

Developing Entrepreneurial Skills through Screen Printing: the 100 Level Practical Workshop Experience in Design

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Abstract.

Art develops many skills in an individual which enhances problem solving abilities and a means of raising livelihood in the society. The peculiarities of artistic designs in the society cannot be over emphasized. This is because various aspects of our daily living and part of the basic necessity of life is clothing and the need to keep warm and also to look aesthetically presentable. Developing entrepreneurial skills among students is a vital aspect of daily living and the general buildup of a student to face life's enormous responsibilities. This paper attempts to give a practical guide to students and other art enthusiasts on the processes of creating interesting designs on t- shirts using silk screen printing and tie dye methods and also exploring marketing outlets to boost the financial base of the students in practice. This discuss is principally on screen printing.

Key words: Art, design, silk screen, entrepreneurial skills, workshop.

Introduction

Screen Printing is an art form, it involves creating images by forcing ink using a squeegee (a flat rubber tool) through a fabric or silk screen onto the surface to be printed. A stencil attached to the screen prevents ink from passing where no image is desired. Screen printing is both an artistic technique and a production printing method. The history of screen printing and other form of stencil resists dates back to cave man and early civilizations. Creating repeat patterns and achieving uniformity in design is usually made possible through stencil methods and the screen printing is a modern method of creating winsome designs on fabrics and other surfaces. According to Wikipedia, screen printing is a form of stenciling that first appeared in a recognizable form in China during the Song Dynasty (960–1279 AD). It was then adapted by other Asian countries like Japan, and was furthered by creating newer methods. The art form and stencil design through the use of silk mesh thrived greatly in the aforementioned countries and is still being practiced today with outstanding results and a source of income to the practitioners. In modern times as reported in Wikipedia, credit is generally given to the artist Andy Warhol for popularizing screen printing as an artistic technique, identified as serigraphy, in the United States. Warhol is particularly identified with his 1962 depiction of actress Marilyn Monroe screen printed in garish colours. This technique of design used by this great master is indeed worthy of emulation among the upcoming artists and students of design. Another artist of importance is American entrepreneur, artist and inventor Michael Vasilantone started to use, develop, and sell a rotary multicolour garment screen printing machine in 1960. Vasilantone later filed for patent on his invention in 1967 and granted number 3,427,964 on February 18, 1969. The original rotary machine was manufactured to print logos and team information on bowling garments but soon directed to the new fad of printing on t-shirts. The Vasilantone patent was licensed by multiple manufacturers, the resulting production and boom in printed t-shirts made the rotary garment screen printing machine the most popular device for screen printing in the industry. Screen printing on garments currently accounts for over half of the screen printing activity in the United States.

In Nigeria, screen printing and other relevant design oriented crafts have played a very important role in the social and economic life of the country. This technique which is a modern adaptation of western form of design is gaining grounds in the textile industries and creating vocational skills at the same time reducing the unemployment rate in the country. Oguntona (1986) aptly states “ The persistence of the textile art to this day may be attributed to our people's creativity, needs and lifestyle that wove vitality into anything hand – crafted”. Nigeria is a blessed country, and even though we cannot claim indigenization of screen printing as a technique of fabric design, we have taken the design a notch higher in incorporating rich indigenous motifs and making the western world and other nations trooping to patronize our local textile markets.

The Workshop

The 23rd of February, 2013 started with a lot of fun and eager expectation. The Jos Museum venue of the screen printing and tie dye workshop witnessed a large turnout of students. The call time was slated for 8.00 am, however, before that time, a large percentage of the students have assembled close to the tin mining exhibition centre to start the workshop class. The serenity and setting of the area was indeed welcoming and a good atmosphere to engender creativity and productive mind sets. The antiquities around the museum premises, natural rocks formations typical of the Jos Plateau and trees to create the needed shade and greenery, ancient architectural prototypes and craft shops all around are indeed inspirational to the success of the planned

workshop. The expected number of participants was 99 (Theatre and Film Arts and Mass Communication students) Design and Technical Theatre course students. The actual point of the practical class was Udubrae Art Gallery, a spacious studio and gallery area within the Museum premises.



Plate I. Briefing session by one of the resource person Mr. Abati Oluwaseun Isaac at the Museum premises. (Photo by the Lecturer in charge Mr. Jacob Onoja)

The workshop was pre- planned before the 23rd of February, 2013.. Some of the areas of planning include

1. Writing letters to the Department and obtaining permission for the workshop/ excursion to the museum.
2. Writing to the curator of Udubrae Art Gallery to use the studio space for the workshop and the dye vat points.
3. Budgeting and buying of the materials for the workshop.
4. Collecting all the T- shirts for the workshops.

The Briefing.

The workshop is hands – on practical experience in screen printing and tie dye methods. This is to help the students in understanding the application of the elements and principles of design and how it applies to costume designs and also to develop the skills of knowing how to make products for the Nigerian market (entrepreneur skill). The Lecturer in charge reiterates some of the specific objective of the course as he states; this course is intends to build your skills with the graphic communications used in design for theatre. Everyone has imagination and ideas. A designer's imagination and ideas are inaccessible without graphic communication skills. Most people practice verbal communication skills from an early age, but not everyone practices graphic communication skills ("communication by drawing"). Since "communication by drawing" requires the same amount of practice as "communication by talking," the exercises for this course are a way of achieving some of the practice needed for successfully communicating design ideas. The use of printing and tie dye as a media of graphic communication will be employed in this workshop. It is also important to note that, this workshop aims at instilling psycho motor skills in every student participant through the following;

- I. Creation of aesthetic awareness among students of Theatre and Film Arts, Mass Communication and other design enthusiast.
- II . Analyze information and ideas from a variety of sources in the immediate environment
- III. Implement strategies to assess and solve a variety of problems, interact successfully in working and social environments. This will create a new environment outside the regular class room for socialization and networking with others in the practical field within the Museum craft village.
- IV. Utilize effective goal-setting strategies in the design process, manage time and resources effectively by evaluating progress and exploring marketing possibilities.

The Lecturers involved briefed the students interchangeably on the essence of the workshop and the need to fully participate for optimal results. Each student was then given two pieces of T- shirts to work with. One for screen printing and the other for tie dye.



Plate II. Workshop participants taking notes during the briefing.

The Workshop Process



Plate III. Collage of the working processes during the workshop.

For a successful screen printing process to take place, the following materials are needed.

1. A wooden printing frame (40cm x 55cm x 3cmt hick)
2. Organdie (a lightweight see-through cotton or silk fabric, often stiffened)
3. Staple gun or drawing pins
4. A squeegee to force the ink through the mesh to the design surface. (For this workshop, rubber slippers were used as improvisation in the place of a professional squeegee)
5. Print out of logos, floral designs and other motifs for the transfer to the organdie (This was done using transparency paper. It can also be improvised by printing out on paper and smearing kerosene or olive oil on the surface to achieve transparency).
6. Photo emulsion
7. Printing inks of various colours(Preferable the primary colours of Red, Blue and Yellow. This is to aid experimentation with colours in printing in the workshop)
8. Large cellotapes
9. Turpentine and silk cleaning solvents
10. Cleaning rags
11. Knives and scissors
12. Polymer marker of various colours to accentuate the designs and also for name branding

The next thing to do is to stretch the organdie or silk on the wooden frame. Ensure that the frame is large enough to give ample space when printing on the t-shirt. Cut the silk material to extend several inches outside the wooden frame and then start the stretching from one side using staple gun or drawing pins. Move across to the direct opposite and staple the other side pulling the fabric tight. Spin the frame around and staple the middle of the other side of the frame and across from the opposite side to give even stretch on all sides. You can then move to any of the sides and staple across completely and across the opposite before moving round the frame pulling tight as you go.

Once the screen is ready and properly stretched evenly, the next thing to do is to get the photo emulsion. (This is a blue emulsion but turns green with the addition of a sensitizer to make it light sensitive). The squeegee (rubber slipper) is used to evenly and thinly spread the photo emulsion on the silk screen mesh. Cover the screen right to the edge of the frame, and turn over to the other side and repeat the same process for even spread. Smoothen the spread starting from the outside part of the frame and finishing with the inside. After that, keep the frame in a cool dark place to dry out well. (Overnight is usually advisable, this demonstration is just for workshop purpose). The photo emulsion chemical can be kept in a safe place or the refrigerator to preserve it over a long period of time.

The process of transfer of the logo or the floral motif is more of art than science. The more you practice the time of exposure to light, the better you will become. The natural source of light which is the sun can be used with regulated time and artificial incandescent light bulb can also be used indoors. The image is placed on the screen and transparent flat glass is used to hold the image flat on the screen before exposure to light. The green area exposed to light will harden and won't wash out while the areas of the image masked out in black will wash out and serve as the stencil for the print. The process takes between 15 to 20 seconds under the sun and 20 to 25 minutes using light bulb. Perfection comes with practice as earlier stressed. The mesh is then moved (after removing the glass and the transparency) to under running tap water or spraying with a bowl of water to reveal the design. A clean rag can be used to gently wash off the weak emulsion to reveal the clean design. The mesh is allowed to dry and afterward cello tapes can be used to mask off the edge of the frame to define the printing area. At the end of the afore mentioned procedures, the screen printing mesh is ready for the printing process.

Printing the T- Shirt

The workshop is demonstrational in nature and hence all the students have their t – shirts for the printing. White t – shirts are idea for this purpose. This is because white reflects all colours and it is a good surface to adjudge the success of the print. Using white will also create the consciousness of carefulness in order not to smear the fabric and mar the design.

The t- shirt is placed on the flat work bench or table and the mesh is carefully placed over it. (For accuracy in printing logos and some uniform designs with more than 1 colour, a flat wooden board is hinged to the mesh to keep it in place and to maintain uniformity in prints) The printing ink is then applied to the inner surface of the screen and using the squeegee, lightly spread over the screen surface using even pressure to pass the ink from the mesh to the t- shirt. Do a couple of passes to ensure the stencil areas are fully printed. Lift the mesh to reveal the design and take the t- shirt outside to dry. Depending on the ink in use, the setting processes differ. Some inks like autobase inks will set under the sun or in a cool dry place after a long time. Others will require the use of pressing iron over the dried print or electric oven for embossing ink. The moment the print is dry, the fabric is ready for use, and in the workshop case, ready for assessment and evaluation. The designs are further enhanced using polymer markers to mark and brand the shirts. Various colours were used to highlight the design and to improve the marketing value. Several materials can be printed from a single mesh and hence the viability for commercial purpose using screen printing.



Plate IV. The printing process using improvised rubber slippers in place of a squeegee.

Marketing the Product.

One of the cardinal objectives of this workshop is to develop entrepreneurial skills among the students to lessen financial burdens on parents and guardians and create room for financial independence. Several students engage in useful ventures through which they eke a living on campus. Some are into painting, bead making, sculpture, stand-up comedy in Theatres, choreography, textile designs as exemplified in this workshop and a host of other entrepreneurial skills for economic gain. Oloidi (2009), states unequivocally

The economic potentialities of art are also clearly reflected among the art undergraduates in the universities and colleges. It is common knowledge that, for decades, many undergraduate art students have been sponsoring themselves from the funds received from their art commissions and practice. And very unbelievably, particularly in Nigeria, more than half of our art graduates in the higher institutions do not look for jobs; they are self-employed. In fact, many are employers instead of employees, thereby helping the various government to solve their unemployment problems.

This is very pertinent because the unemployment rate in the country is outrageously alarming. The number of graduates seeking for the few available white collar jobs by far outweighs the jobs available. Being self-dependent and creating a niche in the business world through design will solve a lot of future dependence on office based jobs. The Nigerian Immigration employment saga is a case in view, where able bodied Nigerian citizens died in stampedes across the various stadia where the exercises took place. I wonder if any gainfully self-content and employed citizen will be part of the casualties. Oloidi(ibid) appeals in his discuss when he says;

For this reason alone, I am appealing to the various African governments, particularly in Nigeria to seriously increase the number of first year Fine and Applied Arts students in the Universities and colleges. By taking this action, the government will be helping their administrations. Because with little or no funds, art graduates have been able to set up their own art infrastructures that are still helping to solve the socio- economic problems of Africa. We are also surprised that many African artists have acquired sound economic powers that made them relevant to their people and nation.

For the purpose of this workshop, the costing is stated as follows to ascertain the gain margin and if indeed the business will be viable. A good plain t- shirt costs between N400.00 – N1,000.00 from the whole sales point in the market. Given that all the initial capital per student for the production of a screen printed t- shirt is N700.00 (Plain t-shirt, screen inks,

frames and other necessary materials), if the t- shirt is sold at N1,000.00 or N1,200.00, the gain is between N300.00 and N500.00 which is a good margin. Hypothetically speaking, if a student invests on the production of 20 pieces of t-shirts at N700.00/ shirt (20 x N700 = N14,000.00) for production cost of the shirts, and the shirts are sold at N1,000.00 each (20 x N1,000 = N20,000.00). The gain margin is N6000.00. In printing however, the more the prints, the lesser the cost of production and hence better financial base.

The marketing of aesthetically appealing t- shirts is on our various campuses is always open with daily prospective clients and collectors. The need for uniqueness and style in wears is always a fashion vogue on campus. A student who perfects this art form will always be in business as t- shirt and jean are ready wears on campus. Creating a winsome label and style will distinguish any serious minded design student.



Plate V. Collage displaying the finished products ready for adverts and the market. (Pictures and collage by Mr. Jacob Onoja)

Conclusion

This paper gives a brief discuss on the working processes of the art of screen printing and how students can harness same for economic and social development in the University of Jos and other campuses. Parents, guardians and other relevant bodies can encourage their wards to gain this skill and transmit same to money spinning venture.

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