

# Academically supported social work for the development of handicraft skills – case study: the Pitangaporã Project

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**Abstract:** The Pitangaporã Project involves the establishment of production teams comprising apprentices from by low-income families with physically and/or mentally handicapped children living in the poorer areas of Belo Horizonte, Brazil, and the planning and development of income-generating activities. The initial idea was to foster family ties with a special focus on handicapped children and the families' broader integration with the community, based on principles of independence, self-confidence and belonging. This is achieved through the manufacture and sale of handicrafts. Financed by the Ministry of Social Assistance, this is an inter-institutional project of integrated actions in product planning, management of productive processes and the establishment of optimal methods to encourage the continuity of the work of the apprentices themselves. This article describes the introduction of Product Design principles into the project, as elements to foster the consolidation of the apprentice production teams.

**Keywords:** handicrafts, product, market

## 1. Introduction

Nowadays, “handmade” has been observed to be in vogue. Somehow handicraft resists massification and uniformity of consumer products... Consumers have been looking for items that seem special and original in all areas (SEBRAE, 2004). This article contends for the continuation of studies on handicraft products, the principles adopted in the processes and the attitude of the main actors involved, in our case, the apprentices.

In Brazil, virtually all projects and programs aimed at training handicraft making apprentices are initiated by institutions such as SEBRAE (service of support to the micro and small enterprise), the ICCAPE (institute of training and support to the entrepreneur), the PAB (program for Brazilian handicraft), the latter directly associated with the MINC (Ministry of Industry and Foreign Trade), all generally in partnership with the city or state administrations. Our purpose, (besides offering original handicraft to buyers), comprises the training of the artisans-to-be and the betterment of production standards, besides the recovery of a traditional trade.

The items of handicraft produced within the project are differentiated by the materials, the techniques and the cultural elements involved, be they religious, folkloric or from other traditions, revealing aspects peculiar to the background of each apprentice involved. The training prepares the apprentices also for the market laws, on the importance of quality of product, on how to market their products, and their professional organization through eventual organized associations. Besides providing handicraft-making classes, the Project aims are to strengthen the apprentices' feelings of belonging within society in general and to make them into entrepreneurial-minded individuals. The aforementioned demand for handicraft has increased production in general and we have perceived this to require new and better planning, management and working conditions that satisfy both artisan and buyer. In many cases, production has been observed to have intensified, whereas factory circumstances have largely remained the same as before. In view of all that, all our actions and intentions have, first of all, the respect for the apprentices' cultural values and material conditions. The Pitangaporã

Project, formerly named Muriki Program, has been organized to work toward the welfare of low-income families with handicapped children in the city of Belo Horizonte, through the development of working principles directed both to the apprentices as well as to undergraduate students who wish to work with product development.

## 2. Muriki program

Muriki, in Tupi-Guarani, means *happy being*. This program was created in 1999 from the integration of five propositions presented by UNICEF and made possible by the “Criança Esperança” campaign of 1998. The program has been developed for three years now, under the legislation of the Municipal Counsel for the Rights of Children and Adolescents of Belo Horizonte, The Municipal Counsel for Social Assistance and The Municipal Counsel for the Rights of the Handicapped Child. The Program is developed in the city of Belo Horizonte, divided in five regions: north, northeast, northwest, east and Venda Nova (northwest II).

The general purpose of the Muriki Program consists in the creation of groups with the families with children and teenagers with special physical and mental needs, with the planning and implementation of income-generating activities. Within this context, the propositions are 1) to foster the strengthening of ties between the handicapped child and adolescent with their families and those of the families with the community around them; 2) to work on the principles of independence, self-esteem and feelings of belonging in society in general; and 3) to promote the entering of those families into the income-generating world and the local trading community.

The methodological structure of the Muriki Program consists in the identification of the families which fit the description and in the formation of groups for weekly meetings focusing on topics such as their interests to learn handicraft making, selling procedures, partnerships with the community, where to sell, financing and managerial support to help them achieve future independence in business.

Ninety five per cent of the apprentices who enrolled were found to be female, mostly between 35 and 44 years of age. Schooling was of 7% of those who had finished secondary school and 65% Who hadn't. 58.75% said to be unemployed, 10.2% employed and 13.66% declared to do odd jobs. Family income was around 2.32 the minimal wage, with an average of five family members, which makes 0.46% of the minimal wage per capita. (PBH 2002)

### **3. Multidisciplinary integrated and inter-institutional actions - initial assessment**

In September of 2003, the Design-Enterprise Integration Center, (IDE) and the School of design of the University of the State of Minas Gerais (UEMG) were approached by the directors of the Muriki Program, the Special Education Center (for the handicapped), the INAPLIC Clinic and the Training and Productive Social Inclusion Administration (GEIP PBH) with a request for assistance by an educational institution specializing in on product development specifically for the implementation of productive activities in low-income communities, and in what concerns the introduction of products into the market with income-generation purposes.

UEMG then formed a research/technical group to establish training procedures and the main criteria for the selection of production techniques for handicraft articles, materials acquisition and production viability. Besides these initial data, we presented the clients (PBH and INAPLIC), a work proposition conceived to initiate the product development activities. It was arrived at through a competition in which students of the Design School in UEMG who were interested in this area could develop propositions of products to be made by the apprentices. The group determined that the main purpose had to be to create a confident team of apprentices, but there was something wrong with the proposition, for it had originated from the students and not from the artisans-to-be. This is, actually a typical aspect of the action research methodology, adopted in this work THIOLENT (1997).

The proposition of partnership matched the goals of the IDE UEMG Center, because it would deal with the integrated conception of product research reverting general science in a public institution of higher learning in favor of society and, at the same time, promoting the education of its students, by supervised traineeships by a group of professors within their respective areas of action. The actions of design and handicraft proposed by the IDE Center encompass the analysis of real-life conditions of handicraft production within the new scenario of the market, buyers' expectations on what means product quality and a growing demand. With more and frequent interventions, the activity of product design is now considered as an important contributor in the adaptation process, nowadays so frequently required, considering principles of innovation, management and production. A proposition for training and research was conceived and presented to the clients. Taking into consideration the expected pace of activities, the time and the budget available, this proposition will be presented below divided in two phases: 1) actions developed simultaneously in all five regions and 2) actions developed when the participants formed a single work group.

### **4. Principles: action research, creative processes and product development**

Based upon the assessment presented by the clients and additional information focusing on product development for handicraft making, a plan of action was conceived, having as basis the principles of product design, the creative process and action research, looking to integrate all with respective particularities.

The principles of product design according to MUNARI (1981) and BAXTER (1995) deal with the setting of project procedures. From the identification of a market opportunity, the technical particularities are determined, following the classic scheme of project phases, adapted to handicraft production. Research, generation of product ideas, selection, prototyping, evaluation and revision.

The application of the principles of the creative process in this project has the role of facilitating the apprentice in his/her realization of their creativity which, according to PARNES (1997), is a natural process.

The methodological structure was developed based on the so-called RCD system (creative solution of challenges), CARVALHO (1998), with emphasis on creative behavior on action-oriented thinking, activating the cultural background of the individual, in our case, the apprentices, generating and organizing ideas based on the purpose of helping them become creative, original and businesslike artisans.

The principles of action research THIOLENT (1997) were decided to be the most fitting for the case, considering that the supporting programs to handicraft production are maintained with the purpose to help craftspeople within their own communities. The establishment of the plan of action was in tune with the procedures of making, verifying, evaluating and revising. All the phases were established and carried out in a joined effort of the clients, the supervisors of the project, the students and the apprentices, characterizing, this way, a collective action focused on social change with educational and technical endings considered.

### **5. First phase: october 2003 - june 2004**

With the timetable handed in by the clients for a first phase, five month plan, (the first three being for the east and north regions and two more months for the other three), the meetings with the apprentices were established to take place once a week, with two hours duration. The rest of the week apprentices were free to carry out their work in the home. The setting in motion of a competition among students of the Design School was introduced on October of 2003, at first, while a new proposition was being worked on. This was due to the immediate need to begin hands-on activities of product development due to concern on the clients' part with the apprentices' eagerness. After this first moment, in November, a new plan was then initiated with the technical cooperation of the IDE Center. The plan comprises the following activities:

- (re)introduction of project to the apprentices: goals to be pursued and the recommended principles - commitment, teamwork, quality level, consumer mindedness, and what adds value to handicraft;
- Handicrafting techniques: training on "fru-fru" and papier-mâché techniques, put forward to suit the initial production conditions;
- Refinement of performance: techniques to make possible the attainment of desired;
- Design: work on apprentices' creativity, always highlighting their cultural backgrounds;
- Product: relating participant creativity with market expectations;
- Defining propositions: defining usefulness, forms, sizes, colors etc;
- Ranking of concepts: choice of propositions according to criteria referring to usefulness, resistance, upkeep, besides production viability and market suitability;
- Prototyping: production of selected items: product + design;

- Market: (re)definition of marketing strategies;
- Selection of products: choice of items according to above-mentioned criteria; and
- Evaluation: results reached in what concerns technique, product and teamwork.

The research group responsible for the establishment of the actions of design and handicraft of the IDE Center was composed by trainees of the Product Design and Graphic Design courses and supervised by a professor/coordinator.

Two techniques were put forward for the apprentices to start activities - first the papier mâché, then the fru-fru, which has as main component rags of cloth. The papier-mâché was not well received at first. Apprentices complained that it was "sticky" and that it made a lot of mess in the house. The fru-fru technique was better accepted but, with the progress of activities, it was perceived that the finishing was difficult. This technique requires the use of hot glue and, shortly, the apprentices felt frustrated for not being able to attain the required precision. The lack of sewing machines was also a problem. In face of such difficulty and going on with the planned activities, the apprentices realized that the papier-mâché technique could give, after all, more freedom to create and handle the products.

According to participants what they had expected at this first moment was to learn less tedious techniques which permitted the confection of simpler items such as fake jewellery and refrigerator magnets, that is, objects which, in their understanding, would be easier to sell. Predicting such reaction, our researchers presented examples of handicraft considered to be high quality by consumers. To make the apprentices conscious of the need to produce more complex items, from the inception of activities, the group from the Design School highlighted the aspects which add value to differentiated handicraft by field visits to selling points, from the sophisticated to the most popular. This concern was kept in mind during the whole project and frequently was a topic of discussion in the meetings.

The workshops were first started with an average of 15 apprentices per region but, at the end of the first phase, 13 was the number of apprentices who had participated directly both with the workshops and the meetings. In some cases, the productive activity involved other member of the families, and it can be said that dropping out had to do with a natural process of selection, as many who had started in the program did not really have an interest in handicraft making. Another aspect was the need that many participants had to dedicate a considerable portion of their day to take care of their handicapped child and there was also family pressure to stop because they did not perceive any immediate income-generation.

At the ending of the first phase, in each region a products showing was set up. From a total of approximately 50 models, 20 were selected to initiate production - among decorative and utilitarian items. At this point, some participants were upset by the fact that their items had not been chosen, generating an atmosphere of frustration. The criteria which had determined the choices were then made clear and it was suggested that a bank of ideas should be created with the non-selected items.

The production takes place in the home of each apprentice, that is, it is a disseminated production. Actually, this was a condition of the project since the handicapped child should feel loved and surrounded. This condition created some difficulty with quality control in the preparation of the dough for the paper, the painting, for the achievement of a high finishing standard, but all this did not prevent that the desired standards be finally achieved. Among the propositions for painting created by the apprentices, a choice was made for the first collection, the standardizing of the pastes was

made and, during the weekly meetings there was time specifically allocated for such evaluations.

The low commitment with the take home activities was a problem in the beginning, which was frequently brought up by the researchers for discussion. The main points discussed then and still now, are: loss in production, the need to finish tasks, and group commitment. About the finishing problems, there actually was a lack of a reference for the apprentices in what are considered elements of quality in the purchaser's view. In view of this, it was again proposed that apprentices be taken into the field to visit some of the main marketing points of handicraft in town, as well as to analyze and compare products, their constituent materials, different techniques and finishings, besides function and usefulness, and some other aspects which identified the origins of the products. Some of these meetings were held at the Design School, where participants got to know all of the centers of work and study. This way, we had the opportunity to bring them in direct contact with an institution of teaching and research.

Simultaneously with the practical activities of product development, the Graphic Design Project was directed toward the creation of graphic items which could further strengthen the social values highlighted through the whole process and to secure a consumer market presentation with which be viewed as professional. The items were tags, stamps, bags and t-shirts. Although the project predicted resources for this end, the graphic part was made impossible due to restrictions imposed by the supervisor who had developed the Muriki Program name. The IDE center made then a proposition to develop a new name and a new brand together with the apprentices, now craftsmen and women, according to their particularities and needs. The clients accepted the proposition. It was the wish of the apprentices to continue working with the same color patterns. Thus the Pitangaporã Group was created. Pitangaporã means *handsome child*, in Tupi-Guarani.

## **6. Second phase: july 2004 through december 2004**

The coordinations of Design and Handicraft studies of the IDE Center presented, to the other coordinations and to the apprentices, the plans of action concerning this new phase. Before starting activities, it was established that a new location would be used by the project, where meetings are presently conducted, as well as continuation of training, finishing of product and production stocking. It is also the location which might come to be a reference to those interested in buying handicraft. The place is not yet definite, it is in one of the welfare promoting units of the PBH, lent to the Pitangaporã Group on afternoons, until july 2005. Activities on schedule are as follows:

- Refinement: technical refinement - materials, production procedures and aesthetic treatment of products; standardizing lessons on what concerns production processes and techniques. Since differences in quality were noticeable between different regions;
- Production: establishment of location and organization of production in what concerns working conditions, acquisitions and preparation of materials, and chores division;
- Market: (re) definition of plans of putting products onto market and in selling skills;
- Presentation of results: Publishing of pacing of research activities and on the improvements of the Pitangaporã group of apprentices in the academic milieu and related institutions; and
- Evaluation: results achieved - techniques, product, production and teamwork.

The researching team from the IDE center responsible for the continuation of actions of product development and management was continued with trainees from the Product Design course - and from the Graphic Design course, all under the supervision of a professor/coordinator. In this phase, a timetable was not established due to the degree of acceptance of the products by the consumer market and the adaptation process these new artisans and a daily routine of production established together with the project researchers.

The first step now was to help the new artisans to concentrate on production from models already selected in the first phase. Some of them couldn't seem to stop putting forward new propositions for products, especially those whose ideas had not been accepted the first time, which created a minor difficulty in the reinitiating of production. The products made by the apprentices brought about enchantment by their aesthetic-formal results in a diverse audience - neighbors, teachers, students, city hall employees, interior designers and, mainly, the coordinators of the Project - from the INAPLIC Clinic, the GEIP, and from the IDE Center. The strategy of inserting the products in the market had been initially focused on selling the products in handicraft and decoration stores and at events in the handicraft field. Due to the anxiety of participants to begin selling, and the consequent risk of dispersion, the GEIP PBH proposed the request for a space at the handicraft fair at Afonso Pena Avenue, taking place on Sundays, this being one of the main and most traditional selling points of handicraft in Belo Horizonte. Like every exposor, the participants of the Program had to go through an evaluating panel for the presentation of the group, of the techniques and sampling of products. The initiation of the participants in direct contact with the buyer and with receiving money was also a necessary learning step. With the beginning of sales the new artisans gained new motivation, but there were some immediate negative consequences. The participants, in hopes of securing more sales, accepted, initially, orders which complied with buyers requests as, for example, new colors and change in materials and finishings. This fact brought back to discussion the importance of establishing principles for procedures with handicraft making and selling.

Besides the Afonso Pena fair, other options were also volunteered. Nevertheless, this would involve an increase in production, which was not well received among the new artisans, so much so that production did not increase. This decided, the group was able to re-establish itself in production and quality standards which, in fact, resulted in two days of successful sales.

Due to the success in sales, the group encountered a new problem: the stocks had depleted and they would now have to produce the same number of items as before in only two weeks. The new artisans then set to work like mad, which caused noticeable fall in product quality. In this time of confusion, many prototypes were ignored, generating items completely different from those which had been first defined. The artisans felt frustrated when the responsible technicians refused most of their production, which was to be brought to the fair. It was then the second fortnight of december 2004 when the group realized how much a fall in production standards may result in buyer dissatisfaction. At this point, it became clearer to them that a low quality product cannot be expected to sell well at any marketing point. With the sales, the Pitangaporã group started to concern themselves with their managerial aspects. Who was to handle the money and in which way, how the groups was to go formal etc. At this point, the GEIP started training focused on these managerial aspects.

The graphic design project was renewed, now with the brand name Pitangaporã. Business cards, bags, stamps and t-shirts were produced. The purpose here remained securing a satisfactory and professional presentation of products and the groups' attitude attaching an identity of origin to their work.

In this second phase, some events took place which initiated the presentation process of the Pitangaporã Project to the academic milieu as well as the market. Through UEMG in september 2004, a television recording was made. The program is called Unidiversity. This was a partnership of the Health Channel (the health channel) together with FIOCRUZ (RJ). In October, a presentation of the project was made, highlighting the work principles adopted in an event called Minastec, which was promoted by SEBRAE MG, and directed to professionals and students in the product development area. At this same period, the management of Minascasa Shopping Center invited the Pitangaporã Group to participate in the competition "Christmas Tree". The winning decoration stayed in exposition through the beginning of january.

## **7. Scheduled activities to be continued**

The technical staff, together with the GEIP PBH concentrates in accords to put the products on the market through expositions and in handicraft stores. In this sense, an important aspect will be the production organization, aiming at establishing rhythm, matching and quality standards of the items. A present concern of the supervisor of the Design and Handicraft making from IDE Center is to get to know the working conditions of the artisans at home. This question has been widely debated among the researchers due to the other priorities set above, and it may be put up to the artisans at a later, more mature stage.

The Pitangaporã Project goes into a new phase. Along the preceding phase, some of the initiatives taken by the group, now with nine members, showed a looking for autonomy and self-management, as when they asked for private meetings among themselves. Considering this to be a fundamental part of the initial plan, the coordinations of the INAPLIC Clinic and the IDE Center now leave the project, with the hiring of a trainee who studied the whole project from the beginning. Graduated in december of 2004, this trainee becomes the designer responsible for the artisans' technical coordination, with support from a Product Design trainee who was, herself also, one of the members of the UEMG research team.

All the data referring to the project's developments have been recorded, but in random and informal ways. This fact was due to the overload of responsibilities taken by the Product Design trainees. Despite these record problems, the technical staff have been dedicating themselves toward the best possible organization of the data to prepare them for presentation to the Pitangaporã Group, the clients (PBH and INAPLIC Clinic), and to the academic milieu. In what concerns academic actions, the purpose is to compile all the information obtained, and turn it into formal scientific knowledge and, in this way, to contribute to the planning and application of similar projects in the future.

## **8. Conclusions**

In view of the results obtained thus far, we believe that real and comparative datas have been gathered for the creation of a methodological structure for product development in the handicraft field, which, more and more, brings new opportunities for income-generating activities. Through the experience acquired with the Pitangaporã Project, among others, the viability of the setting up of new production groups is reinforced, with production planning and managing and the coaching and support of the apprentices involved being the main focus. We would like to emphasize that, despite the fact that the objectives had been defined before inception, the Pitangaporã Project was revised every step of the way, always taking into consideration the socio-cultural particularities of the participants

involved. We hope that this experiment will be inspiration for similar actions in the future in what concerns social inclusion and a betterment of living standards in our country.

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