

International Interdisciplinary Congress on Renewable Energies, Industrial Maintenance, Mechatronics and Informatics Booklets



RENIECYT - LATINDEX - Research Gate - DULCINEA - CLASE - Sudoc - HISPANA - SHERPA UNIVERSIA - Google Scholar DOI - REDIB - Mendeley - DIALNET - ROAD - ORCID - V|LEX

Title: Strategies for early detection of students at risk of dropping out

Authors: LEYVA-MALDONADO, Yadira and ESQUIVEL-SALAS, Abraham

Editorial label RINOE: 607-8695

VCIERMMI Control Number: 2023-02

VCIERMMI Classification (2023): 261023-0002

@Rinoe México

Pages: 05

RNA: 03-2010-032610115700-14

RINOE - Mexico

Park Pedregal Business. 3580-Adolfo Ruiz Cortines Boulevard – CP.01900. San Jerónimo Aculco-Álvaro Obregón, Mexico City Skype: RINOE-México S.C. Phone: +52 | 55 | 260 0355 E-mail: contact@rinoe.org Facebook: RINOE-México S. C.

Twitter:

www.rinoe.org

Mexico Peru
Bolivia Taiwan
Cameroon Western
Spain Sahara

Introduction

- Dropout in Higher Education Institutions is a widespread phenomenon
- The goal of this study is to know the factors that allow identifying at an early stage, students who are at risk of dropping out
 - Detecting students at risk began by monitoring their academic performance.
 - The results are promising, since they allow generating a profile of the student at risk of dropping out

Proposal

- The Instituto Tecnológico Superior Zacatecas Norte has decided to make an effort to apply the "prevention and intervention" of Stăiculescu and Ramona (2019).
- An academic tracking of the initial curses students was carried out
- The number of **dropouts by study program was documented**, as well as the **reason for dropping out**, in order to determine if it was due to poor academic performance, or due to factors that are part of the institutional perspective.

Results

- The students who dropped out of the study programs had a **deficient rating from high school**.
- About 80% of the dropouts were due to the fact that the Instituto Tecnológico Superior Zacatecas Norte was **not considered their first option to continue their professional studies**. Finally, they are students who enter temporarily hoping to be accepted at another institution.
- About 90% of the students who dropped out **failed on study programs in the first months of the course**.

Conclusions

- Based on the academic tracking results, it is necessary to establish a traffic light strategy that allows the dropout phenomenon to be contained.
- The analogy with the traffic light allows us to determine that the green color is a student profile indicator with low probability of dropping out.
- On the other hand, it is necessary to attend to those students who, upon entering to high school, are already labeled in yellow, because they have a low-grade rate
 - The Tecnológico Nacional de México has a **tutorial** program whose purpose is to strengthen student profiles as an **empowering mechanism**, which allow preventively addressing phenomena such as failure, lag, and desertion.
 - The tutoring program can be used as a **containment mechanism**, with the aim of dissuading desertion. Given that the available number of tutors is insufficient, the tutor assignment will have to be based on the high school graduation grades, prioritizing tutoring to those students whose grades are less than 80.
 - It is crucial that career managers implement a **strong tracking** of exams failed.

References

- I. Stăiculescu, C., & Elena Ramona, R. N. (2019). University dropout. Causes and solution. *Mental Health: Global Challenges Journal*, 1(1), 71–75. https://mhgcj.org/index.php/MHGCJ/article/view/29/22
- II. Fernández, N., & Pérez, C. (2016). La educación superior latinoamericana en el inicio del nuevo siglo: Situación, principales problemas y perspectivas futuras. *Revista Española de Educación Comparada*, 27 (2016), 123-148. http://dx.doi.org/10.5944/reec.27.2016.15044
- III. Rumberger, R. (2012). *Dropping Out: Why Students Drop Out of High School and What Can Be Done About It.* Cambridge, MA and London, England: Harvard University Press. https://doi.org/10.4159/harvard.9780674063167
- IV. Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, https://doi.org/10.1787/5km4m2t59cmr-en.
- V. Goldrick-Rab, S. (2020). "Paying the Price": The Costs of a College Education and the Realities of Broken Dreams. *Explorations in Adult Higher Education*, 121.
- VI. Seidman, A. (2005), Minority student retention: Resources for practitioners. New Directions for Institutional Research, 2005: 7-24. https://doi.org/10.1002/ir.136
- VII. Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. US Department of Education, Office of Educational Research and Improvement.
- VIII.Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. US Department of Education.
- IX. Ferreyra, M.; Avitabile, C.; Botero Álvarez, J.; Haimovich Paz, F. y Urzúa, S. (2017). Momento decisivo: la educación superior en América Latina y el Caribe. Resumen. *Banco Mundial*. Licencia: Creative Commons Attribution CC By 3.0 IGO.



© RINOE-Mexico

No part of this document covered by the Federal Copyright Law may be reproduced, transmitted or used in any form or medium, whether graphic, electronic or mechanical, including but not limited to the following: Citations in articles and comments Bibliographical, compilation of radio or electronic journalistic data. For the effects of articles 13, 162,163 fraction I, 164 fraction I, 168, 169,209 fraction III and other relative of the Federal Law of Copyright. Violations: Be forced to prosecute under Mexican copyright law. The use of general descriptive names, registered names, trademarks, in this publication do not imply, uniformly in the absence of a specific statement, that such names are exempt from the relevant protector in laws and regulations of Mexico and therefore free for General use of the international scientific community. VCIERMMI is part of the media of RINOE-Mexico., E: 94-443.F: 008- (www.rinoe.org/booklets)