

Speedy Science

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Abstract

For this particular project, we utilize the publication model that consists in a fascicle that is recycled and read several times in order to reach the largest number possible of people. In this case, we are talking of a fascicle with 24 pages that is published in a co-edition effort with the “Sistema de Transporte Colectivo Metro del Gobierno del DF” that is the public transportation system —subway— in Mexico City and the UNAM, with the economic support for the printing by Teléfonos de México.

Given the fact that nearly 40% of the Mexican population does not read, not even a single book in a year, the main objective of the project was to raise their interest in reading and in particular in reading scientific material, at the same time making approachable to the population with less economic resources, fundamental scientific topics, for it is the population with less economic resources the one that uses the subway as means of transportation. So it was through the Speedy Science Fascicle that we are making inroads in the less economically favored segment of the Mexican population by given them access to fascicles that will complement their education in diverse scientific topics, thus widening and deepening their scientific culture.

Introduction

Given the fact that printed books, magazines or fascicles have high cost, it is very important to try new models through which one single product can reach a larger audience. Of course, the electronic model might be the most convenient one; first of all, it can effectively reach a high number of readers. Second, readers can consult it and it can be in Spanish. This last characteristic is the one that can be the most difficult to accomplish, if we consider that out of the big universe of publications that populate internet, the great majority of them are in English.

If we take México as an example, up to the year 2013, only 38% of the Mexican population had internet access, so approximately two thirds of the population had no access to electronic publications.

But, let's assume that a 100% could have access to electronic publications, what is the probability that a reader will consult our publications in Spanish?

Up to now, the electronic means for publishing are a novel media, which we need to experiment with and use, but we need not disregard the fact that so far it has not been proven that it is a better media than the printed publications.

It is important to consider that books have been printed and published for more than 500 years, while if we take one of the most recent forms for information storage, the USB, has been with us for only 5 years. Presently, a book, a magazine or a fascicle that was stored in a 5 ¼ inch disc cannot be read anywhere in the world.. And this happened in a 20 year time period.

It is therefore not so clear how are we going to make available publications to the society if we do not have the computers, the programs and the storage systems that will we turn out to be adequate in a time frame of tens of years. We are profoundly dependent on these systems and media, which it is not comparable to what has happened to libraries, where we can continue to read books that are hundreds of years old.

Speedy Science

In the Speedy Science project we use a publication model consistent in a single fascicle that is recycled and is read many times, therefore reaching a large number of readers. Speedy Science is a 24 pages fascicle, co-edited with the "Sistema de Transporte Colectivo – Metro del Gobierno del DF, which is the public transportation system –

subway in Mexico city, the UNAM – Universidad Nacional Autónoma de Mexico (Autonomous National University of Mexico), and with the economic support of Teléfonos de México, the Mexican telephone company for the printing of the fascicles.

The project was initiated by the UNAM in the year 2005, with the objective to promote the reading of public communication of science and technology amongst the subway passenger in Mexico City. Initially the project had the intention to promote general literature reading, but the public communications of science professionals from the UNAM thought it was relevant and timely to broaden the scope so the general public could have access to free texts with scientific information that could be read by dozens of subway passengers.

The initial idea was that the subway passengers could take a free copy of the Speedy Science fascicle from a kiosk located in the subway stations, read it and leave it in another kiosk in the next station for another passenger to read. This way, one fascicle could be read by dozens of passengers, the same way as with the airplane magazines, therefore reaching a huge number of readers with smaller print run

In the back cover of each fascicle you can read the following message “Science is culture. The Speedy Science collection, prepared by the UNAM for the Collective Public Transportation System – Metro, pretends to get people closer to science and that they considered science as part of their culture. Those who get concerned with not fragmenting knowledge think that quality public communication of science is literature and art. A good number of researchers and public science communication professionals from the UNAM are putting its share of effort to bring science out of the laboratories and the schools and take it to you, the subway passengers. We hope this effort will be or your liking. You can learn in classrooms and universities, but also in the subterranean paths of our city and while you move. Read and return Speedy Science”

Ideally, we think that as it happens with literature books, that some of them are in fact anthologies of great Latin-American writers, people would read the book and return it back so it could be read by another passenger. However, en the case of the Speedy Science fascicles, with only 24 for pages, what happened was that people were taking the fascicles with them and not turning them back, in spite of having a group of Metro

assistants that were explaining the process, please read it and return it back to the kiosk in the next station, so more people can read it.

The Speedy Science fascicle collection started in 2005, under the editorial coordination of Juan Tonda, Rosanela Álvarez and Nemesio Chávez, text correction was under Martín Bonfil, Javier Cruz and Nemesio Chávez, public science communication professionals, design was done by Elizabeth Cruz, and the editorial assistant was Leticia Monroy.

The project was conducted in the Dirección General de Divulgación de la Ciencia-UNAM (the public communication of science department in UNAM) run at that time by Julia Tagüeña Parga Colín PhD. It was done on behalf of Rene Drucker Colin PhD, then the UNAM Scientific Research coordinator.

Fascicles are in half letter size format with 24 pages. Initial print run was of 100,000 copies, which was later reduced to 30,000 copies. Initially, ISA Company financed the printing of the fascicles, later the financing was done by Teléfonos de México.

In the first stage, some of the authors were well known UNAM researchers.

First titles were:

1. The scorpion and its bite, Lourival Domingos Possani, 2005
2. The next earthquake in Mexico City, Cinna Lomnitz, 2005
3. The cell and its world, Horacio Merchant Larios, 2005
4. A look at matter. What is a superconductor?, Julia Tagüeña Parga, 2005
5. An atom, how is it build, Luis de la Peña, 2006
6. Plate tectonics, Juan Manuel Espíndola Castro, 2006
7. México and the global climate change, Cecilia Conde, 2006
8. The subway, food and biotechnology, Agustín López Munguía, 2006
9. Insects, can we eat them?, Julieta Ramos-Elorduy, 2009
10. New materials, Pedro Bosch and Cristina Piña, 2009
11. Bioremediation what is it?, Rosario Iturbe Argüelles, 2009
12. Sexual conduct, Wendy Portillo y Raúl Paredes, 2010
13. Landslides: a light at the end of the tunnel, Irasema Alcántara Ayala, 2010
14. Biodiversity, Mireya Imaz Gispert, 2010
15. Ecology, Ken Oyama y Ana Claudia Nepote, 2011

16. Depression and anxiety, Miguel Pérez de la Mora, 2011
17. Body clocks, Raúl Aguilar Roblero, 2013
18. CTI's Citizens Agenda from, Rosalba Namihira y Adriana García, 2012
19. Stars' night. In between the end of the world and Mayan astronomy, Daniel Flores, 2012

Second Stage

For the second stage, it was decided that instead of the researchers been the writers, the public science communication professionals would write the fascicles. A new design would be done and following José Franco's Phd, the General Director suggestion, topics would be scientific and technical themes related to Mexico City.

For this second stage, proposed titles are:

1. Electric cars, José de la Herrán
2. The other inhabitants of Mexico City, Alejandra Alvarado
3. The National Astronomic Observatory, Susana Biro
4. Evolution, Carmen Sánchez
5. Time and city, Nemesio Chávez
6. Sound contamination, Paula Buzo
7. The ecological reserve Pedregal de San Ángel
8. Renewable sources of energy in the city, Juan Tonda
9. Sexuality, Javier Flores
10. Drugs a la carte, Gloria Valek
11. Light pollution, Rolando Ísita
12. Movement patters in the city, Sergio de Régules
13. Transportation, Javier Cruz
14. Chocolate, María Emilia Beyer
15. Garbage that is not garbage, Leticia Monroy
16. Forensic sciences, Renato Gómez
17. Obesity, Amanda Gálvez
18. Water in Mexico City, Arsenio González
19. Biomaterials, Mónica Genis

20. Molecular machines, Martín Bonfil

Presently, we have the text for the first 4 titles, and it is completely finished the first fascicle, Electric cars, written by José de la Herrán, Eng. As it is well known, Mexico City is one of the largest cities in the world, that has more than 4 million cars circulating every day, which creates huge pollution problems. Given the fact that subway –Metro- construction in the city is very expensive, it is critical and important that the use of electric cars in the city should be privileged and make them affordable to the majority of the population.

In this new stage of Speedy Science we are also planning on having the digital version of the fascicles and have free distribution through the DGDC web page, until we can get the financial support to print and distribute them in the subway with no cost to the passengers. In order to get this, we will need to get support from institutions like the Consejo Nacional de Ciencia y Tecnología (National Council for Science and Technology) or from big companies that can finance the printing or the fascicles.

Speedy Science is a project with the objective to bring science and technology, free of charge, to population of big cities and that it is read while you are going from one place to the other. In order to get to know what is the public thinking about this, and get their feedback, we are going to conduct a survey to get to know Metro's readers opinion.

Bibliography

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13th International Public Communication of Science and Technology Conference

5-8 May 2014, Salvador, Brazil

<http://www.metro.df.gob.mx/cultura/cienciaboletto.html>