Discussion on Science Popularity of Food Safety Based on Participatory Network

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Abstract. Years after the innovation-oriented national strategic goal was raised, the demand for science popularity is in a great increase by the people, and the mission to improve the scientific quality of the people becomes much harder than ever, and the poor construction in science popularity is much highlighted. This article gives an introduction to basic concepts of new media and participatory network, based on which, cases of relevant applications are listed systematically on the science popularity publicity; proposing implementation programs for promoting the participatory network science publicity in the country in allusion to the problems and challenges existing during the construction of science popularity relative to the food safety, mainly including integration and sharing of science resources, sharing and comments of science popularity knowledge, innovation and enriching of science popularity contents, training and development of science talents.

Introduction to the Participatory New Media

Definition and Application of New Media Online

Experts and scholars have been arguing on the "new media", which is not finally defined. The magazine “Wired” in the US gave a definition of its own to new media: "Communications for all, by all". Prof. Xiong Chengyu, director to new media research center of Tsinghua University thinks that new media mainly refers to: a media form influential emerging on the basis of the computer-aided information processing technology, including online media and offline other digital media forms”[1]. New media mainly include blog, podcast, wiki, WeChat, online magazine, mobile multimedia, digital TV, online TV, building screens (large screens), virtual communities, etc. [2].

Definition and Applications of Participatory New Media Online

The participatory new media online is embodied through the Web2.0 network application, which evokes the power of the mass for spontaneous sharing and dissemination and leads the mass to participate in the trend of culture, making the network go from one-way communication to a two-way interaction. Based on the participatory new media online, the "participatory science popularity" is a new science popularity mode, which is focused on all netizens for dissemination of science popularity contents after active creation through an identity confirmation, where communications are achieved online [3].

Social network acts as a service platform for communications between users online. At the beginning, the social network sites developed slowly, going with the development of Renren online via financing and the rise of Kaixin online, the social network markets go viral [4].

Microblog is a user-based platform of information sharing, dissemination and acquisition, through which, users can post the latest information via network terminals such as computers, mobile phones and the like, and the audiences can re-post or make comments [5]. “The 39th Statistics Report of Internet Development in China” shows that 37.1% netizens take to microblogs [6].
Deficiency of Participatory New Media Online

The "Study Report of Status Quo of Science Popularity Market and Science popularity Use Behaviors of Netizens in China”, released by China Internet Network Information Center (CNNIC), shows the netizens in urban areas have accepted more science popularity online than those in rural areas; and the penetration of Internet in urban areas are higher than that in rural areas. Urban residents are main users for the science popularity online, occupying 72.0%. The network development is in an extreme imbalance between urban areas and rural ones, which will cause great differences in the science popularity spread. In addition, the creditability and copyright of science popularity online also affect the application of participatory new media for science popularity spread.

Advantages of Participatory New Media Online

First of all, the growing Internet users and individual habits changed by the Internet play a key role in the science popularity of participatory network. "The 39th Statistics Report of Internet Development in China" released by CNNIC shows that as of the end of December 2016, the scale of Chinese Internet users had reached 731 million, an annual increase of 42.99 million [6]. China's mobile Internet users reached 695 million, up 75.5 million over 2015. A majority of the mobile Internet users are young people, those aged 10-39 accounted for 73.7% [6]. Instant messaging, search engines, online news and social networking, as basic applications, have users increased steadily.

Second, currently the participatory new media online is in a rapid development, which brings more convenience for promoting the knowledge of food safety science popularity. "The 39th Statistics Report of Internet Development in China" released by CNNIC shows that by the end of December 2016 the first three typical social applications are comprehensive social ones. WeChat friends loop, QQ and microblog users were the first three, occupying respectively 85.8%, 67.8% and 37.1%. Nowadays, the society has entered into an era of participatory culture, that is, going from "read" to "read and write", from one-way dissemination to two-way interaction. The participatory new media online, including social network, microblog and WeChat, just meet the needs of the public [3].

In addition, the construction of science popularity work and capabilities are divided into three stages. The participatory new media online can push the science popularity work to a much advanced stage. The key point of "the public accepting the science popularity" is focused only on the one-way dissemination and imparting of scientific and technological knowledge, where the public are passive to accept it. “The public understanding the science popularity" emphasizes a feedback-oriented two-way dissemination, focusing on the public interaction. "The public participating in the science popularity" aims to enable the public to participate in the science popularity, emphasizing the public’s experience of the science and technology and the participation in scientific and technological decision-making. Most of China’s science popularity work still remains in the first stage, yet with "the public understanding the science” valued increasingly, it is ultimately to take to the highest stage.

Implementation of Participatory Science Popularity Publicity Online

Integration and Sharing of Resources Relative to Food Safety Science

The science popularity websites are sponsored in diverse forms in the country, having 11 categories, including technical associations at all levels, the Chinese Academy of Sciences system, the Communist Youth League system, educational institutions, communities and academies, science popularity stations, government authorities, individuals, media, enterprises and comprehensive business websites. There are two major problems existing there. First, the co-construction and sharing channels are singly gathered in the technical associations and the science popularity resources owners, and only the China Association for Science and Technology takes the lead for
collaboration within the science and technology systems, yet there are almost no horizontal unions. As a result of it, the poor exchanges of information causes the science popularity resources in a fragmented state, failing to work. Second, the science popularity resources show a distribution of an inverted pyramid, the capital, the provincial capital cities occupy most of and rich science popularity resources, yet little of which can be found in grassroots.[7]

In order to realize the integration and sharing of science popularity resources, the sponsors need cooperation and division and finally establish a science popularity network alliance, effectively coordinating and utilizing the existing science popularity resources and forming a network mechanism featuring complementary advantages, information sharing and system linkage. During the establishment of the alliance, it needs to solve bottlenecks such as capital, copyright and labor division. In the United Kingdom, the Royal Society and other authoritative organizations establish and supervise science popularity publicity committees specifically responsible for the science popularity publicity. The operation of the British Royal Association shows a pattern for the science popularity publicity in the developed countries, achieving the high integration of science popularity resources and avoiding the waste of resources [8].

**Sharing and Commenting of Science Popularity Knowledge of Food Safety**

On the Sina website, an official microblog can be opened for the science popularity network alliance which can create single official microblogs for local branches of its own for independent functions. Through the dandelion pattern shown in official microblog strategy by enterprises or organizations, namely the information is post by an official account, which will be re-posted by other official accounts inside the science popularity alliance [9]. The transmission of a message will take a long time with low efficiency, generally 10%-20% at a place, also called an outburst point, will meet a rapid increase, going from a slow curve to an exponential growth, so that the public may share, re-post or make comments to the science popularity knowledge.[9]

**Innovate in and Enrich the Food Safety Science Popularization**

There are few original works of internet-based science popularization concerning food safety in our country. Copied articles can be seen everywhere. Currently, the information on most websites comes from the traditional media. It is in urgent need of creating popular science works suitable for the participatory network science popularization from contents and organizational forms. Besides, the forms of popular science information lack diversity. The traditional static text and stiff image information fail to attract the cyber citizens effectively [10].

The object of food safety science popularization is the public. The knowledge of food science will be widely popularized. Therefore, the contents and forms shall fully consider the public’s ability in acceptance and understanding. The participation, interactivity, universality and practicality shall be embodied to make it closer to the life of common people and easier for them to accept and understand. The design principles of popular science contents are crucial. The entertainment of it shall be explored. The products of science popularization shall not be too didactic, serious and rigid. Non-elegant words will not become popular. We shall be adept in showing the scientific knowledge through interesting and exaggerated forms. The idea “science and exploration is interesting” shall run through the activities of science popularization to spread the science in entertainment. The interesting contents can be divided into several parts with clear indication that it comes from the newly-built network science popularization alliance. We can transmit it on social network sites, microblog and WeChat for people to comment. British scholars Aquiles Negrete and Cecilia Largigue (2004) observe the knowledge of popular science becomes more interesting and easier to be understood after we put it in novels, cartoons or short stories. It is easier for the public to remember. In addition, it can be publicized and shared through animation and videos [11].

**Train and Expand Talents of Food Safety Science Popularization**

After the unified network alliance of science popularization is established, professional scientific and technical workers, teachers of science curriculum, personnel of popular science creation,
reporters and editors of technology and science of the mass media, photographers, creators of films and television as well as cartoon works, artists, personnel in planning and managing activities to popularize scientific knowledge and researchers of popular science theory shall be chosen to form the talent teams of science popularization. In order to improve their professional level, corresponding training and evaluation system shall be designed for them. The training of science popularization mainly covers: learn skills of media workers, the operating skill of participatory network new media, innovate in the contents of popular science, the skills to popularize the popular science to the public, the psychological and behavioral science, as well as the explanation and improvement of related policies. The ultimate purpose is to create dialectical works of popular science with high reliability, strong innovativeness, thick interestingness and high circulation. In order to gather the frontline experienced researchers and authoritative experts to participate in the activity of popular science popularization, corresponding encouragement and support shall be given on national level and incentive mechanism and corresponding supportive policies shall be established [12].

Conclusion

The implementation of the above schemes needs the attention of the government, the relevant units and experts, mainly embodied in policy, capital investment, organization and implementation, evaluation and theoretical research. Besides, it needs to strengthen the awareness of “public relation” and publicize the significance of “the construction of science popularization resources” through media, so as to improve people’s consciousness of resource sharing and let them understand and voluntarily participate in the co-building and sharing, laying a solid foundation of public opinion for the smooth implementation of construction. In publicizing the participatory internet-based science popularization, it is necessary to pay attention to the behavior change of the public, such as the preference for topics about media and food safety. Questionnaires can be designed to fully know about the science popularization behavior of different people in different areas. Ultimately, we shall conform to the historical trend of the time, let science popularization move towards the market and serve the society, changing “free” science popularization into “paid” science popularization, “science popularization of plan” into “science popularization of market”. It is stressed on the Fifth Plenum of the 18th Central Committee of the CPC that we shall “expand the space of internet economy” and implement the “Internet Plus” action plan during the “13th Five-year Plan”. Therefore, the foremost task at the present stage is to base on the participatory network, positively carry out the food safety science popularization and put the requirements of people in the first place.

References


