

Images of knowledge (imagens do conhecimento)

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Abstract

The project Images of Knowledge uses scientific images to communicate science for a broad public. The images are chosen among many generated from research and other academic works by professors, students and staff of the Federal University of Minas Gerais. Images may derive from several sources such as microscopes, softwares, drawings, photographs and graphics. Although the image itself is the trigger for the communication of the scientific object, the project involves production of TV spots with the researcher. All images are explained by a caption and short texts in a section referred as Saiba Mais (More on the topic) which provides more details on the research in focus. The project has contacted some researchers to talk about their contribution to science. We will be presenting the contribution that the project gives to create a culture of science popularization among researchers of the University. Although the video spots created are broadcast in the University cable channel and video channel (UFMGTube), there is a difference from the programs produced especially for TV. The implications of constructing this methodology will be discussed.

Introduction

Developed by the Communication Center of UFMG (Cedecom) and coordinated by the Scientific Dissemination Center (NDC), the project Images of Knowledge shares knowledge from images that are produced and used in the development of scientific researches and academic and administrative works of the university. The images (illustrations, charts, photos) are used for the creation of several products, as the website of the project (www.ufmg.br/imagensdoconhecimento), spots of TV (short videos), the texts from Saiba Mais, the postcards, bookmarks and the exhibition Images of Knowledge. Using images, texts and videos, the project has the objective of sharing to society the knowledge that is produced in the University, in an efficient and simple way. The target audience of the project is the researchers who join the process of recording a video and feel the experience of making scientific publicizing not only for their colleagues, but for a target that is not specialized in the subject. The target audience of the products, besides the researchers, also includes the university community and the general public. With an interdisciplinary character, the project Images of Knowledge

wishes that, when it talks about a research with a simpler language, it will increase in the public the desire of knowing more about what the university produces and it will also encourage the researchers to publicize their works.

Objectives

The objective of this study is to evaluate the contribution of the project Images of Knowledge for the researchers in the process of scientific dissemination, mainly in the collaboration or creation of a culture of scientific dissemination with the researchers.

The data collection through a questionnaire that was applied to the researchers let us know their opinion about the Images of Knowledge and it enabled us to verify the success (or not) of the project and its objectives.

Methodology

The elaboration of the questionnaire

To make this evaluation, we created a questionnaire to be answered by the researchers that produced videos with the team of Images of Knowledge. The questionnaire was elaborated based on the principles of Users Studies, that defines this kind of analysis as “an investigation that intents to identify and characterize the interests, necessities and habits of the use of information” (DIAS e PIRES, 2004, p. 11). The multidisciplinary team of Scientific Dissemination Center (NDC) produced 28 multiple choice and open questions, divided in four categories.

1. Researcher profile: three questions that show who is the researcher and how long he has been working in the university.
2. The trajectory of the researcher before he was part of the project Images of Knowledge: this part has 14 questions about the researcher’s early projects and how was his relation with scientific dissemination.
3. Experience in the project Images of Knowledge – with six questions, this part deals with the satisfaction of the researcher with his project and his participation in the production of images, videos and texts.

4. Contribution of the project Images of Knowledge – with five questions, this part is about the research center: the evaluation of the project and how it contributes to the culture of scientific dissemination.

Application

The project has 66 videos with 58 researchers. 34 of them were invited to answer the questionnaire because the process of edition of their videos were already ended. The contact was made through email and telephone and only 26 researchers answered the questionnaire. The deadline to answer the questions was 15 days, that started in the day the questionnaire was released in the website of the software. For the application of the questionnaire, we used the software *Qualtrics*, that is an open source software that allowed the use of different layouts and gave us the statistician data in graphics and tables, what let the analysis of data easier.

It is important to emphasize that despite of the contact made by email and telephone, the researchers were not recognized individually, but in group, according to the eight knowledge areas used in the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq): Agrarian Sciences, Exact and Earth Sciences, Human Sciences, Applied Social Sciences, Engineering and Linguistic, Letters and Arts. There is not any question that refers to the identification of the researcher in the questionnaire. That way, the researchers feel free to express their opinion.

Results and discussion

After the analysis of the data from the research, we defined the profile of the researchers that were part of the project Images of Knowledge in the production of videos. Most of them have between 31 and 50 years old (38% is between 31 and 40 and 27% is between 41 and 50). 46% of them have been researchers for more than 12 years.

When questioned about what is scientific dissemination, there is a consensus about the answer, as most of them believe that it is the dissemination of the results of scientific researches – knowledge, methodologies, results and benefits – making the

information accessible to general audience and in a accessible language, using media e communication technologies.

Most of the researchers already have experience in scientific dissemination, by initiative or invitation. Those who make it by initiative, act in the publication of scientific articles and in speeches and events. Some of them also ask for the dissemination of their researches in articles published in communication vehicles. Those who make scientific dissemination by invitation act mainly in speeches and events, production of videos and images and articles in communication vehicles. When we analyze the ways the researchers make scientific dissemination we conclude that there is a valorization in the use of media as a way to share the scientific knowledge.

The main audience of the researchers is their colleagues of work – what justify the big use of scientific dissemination in events and speeches. As second audience, they quote the general public. When we consider that society is the second audience of the researchers, we tried to verify how they consider the importance of projects used to scientific dissemination for this audience.

When questioned about the importance of projects directed specifically to scientific dissemination, 84% said that it is very important, 12% that it is important and only 4% were indifferent to it. Despite of thinking that the scientific dissemination is important, before the participation in the project Images of Knowledge several researchers (65%) did not know projects like this. So, the Images of Knowledge helped in the presentation of this kind of action and in the first experience of the researchers in the production of videos for the general audience (65% have never participated in projects of scientific dissemination to publicize their researches).

The experience of recording a video was positive for most of the researchers (46% considered it was very good, 50% that it was good and 4% that it was bad). The level of satisfaction with the video was also positive (65% was satisfied, 27% was very satisfied and 8% was half satisfied). About the videos that were already released in the website of the project (73%), 42% of the researchers said it allowed a better repercussion of their works. Moreover, the website of the project allowed that these researchers could know about other jobs that are developed at UFMG.

A big part of the researchers interviewed (62%) believe that videos produced by

the project can be used in other environments with other purposes. Some of them (23%) already use those videos in classes, schools, congresses, events, companies, personal blogs, social networks, defenses of master and doctor degrees, graduation of students, researches dissemination, speeches about innovation, etc. After the production of the researchers's videos with the Images of Knowledge, 73% of them said that this experience generated interest to develop more actions of scientific dissemination and 27% said the project had no impact for them.

Conclusion

After the analysis of the results from the questionnaires, applied to the researchers involved in the production of videos in the project Images of Knowledge, it was possible to realize that the project achieved good results in its main objective: to publicize and to popularize science with the production of videos that use a language that is more accessible than the scientific one and to contribute to create a culture of science dissemination with the researchers who participate in the production of videos, creating in them the desire of publicize their work.

Among the main contributions of the project for the researchers we can emphasize: 1) presented to the researchers the existence of projects dedicated to scientific dissemination; 2) gave to the researchers, because of its website, the knowledge of other researches that are developed at UFMG; 3) gave to the researchers the interest of doing scientific dissemination using media; 4) gave to the researchers a positive experience in the production of videos; 5) contributed for a better repercussion of their researches; 6) offered a video of good quality and with potential to be used in other environments and with other purposes (dissemination, educational, etc.)

Moreover, we intend to optimize the processes of production in the project Images of Knowledge to include more researchers in the production of videos and in the scientific dissemination. We also hope that the work developed will make more researchers desire to be part of the project.

We also want to increase the ways of releasing the videos to guarantee the access to more people, like the general society, and not only the academic community. This way, the society will be able to know the scientific researches and its results.

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