

Brazil's Telecurso 2000

The Flexible Solution for Secondary School Equivalency

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Faced with a rapid globalization of the Brazilian economy and workers' low levels of school attainment, the country's Federation of Industries and the Rede Globo education branch—the Roberto Marinho Foundation (FRM)—joined forces to launch Telecurso 2000. This 1200 lectures program allows young adults to study for open examinations and obtain secondary certificates. The courses focus on job-oriented education, development of basic skills and citizen education. Over seven million people watch it on a regular basis for entertainment and/or informal learning and over half a million are formally enrolled in courses taught in teleaulas.

History of Telecurso 2000

Brazil, with its large territory and low school attendance, has been experimenting with radio and television education for more than three decades. Two states in the Northeast (Ceará and Maranhão) created secondary schools through television in the 1970s. Yet, a bit later, another player—a private enterprise, the Globo Television Network—stepped on to the stage and completely changed the relationship between secondary schools and television. Being the world's fourth largest network, Globo had ample experience in production, excelling in soap operas that found huge markets in all continents. Twenty years ago, the Roberto Marinho Foundation (FRM), the education branch of Globo, created the first Telecurso, adding a number of important innovations. First, it used very expensive production. Second, it used actors instead of teachers. This program was a major success and was aired for more than 15 years.

By contrast to Mexico's Telesecundaria, Telecurso targeted young adults who left primary or secondary schools before graduation. Brazil always had open examinations for primary (eight years) and secondary (11 years) certificates ("exame supletivo") for young adults who are beyond a certain age. Since these were open examinations, students could prepare on their own or enroll in preparatory courses. The Telecurso took the place of these preparatory courses, allowing students to follow the curricula by watching television. A number of institutions received supervision from FRM to create classrooms where, under the supervision of a teacher, improvised or certified, students could watch the programs/classes and use the complementary written materials.

In the early 1990s, with the rapid transformation and globalization of the Brazilian economy, industrialists were having problems with the appallingly low schooling levels of their workers. In many cases, they provided sponsorship for them to take the preparatory courses leading to the government examinations. However, the quality of these courses was, at best, mediocre.

The Federation of Industries of the State of São Paulo then struck a deal with FRM to prepare a new Telecurso for its workers. In this joint venture, the industrialists contributed US\$30 million to produce a new program and Globo offered to broadcast it without any charges. Globo also donated the equivalent to US\$60 million worth of commercial TV time to promote the new program, called Telecurso 2000.

Content of Telecurso 2000

Telecurso 2000 is a condensed version of a basic curriculum for distance education, which is to be provided through a combination of videotaped classroom sessions and books. Thus, both television sets and videocassette equipment are used. In addition, an optional curriculum is offered that focuses on teaching basic mechanical skills (the vocational course on mechanics).

The initial discussions on the development of a curriculum for the three courses to be offered by Telecurso 2000 (Level One, Level Two and the Vocational Course on Mechanics) were subsidized by education specialists who wished to elucidate the teaching of basic skills in the context of a postindustrial society.

With that beginning, the guiding principles for the educational program of Telecurso 2000 were developed as follows:

1. *Job-oriented education.* The purpose is to educate individuals for a job: to educate workers so as to enable them to relate in a meaningful way to life in society, bearing in mind the fundamental role of education in ensuring worker productivity.
2. *Development of basic skills.* In a society marked by scientific and technological progress, it is not enough simply to learn to read, write, count and solve simple arithmetic and geometry problems. It is essential to enable people to organize their thoughts, solve problems involving numbers, interpret what they read and apply it in different situations, read and express themselves in another language, understand instruction manuals, develop basic know-how in economics and quality control so as to be able to produce more and better products and eliminate waste, and hold discussions by making use of cognitive and social skills.
3. *Citizenship education.* The nature of the new relationship between science, technology and society makes it necessary for workers in all categories and at all levels to broaden the scope of their learning, so as to enable them to play an active role in the political and cultural scenes. Production-oriented skills must go hand in hand with civic responsibility.
4. *Contextualization.* The most advanced teaching practices stress the importance of applying what is learned in class to situations that arise in daily life. In other words, daily life provides the material for the teaching of specific skills.

These four principles—job-oriented education, development of basic skills, citizenship education and contextualization—underlie all the disciplines that are taught through Telecurso 2000. The development of the program content for each discipline was entrusted to teams of professors associated with the major universities, all of whom were required to have ample experience in the field of basic education. This requirement was particularly important given the highly specialized nature of adult education and the need to adjust the language to be used accordingly. Textbooks had to be easy to read without being childish.

Table 1 shows the content of the curricula for the three courses offered by Telecurso 2000, as well as the number of TV classrooms and books used in each discipline.

Approach

The new program employs only professional (soap opera) actors, thus making the production even more expensive than in the first Telecurso. There are other differences as well. Since it is aimed at young adults, it does not put classrooms, teachers or students on the screen. All scenes take place in factories, streets, homes, offices, newspaper stands and travel agencies. Real life problems precede the presentation of theories and explanations. Telecurso 2000 also borrows heavily from the pace of commercial TV, moving very fast and including plenty of humor, very much like the regular TV programs Brazilians usually watch. Although the program occasionally may sacrifice depth, it seldom sacrifices rhythm.

Table 1: Composition and Resources of Telecurso 2000

Course	Discipline	TV Sessions		Resource		Hours of study required
		N	Hours	Video	Books	
Level 1	Math	80	20.0	10	4	1 hour 45 minutes per class session
	Portuguese	90	22.5	12	4	
	Brazilian	40	10.0	5	2	
	History					
	Geography	50	12.5	7	2	
	Science	70	17.5	9	3	
	English	30	7.5	4	1	
Total	6	360	90.0	47	16	630 hours
Level 2	Math	70	17.5	9		1 hour 45 minutes per class session
	Portuguese	80	20.0	10	3	
	Chemistry	50	12.5	7	3	
	Physics	50	12.5	7	2	
	English	40	10.0	5	2	
	Biology	50	12.5	2	2	
	Brazilian	80	20.0	10	4	
	History					
	Gen. Geography	40	10.0	5	2	
Total	8	460	15.0	60	20	735 hours
Technical Course on Mechanics	17 modules including a variety of subjects	360	90.0	53	19	1 hour 45 minutes per class session = 630 hours

The forms of delivery also evolved. The programs are broadcast nationwide between six and seven in the morning, a most inconvenient time. They are then rebroadcast through cable and satellite at more convenient hours. Similarly, education and culture public televisions also broadcast them during the day. In most cases, these are recorded and later played at a more convenient time. In contrast to Telesecundaria, such “videotape education” is common, occurring not necessarily by design, but by choice of users. A telephone survey indicated that few watch it on the TV to prepare for the examination, confirming the hypothesis that those who want to take the examinations work from tapes in classrooms with teacher support.

Users of Telecurso 2000

It is difficult to identify all the users of Telecurso. Suffice it to say that 5.2 million accompanying texts were sold or distributed between 1995 and 1999. “Telesalas” (classrooms with television sets) have been created in enterprises, and a support system for those working with students has been established. At present, more than 200,000 students attend classes at factories, schools, churches, offices, prisons, ships and buses.

An unknown - but probably large - number of people watch television and study on their own. But even more surprisingly, another large and uncounted crowd watches the programs regularly or occasionally, apparently because it is interesting, light and fun. A recent telephone poll indicated that 5 percent of the respondents—closely representative of the Brazilian population—had watched Telecurso 2000 in the previous week (this is close to 7 million people). The interviews have shown some interesting findings. Sur-

prisingly, the modal level of schooling of the audience is higher education, and most respondents indicate that the reason they watch the program is that they like education programs.

A further development is the spontaneous utilization of the programs in regular schools—something that had already started with the old Telecurso. The growth rate of this form of use is even more impressive. The data are unreliable but it seems that more than 200,000 students attend classes where the Telecurso is the predominant mode of delivery.

The Economics Of Educating With Television: Big Is Beautiful

Like all forms of education using technology, television requires heavy initial investment. Significant savings are obtained in current costs, since one can use less expensive teachers and still obtain serious results. However, the fixed costs up front are quite high.

Simple arithmetic suggests that in order to have reasonable costs per student, many students are needed to share the fixed costs. Assuming a cost of US\$30 million for preparing Telecurso 2000, if the program were to stop today, figures for book sales indicate that several million students participated in Telecurso somewhat seriously. Suppose three million used the program, this would amount to US\$10 per student. This is a very modest price (per student) for a set of 1200 15-minute lectures.

Costs per book are around US\$4 (the primary school program uses a single book and the secondary program uses multiple books). Hence, the social cost per student working on his/her own is US\$14.

Classroom modalities completely change this cost equation. Since it requires one teacher per classroom, the costs begin to approach those of conventional education. Estimates for classes offered in factories and in well-respected philanthropic institutions yield costs per student around US\$400. This is no more than the average costs for public education but less than the costs in the more affluent states where most of these classes take place. In other words, once we put a teacher in each classroom, the costs of Telecurso look about the same as those of regular schools—which do likewise, without the support of technology and good books. At the present scales of operation, the imputed costs of the US\$30 million initial investment almost disappear inside the much larger recurrent cost of paying teachers or instructors. Actually, there is a strong tendency to hire regular teachers for the “telesalas.” Hence, cost-wise, the Telecurso is similar to a regular school, since the television component has a negligible weight. But there are ways of reducing costs even with a teacher in the classroom, which have not yet been experimented with. For example, the number of classroom hours for night schools, attended by 60 percent of all secondary school students could be reduced by say, one half, requiring students to watch the program on their own half the time and in teleclassrooms the other half time, at which time teachers or monitors could help with problems.

How Effective Is Telecurso?

Telecurso 2000 is an ambitious initiative, mobilizing hundreds of people at the production, distribution and instructor-training levels. Does it pay? Are the results commensurate with the costs?

No rigorous study allows us to give a precise and reliable answer. Costs are easy to compute. The delivery and its organization are clear enough. But good measurements of outputs are lacking. And when they are available, they lack comparability with other groups (regular students or students preparing for “supletivo” by other means). Research is currently underway to try to answer these fundamental questions. In any event, Telecurso has already proved its value through providing opportunities which were not available to young adults, through opening a new perspective on pedagogy and on educational materials.