Use of the social network Instagram focused on the presentation of Course Completion Monographs

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Abstract The experience of using the Instagram platform for creation and dissemination of knowledge is reported, focusing on the presentation of Course Completion Monographs (TCC) by undergraduate dental students. A descriptive report of the diffusion of content on the social network Instagram was performed, on the profile @powerpoint.tcc. The content was produced by an undergraduate dental student, with the support of students and professors involved in scientific and academic presentations. Frequent posts were made addressing several topics related to the presentation of TCC. Several materials were prepared in the form of posts, highlighting the use of PowerPoint software to create presentations; speech, posture and language; as well as information on presenting data in an attractive and interesting manner. The formats of posts were those available on the Instagram platform: feed posts, reels, story, videos on IGTV, besides lives on the account or partner accounts. The frequency of thematic posts was at least one at every two days. The evaluation of content reach and delivery was achieved by the metrics available in the social network application. There was great interest in the topic addressed, since scientific and academic presentations are common for undergraduate students. It was concluded that the practical experience of using the Instagram platform for creating and transmitting knowledge focused on TCCs proved to be extremely promising and purposeful.
Descriptors: Education, Dental. Scientific Communication and Diffusion. Social Networking.

El uso de la red social Instagram con foco en la presentación de Trabajos de Fin de Curso

Resumen Se relata la experiencia del uso de la plataforma Instagram en la creación y difusión de conocimiento, con foco en la presentación de Trabajos de Fin de Curso (TFC) por parte de estudiantes de pregrado en Odontología. Se realizó un relato descriptivo de la colocación de contenidos en la red social Instagram, a través del perfil @powerpoint.tcc. El contenido fue producido por un estudiante de pregrado en Odontología, con el apoyo de estudiantes y profesores involucrados en presentaciones científicas y académicas. Se realizaron publicaciones frecuentes abordando diversos temas relacionados con el tema presentación de TFC. Se prepararon diversos materiales en forma de post, destacándose el uso del software PowerPoint para la creación de presentaciones; oratoria, postura y lenguaje; así como información sobre cómo presentar los datos de forma atractiva e interesante. Los formatos de las publicaciones realizadas fueron los disponibles en la plataforma de Instagram: publicaciones en el feed, reels, story, videos en IGTV, además de live en la propia cuenta o en cuentas de compañeros. La frecuencia de publicaciones temáticas fue de al menos una cada dos días. La evaluación del alcance y entrega del contenido se obtuvo a través de las métricas disponibles en la propia aplicación de la red social. Hubo gran interés en el tema abordado, ya que las presentaciones científicas y académicas son comunes para los estudiantes de pregrado. Se concluye que la experiencia práctica del uso de la plataforma Instagram para la creación y transmisión de conocimiento con enfoque en el TFC demostró ser sumamente promisoria y propositiva.
Descriptores: Educación en Odontología. Comunicación y Divulgación Científica. Red Social.

O emprego da rede social Instagram com foco na apresentação de Trabalhos de Conclusão de Curso

Resumo Relata-se a experiência de utilização da plataforma *Instagram* na criação e

disseminação de conhecimento com foco na apresentação de Trabalhos de Conclusão de Curso (TCC) por acadêmicos de graduação em Odontologia. Foi realizado um relato descritivo da veiculação de conteúdo na rede social *Instagram*, por meio do perfil @powerpoint.tcc. O conteúdo foi produzido por uma acadêmica de graduação em Odontologia, com o apoio de discentes e docentes envolvidos em apresentações científicas e acadêmicas. Foram realizadas postagens frequentes abordando diversas temáticas relacionadas ao tema apresentação de TCC. Foram elaborados materiais variados em formato de posts, destacando-se o uso do *software* PowerPoint para a criação de apresentações; oratória, postura e linguagem; além de informações sobre apresentação de dados de forma atrativa e interessante. Os formatos das postagens realizadas foram aqueles disponíveis na plataforma *Instagram*: *posts* no *feed, reels, story*, vídeos no IGTV, além de *lives* da própria conta ou em contas parceiras. A periodicidade das postagens temáticas foi de pelo menos uma a cada dois dias. A avaliação de alcance e entrega do conteúdo foi obtida por meio das métricas disponibilizadas no próprio aplicativo da rede social. Observou-se grande interesse sobre a temática abordada, uma vez que as apresentações científicas e acadêmicas são habituais para os acadêmicos de graduação. Conclui-se que a experiência prática de utilização da plataforma *Instagram* para criação e transmissão de conhecimentos com foco nos TCCs mostrou-se extremamente promissora e propositiva.

Descritores: Educação em Odontologia. Comunicação e Divulgação Científica. Rede Social.

INTRODUCTION

The preparation and presentation of scientific works can be considered a challenging step for undergraduate students. The course completion monographs (TCCs), mandatory according to the National Curriculum Guidelines for Graduation in Dentistry[1], aim at creating a space for students to start in the scientific field, seeking not only to expand the knowledge acquired during graduation, but also to provide answers to some questions and serve as a guide for future research work.

However, the act of speaking in public, which is related to seminar activities, presentations in congresses and events, can trigger great stress for university students. These stressful manifestations of physical and emotional discomfort during public speeches are a reality among university students[2]. However, this challenge can be coped with and overcome, provided appropriate techniques and methods can aid in this training[3].

According to Consolaro (2011)[4], analyzing the perspective of sociologist Max Weber, the most difficult pedagogical task consists in exposing problems to allow a receptive mind, even inexperienced, to understand them autonomously. The greater the communicative and persuasive skills through which individuals perceive themselves, the lower the chances of being disturbed by the fear of public speech[2].

When analyzing the use of social networks as tools for practices in knowledge management, some authors observe that most teachers positively understand the importance of using and applying information and communication technologies[5]. These technologies are important in the educational process, acting as teaching and learning tools, diffusion and sharing of knowledge[5]. Within the interactive context between individuals, social networks can be understood as means of articulation, establishing communicative relationships and organizing themselves according to the way they relate or share interests[6]. The use of a social network as a tool in the teaching and learning processes should follow the premise of interaction between people who aim at a common sense of acquisition, sharing and construction of knowledge[6].

The new web technologies are redesigning and redefining the transmission and teaching of informational content, providing new and interesting opportunities for personalized and flexible dissemination, associated with a character of

sharing information of great importance[7]. Among these new possibilities for promoting the educational process, emphasis is given to social networks with a broad reach, such as Instagram. According to the *OmniCore Agency*, the total number of monthly active Instagram users already exceeds 1 billion, and Brazil is in third place in number of users[8].

To analyze if the growth in the use of the social network Instagram caused any changes in the pedagogical practices of teachers who use this technology, a systematic review was performed to identify scientific articles presenting information on the use of this social network in or out of the classroom, aiming at achieving a meaningful learning by the students[9]. After mapping publications, the authors identified a pedagogical intention for the use of the social network and a rise of possibilities of use in the learning process in a participative and collaborative manner[9].

Thus, the objective of this study is to report the practical experience of using the Instagram platform for the creation and dissemination of knowledge, focusing on the presentation of TCCs by undergraduate students.

EXPERIENCE REPORT

This study is characterized as an experience report and presents the detailed characteristics of experiences from the standpoint of narrators, without manipulating their data[10]. A descriptive report of the placement of content on the social network Instagram was performed, on a profile created specifically for that purpose - @powerpoint.tcc. The content was produced by an undergraduate dental student, with the support of other students and professors involved in scientific presentations, especially TCCs.

Several materials were prepared in the form of posts, especially PowerPoint software tips (Microsoft Corporation, Redmond, WA, USA) for creating presentations; speech, posture and language tips; as well as information on how to present data in an attractive and interesting manner. The post formats used the tools available on the platform, such as feed posts, which are characterized as posts and profile publications in chronological order and serve as a summary of the content produced. Reels, which are an Instagram feature for recording short videos. Stories, which allow publishing photos or videos to share moments and experiences that remain accessible for up to 24 hours. Videos on IGTV, an Instagram application that allows the creation of long videos up to 60-minute long, besides live video transmissions (lives) on the account or on partner accounts. The frequency was at least one post at every two days.

On Instagram, the format of feed posts (timeline) is the most used, being the initial platform. This usually delivers tips of all themes and can have up to 10 pages in each post, in this case receiving the post denomination "Carousel". The Reels format was used for faster and more objective tips, since it has a maximum time of 60 seconds per video. Longer videos posted in IGTV format provided longer and more complex explanations that could not be summarized in shorter posts.

The lives performed on the @powerpoint.tcc account were all in the format of conversation/interview with other content creators on the same topic. Some of the topics addressed were: "How to make a good presentation of the TCC?", "Presentation of the TCC", "How to make your presentation and the Board", "Scientific Presentation: the Board and the Student".

Evaluation of the reach and delivery of content was established using the metrics provided by the application, to measure the performance of publications, stories and everything related to the account movement.

Metrics exclusive of feed posts allow measurement of likes (number of likes per post); saves (number of saves performed); engagement, which is the total interactions of a publication, which for feed posts includes the sum of likes, comments and saves; the views of videos in the feed (number of views of the video); and, finally, the comments made per publication. These Instagram reporting metrics are important to improve the posts and provide the public with subjects of actual interest, thus providing quality content on the subject addressed and consequently promoting greater interaction and engagement.

The Instagram account was initially created at the end of November 2020, aiming at diffusing and transmitting knowledge about scientific and academic presentations, mainly for undergraduate students who need to present their TCCs, who may thus feel apprehensive and insecure with such important moment in academic life. Besides the selected target audience, this profile also reached graduate students, professors and presentation enthusiasts using the PowerPoint software.

The selection of content was based on the difficulties faced by this population, perceived by the account administrator, from creation of the TCC presentation script to the moment of questioning by the board. Among the themes, the following can be mentioned: 1) Visual identity (color palette; fonts; geometric shapes; images; icons); 2) Speech (script; posture; eloquence; voice tone; presentation training); 3) PowerPoint tips (software tools; how to use it); 4) Design and layout (how to make slides; combination of elements; design inspirations); and 5) Scientific content (how to present each element of an academic work) (Figure 1). Each of these content categories was alternated in the posts, so that the delivery of content was performed in a dynamic and non-repetitive manner.
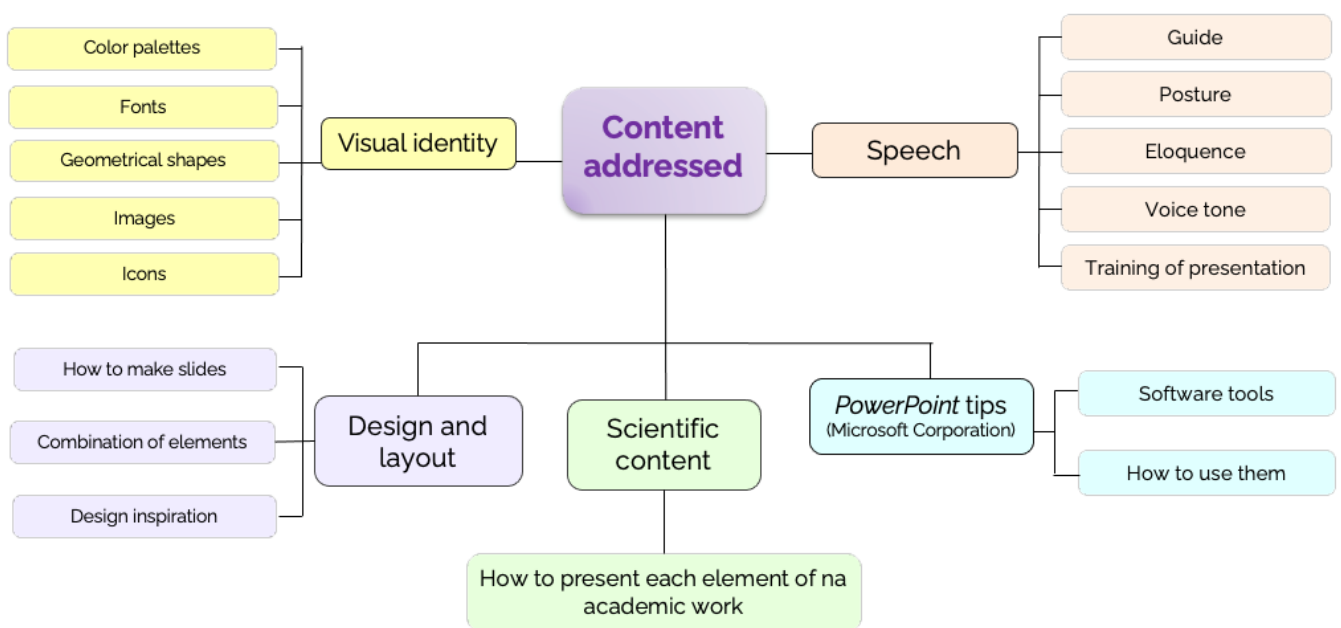

Figure 1. Codification flowchart with the subjects addressed.

In July 2021, it was observed that the Instagram account @powerpoint.tcc already had more than 3,300 followers (named as users of the social network who "sign up" and start to follow and receive posts of a given profile in their account). The reach added up to 2,823 accounts in a single post and 271 "saves" of the same post (Figures 2 to 4). The metrics available on the Instagram platform showed a growing interest in the subject, besides a noticeable engagement of the target audience in the interactions (likes, comments and shares) generated from the published content, demonstrating the effectiveness of this type of use of social networks in this platform for the diffusion of knowledge about scientific presentations.

The 10 publications with the highest number of saves were not the same as the 10 publications with the greatest reach, according to the metrics provided by the platform. This aspect may be justified by the possibility of saving and sharing publications without the interaction of users. That is to say, even though a certain publication may have a good reach, since most of the time we rely on diffusion by the users themselves, if they do not "like" or "comment" on the content, this is computed only on the reach metrics, and the opposite mechanism is also valid.
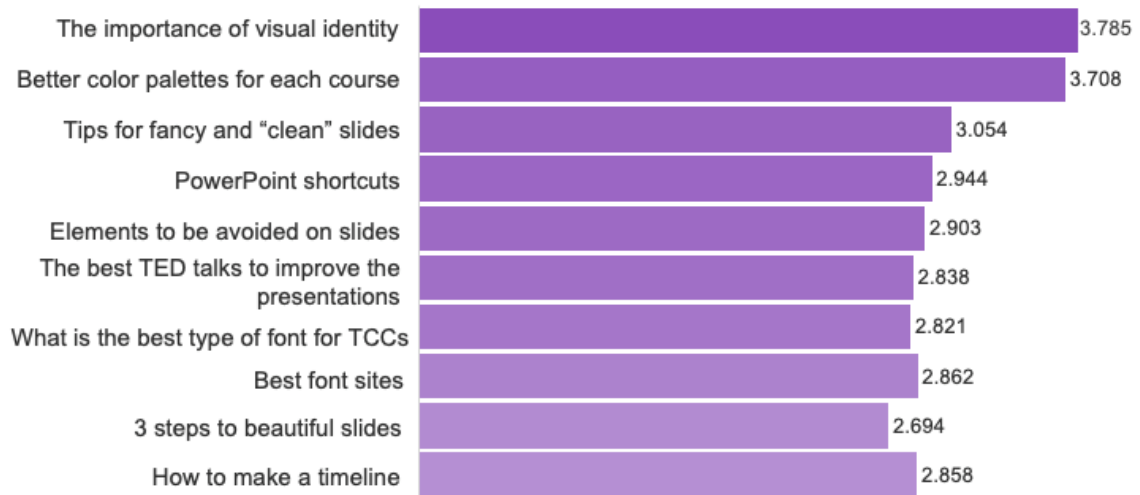
**Figure 2.** Reach of top 10 Instagram posts.
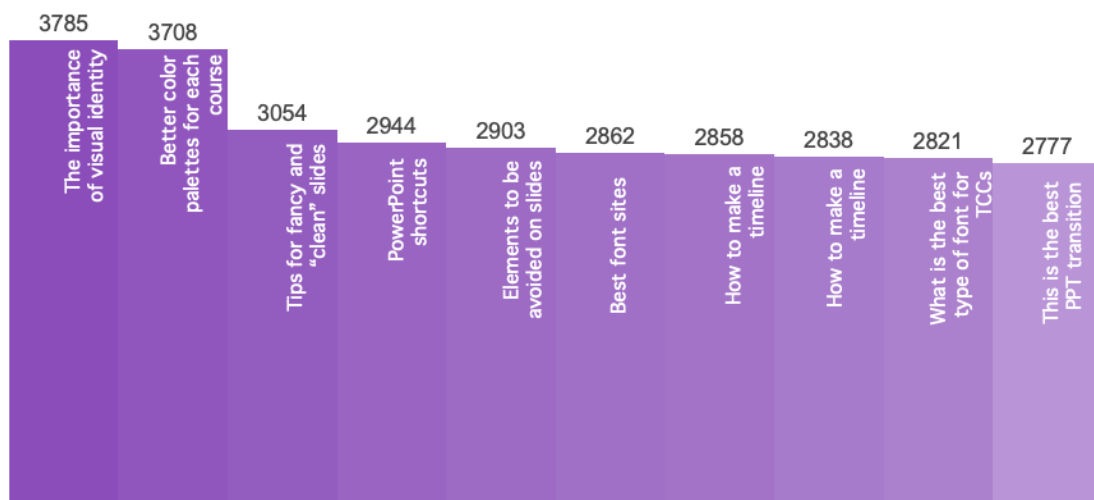
Figure 3. Number of saves for the top 10 Instagram posts.

All posts presented in the graphs were in carousel format. This type of post generates the most engagement because it usually presents more accurate and detailed tips, proper contents to save and share with others. Also, everything depends on how that post is diffused to generate interaction with the followers: if it is a broader subject, it will trigger more interaction; if it is a more specific subject aimed at only one audience (for example: students in the health area), it will not trigger as much engagement.

The findings and reflections of Alves et al. (2018)[11] are corroborated, which highlight the considerable number of functionalities and resources of Instagram. Thus, it allows an intense flow of knowledge and experiences with predominance of communication and visual authorship, in a bundle of characteristics that can provide re-creation or renewal of pedagogical and educational practices.

It should be noted that the highest percentages of account followers are from the cities of Pelotas (10.6%), Rio Grande (5.7%), São Paulo (4.1%), Rio de Janeiro (3.7%) and Fortaleza (2.9%). The age group of followers was mainly between 18 and 24 years old (40.6%) and 25 to 34 years old (39.1%). A total of 80.3% of followers declared themselves to be females, and the times of greatest activity on the account were between noon and 1pm and between 6pm and 7pm.
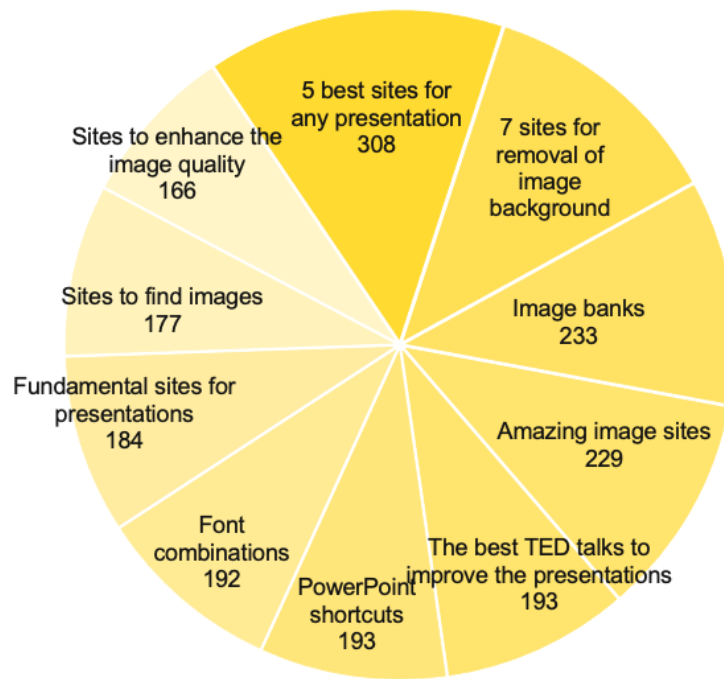
Figure 4. Total number of saves observed in 10 Instagram posts.

The 6,734 interactions achieved in only 10 posts allow to infer the need to be informed and well qualified for this target audience. Also, by the tools available on the platform, the community was consulted in surveys on different data content options that had greater impact and aroused their attention to situations of real difficulty on the subject. The desired goal was the sharing and construction of knowledge aiming at strengthening the academic skills. It should also be noted that there are some limitations in this form of communication, such as the assessment of improvement in the participants' skills before and after some publications; i.e., the participants/subscribers did not practice the teachings of posts in an assisted manner, thus not allowing conclusions regarding the promotion of their academic skills.

The pedagogical use of this important social network to help with TCCs requires, besides all published material, the careful monitoring and evaluation of actions involved in this electronic environment[6]. If the follow-up allows a view of the work scope, the evaluation considers the compliance with the established planning.

It is known that social networks are changing the way of thinking in terms of learning, with this new generation of pioneers of Digital Dentistry, who have the knowledge, tools and content capable of impacting clinicians and researchers[12]. Within this active learning process, social networks, as environments for the diffusion of information and knowledge, show a remarkable spread and diversity of content in the field of Dentistry and its broad reach among professionals and students[13-15]. Nevertheless, social media such as Instagram can also constitute an important auxiliary environment for research design and scientific diffusion, a timely ally in the transmission of information and experiences about professional practices[16].

Reviewing the entire period of sharing academic-scientific content and presentations on the social network Instagram, some perceptions are interesting for analysis. It is known that there is interest from students and teachers in this type of content, which may indicate that making a good presentation of an academic work is relevant for this audience. By itself, the interest of a community spread across different age groups and across Brazil already validates the existence of this work distributed free of charge and accessible. Regarding the exchange of established knowledge, both what is exposed and what is received, followers often mentioned or sent private messages thanking the content and reporting how much the information helped them. It is extremely rewarding to realize that an undergraduate student, without pedagogical training or formal experience in the field of social media or design, is capable of transferring knowledge and helping people with this type of action. The future certainly lies in this type of information sharing, and social networks

will not be temporary. With the advent of the pandemic, this became even clearer, with the increase in distance learning and the substantial migration to digital learning.

Also, in this experience report, it is worth highlighting the motivational character of this work of creating and diffusing knowledge for academics focusing on their course completion works. Despite the goal, learning has a positive relationship with several cognitive skills and competences for intellectual growth, which favors the students' perception of their own performance[17]. This further strengthens these new learning strategies, totally non-mandatory, moved by the individual effort and persistence in the search for knowledge and absolutely detached from the university walls.

FINAL CONSIDERATIONS

It is concluded that the practical experience of using the Instagram platform for the creation and diffusion of knowledge focused on the Course Completion Works of undergraduate students proved to be extremely promising and purposeful.

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