fluency and written-mathematical explanation to select constructed response tasks of students in Thermodynamics problems. And they conclude that the students' procedural fluency is dependent to their mathematical ability, both algebraic and trigonometric, while their written-mathematical explanation is associated to their English ability.

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