

Review Article

How to Organize Resources for Higher-Level Teachers in the Faculty of Medical Sciences

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Abstract - The volume of available resource activities, not only present on the web but also produced in-house, demands that they be ordered to facilitate quick viewing. The members of the Simulation Software and Mobile Applications research group have surveyed and analyzed a large amount of resources. The objective was to examine the degree of acceptance by the teaching staff of a privately managed Faculty of Medical Sciences in the city of Mar del Plata, Argentina, 2023, of a Google Site that presents software listings, free Apps, Podcast of clinical cases, Videos, Recommended news.

Keywords - Google Site, Software, Mobile applications, Simulations, New technologies.

1. Introduction

The organization of the resources that the participants of a research group have sought, analyzed, and evaluated, together with those prepared by the members, constitutes a challenge to achieve a good visualization for the teaching staff of the Faculty of Medical Sciences in the form of an intranet. That is why Google Site is recognized as a tool that provides great benefits in its use[1]. This is an easy-to-use alternative that does not require complex programming preparation. “Its design and construction is intuitive, friendly, enjoyable, and easy to handle.” But when deciding what to put in this tool, an exchange is generated in the group of I work until I agree on what to share in it. The authors emphasize that virtual simulators have played a fundamental role in medical education and that this role has been enhanced since 2020 during the COVID-19 pandemic.[2] Another aspect to consider is that many authors refer to interdisciplinary as an unavoidable path in current scientific development, which, faced with the demands of society, seeks to solve problems. [3] Interdisciplinary, critical thinking, creativity, and active and collaborative work have been the backbones in the formation of this research group, which began as such at the end of 2017. It aims to generate spaces that lead to a critical, respectful, joint reflection that enables progress and development in different contexts, enhancing the skills and competencies of its actors. In this sense, opinion-sharing software, wikis, and shared documents gain value. The objective of this study was To examine the degree of acceptance by the teaching staff of a privately managed Faculty of Medical Sciences in the city of Mar del Plata, Argentina—2023, of a Google Site.

It presents a list of free software, mobile applications, podcasts of clinical cases, videos, recommended news, and free resources available on the web. Faced with the paradigm shift that is perceived in the training of professionals and which is accelerating, there is a need for on going training for those responsible for these students. Universities must face the challenges that arise, and among them, the impact of new technologies in different contexts is one of the most topical. [4] Simulation dates back to historical anatomical practices. Its implementation is currently considered of great relevance due to the multiple advantages identified with respect to the acquisition and/or strengthening of skills, in addition to the speed of student feedback. [5]

The search, analysis, and evaluation of simulation software, mobile applications, design of models using 3D printers, and artificial intelligence are some of the diversity of alternatives that this research group proposed with a view that involves approaching the reality to be studied from an interdisciplinary perspective. Five types of simulators are identified. Low-tech simulators simulate patients with actors; screen simulators, which are software that allow similar diverse experiences; complex task simulators and those known as high-fidelity simulators. [6] The group specializes in the search, analysis, and evaluation of free simulation software mobile applications, which are classified as screen simulators. However, how can we make them visible in an easily accessible space for teachers? A Google Site makes this possible, and many benefits are recognized in the features that are identified. [7].



Table 1. Resources included in the Google Site

List of free Simulation Software.
Videos explaining how to use this software.
List of free mobile applications available with explanations about the strengths and weaknesses of each of them.
Signatures that suggest their use in each of them.
Clinical Case Podcast.
Original videos of clinical cases.

2. Materials and Methods

The research was conducted as a descriptive cross-sectional study with a non-probabilistic convenience sample of 44 teachers from the Faculty of Medical Sciences from four careers, who were sent an online form combining open and closed multiple-choice questions using a 5-point Likert scale. A specially adapted informed consent form was attached to the form.

3. Results and Discussion

After analyzing the alternatives offered on the web, a Google Site was chosen to store and classify the selected material. This space made it possible to store and organize the material with labels designed by members of the research group in the manner of a web portfolio where, for example, pressing the button called APP (Mobile Applications) opens a table with a list of the same indicating their characteristics, in which careers associated with Medical Sciences, professorships and contents of the same could be used, in which they could be used. Other proposals are also stored, visible with labels such as works presented at conferences and other academic events: Case studies, Software, a Google Site designed especially for the prevention of breast cancer, Sites of interest, podcasts on clinical cases, and videos. The Faculty of Medical Sciences of a privately managed University in the city of Mar del Plata, Argentina, is made up of 5 careers, among which are identified: Medicine, Dentistry and Nutrition, Kinesiology and Physiatry, and Degree in Speech Therapy. In this experience, the form is sent to four careers.

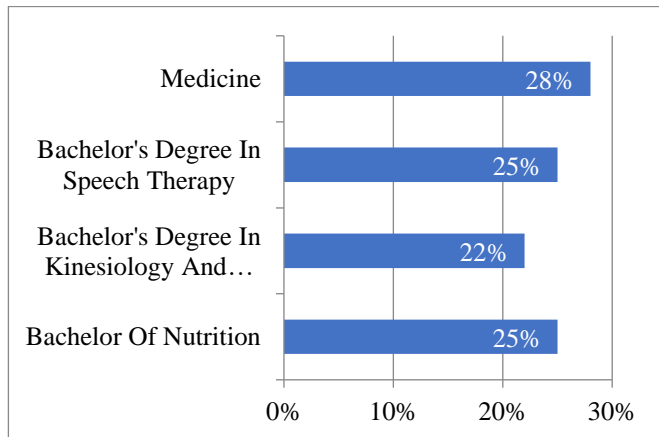


Fig. 1 Percentage of professors who responded to the survey according to career path

The submitted online form presents an introductory paragraph about what a Google Site is and asks if they have used one.

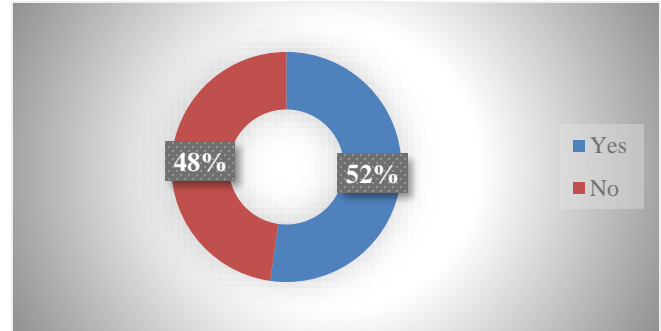


Fig. 2 Percentage of professors who have used a Google Site 52% indicated that they had used one

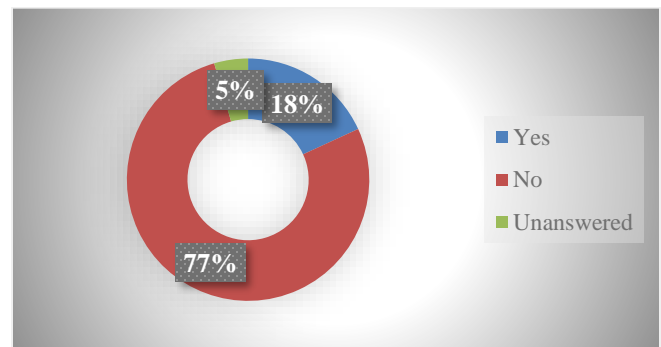


Fig. 3 Percentage of professors who have designed a Google Site

Only 18% say yes, and 5% do not answer this question. When asked about the benefits they recognize from a Google Site, it can be inferred that professors have information about them. However, the percentage indicating that they have designed one is very low, as shown in Figure 2. Regarding benefits, 81.3% indicate that it allows them to store information, and 71.9% organize and sequence activities and resources.

Table 2. Benefits that are recognized

Organizes both activities and resources	71,90%
Insert videos and recordings	56,30%
Easy access	53,10%
Details of what happens in activities	37,50%
Allows to analyze user characteristics	46,90%
Save information	81,30%

Subsequently, the degree of usefulness of the contents selected to be offered on the research group's Google Site is asked, considering the following aspects, using a 5-point scale ranging from extremely useful to not useful at all. In addition, a percentage of respondents did not answer.

The resources considered most useful are the list of simulation software, mobile applications, and clinical cases, both those displayed in multimedia presentations and podcasts.

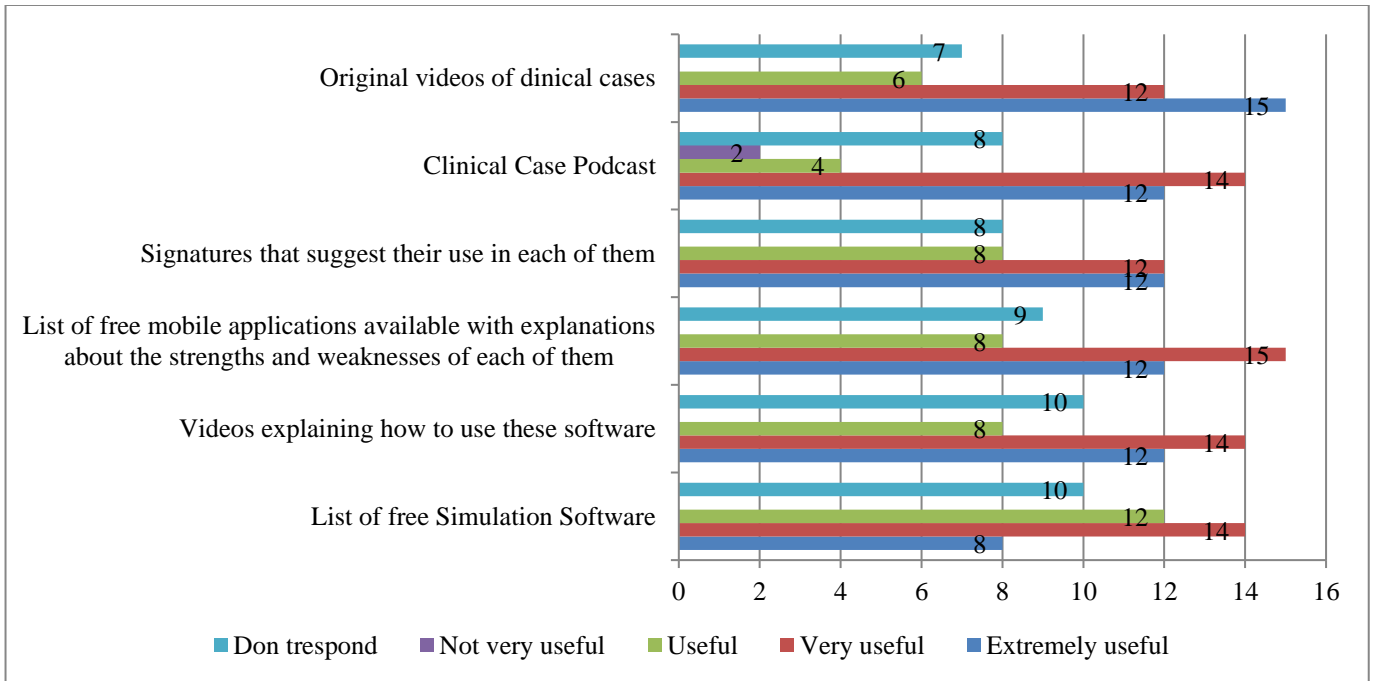


Fig. 4 Level of usefulness that indicates the following resources that are included in the Google Site designed

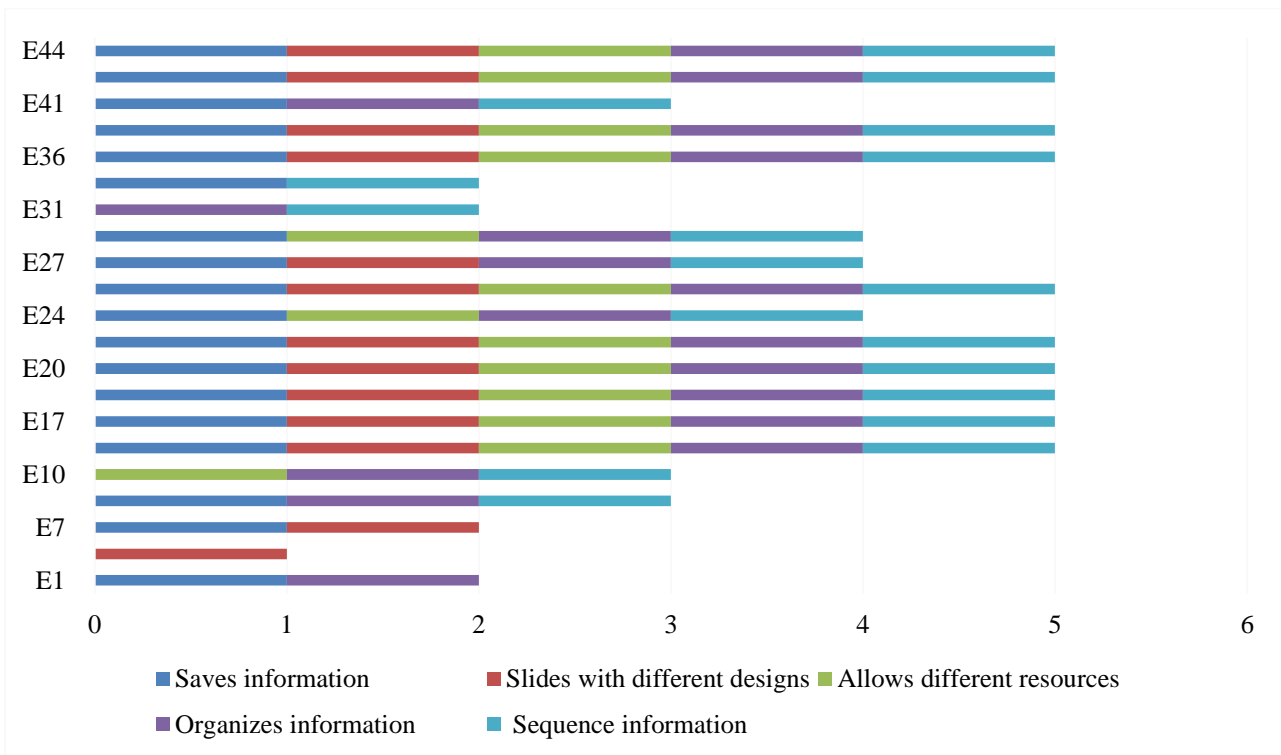


Fig. 5 Aspects highlighted by those teachers who indicated using the Google Site

Among the aspects most frequently highlighted by Google Site users, the first one stands out: saving information, allowing different resources, and sequencing information. There are recognized benefits provided by this tool, which is easy to access, free of charge and, above all, is not complex to

use (8). Moreover, without a doubt, during the COVID-19 Pandemic, its use has been enhanced, with its effectiveness being evaluated in some experiences. (9)

Conclusion

Higher education institutions must prioritize not only knowledge management but also innovation. This is where New Technologies have an important role, allowing accessibility to different resources available on the web. In addition, the different communication channels that have

become visible in recent years to promote exchange between the teaching team and students are highlighted.

Acknowledgments

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