

Citizens' Popular Science Tour: A Happy Approach to Science

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Abstract: Citizens' popular science tour keeps up with the time and is indispensable for the fast urban development. The tour, with unique methods and multi-dimensional innovative contents, is intended to convey to citizens fresh knowledge and new information so as to enable them to get a taste of science in a comfortable environment. Moreover, it is bidirectional and interactive, not only arousing citizens' interests in science but also help them better understand and appreciate science through their participation, thus meeting the demand for science popularization. Besides, between scientific education and recreational tour, it turns out to be a short-cut and an innovative method through which science popularization will find its further development.

Keywords: citizens' popular science tour, popularization, knowledge about science

Introduction

The fast development of science and technology has given rise to an unprecedented demand for popular science in both its contents and forms, which outpaces the previous "please-listen-to-my-explanation" method. This calls for various interesting forms of science popularization, so as to attract citizens to walk out of their houses and acquire more knowledge about science in a pleasant environment. This has actually become indispensable for the fast urban development.

1. Background information

A community is a place where a group of people live together. On the one hand, it, as the basic unit of a city, has many social functions, playing an irreplaceable role in the urban development. On the other hand, it is an important place where science popularization activities can be conducted. Popular science tour for citizens in keeping with the time is indispensable for the fast urban development. The tour, with unique methods and multi-dimensional innovative contents, is intended to convey to citizens fresh knowledge and new ideas and concepts so as to enable them to get a taste of science in a comfortable environment.

1.1 Communities affording more leisure time for catering citizens' thirst for a meaningful life.

With the economic development and social progress, substantial changes have taken place in the life of our communities. Except for the comfortable living environment, they can afford more leisure time and are eager for a colorful life. This makes adequate room for popular science activities.

1.2 Crucial importance for citizens to learn more about science.

Some citizens are becoming more socialized along with the promotion of market economy and social security system. But they have little access to knowledge about science in their communities where inadequate finance prevents the construction of more popular science facilities and the launching of popular science activities.

However, with the fast growth of science, technology and information knowledge as

well as the quick knowledge updating, popular science becomes crucial due to citizens' high-level mental requirements.

1.3 The faster urbanization calling for extensive science popularization in communities.

The deepening reform, the faster urbanization and the social development have witnessed more and more economical institutions and social associations setting up in communities in which live some retired workers, job hunters and immigrant workers. This results in more community services for a larger population and there prop up problems such as citizens' limited knowledge about science, conservative thoughts and practicing of feudal superstitions, which have a negative effect on social stability and progress. Therefore, there is much that has to be done in guiding the citizens' interests in and demand for science.

1.4 Popular science tour, an innovative, effective, popular and easily accessible activity

Unlike other popular science activities, the tour just elaborates on one theme. And experts demonstrate in an interactive way to the audience the beauty of science. It is mainly planned for the communities and aims to convey to them the knowledge about some theme and more importantly, encouraging them to experience the whole scientific process in person.

1.4.1. The process of popular science tour for citizens

The tour is available to the public and is intended to convey to them more knowledge about science through a dynamic way. Its process, unlike the material productivity that may take great leaps forward, is gradual, life-time and has a enduring result. Therefore, it will take a longer time to help the citizens learn more about science and this makes science popularization a difficult task.

1.4.2. Methods of popularizing science

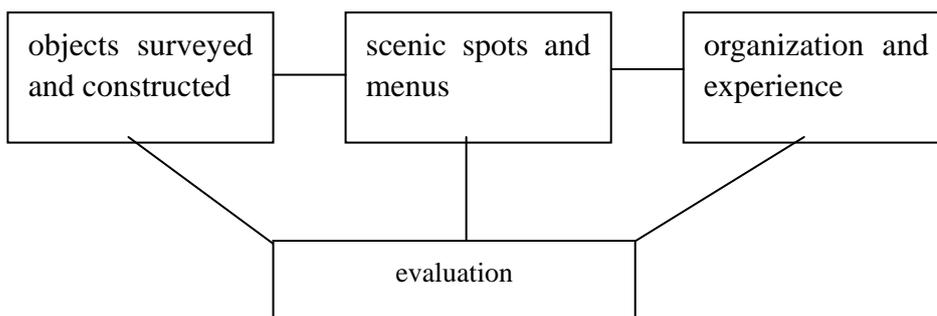
1.4.3. Popularizing science through social activities and defining its essentials

A theoretical and practical analysis about the tour should be conducted, on the basis of which the practical results should be summarized, abstracted, constructed and then conformed.

2. Pattern of the tour

To meet the communities' demand for science, the tour is intended to illustrate the thoughts, ideas and methods about science which, in turn, are converted into a living motif and guide the citizens' everyday behavior. And the pattern here is a general plan reflecting the feature and process of the tour. (See the diagram)

The sketch map of a pattern of popular science tour for citizens



3. The key factors of popular science tour

Popular science tour is an interactive activity. It meets the demand of popular science, which can not only arouse the interest of citizens toward science but also offer them the experience of accomplishment and success, promote their understanding and appreciation of science. We should introduce the mold of social activities and classify the key points.

3.1. Study the participants according to the survey. Community dwellers have been regarded as major participants of this tour. Suzhou Popular Science Office has been established at the call of this drive; *Suzhou Popular Science Tour Organization Manual* has been framed; public welfare activities have been considered theme of our tour; some routes of the popular science tour have been subsidize; and our citizens have been organize to play a major role in the tour. We are trying to make our tour more appealing and meaningful. According to the demands of community dwellers, we should abide by the principle of *Three Approaches*: approach reality, approach life and approach people. On the premise of this, we have two basic points in our mind: to choose the activities to which the public will show their interest; and choose the appropriate subjects.

3.2. Study the conditions according to the object of our tour. We should relate object to subject, environment and behavior. We should provide such a menu so as to serve the theme and subjects, taking advantage of tour base, planning the line of tour.

A. Drive and photo tour. On the Day of National Popular Science Tour, we organized more than 100 auto-fans to drive 30 automobiles parading through the streets. There was a flag on every car which aroused the interest of passengers. The auto-fans paid a visit to National Popular Science Base, about *Future Agriculture in Big Cities*. And some interactive tours were scheduled: horse riding, archery, grass-ski, fruit picking, etc. That is learning while playing. We have helped our citizens to have a deeper understanding of modern agriculture while they were having fun. Many photo-fans recorded with their cameras the beauty of ecological farms in big cities, as well as moments of their happy tour, and took these pictures to the photography contest *Window to Suzhou Popular Science*.

B. *Two views* tour. With the economic advancement in Suzhou, the construction of urban areas has undergone dramatic changes. In order to help citizens experience the economic and social development of suzhou, we organized the tour consisted of *Two Views*: to view the modernization of Suzhou, as well as view the development of hi-tech industry. The tour attracted many civil servants, scientists, officers, students, and community dwellers. During the trip, they visited hi-tech enterprises such as Lion-nathan Beer & Beverages, Gold Hong Ye Paper, and Xishan National Model Agricultural Park. They were deeply impressed by the high standard product lines and ecological vegetable planting, and came to realize that hi-tech has become an integral part of our life.

C. *Love My Beautiful Home Suzhou* tour. In order to encourage the community dwellers to go out and view the economic and social, ecological and virescence developments in Suzhou, we organized them to *View New Suzhou*. They visited old and new bridges: Sanxiang Cloverleaf Junction, Suoshan Bridge, Guanduli Cloverleaf Junction, Midu Bridge, Renmin Bridge, etc. They belong to cloverleaf bridges, suspension bridges, rope bridges and covered bridges. Especially the magnificent Guanduli Cloverleaf Junction is like a butterfly; Suoshan Bridge is the biggest in China; Renmin Bridge corridor embodies elegant ancient Suzhou features of black round tiles, hooking eaves, etc.; and there are tranquil Ecological Parks, and the old moat around Suzhou which is like the twin sister of the Bund in Shanghai, as well as the leap in the development of the New district and Industrial Park; Around the moat there are high trees, green lands, colorful flowers, and so on. They are like the necklace of old Suzhou. There are various trees and flowers near Midu Bridge: evergreen broadleaves, hardwoods, carpeted with flowers.

They are not only ornament but also natural reservoir of water. As the largest ecological park in Suzhou, Tongjing Park employs the finesse of foreign horticulture, integrating the advantages of modern and classical parks, central square, amusement park, ecological park and blind arboretum. The park exemplifies the characteristics of modern parks and cities, offering the citizens an opportunity to approach nature and green life.

D. *Approach nature, love life* Tour. Marching toward Shangfang Shan Hill and Taihu Lake, city dwellers rid themselves of all the drudgeries of everyday life and take their popular science tour. They appreciate the pastoral landscape and enjoy the country life, experience the development of agriculture in Suzhou. *Fun Ranch* is like a zoo where you can see greenhead wild ducks, ecological chickens, Gold Ingot Chickens, Fragrant Boars, turkeys, peacocks, and goats, etc. Cacti are not only luxuriant but also delicious. They are cooked into excellent cuisine which appeals to the citizens. And there are so many vegetables in the green house: Tomato sweet peppers, Japanese Cucumbers, pumpkins, Sweet Radishes and Sweet Potatoes. Love apples are ripening on the vines, awaiting the old and young amateur farmers to pick. Popular Science Tour encourages our citizens to take a look at our agricultural bases, becoming interested in learning, discussing and using science, integrating scientific thoughts and methodology into their mind, enriching their knowledge about non-pollution vegetables. All these benefit the citizens profoundly.

3.3. To accomplish the goal of the tour, we must study key points of the tour. We have to group the participants according to their own will. Organize the citizens to take the tour consisting of Popular Science and tourism, which means science, scientific spirits and tour, journey all together. During this tour, the guides are not only public servants but also disseminators of science. Speech scripts for some routes has been published, from the view point of science, explaining knowledge about ecology, environment, municipal utility, new industry, preservation of old city, etc. Meanwhile ask and answers on science have been hold, where the participants played the role of tourists as well as learners. People are learning while playing, which enables them to renew their knowledge and become lifelong learners.

3.4. Take the final evaluation as orientation and confirm the evaluating essentials of popular science tour. The tour will not achieve the goals of promoting community popular science, scientific spirit, or scientific thought, in case it fails to attract the citizens. The model construction of citizen popular science tour is an integration of scientific education and entertaining tour, which focuses on Science- Popularization-entertainment, dynamically describing the running of citizen popular science tour all the way and formulizing the basic elements. This is a logical must from abstract to concrete, as well as providing the guide and code for citizen popular science tour.

Fruits of Citizen Popular Science Tour:

With vivid, direct and interacting measures, the tour makes itself better understood and accepted and enable the senders better infuse their ideas, which will become the receivers' life behaviors. See details as following:

(1) Participation: It is the basic of citizen popular science tour, which faces to the whole society. Since the target of community popular science includes every neighborhood, all the community citizens are accessible. Popular Science Chains for different targets and contents are formed according to different citizen demand. The tour enables the family-trifle troubled neighborhoods get out to know the society, obtain the knowledge, as well as arises their interest on Learning Science, Loving Science and Applying Science.

(2) Diversity: It shows the various form of popular science tour. The diversity is not

only shown as multi-level and multi-structure of neighborhoods, but various form and content of tour, which attracts the mass attention with such innovative theme activities as photographing tour, self-driving tour, ecology tour, I LOVE SUZHOU WATER environmental protection tour, TWO LOOKS tour, SEE SUZHOU tour and etc. All the tours have been fruitful.

(3)Interaction: It enables the receivers have a better understanding of the sender's idea. The popular science promotion is a course, during which an individual interacts with the collectivity or society. The scheme has paid special attention to the receivers' learning stimulating as well as the integrating of visit, travel and quiz. It makes easier for the receivers to obtain the science information and transform to their own ideas and everyday practices.

Evaluations on citizen popular science tour:

1. The tour updates the citizens' science ideas, meets the demand of city skip-development, promotes the construction of harmonious society and wins the welcome of neighborhoods and adolescents. According to the citizen, the popular science tour is incomparable, which enriches the neighborhoods' life of science, culture and entertainment, making the community life more substantial and fantastic, lubricating the neighbors' communication and constructing the harmonious and scientific atmosphere; the popular science tour, taking the form of edutainment, as well enables the citizens have a view of Suzhou scenery, obtain the knowledge and feel the power of science. In the year 2005, Suzhou Science Association, taking the national popular science education base--- Future Agriculture and Forestry World as the base of popular science tour, kicked off the Ten Thousand Citizens Popular Science Tour, which has aroused great interest. After that, the Science Association has been keeping the neighborhoods as the tour targets, organizing them to participate and, by different seasons, targets and groups, proposing the theme tours as self-driving tour, photographing tour, family tour and etc., which enable more citizens feel the power of science while enjoying the happy tour.

2. The popular science tour has enhanced the organization and responsibility of residents' committee science associations, which, taking their own advantages, cooperate with academies, give science lectures, organize performances and etc. All these have infused new content and energy to the community work, raised the community management level and become the hot spot of community popular science work.

3. The popular science tour has innovated a new mode of urban popular science, found the way to social, serving and people's popular science, enriched the popular science with new content and new form, which educates the public while enjoying.