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Journal Name:	<u>Journal of Advances in Mathematics and Computer Science</u>
Manuscript Number:	2015_JAMCS_16325
Title of the Manuscript:	ASSESSMENT OF STUDENTS' ABILITY TO APPLY CALCULUS CONCEPTS TO ENGINEERING PROBLEMS.
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The question about the relationship between the teaching of realistic applications to Engineering and learning of Calculus is relevant. The antecedents of research on this issue that are quoted in this paper are recent and provide an adequate theoretic framework. The investigation is not based on an experimental design since there is no control group, and Calculus Proficiency Test (CPT) and Calculus Application Test (CPA) cannot be used as pre-test and post-test because there is no intention of testing any didactical	All observations and issues raised are noted and necessary revisions and updates are provided and are highlighted in the updated manuscript.



SDI Review Form 1.6

	intervention. These issues must be revised. Also, the attitude attributed to students cannot be inferred from their performing in test as CPT or CPA, but could be observed along the development of the tasks, or in other instances. However, the results obtained about the correlation between the scores in CPT and CPA, and the significant difference between these tests that shows that applications are more difficult than the use of algorithms, are important, because they raise the question about which teaching strategies help students to improve their skills to apply Mathematics. Finally, it's remarkable that the construction of CPA's items is based upon the idea of presenting an application which solution requires the algorithm carried out when solving the corresponding item of CPT. This is one of the strengths of this work, since teaching oriented in this way could be motivating for students.	
Minor REVISION comments	It would be useful that results of statistical analysis of data were presented in a table, indicating which test is being used, levels of signification and values of parameters.	Necessary tables and values provided as suggested.
Optional/General comments	Since at least some of the items of CPT may be paired with some of CPA, it would be of interest to show some cases where performance of students was similar and other where it was not so, and try to explain this difference. It is also interesting to explain on the basis of what evidence are made the statements about the attitudes of student.	Suggestions are noted and necessary explanations were made.



SDI Review Form 1.6

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i><u>(If yes, Kindly please write down the ethical issues here in details)</u></i>	