

#### SEVENTH INTERNATIONAL CONFERENCE ON TECHNOLOGICAL ECOSYSTEMS FOR ENHANCING MULTICULTURALITY

THE USE OF TWITTER AS A TEACHING-LEARNING AND SCIENTIFIC DISSEMINATION TOOL IN THE FOOD SCIENCE AND TECHNOLOGY DEGREE

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## **OBJETIVES**

- Promote the critical thinking of students and the development of their own ideas based on theoretical concepts.
- Encourage students to find a practical application based on theoretical framework.
- Improve students' communication skills.
- Integrate the use of social networks in the classroom.
- Improve the degree of motivation and participation in the classroom.
- Disseminate information on current issues in the Food Science and Technology field, with scientific rigor.

# METHODS

- The teaching innovation group DOCITECAL created the Twitter account: **@docitecal**.
- In the subject "Packaging Technology" taught in the 3<sup>rd</sup> year of the Food Science and Technology degree, 37 students were enrolled in the 2018-2019 academic year. Work pairs were randomized and each of them selected a theoretical item from those available in a list created on the Moodle platform.
- The students created 3 tweets for the selected topic and they also created a tweet for each of the visits made to

factories during the course. **#DOCITECALstuMOOC** was included in order to track the tweets.

- The tweets were corrected and evaluated based on the expression of the concepts, presentation and originality. This activity accounted for 10% of the final mark.
- A 29 closed-ended and 5 opened-ended satisfaction questionnaire was developed using the "Google forms" web tool and it was distributed among the students.

### RESULTS

DOCITECAL-ULE @docitecal · 16 mar. Seguramente cuando se te acaba el agua en la botella de plástico simplemente la rellenas. ¿Sabes que lo estás haciendo mal? En este enlace tienes los pasos a seguir para evitar la contaminación microbiana: bit.ly/2ucFq4W @gominolasdpetro #DOCITECALstuMOOC #Infórmate



**DOCITECAL-ULE** @docitecal · 5 mar. ¿Sabías que en el proceso de elaboración de los envases de vidrio, utilizando vidrio reciclado, se alcanzan temperaturas entre los 1500 y 1600 °C, utilizando con ello el 100% del material del antiguo envase? #DOCITECALstuMOOC bavidro.com/es/processo pr... Table 1. Main results of the questionaire distributed among the Food Science and Tecnology students about the teaching-learning experience using Twitter.

	Students ´opinion (%)						
ltem	Totally agree	Agree	Neutral	Disagree	Totally desagree		
Twitter as learning-teaching tool	4.76	57.15	28.57	9.52	0.00		
Twitter as teaching support medium	9.52	71.43	4.76	14.29	0.00		
The format helped to synthetize the concepts learned	28.57	38.12	19.05	9.50	4.76		
Twitter was useful to synthesize and express the							



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Figure 1. Tweets created by the students.



information of the topics taught and factories visits	9.52	57.15	19.05	9.52	4.76
Twitter was not useful in the subject	0.00	4.76	19.04	38.10	38.10
Twitter helped to deepen the study of the topics	9.52	38.10	18.00	17.76	16.62

The average mark of the students in this activity was 7.67 out of 10. The maximun mark observed was 9.90 and the minimun was 4.00.

The 95.2% of the students would like to follow the @docitecal twitter account to check their classmates' activities in other subjects of the Food Science and Technology degree. Therefore, the authors will continue using Twitter in other subjects of the degree.

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