POP Science UFU: science popularization on initiatives at public schools and broadcast on radio, tv, newspapers and internet, made by professors and students of the Journalism course

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Abstract
The current article presents results of the project “Science/UFU - the news agency and the web radio of the journalism course/UFU working for the diffusion and popularization of science on printed newspaper and college and radio tv in Uberlândia, MG, developed with funds from FAPEMIG, which enabled, through actions taken at the “News Agency” laboratory of the journalism course/UFU, and through activities with printed newspaper, radio, tv and internet, the diffusion and popularization of Science in Uberlândia, MG and its region. It developed and implemented on the webradio “Radio In” the program “Ciência no Ar” which works out the diffusion and popularization of countless productions/discoveries and scientific experiments of the institutions researchers, by an accessible language to the general society. It also enabled the production and distribution of the printed newspaper “Ciência em Pauta” and the factsheet “Transformação”, this one with specific content related to science and drug abuse. Besides that, short interstitials called “Minuto Ciência UFU” and “Ciência no Ar” have been produced and broadcasted during the breaks of the college radio and tv. Different tools and communication media have been used to diffuse and popularize the scientific production, through educative works with different cross-cut themes related to Science and Technology (S&T), further to the capacity-building of scholarship students and of the public teachers to work with the science production theme. The accomplished project was developed between

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2010 and 2013 and was supported by teachers, lab technicians, and scholarship students and countless others.

Introduction

Brazil is the 14th largest world producer of researches and the 6th on patent requests, according to data from the Ministry of Science, Technology and Innovation (MCTI, 2010). In 2011, 1.21% of the brazilian GDP was invested into scientific and technological production. Data from the same period show that, all over the country, there are over 260 thousand people directly involved with S&T production within different areas. Despite the volume of investment and the relevant number of people involved, the Scientific Production broadcast is still incipient.

News broadcasting related to S&T production, through information gathering and presenting, determined through the journalistic routines might be named scientific journalism. Such broadcast, according to Fabíola Oliveira (2002), is fundamental to the full exercise of citizenship, to the accountability of the S&T producers before the society that sponsors them, and to enable the receivers, from awareness of the scientific innovations, to take decisions, either on personal or collective manner.

On such coverage, journalism performs several functions, according to Nilson Lage, such as informative; educative; social; cultural; economic; political-ideological; and its scarcity on the medias may also be considered an indication for comprehension of the social reality (2004). According to the author, the scientific journalism, “when informing, complements and updates knowledge and, to that extent, educates; by transmitting knowledge, acts upon the society and the culture, determining economic choices and, eventually, political-ideological options”, for this reason, “the scarce broadcast of the brazilian scientific activity moves into a delayed representation which does not always correspond to the country reality, but it serves to clear political and intitutional goals.” (LAGE, 2004, p.122).

Developed between the years 2010 and 2013, CIÊNCIA/UFU was a Social Communication course project: license in Journalims of Universidade Federal de Uberlândia (UFU) who's objective was to use the scientific journalism to enable the popularization of the sciene made at college by means of the activities developed in the course news agency such as: TV and radio productions, printing newspaper, Edu-
communicative material and radio web. The aim of this action was to use the scientific journalism as a tool for the inseparability of the teaching, research and extension.

The final Project product, besides dealing with this tripod which is the purpose of the university, could also disclose research results and S&T activities developed at UFU, in order to bring to the social discussion meaningful contemporary scientific themes, and highlight the presence of science in the society daily life. Another target of the Project was to strengthen the Professional culture of the region journalists, trying to bring science into the media agenda.

The current article intends to report the experience of “Sciencwe/UFU Project-the news agency and the radio web of the Journalism/UFU course working for the diffusion and popularization of science on printed newspaper and Radio and TV Universitárias in Uberlândia, MG.”

To do so, we will briefly present the main end result product of the work. To be known. The radio program “Ciência no ar”, the short interstitials “Minuto Ciência UFU. The printed newspaper “Ciência em pauta” and the factsheet “Transformação”. At first, the steps of the working production will be discussed in the item “results”: products of Science/UFU and t last in the topic “discussions and conclusions: new challenges” some clear-cut Will be pointed out.

**Methodology: Mapping of the scientific production at UFU**

The Scientific journalism must be the mediator between the technical language of several fields of the science and its public Who is not always made up by experts. Such translation happens by the mutual cooperation between the hounalist and the researcher, and, for this reason, the first step to the achievement of Ciencia/UFU was mapping the scientific production at Universidade Federal de Uberlândia. That was also the first challenge of the Project due to poorness of Systematized sources and the lack of some researcher’s commitment toward the development of data collection works.

The researcher Fabíola Oliveira highlights the responsibility of the scientific spread is not only due to the jornalistic canvass. The primary data sources must contribute to the popularization of the science since.

[...the organs of government, the research institutions and the scientific community are the starting point to motivate the spread of S&T in the country in a]
continuous and effective way. In the basic process of the social communication, they are the message issuers by being the primary data owners. (OLIVEIRA, 2002, p.14)

This divulgation might not only benefic the society which acknowledges the research results they finance, but it also provides the researchers a clear view to attract public and private investments for the development of their projects. In spite of that, the difficult relationship between researchers and journalists who cover science is pointed by many authors (Burkett, 1990; Lage, 2004; Oliveira, 2002.) as problematic and the first stage of the performance of the Project described here is an example of such difficulty, as it may be seen next. In the Project SCIENCE/UFU, the following procedures to map the scientific researches productions in Universidade Federal de Uberlândia.

1. Two scholarship students groups were made: one team was in charge of the data collection of researches at UFU financed by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPQ), and the other one was supposed to get the coordinators’ e-mails of the scientific projects under development at UFU, by being financed Fundação de Amparo à Pesquisa de Minas Gerais (FAPEMIG);

2. A cover letter of the Project was done, requiring basic data of the coordinator of researches at UFU: title of the project under their coordination, coordinator’s name, the researchers’ names (professors, scholarship students volunteers), abstract, the research stage, prevision of the conclusion, main expected results, contribution to society and finance. (value and agencies);

3. Each group was in charge of sending an e-mail to every research coordinator with an attached letter.

In the following stage, the research professors of CIÊNCIA/UFU were supposed to make a selection of the fulfilled forms in order to identify the most relevant projects for the scientific spread intended by the Project. However due to the difficulties the scholarship students faced during the data collection, the selection of the projects was at risk. The difficulties were caused by the lack of systematization of the data which had to be taken practically by hands.

The responsible group for the data collection of the financed researchers by FAPEMIG had an access to the e-mails of all the projects registered at the institution in a list provided by FAU.3, an advantage over the group in charge of the data gotten
through CNPQ. Keeping procedure, the e-mails with the letter were sent to 308 addresses found in FAPEMIG list. Just 21 research coordinators out of this above number answered the requirement, and that corresponds to less than 10% of all the total addresses of listed e-mails, whereas lots of e-mails were invalid because they failed message sending. The rest of researchers have not answered.

Results: Product of SCIENCE/UFU

By finishing of the scientific production, according to the previous item, it was possible to accomplish the journalistic products which built the results of the project here presented. Different media were selected in order to achieve the aim of the proposal of joining research an extension whose production was a result of a work connected to teaching and done by scholarship students and volunteers under the guidance of professors supported by technicians of different fields of the Social Communication Course: license in journalism/UFU. Next we describe the main products resulted from SCIENCE/UFU.

The sound media came from the program “viva ciência- ciência UFU no ar” which transmitted a one-minute daily program on Universitária Radio Station. The program issues were about different aspect of the product and managed by the radio journalism subject where the scholarship students and partners of the project participated. Three 90 seconds inserts including vignette were broadcast, always presenting a research project which was selected for spreading every week.

The “Minuto Ciência UFU” was produced for the audiovisual media and transmitted by Universitária TV.(5). Along the week, two different short programs were exhibited during the programming breaks. Each of them lasted one minute. The activity was led by a technician (6), acquainted with telejournalism and in charge of the production of video classes of EaD (7) in the institution. He was tutored by a professor responsible for telejournalism subject (8), and could count on the scholarship students participation.

The printing media was contemplated in SCIENCE/UFU through two products. The printed newspaper “Ciência em Pauta” was made up by eight colored pages, A4 format and 200 samples impression which showed information about a determined research project. The cover had a magazine style, with one only big-sized picture about the issue discussed, occupying all the graphic spot, and by the inside, the newspaper
was structured into sections: “Você Sabia”, “Na UFU”, “Entenda mais”, “Faça você!”
and “Diga ai!”. The target public were high school young students of public schools in
Uberlândia/MG city.

The factsheet “Transformação” was the other printed product of the Project. It
was about the partnership among the Project, the journalism/UFU course and the therapy
community “Nova Criatura”. Punctual meetings were made among the involved ones,
topics to be issued in the factsheet intending the popularization of science and the
exchange of common sense knowledge. Educommunicative activities were taken in
order to make the factsheet available even after the end of the Pop Ciência Project.
Workshops in the community were made to get ability of diagramming; editing
technique etc. the first factsheet was developed by the project team and the second one
through the cooperation and participation of the project team and community members.
The third one was supervised by the team and from the fourth on, the community itself
took over.

Discussion and conclusion: new challenges

At the end of the work proposed by SCIENCE/UFU, it was possible to identify
some of the problems and challenges for making the public communication of science
real at Universidade Federal de Uberlândia. It was observe that the scientific journalism
faces difficulties to be established at the university because of an organizational
deficiency of systematization of the data and the lack of commitment of the scientific
community.

It would be important for UFU to be aware of the commitment to make the
information interchange real by organizing the project data in fostering at the institution
through a systematized and accessible way to the scientific community. The project was
based on the right to the information and communication to the education and
Citizenship that belong to everyone and must not be privileged of anybody. The
intention is to observe how the institution has been facing the challenge of the
inseparability and to provide access to the information by working the diffusion an
popularization of science by means of educommunicative initiatives because they link
the communication and education so that knowledge and receivers do not come apart.

Therefore, it is essential that the professor and the researcher and, as a
consequence, the communication of the institution come closer to the communicative
means and may become acquainted with them. Taking possession of their potential through efficiency and use. By this way they can make up new knowledge and popularize the science and the knowledge produced academically.

To this task, the presence of journalism is essential once it is not a report but an interpretation of reality. By this view, the presence of the means of social communication in our daily life makes it possible to understand that the communication keeps a straight and close relation to the education and that the popularization of science must be enabled by scientific journalism and it is all about communicative and educational processes.

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