DOCUMENT RESUME

ED 375 926 PS 022 486

AUTHOR Margioridou, Chrisa; Takantza, Efterpi
TITLE Cognitive Development through the Study of the Environment: From Sheep to Jumper, from Popular Tradition to Modern Ways of Production.
PUB DATE [92]
NOTE 17p.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Art Activities; *Clothing; *Cognitive Development; Cultural Background; *Experiential Learning; Field Trips; Foreign Countries; *Handicrafts; Learning Activities; Music Activities; *Preschool Children; Preschool Education
IDENTIFIERS Greece; Sheep; Textile Industry; *Textiles; *Wool

ABSTRACT

The paper describes how preschool children's cognitive development is affected by the study of their surroundings and environment. A group of preschool children from the Child's Center of Aristotle University of Thessaloniki, Greece, were provided with opportunities to examine the transformation of wool into cloth and clothing. These included: (1) a puppet show to expose the children to the composition of jumpers and other clothing; (2) a discussion of the qualities of home-made and purchased jumpers; (3) a visit to a clothing factory that made woolen jumpers; (4) a demonstration of the process whereby raw wool is turned into thread; (5) a visit to a museum to see how wool was turned into thread and cloth in the past; and (6) a visit to a farm to see sheep. At each stage the children were questioned about their attitudes and experiences. The children participated in art and music activities related to the production of wool, cloth, and clothing, and gained an understanding of the historical role of thread and cloth-making in Greece. The activities contributed to the children's cognitive and vocabulary development, as well as to their ability to think scientifically. Contains six references. (MDM)

Aristotle University of Thessaloniki, Greece
Department of Early Childhood Education
P.O. Box 1664
540 06 Thessaloniki
F A X 3031-207-379

Margioridou Chrisa
Iridos 6A
551 32 Thessaloniki
Tel. 031 445.104

Takantza Efterpi
Halkidikis 79
542 48 Thessaloniki
Tel. 031 821.529

Associate Professor
Marika Tsiantzi
Department of Early Childhood Education
Aristotle University of Thessaloniki

CURRICULUM VITAE: We are both kindergarten Teachers in the Child Development Centre at the Aristotle University of Thessaloniki.
We graduated from the kindergarten school of Thessaloniki. We also attended the assimilation department of the Aristotle University of Thessaloniki.
Besides the University Kindergarten we have also worked in other Kindergartens of our country.

Cognitive development through the study of the environment:

From sheep to jumper.

From popular tradition to modern ways of production.

TITLE: Cognitive development through the study of the environment:
From sheep to jumper.
From popular tradition to modern ways of production.

INTRODUCTION:

Sheep's wool was always found in large quantities in our country, and used on a large scale in the domestic art of weaving.

Elaboration and weaving of wool constituted not only an important financial factor, but a social one as well.

The importance of wool and its use in the popular tradition of our country led us to decide to teach about it to preschool children extensively.

THEORETICAL BASE:

Through the Investigation of natural surroundigs, infants obtain a wealth of primary experiences, leading them to active learning. Active learning presupposes an energetic mental faculty in order to analyse, compose, compare and generalize.

To enrich a child's thought, so that he can generalize, the concepts we pass on to him should be

well chosen and systemized.

They should help him understand simple general connections between phenomena, a characteristic found in similar situations of reality. For instance, when children become acquainted with organic nature, their knoeledge is systemized, they are helped to discover general rules (sheep are sheared in spring and not in winter; in spring it's quite hot, in winter they need their wool to keep them warm).

The procedures employed in our project was based on teaching principles suitable for the preschool age.

a) We made sure that the content of our teaching corresponded to our children's cognitive development, but, it was at the same time, used as a base, for higher level development, according to Vygotsky's zone of proximal development.

b) Children of preschool age have their representational thought developed. Using several teaching aids and direct observation, we influenced the development of children's sensory functions and the connection between thought and language. Through careful supervision, we created conditions that would help us enrich children's ability of observation, as well as their curiosity - two essential factors for the development of cognitive interest.

c) Children were given systematic elementary knowledge, reflectiny the basic connection between

phenomena and objects. In this way, we created a general conception about the particular connection and its different forms.

Following the principle of systematization and succession, we proceeded from concrete conceptions to abstract ones, from known to unknown, from easy to difficult, so that the children realised what was happening.

At the beginning, emphasis was placed on the jumper (already known and accessible to a child's mind) and led to the sheep, the origin of wool.

d) Children's consciousness is closely related to self - initiative. In order to develop children's consciousness and initiative throughout the process of learning, we guided them towards what they should do and how. Through pleasant activities, we created an emotional cognitive attitude towards the knowledge they acquired. Therefore, throughout our projet, children had a chance to wash wool, unweave, twist and weave themselves.

e) In every step we took, we verified each child's level of development in relation to the general group level and, according to our verifications, we selected appropriate means to ensure that every child would participate in the activity actively.

Observation was the basic method of the teaching process. Through observation, children had a chance to

analyze and compose the qualities, characteristics and functions in every stage of wool's treatment and transformation to fabric. We gave children a chance to compare modern ways of working out the wool to old ones and, therefore, to arrive to general conclusions.

Children made short systematic observations, often reinforced by discussion, narration and dialogue.

We believe that children were exposes to several interrelations, as well as to some of the most fundamental laws of nature and society, that constitute a good base for their cognitive development.

DESCRIPTION OF THE RESEARCH:

The project took place at the Child's Center of the Aristotle University of Thessaloniki.

The group of children that participated consisted of children between the ages of 3 1/2 - 4 1/2.

The project lasted for three months and it was part of the kindergarten's daily program.

Procedures, and finding resulted from the cooperation between two kindergartner teachers.

Puppert - theatre has always been a most exciting activity, of great psychological and pedagogical value. Having in mind how important it is, we decided to use a puppet-show to introduce our subject. The story was about a child that was sentimentally attached to his

jumper, knitted by his grandmother. The reason for his attachement was due to the fact that his grandmother had told him the story of how sheep's wool could change from thread and to jumper.

The puppet - show that the children watched created a satisfying emotional attitude towards the new cognitive interest and, at the same time, posed some new questions to the children. From that day on, they started wondering whether their own jumpers were made of sheep's wool too and whether they were the result of the same procedure.

At the same time, inside the puppet house of our kinder-garten, we created a corner on the theme popular tradition. We used several woven pieces of cloth, carpets, embroidery, woolen clothes, etc, which children's parents brought in cooperation with us. After the puppet-show, children had a chance to get into the puppet-house and see those things, could look at them carefully and ask themselves about their origin.

Following a reverse process with regards to the jumper's origin, we asked children where they had gotten their jumpers from. A division between hand-made and other jumpers was drawn. In that way, children who were not wearing hand-made jumpers at the time, knew that they had gotten them from a shop.

The question we asked children was: where do shops get the jumpers from?. Children answered very success-

fully, namely that jumpers must be made in large factories. Posing the appropriate questions to the children, we led them towards the right answers. Jumpers are made by machines, which, obviously, are called weaving - machines and, therefore, factories that use such machines are called weaving - factories.

Children, realising how difficult it is for a jumper to be made by hand, came to the conclusion that a new way had to be found, so that all such thing could be made easily, quickly and with less cost. So, the use of machines, instead of human labour, to make woolen jumpers, was actually a social need.

On the other hand, it was very difficult for children to realise how a machine can knit a jumper the way their grandmother does, for instance, and, therefore, asked if they could visit such a factory. We decided to visit a weaving-factory, and have the person in charge show us around.

At first, children saw a manually operated machine, used in the past. Afterwards, they saw several modern weaving - machines and were really impressed by automation and, even more, by the minor need for human labour. Comparing this kind of machines to the manual one they had seen first, they realised that even machines develop gradually. During our visit, children saw how woolen thread is woven into fabric, which, is then cut, sewed, pressed, packed and sent to several

shops and how it all happens with incredible speed, convenience and automation.

After our visit to the weaving-factory where children saw how woolen thread changes to woolen cloth, the next question emerged: How does sheep's wool become thread?

In order to help children, better understand all the stages through which wool passes until it becomes thread, we decided to give them a chance to experience this in class, so that they 'll become able to understand the whole process more easily and, therefore, assimilate the new cognitive subject.

Having in mind the infants' need to use all their senses, we gave them a chance to see raw sheep's wool, to feel its weaving, to smell it, to see how dirty it is and to realize that it needs washing to clean. Each child had a chance to come near the hot water bowl, where washing took place, to mix water with a piece of wood, to see how dark the water's became and to smell the characteristic smell wool has at this particular stage. What followed was the washing and the hanging out of the wool, until it dried, which took place at the kindergarten's yard. At this point, we must emphasize how each child wanted to participate in every single activity with great interest.

The next step for children was to see how the already washed wool should be worked to become thread.

They realised that the wool we had washed was not very clean and that gave us the chance to tell them that some years ago women used to clean the wool with their hands and to unweave it, in order to take away the residue. This procedure is called unweaving.

The third stage in wool's treatment, that is unweaving, was practiced by children in the classroom, since each child had a chance to unweave a piece of wool by himself.

We used all different kinds of teaching aids we were able to find [pictures, several tools for treatment, weaving instruments, sheep's wool in all forms (raw, washed, unweaved, combed, twisted), balls of thread and several woven clothes].

Children attended a very expressive narration about the stages of wool's treatment and weaving. After unweaving comes combing for which we use the wool-comb to make it like a soft tuft. Then, spinning, for which we use the distaff and the spindle to turn wool to thread. After that comes reeling, for which we use the reel to change thread into "yarn". Then, winding into a ball or reeling, for which we use the spinning-wheel and the "τσιμπίδι" to change the "yarn" into a ball of thread or spool. Finally, we refered to the loom, which is the most important tool for weaving.

We showed children a small loom and explained how the woof passes through the warp.

Because of all the new knowledge and the quantity of information with all the difficulties in understading we decided to visit the folklore museum, where an extensive presentation of the stages of wool work was offered.

In the museum's area for wool's treatment and weaving, a presentation was made by the person in charge of the Museum's, educational matters. There, children had a chance to observe all the equipment needed in working with the wool and for weaving in their true sizes (shears, wool-comb, distaff, spindle, reel, spinning whell, "τσικρίκι" and loom). That time they were also able to observe how wool was spinned by an old lady who knew the craft very well and had come to the museum for that purpose. At the same time, children tried to twist wool in order to make it into thread. Then, they observed a woman weaving wool at a big loom. We prompted children to weave pieces of paper, in order to better understand how the woof goes up and down through the warp. Children responded willingly to this activity. From their work we ascertained that they had understood the process of weaving.

What children experienced at the Folklore museum and through the questions we raised we helped them realise that all these steps (wool - combing, twisting of the thread, weaving at the loom, etc) are difficult to make by hand, they are tiring and time- consuming.

So, the understood one more time why man has created machines to do these works. O course, it was difficult for them to imagine what these machines look like and how they function, so we planned a visit to a spinning mill. There, children were able to observe the automatic wool-comb, the rapid twisting of the thread by machines, the dye, and the huge mechanical loom.

At the same time, children, comparing wool treatment in the past and now, they realised how quickly and to what extend evolution of the human mind succeeded in the field of technology, as well as the development of civilization in the passage of time.

After such detailed and descriptive analysis, we considered necessary for the children to become aware of the origin of wool, the sheep, and to see how sheep are shorn. It was easily understood by them that sheep are shorn in the summer, because they get hot, while in the winter they keep their wool because it is cold. So, they discovered another rule of nature.

Children were deeply impressed from our visit to the fold. At the beginning, they kept to themselves and were probably a little frightened. However, at the end they relaxed and went close the sheep, they stroked and played with them. They really enjoyed the shear of the sheep, because neither they nor we had ever before experienced any thing like that.

In addition from the area of studying the environ-

ment, we wished to extend to other areas as well, such as the arts and music.

In the arts, at first children made a collage with wool on a piece of cloth, they then unstitched sack-clothes in order to realize how the woof gets crossed with the warp, then they weaved paper, drew and at the end weaved at small, self made looms. So, children experienced the change from thread into cloth. Of course, children of our class were too young for such delicate work and they were often confused when they had to pass the woof through the warp. However, in spite of the difficulties, with our help and guidance, they managed to weave pieces of cloth, which made them feel the joy of creation.

In music, we taught them a song referring to the loom and to the value this has for every woman who knows how to work with it. The verses of the song came from our traditional poetry and Mrs L.Madena, professor of the Department of Early Childhood Education, composed the music.

Before our project came to an end, we considered necessary for children to recapitulate it, for them to have a complete point of view on the subject, as well as for us to find out the knowledge they had acquired, their impressions, probable doubts or uncertainties and their emotional attitude towards the subject we had analyzed.

EVALUATION - CONCLUSIONS

The actual participation of children in most parts of this process resulted in the formation of a positive emotional attitude towards the new cognitive subject, which children showed often with their direct interest, willingness, and joy in every part of this process.

Children comprehended practically how raw material (fiber, thread) changes into craft. From the whole process, they had a chance to evaluate the decoration and combination of colours in different ways of weaving and to also cultivate a sense of rhythm, their imagination and sensitivity. However, the most important thing we succeeded in was the fact that children became aware of and appreciated our cultural heritage.

We managed to enrich childrens knowledge on a field completely new to them. They acquired a rich vocabulary related to our subject and played with derivative words such as weave-cloth-weaving-weaver-woven cloth-spin-thread-spinnery // knit-knitted wear-weaving machine-weaving room-knitter, etc.

The problems we posed to children gave them a chance to compare, analyse and generalize. In every step they were able to discover the connections between things, to realise rules of nature and push forward their scientific thought. This, in our opinion, is the most important benefit for children.

SUMMARY:

The reason for selecting as our subject wool's treatment and weaving was its importance in our popular tradition.

During the whole process of our work, we followed certain general teaching in principles. These principles were: a) accessible education, b) supervision, c) systematisation and succession in education, d) relation between consciousness and activity, e) individuality. The basic method of our work was observation, often reinforced with discussion and narration. The research concerns children between the ages of 3 1/2 - 4 1/2 and it lasted for about three months.

Children of the class became aware of the work and utility of the wool comparing, at the same time, how wool was produced in the past and now. They had the chance to visit an up-to-date weaving room and a spinnery and also the folklore museum, where they followed the stages of wool treatment and the art of weaving. As we were finishing the presentation of the subject we visited a fold, where they saw how sheep are shorn. It is noticeable that the children participated actively in every possible stage of the work (washing, washing-out, unweaving, twisting of thread).

During our work in classroom, there were plenty of teaching aids (pictures, tools for the work with wool, sheep's wool, etc) and, also, a traditional place with

embroidery, carpets, woven clothes, created in cooperation with children's parents.

In addition to the area of studying the environment, we extended to the areas of arts and music, as well.

With this project, we gave children the possibility to cultivate their imagination and sensitivity and to appreciate our popular tradition. Of the same importance is the fact that the work contributed to the children's cognitive and vocabulary development as well as their scientific thought.

BIBLIOGRAPHIC REFERENCES

- Motusolati E.Sabrina O. People and Nature, Products - Invetions.

Encyclopedia, Pataki Publications.

-Nikoltsou K. (1991). Plastic Arts. University Notes Thessaloniki

-Vaou 2. The Traditional wearing of Milos. EOMMEX Publication.

EOMMEX Greek decorating subjects: 2 volumes, Athens 1983

-Guide to the acquaintance of school with the folklore and Ethnological Museum of Macedonia Thessaloniki, 1987

-Folklife - Ethnological museum of Macedonia. Ministry of Macedonia - Thrace. Thessaloniki 1988

-Tsiantzi Marika, Notes for the lesson "Pedagogy of Teaching", Thessaloniki January 1992