

MANAGEMENT OF COMMUNICATION AREA IN A NUCLEAR RESEARCH AND DEVELOPMENT INSTITUTE

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ABSTRACT

Nuclear energy to the general public is always associated to the production of nuclear weapons or to nuclear and radiological accidents. Public communication actions done by the National Commission of Nuclear Energy (CNEN) have been contributing to make known the social and peaceful applications of nuclear energy, reaching different kinds of public. Interaction programs with society and in particular with students have also been carried out by the Nuclear Technology Development Center (CDTN/CNEN). Measuring public communication results can help to show that financial resource in this area should be considered as investment and not as expenses. One needs therefore a well-established managing system. Fundamentals of the National Quality Award Criteria for Excellence – PNQ are being applied in the area in charge of business and public communication at CDTN. Systematic registration of results started in 2000 and a gradual increase in the number of means of communication for the internal public has occurred in the last five years. The Center has now a bimonthly newspaper edition. Communication indicators have shown an increasing number of students received in the Center or provided with lectures in schools. Results of satisfaction inquiry from these students show good results. The implemented management system has allowed informing the nature and quantity of people reached by the information on nuclear applications and the improvement in the institutional image.

1. INTRODUCTION

Despite the existence of several social and peaceful applications, nuclear energy to the general public has been associated only to the production of nuclear weapons or to the occurrence of nuclear or radiological accidents. Communication actions done by the National Commission of Nuclear Energy (CNEN) have been contributing to enlarge knowledge on such nuclear applications, promoting events and participating in scientific events, reaching different types of public. The institutes of CNEN have also been carried out interaction programs with society and in particular with students. The Nuclear Technology Development Center (CDTN) is one of these institutes in charge of such activities.

Business and Public Communication Sector (NC) is the area responsible for the interaction with society, conducting systematic programs for receiving visitors at CDTN.

The NC's team has now eight effective employees and is a very small group compared to the whole staff of the Center that has about 400 people including effective employees and collaborators (students, undergraduates and Post Doctors).

Improvement in the management quality of the Center required NC to implement managing practices based on the fundamentals of the National Quality Award Criteria for Excellence

(PNQ) in its activities. Knowledge acquired by the author of this paper in the Technological Excellence Project managed by the Brazilian Association of Technological Research Institutes (ABIPTI) helped the application of such practices in NC [1, 2].

In order not to be disturbed by unforeseen demands that in the general are driven to the communication area, the sector has to be well structured in relation to its basic and routine tasks. The PNQ Excellence Model can help the manager to introduce good management practices and avoid such problems.

Only clear and written management practices related to the standards of work worth nothing if they are not incorporated in the task of each employee in his daily activities. The participation of each employee in the definition and implementation of management practices and in related standards of works is important, once each actor involved will define the way to follow in order to pursue excellence. This has been done in NC in the last four years.

Mission, vision and organizational values were defined by the NC employees, based on general guidelines of CDTN and on opportunities for improvements detected in previous years. Macro-processes and support processes were reorganized and associated management practices and standards of works described by each employee concerning the tasks under its responsibility [3]. Indicators for each practice were extensively discussed in the group. Many of them have already been registered since 2000.

All information concerning the description of the standards of work, general activities and results related to NC are available in a specific channel in the Intranet of CDTN.

2. IMPLEMENTING MANAGEMENT PRACTICES BASED ON THE FUNDAMENTALS OF THE PNQ EXCELLENCE MODEL

2.1. Defining Mission, Vision, and Organizational Values of NC

Mission: “To make known the activities of the Center and applications of the nuclear energy, then promoting the accomplishment of business and partnerships reinforcing”.

Vision: “To be reference to CDTN, up to 2007, in the use of good management practices and related standards of works in all NC processes”.

Organizational values: Ethics, responsibility, valuing the customer, care for the image of the Center, share of knowledge.

A clear delimitation of processes inherent to the sector was done in order to define management practices and related standards of works and also people responsible for each one of these practices. Business and Public Communication are the Macro-processes of the sector. Support Processes encompasses Administration of the sector and Secretary’s activities.

2.2. Defining processes, activities and some public communication indicators

This paper is focused only on NC Public Communication actions. The activities of this area are: a) Public Relations, in charge of receiving students and the public in the Center as well as

giving lectures in schools; b) graphical creation for divulging the image of the Center; c) elaboration of news and edition of electronic bulletins and internal and external newspapers; d) content maintenance of the Web Site and Intranet of CDTN; d) elaboration of electronic synopsis for internal dissemination with themes selected from external electronic bulletins; e) promotion of internal events or participation in large institutional events sponsored by CNEN.

2.3. Connecting customer expectations with the personnel performance evaluation

Employees of CNEN are evaluated twice a year (July and December), considering activities and goals established in the beginning of the year and related expected performance, based on some key evaluation factors. NC's team is evaluated on some common performance evaluation factors that try to take into consideration the customer expectations. Customer Reception, Communicability, Co-operation, Dedication to Work, Initiative and Creativity, Management and Organization, Productivity, Quality of Work, Responsibility, Management of Conflicts, Leadership and Taking of Decision are these factors [4]. The last three factors are applied only to the leader of the sector.

3. RESULTS

Outcome and drive indicators of each management practice of NC are presented in half-yearly reports. NC's management result report is presented once in a year based on the cited National Quality Award, assuming NC as the organization to be evaluated.

In 1997 the Center received the denomination of "CDTN". Since then it had no logo. The author considers the creation of a logo for CDTN in 2000 a very remarkable event, because it is an important component of the institutional image of an organization.

The participation of CDTN in the first national Brazilian Week of Science and Technology in 2004, registering its participation in an official document [5], was an important experience reporting the articulation with other communication people involved with dissemination of science and technology. Report of the participation in the "Expociência" in 2004, in Cuiabá – MT, Brazil, is another important document with this same approach [6].

3.1. Results of indicators from Public Communication Activities

A gradual increase in the number of means of communication for the internal public has occurred in the last four years, like electronic Bulletin *CDTNnews (CDTNotícias)*, mural Informative Newspaper for circulating internal and external news and the Electronic Synopsis disseminating news from external electronic bulletins. The external public is now also contemplated with a bimonthly edition of the newspaper *CDTNuclear*, already in its 4th edition. Results of the public communication indicators concerning the mentioned means during the last five years are shown in Figure 1.

Figure 2 shows the number of educational institutions that visited the Center in the last five years. Some institutions visited CDTN more than once, as can be seen in this Figure. The total number of students that visited the Center is shown in Figure 3.

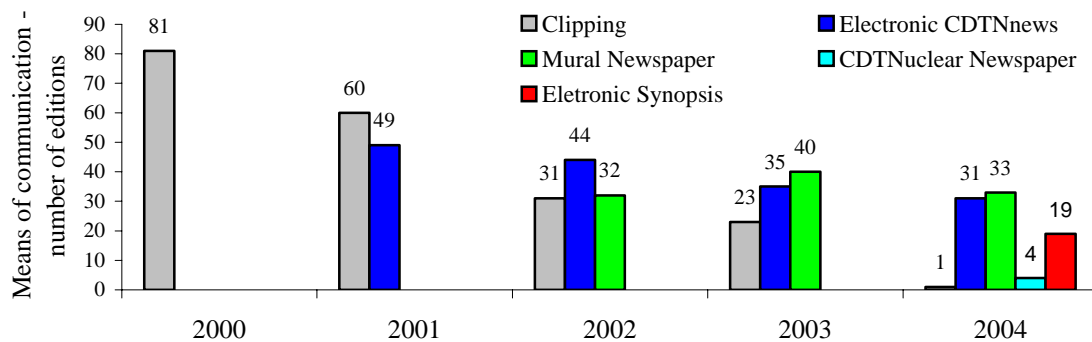


Figure 1. Means of communication and results of indicators.

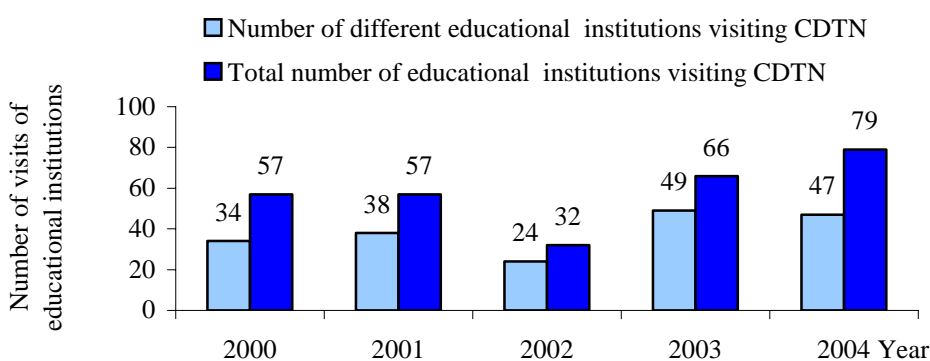


Figure 2. Number of educational institutions that visited CDTN in the last 5 years.

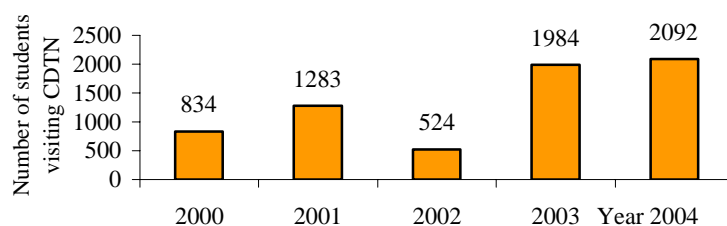


Figure 3. Number of students that visited CDTN in the last 5 years.

3.2. Results of satisfaction inquiry from students visiting CDTN

In order to improve the reception of students at CDTN, a questionnaire is distributed for evaluating the visit. Since 2003, return of this questionnaire is then a compromise assumed by each educational institution that wants to visit the Center. Figure 4 shows that we have been succeeded in the last two years concerning the return of such questionnaires. Four typical questions or statements in this questionnaire try to evaluate the performance of the reception, with focus on preliminary contacts, reception and guide and visits to laboratories. Fields for comments and suggestions are also available in this questionnaire. Grades ranging from 1 to

6 correspond to “Bad” and “Very Good” respectively. Figure 5 shows the global evaluation done by the visitors.

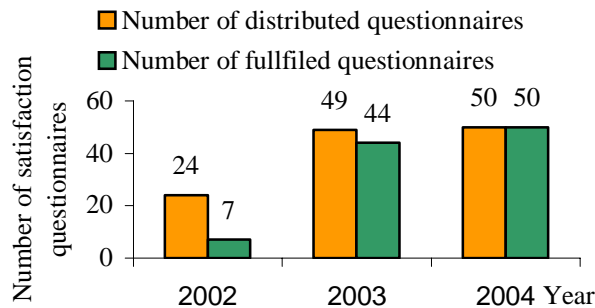


Figure 4. Control of questionnaires used for evaluating the satisfaction of the students visiting CDTN or who attended lectures in educational institutions.

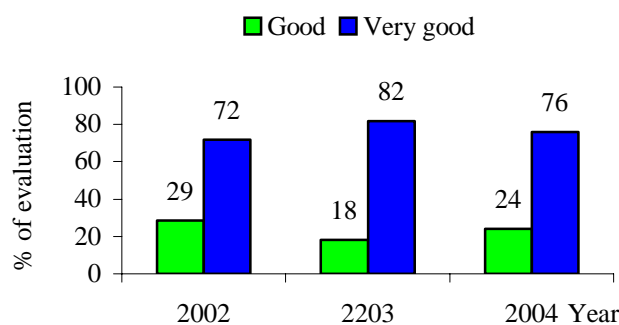


Figure 5. Results of the satisfaction inquiry - visits of students at CDTN or lectures given in educational institutions.

3. CONCLUSIONS

Communication area in a public nuclear and research development institute always work with limited financial resources, since it does not have own budget and have to compete with the budget allocated for the technical areas of the institution. As a result, financial resources are not always available in a flexible way to the communication area in order to do its own tasks like to be present in important events where large a number of people can be reached by its actions. In general the communication area has many times to act in a passive instead of an active behavior. Despite of all these difficulties, communication area at CDTN has produced good results concerning the promotion of the institutional image of the Center.

Management practices implemented in NC based on the PNQ Excellence Model have made easier the work of the sector as well as the quantification of its activities. The sector can now easily inform the institution the nature and quantity of people reached by the information on nuclear applications and improvements in the institutional image.

Communication indicators show an increasing number of schools and the number of students received as visitors in the Center or provided with lectures in schools. Results of satisfaction inquiry from these costumers show good results.

The participation of CDTN in important events in 2004 was well documented with the aid of indicators in order to quantify communication actions, as well as to point out opportunities for improvements in the next events. This documentation also contributes to register the history of the institution for the future.

Dissemination and popularization of activities of a nuclear research and development institute are also communication actions that can help the management of a nuclear institution, bringing more customers to the Center as well as making information available to society in a more accessible language. It is also an instrument that can be used to show how financial resources are been invested in the scientific area.

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