

University for a day as instrument of social inclusion

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Abstract

Due to our experience in university extension activities with students of high school we understand the distance and unknowledge of these in relation to brazilian public universities, which include the process of joining the University of São Paulo (USP), the activities that are developed in the university as teaching, research among others, including gratuitous of public universities. In order to minimize this framework the Institute of Physics of São Carlos (IFSC), institutionalized in 2011 the program "University for a day". Seeks to provide high school students from public or private the opportunity to meet and experience the college environment of the Campus USP - São Carlos. The program's main goal is to promote access to public universities contributing to social inclusion, especially those of low income or with limited access to information. The program includes a lecture on universities and the admission requirements, the student assistance, the structure of the campus, the everyday of university, research activities, teaching and extension of the IFSC, the courses offered and the opportunities

in the labor market. After free lunching at the restaurant university, know the campus, the IFSC and the library. Finally, the Show of Physics conducts experimental demonstrations, totaling six hours of visit. From May 2011 to December 2012 were attended 8005 students, of whom 22 were admitted to one of four undergraduate courses the IFSC. Only in 2013, through the month of July 2245 students from 56 educational institutions participated the program, of which 64% were from public schools.

Introduction

Currently, many actions are applied to various spheres of society, due to the global concern with issues related to social inclusion, citizenship development, environment and others being proposed by the State, NGOs and institutions in general. From the perspective of action, the University occupies an important space by basing its mission in the articulation and integration of teaching, research and extension, including the development of new knowledge from different fields. Thus, the University plays an important role in the development of projects, providing social change, improving the quality of life.

So analyzing more comprehensively, the National Institute for Educational Studies Teixeira - INEP (2007, p 90), states that the responsibility of universities, especially public, focuses on education as a social right and a duty of the State “(...) especially as regarding the academic scientific education, political education, professional and ethical of citizens, the production of knowledge and the promotion of science and culture”.

However, it is noticed that even with the expansion of the supply of places in higher education in Brazil in recent decades, especially in the early twenty-first century as a result of policies of inclusion, there is a pent-up demand across the country.

In order to contribute to the admission of students from basic education to higher education, including the exact science courses, the Institute of Physics of São Carlos, University of São Paulo (IFSC - USP) in 2011 institutionalized the Program "university for a day", devised by the research group Crystal Growth and Ceramic Materials in 2003.

The program allows to students from high school, of institutions private or public, the opportunity to know and to experience the university environment Campus USP - São Carlos, in particular, the IFSC.

The "University for a Day" comes from the observation that many students of basic education have certain detachment and lack of information about the public university, among them the process of admission in the USP, the activities that are developed in university as teaching and research, in addition to gratuity of Brazilian public universities.

The main objective of the Programme is to promote access to public universities, contributing to social inclusion especially, those with low income or with limited access to information. Also seeks to increase the interest of students by Exact Sciences in particular to the area of Physics, strengthening ties between the university and the population, showing students what opportunities that physics provides, in addition to clarifying the means of admission to the courses, presenting the information necessary for the career choice.

In addition to this primary objective, the "University for a Day" have partnership with other Program of the University of São Paulo called "Learning with Culture and Extension" which integrates the policy of support the permanence and student training of the University of São Paulo, which allows the destination of scholarships to undergraduate students with socioeconomic vulnerability to act as monitors in programs such as "University for a Day".

Methodology

The program "University for a Day" brings demonstrative activities that address fundamental different concepts of physics in a laboratory of physics teaching - the "knowledge room".



Figure 1 - knowledge room

Moreover, it aims to motivate students' interest by the exact sciences, especially in physics. The program includes a lecture on universities and the admission requirements, student assistance, the structure of the campus, the university life, the activities of research, teaching and extension of the IFSC, the courses offered and the opportunities in the labor market. After having lunch at the university restaurant for free, students undertake a visit by campus, on IFSC and library. Programming the "University for a Day" includes a presentation on the activities of research, education and extension, Physics Show with experimental demonstrations and a presentation about structure of the undergraduate courses of the IFSC. In addition, there is a lecture about the theme "Environmental Sustainability" and the realization of the measurement of pH of water samples collected by visitors in their respective cities.

The Physics Show with experimental demonstrations related to the everyday and technological applications of physics and related sciences, including content present in basic education and higher education, totaling six hours of visit.

Among the activities undertaken by fellows who act as monitors of Program can be listed, the visits scheduling and resource control, the website update and production of scientific texts. Besides the production of educational videos of the experiments developed in "knowledge room" using editing software, having the opportunity to learn more about the production of scientific teaching materials and improving your posture in public, contributing to their academic training.

Results and discussion

Through of observed data in the reports of "University for a Day" forwarded to the court of auditors (2011, 2012, 2013) is possible to realize the scope of the program with respect to the number of schools, people and cities served. Between May 2011 and December 2012, 8005 students from 175 schools have been met. Only in 2013 participated in the program 4109 students of 108 educational institutions of which 64% came from public schools, serving 50% of the cities in the state of São Paulo. Moreover, a survey of the profile of freshmen was conducted in the IFSC courses through questionnaires through which wondered how they took science of undergraduate course chosen; it was observed that 30 students indicated the presentation of the "University for a Day" as form of knowledge and choice factor for stroke and Institute. When entering the University of São Paulo several of these former participants of the "University for a Day" sought to the program for acting as monitors / fellows.

Regarding the academic training of monitors can be said that they learned more about experiments, the production of scientific teaching materials, besides improving your posture in public. It was possible to verify the increased engagement these at the extension activities university, a significant improvement in their oratory skills and knowledge consolidation, motivating them in their undergraduate courses. It can be noted that the program allowed the academic development of these monitors, for example, as the fellow that has migrated to scientific initiation scholarship, another monitor consolidated its position at the university because he thought of leaving the course.

From these data it is observed that the program has achieved its objective and successfully fulfilled its role in relation to social inclusion, but this understood in the perspective of Moreira (2006) as the action of provide the opportunities and conditions to

excluded social groups in order to achieve social stratum to enjoy of materials, educational and cultural resources. In other words social inclusion is the establishment of conditions for the population of the country live with quality of life, knowledge holders, aware of their rights and opportunities for study, work and existing social development. Achieving social inclusion is enable people are capable to acquire knowledge about science, in order to understand the environment in which they live and perform conscious choices.

Conclusion

During the three years of the program "University for a Day" was observed that there was a great acceptance by schools of the State of São Paulo to participate in the activities proposed by the IFSC. It set up the opportunity to high school students of try out the university environment, discovering the possibilities of admission USP.

Another important fact about the impact the program to promote social inclusion was the entry of 30 high school students in physics course after participates in "University for a Day". This fact points out the relevance of extension actions for the dissemination of physics courses and for awakening the interest of young people to pursue this career because it is notoriously low the interest in courses in this area of knowledge.

The University approached the population through the program and helped students of the Institute that by assuming the role of monitors managed to expand their knowledge in physics through to experiments performed in the "Knowledge room", improved their skills of expression and its actions of university extension.

The program "University for a Day" meets what Santos (2010) conceives as an extension, as a function performed by the University which involves an extensive area of services, including various social groups, social movements, and public or private sectors , with the objective of solving problems of social exclusion and discrimination. Thus, fits to University a great social responsibility, through teaching, research and extension.

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