Iracema program: sustainability in distance education

Programa Iracema: sustentabilidade na educação a distância

Programa Iracema: sostenibilidad en la educación a distancia

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Andrea Cavalcanti Macedo
Master in Technology and Management in Distance Education
Institution: Universidade Federal Rural de Pernambuco
Address: Recife - Pernambuco, Brasil
E-mail: andreaacmacedo@gmail.com

Marizete Silva Santos
PhD in Computer Science
Institution: Universidade Federal Rural de Pernambuco
Address: Recife - Pernambuco, Brasil
E-mail: marizeteufrpe2@gmail.com

José de Lima Albuquerque
PhD in Forest Engineering
Institution: Universidade Federal Rural de Pernambuco
Address: Recife - Pernambuco, Brasil
E-mail: jose.limaa@ufrpe.br

Francisco Luiz dos Santos
PhD in Physics
Institution: Universidade Federal Rural de Pernambuco
Address: Recife - Pernambuco, Brasil
E-mail: chico.ead.ufrpe@gmail.com

Maria Silva Santos Barbosa
Master in Computer Science
Institution: Universidade Estadual do Sudoeste da Bahia
Address: Vitória da Conquista - Bahia, Brasil
E-mail: mssbarbosa@uesb.edu.br

Ivanda Maria Martins Silva
PhD in Letters
Institution: Universidade Federal Rural de Pernambuco
Address: Recife - Pernambuco, Brasil
E-mail: ivanda.martins@ufrpe.br
ABSTRACT
With the change in the means of production since the Industrial Revolution, man starts to cause increasing impacts to the environment, since the means of production are no longer handcrafted to be machines that use steam energy from the burning of fossil fuels - initially coal. These impacts have been discussed since the 1970s at United Nations (UN) events that aim to achieve global cooperation in search of solutions to environmental problems. Research has shown that the key to sustainability is education and that it is necessary to prepare young people to work within a sustainable culture. In this sense, this work is a descriptive research with a qualitative approach that sought to promote environmental awareness in the municipalities where the UFRPE distance education centers are located, through the involvement of a program called “IRACEMa”. With regard to the axes worked on by the project, such as selective collection, and the proper use of resources such as plastic cups, it was verified that there is still an insufficient commitment between the research subjects. Thus, it is clear that actions of this nature must be strengthened in order to foster environmental awareness in distance education centers.

Keywords: sustainability, distance education, poles, environmental projects.

RESUMO
Com a mudança dos meios de produção desde a Revolução Industrial, o homem passa a causar impactos cada vez maiores ao meio ambiente, visto que os meios de produção deixaram de ser artesanais para serem máquinas que passaram a usar energia a vapor a partir da queima de combustíveis fósseis - inicialmente o carvão. Esses impactos vêm sendo discutidos desde a década de 70 em eventos da Organização das Nações Unidas (ONU) que têm o objetivo de alcançar a cooperação mundial em busca de soluções para os problemas ambientais. Pesquisas têm demonstrado que a chave para a sustentabilidade é a educação e que é necessário preparar os jovens para atuar dentro de uma cultura sustentável. Neste sentido, este trabalho trata-se de uma pesquisa descritiva e de abordagem qualitativa que procurou promover a conscientização ambiental nos municípios onde se encontram localizados os polos de educação a a distância da UFRPE, por meio do deenvolvimento de um programa denominado “IRACEMa”. Com relação aos eixos trabalhados pelo projeto, como a coleta seletiva, e o uso adequado de recursos como copos plásticos, verificou-se ainda existir um compromisso inciente entre os sujeitos da pesquisa. Assim percebe-se que ações dessa natureza devem ser fortalecidas no sentido de fomentar a consciência ambiental nos polos de educação a distância.

Palavras-chave: sustentabilidade, educação a distância, polos, projetos ambientais.
RESUMEN
Con el cambio en los medios de producción a partir de la Revolución Industrial, el hombre ha comenzado a causar impactos crecientes sobre el medio ambiente, ya que los medios de producción han pasado de ser artesanales a ser máquinas que utilizan energía de vapor proveniente de la quema de combustibles fósiles - inicialmente carbón. Estos impactos se vienen debatiendo desde los años 70 en los eventos de la Organización de las Naciones Unidas (ONU) destinados a lograr la cooperación mundial en la búsqueda de soluciones a los problemas medioambientales. Las investigaciones han demostrado que la clave de la sostenibilidad es la educación y que es necesario preparar a los jóvenes para que actúen dentro de una cultura sostenible. En este sentido, este trabajo es un estudio descriptivo con enfoque cualitativo que buscó promover la conciencia ambiental en los municipios donde se ubican los centros de educación a distancia de la UFRPE, a través del desarrollo de un programa denominado "IRACEMa". Con relación a los ejes trabajados por el proyecto, como la colecta selectiva y el uso adecuado de recursos como vasos plásticos, aún existía un compromiso inconsciente entre los sujetos de la investigación. Por lo tanto, nos damos cuenta de que es necesario reforzar las acciones de esta naturaleza para fomentar la conciencia medioambiental en los centros de educación a distancia.

Palabras clave: sostenibilidad, educación a distancia, centros, proyectos medioambientales.

1 INTRODUCTION

Human actions have always had some kind of impact on the environment. After the Industrial Revolution, when there was an intense change in the means of production (which became highly polluting due to the burning of fossil fuels such as coal), these impacts began to be felt more frequently and have increasingly affected life on the planet.

According to Camargo (2012), the years following World War II marked the beginning of discussions by various groups and non-governmental organizations (NGOs) regarding this production model that had prevailed since the Industrial Revolution. At the end of the 1960s, discussions on the environment and development were intensified.

At this time, the United Nations Organization began to organize events that focused on the environment and sustainable development, and there was the formal beginning of debates between governments, NGOs and society on environmental impacts and development, setting goals to slow down the depletion of natural resources. It was found that education must be a fundamental part of this process and that a reorganization of the current teaching model is necessary to make it possible to promote a culture of sustainability.
According to Jacobi (2005), lack of information is one of the main factors responsible for the non-responsibility attitude of the population. And, to change this scenario, it is necessary to provide means of information and incentive to good environmental practices that enable changes in habits in communities.

For Sachs (1980 apud Barbieri, 1997, p. 110), sustainable development or eco-development must be “socially desirable, economically viable and ecologically prudent development”. In this way, the IRACEMa Program, conceived by a researcher from a Graduate Program, was conceived as a strategy aimed at sustainability in the on-site support poles.

Since the distance education centers are located in municipalities in the five regions of the country, mainly in the interior, the idea is to involve these centers within the sustainability proposal, seeking to raise awareness in the communities where they are located of the importance of adopting a sustainable culture.

The Program foresees four major actions: replanting of Pau-Brasil in the municipalities that host UAB centers, selective collection, production of multimedia material and training of personnel to multiply the idea of sustainability and act on its three pillars.

2 THEORETICAL FRAMEWORK

The constant actions of man in search of development have been causing increasing environmental impacts. For Shigunov Neto et al (2009), the Industrial Revolution is the milestone in History where the intensification of environmental problems occurs through the process of urbanization and consequent decrease of natural resources, characterized by the transition from feudalism to the emergence of the capitalist production system.

According to Alves (2014), the world population showed the highest demographic growth in the 20th century: it increased from 1.6 billion inhabitants in 1900 to 6 billion in 2000, having already reached the level of 7 billion in 2011 (UNFPA, 2011). Also according to the United Nations Fund (2011), this record growth in the 20th century is due, among other factors, to the reduction in mortality rates. Thus, in this current production model, it becomes necessary to consume a greater amount of raw material to satisfy the needs of an ever-increasing population and an increasingly consumerist society, in which people are valued for what they own: the commercial brands they own.
they consume and classify them, in addition to hierarchizing them (Luzzi, 2007); it presents itself, therefore, as an “unsustainable development model both in environmental and social terms” (Alves, 2014, p. 227).

According to Bursztyn and Persegon (2008), humanity presents a contradictory evolution with regard to development:

The historical evolution of humanity reveals a dialectic of progress: on the one hand, it produces advances in longevity and a reduction in natural mortality; but, on the other hand, it causes ever-increasing risks, which threaten life itself in the long run. The current environmental crisis is a reflection of this contradictory evolution of civilization (Bursztyn and Persegon (2008, p. 14).

According to Scotto, Carvalho and Guimarães (2010), development was the ideal of progress identified as growth: economic, technological, urban, the path to be followed by societies towards development, even if this development was at the expense of growing indebtedness and exploitation of natural resources and the human workforce.

Since the 1970s, several events related to the environment have been held by the United Nations (UN), such as: United Nations Conference on the Human Environment (Stockholm, 1972), United Nations Conference on Environment and Development (Rio de Janeiro, 1992), World Summit on Sustainable Development (Johannesburg, 2002), United Nations Conference on Sustainable Development (Rio de Janeiro, 2012), among others. These events brought together world leaders from several countries, civil society, NGOs, among other institutions and sought global cooperation in search of solutions to environmental problems.

Among the results of these events is the Belgrade Charter (1975), which dealt with issues related to Environmental Education in the light of sustainable development, although this term was not used at the time, dealing with the following objectives: awareness, knowledge, attitudes, skills, evaluation capacity and participation.

Documents were also signed that would guide discussions on the themes. The most comprehensive was the United Nations Program for the 21st Century (Agenda 21), which brought parameters for the actions of governments and civil society, proposing measures to achieve its objectives, including the creation of commissions to promote sustainable development with federal, state and municipal governments (PEARSON EDUCATION DO BRASIL, 2011). That is, the proposition of an agenda to deal with the issue of sustainable development from the municipal sphere to the Federal Government.
According to Alves (2014),

Despite the good intentions of the population, development and environment conferences, anthropic activities continue to degrade nature, without a concrete solution to prevent environmental collapse, an issue that has become the most sensitive and urgent issue today (Alves, 2014, p. 224).

For Oliveira (2012, p. 72), the pillars of sustainability (environmental, social and economic):

The concept of the Triple Bottom Line, which emerged from the study carried out by Elkington (1994), in English, is known as 3P (People, Planet and Profit); in Portuguese, it would be PPL (People, Planet and Profit). Analyzing them separately, we have: Economic, whose purpose is the creation of viable enterprises, attractive to investors; Environmental, whose objective is to analyze the interaction of processes with the environment without causing permanent damage; and Social, which is concerned with establishing fair actions for workers, partners and society. Together, however, these three pillars are related in such a way that the intersection between two pillars results in viable, fair and livable, and of the three, would result in the achievement of sustainability.

According to Nascimento, Mendonça and Cunha (2012), there are authors who relate the three aspects of the “Triple Bottom Line” (environmental, social and economic) to analyze sustainability. According to the authors,

The relationship of the sustainability discussion (...) regarding the three pillars, follows a line in which it should not be seen as defined for an isolated organization, but rather for a complete economic-social-ecological system and, therefore, the relationship with innovation systems and the relationship that it presupposes in terms of institutions, corporations, knowledge and different agents makes sense (Nascimento, Mendonça and Cunha (2012, p. 636).

2.1 EDUCATION AND SUSTAINABLE DEVELOPMENT

According to Mayor (1998), education is a fundamental part of the process of acquiring a new sustainable culture:

Education is the key to sustainable, self-sufficient development – an education provided to all members of society, according to teaching methods and with the help of technologies, in such a way that everyone benefits from real chances of learning throughout life. We must be prepared, in all countries, to remodel education, in order to promote attitudes and behaviors that are bearers of a culture of sustainability (Mayor, 1998, p. 46).
Believing that education is an indispensable condition for sustainable development and with the challenge of stimulating a change in attitude and behavior in populations, the United Nations Educational, Scientific and Cultural Organization (UNESCO), through the United Nations General Assembly, announced, by Resolution nº 57/254, the United Nations Decade of Education for Sustainable Development, lasting from 2005 to 2014 (UNESCO, 2005).

The Decade of Education for Sustainable Development is a simple idea in essence, but with complex implications, since the depletion of natural resources over centuries of reckless exploitation has made the current situation critical, and it is now necessary to learn to live sustainably (UNESCO, 2005).

According to Rossato and Neto (2014),

Environmental issues are increasingly present in society's daily life, however, environmental education is essential at all levels of educational processes and especially in the early years of schooling, since it is easier to make children aware of environmental issues than students (Rossato and Neto 2014, p. 102).

According to Loureiro (2003), in the 70s and 80s, Environmental Education had individual initiatives for the conservation of natural resources, in addition to inclusion as a discipline in curricula of education systems addressing content such as principles and notions of Ecology.

In 1988, Environmental Education was included in the Federal Constitution. In it, the Government was charged with “promoting environmental education at all levels of education and public awareness for the preservation of the environment” (Art. 225, § 1, VI).

The National Environmental Education Program (PRONEA) was the first government initiative carried out through an agreement between the Ministry of Education and the Ministry of the Environment. It was launched in 1994 with the objective of acting along the lines: environmental education through formal education, education in the environmental management process, carrying out specific environmental education campaigns for users of natural resources, cooperation with those who work in the media, intra and inter-institutional articulation and creation of a network of centers specialized in environmental education (Loureiro, 2003).

In Law 9.795/99, Environmental Education was defined as "processes through which the individual and the community build social values, knowledge, skills, attitudes and competences aimed at conserving the environment, an asset for common use by the people, essential to a
healthy quality of life and its sustainability” (Art. 1), and must be discussed in an integrated, continuous and permanent manner within the curricula of educational institutions.

According to Eça (2010), in the long term, education can contribute to facing the planet's serious problems by preparing young people for a new culture, where sustainable development is part of society's principles. For this, it is necessary that the traditional model of education be reviewed, as the traditional school does not prepare the student to have critical thinking:

At school, you live routinely, you play it safe, for students to have good results in exams, because the school and society believe that having results in exams is a passport to success in future life. And the exams normally assess knowledge and skills that are not necessarily important for a sustainable future (Eça, 2010, p. 19).

For Steers (apud Eça, 2010), a complete reorganization of the school is necessary in order to promote a new sustainable awareness:

In order for schools to actively foster creativity in every child, we have a long way to go, we have to turn everything upside down. And that will create a lot of problems for everyone working in the education sector. Creativity requires a type of “space” that is rare in schools directed by objectives, which can hardly let in the accidental unexpected discoveries that sometimes arise when looking for other completely different things (Steers apud Eça, 2010, p. 19).

According to Jacobi (2003),

The population's attitude of dependency and lack of responsibility stems mainly from misinformation, lack of environmental awareness and a deficit of community practices based on the participation and involvement of citizens, which propose a new culture of rights based on motivation and co-participation in environmental management (Jacobi 2003p. 192).

For Milaré (2011), this awareness process is carried out with the community in order to insert it to actively participate in issues that concern them:

It is not a question of imposing models on citizens, as in a practice of co-opting society so that it adapts to the will of State bodies or economic power; instead, care is taken to call on them to participate consciously in the management of issues that, individually and collectively, concern them. It is, consequently, an educational process to be carried out with the community and not for the community, because in the properly structured teaching-learning experience, the person is the subject and not the object of the educational action (Milaré, 2011, p. 636 apud Souza, 2014, p. 99).
According to Navarro (2014), the State, as well as society as a whole, must cooperate in solidarity to prevent environmental damage. However, for society to participate, there must be awareness, which can only be achieved through environmental education.

For Gadotti (2008),

Without an education for a sustainable life, the Earth will only continue to be considered as a space for our sustenance and our technical-technological mastery, a being to be dominated, the object of our research, essays and, sometimes, of our contemplation (Gadotti, 2008, p. 63).

According to Macêdo (2013), distance education becomes an essential tool to allow access to education to the population, considering that the face-to-face model has a capacity limited by its physical infrastructure.

2.2 IRACEMA - PROGRAM (INFORM, RETHINK, ACT, RAISE AWARENESS AND EDUCATE FOR THE PRESERVATION OF THE ENVIRONMENT)

The IRACEMa Program was conceived with the purpose of promoting awareness actions for the adoption of a sustainable culture in the municipalities where the distance education centers are located and at the headquarters of the Graduate Program. Through actions, we seek to provide access to information in these communities so that there is an environmental awareness in the sense of rethinking their daily lives and turning their actions towards the adoption of a sustainable culture and preservation of the environment.

In Brazil, distance higher education courses taught at Public Institutions of Higher Education (IPES) are offered in a blended manner. In these cases, students rely on auxiliary structures in their municipalities, which are called On-site Support Poles. These spaces are installed in municipalities, usually in municipal schools in the interior, where there is little or no offer of higher education courses.

With the IRACEMa Program, four major actions were implemented: replanting of Pau-Brasil in municipalities that have distance education centers, selective collection, production of multimedia material and training of personnel to multiply the idea of sustainability.
2.2.1 Action 1: Replanting Pau-Brasil in municipalities that have EaD centers

Pau-Brasil was declared a National Tree of Brazil, in accordance with Law No. 6607, of December 7, 1978, and is on the official list of Brazilian flora species threatened with extinction by the Ministry of the Environment. According to Barbedo et al (2002), the uncontrolled exploitation that began since the times of Portuguese colonization on the Brazilian coast until the present day is one of the examples of disturbance caused to the Atlantic Forest.

The Pau-Brasil Rebirth action is being carried out through the distribution of seedlings for planting the tree in the municipalities that host UAB centers and among employees of the Postgraduate Program Headquarters, in view of its status as a National Tree, its threat of extinction and its potential for urban afforestation.

2.2.2 Action 2: Selective Collection

According to Lagarinhos and Tenório (2012), factors such as population growth associated with technological development result in an increasing demand for new technologies. These factors reduce the life cycle of products, since society is always looking for the latest generation products, which contributes to the increase in the disposal of these goods. Thus, the volume destined for landfills increases, as well as the consumption of natural resources for the generation of new products.

The aim is to raise awareness among the population and promote campaigns to encourage selective collection and control of material waste.

- Campaign “Adopt a Cup”

This campaign seeks to raise the awareness of students and employees of the distance education centers and the Postgraduate Program headquarters to reduce the use of disposable cups, through the adoption of permanent cups (mugs, bottles, squeeze bottles, cups, etc.) for water and/or coffee.

- Recycling Gymkhana

According to Pinheiro et al (2014), due to the debates that were taking place worldwide about the limits of development of the capitalist model, since the 60s and 70s, attempts have been made to think about and implement the issue of waste management. However, according to the
Associação Compromisso Empresarial para Recycling (CEMPRE), only 14% of brazilian municipalities have the selective collection service, with 86% of these located in the south and southeast regions.

The campaign was launched during the Environment Week (June/2014) with the objective of collecting recyclable materials (paper and plastic) in the municipalities of the UAB centers, seeking to inform and raise awareness among students, employees and the community in general about the types of recyclable materials and the procedures that must be adopted for the separation of the material. The culmination of the action will be at the National Science and Technology Week (October/2014), when there will be awards for the poles that collect the largest amount of material that will be donated to associations and/or recycling cooperatives, seeking to work in the three pillars of sustainability: environmental, social and economic, through attention to the environment and stimulus to the generation of employment and income in the municipalities.

2.2.3 Action 3: Production of multimedia material

Among the objectives of the IRACEMa Program is the production and distribution of recreational materials for children. For Santos (2010), “the word ludic comes from the Latin ludus and means to play. This play includes games, toys and amusements and is also related to the conduct of the person who plays, plays and has fun” (p. 2-3).

In this perspective, the materials developed, such as games and toys, seek to stimulate children’s reasoning and raise awareness of the importance of preserving the environment. It also aims to develop different skills and contribute to learning and new discoveries with the theme of sustainability.

2.2.4 Action 4: Staff training

The first Continuing Education Program was planned with 75 hours, with 15 hours on Legislation in Distance Education; 15 hours of tutoring; 15 hours of Production of Complementary Didactic Material; 15 hours in Center Management and 15 hours dedicated to the Development of Intervention Projects.
The subject Legislation in Distance Education focused on the study of the main guidelines that permeate higher distance education in Brazil, specifically addressing Public Policies for Distance Education; Distance Education in the Law of Directives and Bases of Education n°. 9394/96; Decrees and Ordinances that regulate Distance Education and the Open University System of Brazil.

The Tutoring discipline that sought to discuss aspects related to the tutor's role in distance education, the tutor's skills and abilities and what a student should know when entering a distance course.

In the discipline of Production of Supplementary Didactic Material, the process of elaboration of the supplementary didactic material in the distance modality was dealt with; the elaboration process of complementary didactic material in the distance learning context; Basic pedagogical guidelines for the elaboration of complementary didactic material in the context of EaD. The discipline was able to look at the new reader today and based on this reader, it discussed the guidelines of how the EaD text should be.

The subject Elaboration of Intervention Projects dealt with concepts; reflections on research, teaching and extension; the particularities of the development of intervention projects in distance education; guidelines for the elaboration of intervention projects; project models, in addition to the sharing of experiences.

The discipline Management of Centers deals with the main aspects of managing on-site centers in the distance modality from the point of view of innovation, sustainability and entrepreneurship; operation of on-site centers and presentation of methodologies and experiences that can contribute to improving the management of these centers.

3 METHODOLOGY

The present study is classified as a predominantly qualitative research, which emphasizes description, induction, grounded theory and the study of perceptions (Bogdan; Biklen, 1994), with quantitative elements, which translate information into numbers to classify and analyze them (Silva; Menezes, 2001).

As for the objectives, it is classified as a descriptive research, which seeks to observe, analyze and record the phenomena, without manipulating them (Cervo et al, 2007). As for the
technical procedures, a bibliographical research was initially carried out, based on already published material, consisting mainly of books, journal articles on the subject (GIL, 1991 apud Silva; Menezes, 2001, p. 22), with data collection that served as the theoretical basis of the work.

The target audience served by the Program were students, employees and communities of the on-site distance education support poles, which are the places where the actions were carried out.

Program Actions:
- Rebirth of Pau-Brasil (Brazilwood);
- Selective collect;
- Production of multimedia material;
- Staff training.

4 RESULTS AND DISCUSSION

4.1 ACTION 1: REBIRTH OF PAU-BRASIL

With the Rebirth of Pau-Brasil (Brazilwood) campaign, efforts were made to promote the replanting of this tree in municipalities where there are distance education centers. With this objective in mind, a partnership was initially established between the Graduate Program (Professional Master's Degree in Technology and Management in Distance Education), with the donation by a professor of this graduate program, of 50 seedlings of Pau-Brasil to the IRACEMa Program, which was responsible for forwarding this donation with 03 units of the seedlings for each pole and among employees of the Graduate Program headquarters who expressed interest in participating in the campaign.

In Pesqueira city (PE), a partnership was established between the on-site center and the municipality's Department of the Environment to publicize and monitor the actions of the IRACEMa Program. The face-to-face pole received the donation of three Pau-Brasil seedlings and planted them in three schools in the city: Municipal School Educational Center Dr. Carlito Didier Pitta, Santo Antônio Municipal School and Clarisse de Freitas Valença Municipal School.

The planting of seedlings in these schools was carried out with the presence of students from some classes of Elementary School, who listened carefully to the explanations about the
importance of the plant and the necessary care, provided by the Deputy Coordinator of the Pole and by the Coordinator of the Secretariat of the Environment, where the commitment with the children to take care of the tree was agreed. The children, in rotation, were responsible for watering the plant.

At the headquarters of the Graduate Program, employees were consulted about their interest in planting, on their property or in a public space, a seedling of Pau-Brasil. Fifty-six percent showed interest in participating in this action.

4.2 ACTION 2: SELECTIVE COLLECTION

With the beginning of the 'Adopt a Cup' campaign, research was carried out at the UAB centers regarding the habit of employees and students in using their own cup (mug, bottle, etc.). It was found that 9% generally use their own cup, 46% indicated that they sometimes use non-disposable cups, while 36% reported that they rarely use these utensils, and 9% never use them. These data allow us to verify that there are still few initiatives to reduce the use of disposable cups in the UAB poles (Open University of Brazil). Among the UAB poles, it appears that 46% of employees and students use 1 to 3 disposable cups per person per day, while 36% use 4 to 5 disposable cups and 18% point to the use of more than 5 disposable cups per person per day at the poles.

Based on data analysis, and considering the number of distance education students in the on-site centers surveyed, we can observe in an estimate that considers the use of two disposable cups per person/day, that the number of cups used exceeds 5,500 units. However, 2.36% use 4 to 5 cups, while 18% claim to use more than 5 disposable cups per day, where it is possible to conclude that the number of cups used may be much higher than this estimate.

At the headquarters of the Graduate Program, there is already a beginning of awareness regarding the reduction in the use of disposable cups. It was observed that 41% of employees reported that they already used their own glass or bottle before the beginning of the campaign. However, 47% reported using 1 to 3 cups, while 7% use 4 to 5 cups and also 7% use more than 5 plastic cups per day, which demonstrates that the campaign is still necessary to raise awareness among the public.
The Recycling Gymkhana campaign was carried out at distance education centers in Pernambuco (Afrânio, Cabrobó, Carpina, Limoeiro, Palmares, Pesqueira and Recife) and Bahia (Camaçari and Piritiba). The objective was that students, employees and the community at the distance education centers were mobilized to collect recyclable material (paper and plastic) for donation to associations and/or recycling cooperatives in the municipalities themselves.

At the headquarters of the Graduate Program, employees were consulted about the habit of separating garbage and 65% indicated that they do not separate domestic garbage, while only 6% said that they separate all recyclable material, which highlights the need for educational campaigns for the population.

4.2.3 Action 3: Production of multimedia material

Among the first materials developed is a puzzle that, according to Jesus (2013) “stimulates many skills at the same time: concentration, reasoning, socialization and cognitive aspects”. The puzzle has the theme of the IRACEMa Program and a memory game with the representations of the campaigns carried out by the Program so far (Rebirth of Pau-Brasil, Adopt a Cup and Gymkhana da Recycling). (Figure 1).

![Figure 1 – Games: memory game (left) and puzzles (right)](source: IRACEMa Program (2014)).

The production of multimedia material involved: website for disseminating Program information, such as campaigns and contents developed, fan page on facebook, booklet, games (memory game, puzzle, etc.), videos, among others.
4.4 ACTION 4: STAFF TRAINING

The first Continuing Education Program took place between August 18th and September 5th, 2014. This first course involved 331 participants, including face-to-face and virtual tutors, teachers, coordinators of on-site centers, among others, who worked directly with distance education or who were selected to participate in the Program and is carried out at a distance through the Moodle Platform (open-source learning platform).

5 FINAL CONSIDERATIONS

With the IRACEMa Program, the need for action in distance education centers was verified as a strategy to promote community awareness to live sustainably. With the current relevance of the topic, the insertion of these poles is important given the range that actions carried out in distance education can offer, reaching municipalities in all regions of the country, especially in municipalities in the interior of the states.

Initially, actions were proposed in four areas: replanting of Pau-Brasil, selective collection, production of multimedia material and training of personnel, with the aim of encouraging good environmental practices that enable changes in the habits of the communities in the on-site support centers.

Among the actions intended in the Program, we can mention: 5Rs (Rethink, Reduce, Reuse, Recycle, Refuse to consume products that generate significant socio-environmental impact), management of electronic waste, management of organic waste and creation of incentive and monitoring methodologies and other actions that may arise according to the evolution of the Program.
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