Computational and media resources in adult environmental education: a case study to automobilist sector in Curitiba's metropolitan region - Brazil.

Ivo Lessa Filho, Msc
UFSC - Santa Catarina Federal University
Production Engineering Program Post Graduated
ilf@osite.com.br

Christianne Coelho de Souza Reinisch Coelho, Dra
UFSC - Santa Catarina Federal University
Production Engineering Post Graduation Program Collaborator Professor
Eco-Ergonomics Nucleous
chris@eps.ufsc.br

Francisco Antonio Pereira Fialho
UFSC - Santa Catarina Federal University
Production Engineering Post Graduation Program Professor
Eco-Ergonomics Nucleous
fialho@eps.ufsc.br

Carolina Sant'Ana
UFSC - Santa Catarina Federal University
Production Engineering Program Post Graduating
carolsbr@yahoo.com

The environmental education practice, as suggested in Brazil and abroad, is complex due to its new problems. Such proposals focus mainly the changes in our views on man-nature relationship and industrial production impacts on people's lives that's to say they reformulate man's significance to the world. That's why traditional schools, with their historical limitations, find it difficult to change the regular curriculum and insert this new learning approach in it. On the other hand, companies can educate their employees in a more cognitive way, noticing that they are not bound to basic curricula. Another well know advantage of companies having over schools, is that their companies financial conditions are much better, allowing them to make use of modern technological resources (computers, etc) thus facilitating educational work. This article presents a research realized in three companies from the automobilist sector – Renault, Volvo and Bosch - in Curitiba city, Paraná, Brazil. This research intends to identify contents and medias used by the companies in non-formal Environmental Education of their employees.

Nowadays, industrial paradigm is based on a dominance relation with nature. Nature is still understood as something that has to be controlled, as an enemy. Industries in general still think of nature as an inexhaustible resource. Most of them just collect raw material, burn fuel, etc, without any precaution or concern about future consequences.

It is from public knowledge that nature is losing the battle against man's predatory usage. Investments and efforts to research alternative energy sources, rational collect of raw material, planning strategies for future generations, creation of an environmental conscience among others are urgent. Man has to change his relation with nature; a possible solution is the environmental education.

The problem with Environmental Education in Brazil is the way that is being handle. In regular schools environmental education is precarious and it is not being well developed. We are not sure how it is being conduct in the industrial ambient, where it is surely necessary. Those are the hypothesis of this work: there are not well-structured programs of Environmental Education in industries, there is no continuity in the educational works, there aren't evaluation tools to these works, the used medias reveal an instinctive attempt to develop impressive programs, and for last but not least, industries are developing these works exclusively to obtain the environmental certificate.

The main goal of this work is to carry out a survey about what is being done in terms of environmental education of adults in the industries quoted, including the content aspect, methods and tools used in industrial environmental education. We intend to review the bibliography about the subject in a deeper way, verifying in what circumstances the employees receive the concept of environmental education in pedagogic and critical form, identifying the medias used in visited institutions and checking if the education is helping and changing something in employees everyday life.

We also intend to carry out proposals to environmental education applied for Volvo, Renault and Bosch employees, to elucidate their preservational, philanthropic and legal importance at work environment, reminding them of their technical, social, ethic and even moral role in their community.

The used methodology was exploratory and qualitative research, field survey, file survey and interviews. We analyzed the nature of contents, the ethic and esthetic values of related aspects with political participation. The analyzed medias were the following:

- Didactics books
- Paradidatics books
- Literature
- Folders
- Journals
- Toys/games
- Events
- Internet and intranet
- CD-ROMs
- Videos
- Television Programs

As already quoted, our study case happened in Brazil's Volvo, Robert Bosch and Brazil's Renault. Next, we have a chart containing what medias are used by each industry, concerning environmental education:

Analyzed Medias	Volvo	Bosch	Renault
Books	**No**	**No**	**No**
Folders	**No**	**Yes**	**No**
Catalogues	**Yes**	**Yes**	**No**
Events	**Yes**	**No**	**No**
Toys/games	**No**	**Yes**	**Yes**
Journals	**Yes**	**No**	**No**
Others	**No**	**Yes**	**Yes**
CD-Rom	**No**	**No**	**No**
Internet	**Yes**	**No**	**No**
Intranet	**Yes**	**Yes**	**No**
Videos	**No**	**Yes**	**Yes**

In the aspects related to ethics and esthetics values, we could notice that there is a centralization of medias in “beauty”. The visual is more important than the content. The speech focuses the man responsibility with nature. Esthetics is the motivation factor in many actions, from employees to enterprises. In aspects related to political participation, the enterprise may or may not incentive the active participation, the enterprise is also centralized in the highest hierarchy. But, we could find some effective programs, such as CLIC and “Were are the Heirs of our Actions”, both in Volvo.

There is an absence of evaluation models and, an absence of pedagogic systematization and concrete goals in the environmental education plan. We could conclude that the enterprises are located in two extremes: the ones who are searching for the environmental certification and to carry the law and, the ones who want to innovate with a strong social responsibility.

Key words: medias, adult environmental education, automobilist companies.