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Research Article

The practical possibilities of zoopedagogy and environmental education in education

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Abstract – Zoos have existed since the millennia before BC and have always been designed to entertain a specific audience. Until the 20th century, the showmanship was almost exclusive. However, rapid population growth and the destruction of nature caused by the industrial revolution have drawn attention to the vulnerability and fragility of nature. Zoos, in addition to their showmanship, began to focus more and more on environmental education and training, in order to make the younger generation aware of the diversity of nature and to develop an environmentally conscious attitude. The zoos provide a transfer of knowledge based on experience and experience. This kind of knowledge transfer complements school education by helping to systematise and reinforce what is learned in school. In addition, direct experience and observation have a more lasting effect and thus contribute greatly to healthy emotional development and socialisation. Zoo-education methods include informal and formal tools that enable the zoo-educator to successfully carry out his/her educational activities.

Keywords – Environmental Education, Zoopedagogy, Zoo, Opportunity, Attitude

I. INTRODUCTION

The primary environment for raising children is their immediate family. It is here that children are exposed to the most stimuli that will shape the rest of their lives, as they are shaped by the habits and even the worldview of their parents and grandparents. Nursery schools and schools play a similarly important role in children's lives and education, and in our case environmental education, as they are the institutions where they spend most of their time outside the family. The responsibility of nursery schools and schools for environmental education is therefore indisputable. However, it is also important to bear in mind that it is not enough simply to develop children's environmental awareness, but also to shape their parents' attitudes. Environmental education can be implemented in all directions; children may be inspired by what they have heard at school and encourage their parents to collect waste.

The teacher has a major role to play in shaping the attitudes of children and even families, but this requires the introduction of new pedagogical tools and methods into the familiar toolbox. The new magic of extra-curricular activities gives the teacher many opportunities to capture and keep the children's interest. Zoopedagogical methods help schoolchildren to experience the diversity of life and the varied structure of the living world at first hand. Different methods such as observation, discussion,

scavenger hunts in the zoo, etc. develop skills in children that would not be possible to develop in a classroom.

In addition to providing knowledge, zoo education also has a role to play in shaping the personality of future generations, who need to understand that we must live in harmony with nature, not exploit it.

II. ZOOPEDAGOGY

In its most general sense, the word zoopedagogy refers to zoo education. The role of today's zoos has long gone beyond that of the zoos of yesteryear, which was merely for show. Today, one of the most important and indispensable tasks is education and training. It does this in accordance with its primary mission, which is to show the richness and diversity of the animal world. It is aware that the habitats of many species are gradually being lost due to the conversion of their habitats into economic or human habitat. Every year, thanks to zoos, and thus to zoo education, a message can reach many people, either directly or indirectly. Thanks to zoopedagogy, we can get a clear, or possibly clearer, picture of the problems that surround us, of how to address the issue of sustainability, and it does so while providing a wealth of opportunities to learn about the problems that arise. The most successful method of zoopedagogy is to astonish, to directly create positive experiences. Despite the fact that zoopedagogy is now a recognised discipline with a substantial literature, it is often misunderstood, both in its name and in the content it carries. It may be mistakenly believed that a zoo educator is concerned with the animals in a zoo, but this is not true, a zoo educator is concerned with the animals and the visitors. It is important that during the visit you get accurate information and an idea of the place of the creature you are observing in its environment, its relationship with other species and with humans. Most importantly, feel and understand that we are all connected to all living things by extremely close, unbreakable bonds [14].

III. THE HISTORY OF ZOOS

Today's modern zoos do not have the history of giants, having been around for only 250 years. Of course, there were zoos before that. These zoos were more like animal collections that entertained and delighted the high and mighty. The first known zoos were established in ancient Egypt at least 4,000 years ago. Records from around 1800 BC mention the zoological collection of Pharaoh Thothmes, which included plants as well as the animal species known to the empire. In these, animals were still free to move around, separated from one another only by moats. We know that Alexander the Great set up a zoo in Alexandria and made Aristotle its director. It is through the philosopher's work that we can consider it the first 'scientific' institution, since it was at this time that Aristotle wrote his first zoological encyclopaedia. In many ways, this work is the first work of a scientific nature on zoology to appear in history [2].

The origins of the zoo can be traced back to ancient rulers who collected animals to demonstrate their power. They collected tigers, lions, bears and other predators to show their success and power. Later, royal families began to collect animals as a symbol of their wealth, status and power. These often provided an opportunity for scientists to study the species they collected, to learn more about their anatomy and their needs, especially as the natural sciences began to gain ground [10].

In addition to the zoos belonging to ancient rulers, we know of several privately owned animal petting zoos from the ancient Roman Empire and Greece. These were either private collections or the property of a city, but they had the same purpose as the entertainment and 'education' of a select public. They brought the unknown nature closer to the people of the time. In ancient Rome, the places used to house the animals used in gladiatorial contests could not, of course, be called zoos, since the purpose of these animals and the places where they were kept was not to be enjoyed. Here, predators often waited in tasty conditions for their turn in the galdiator arena, where they were slaughtered by the galdiators for the amusement of the audience. In later times, animal fights, in which animals were pitted against each other, became widespread throughout Europe. Over the centuries, a whole industry has developed around this activity to ensure a steady supply of animals. Armies of trappers set out and transported the captured wild animals. Thanks to this constant demand, the industry flourished for about ten centuries, exploiting hundreds and hundreds of thousands of animals. The first modern zoo was established by Maria Theresa in 1752 in Schönbrunn. However, they ignored all the animals' needs. In menagerie-style zoos, animals were merely exhibits. The animals

were housed in a narrow concrete runway, without any naturalistic features, so that visitors could observe them in a way that took them out of their natural environment. Although these zoos lacked all naturalness and harmony, they were a great success and opened one after the other in the big cities of Europe. At first, only the privileged were allowed to visit. The zoo at Schönbrunn was opened to the public by Maria Theresa 13 years after its opening [3].

The scientific vision was already evident in zoos. Zoological societies were formed to care for, look after and, above all, learn about animals. With the rise of civilisation in the 19th century, zoos were no longer just a leisure activity for the rich. It was during this period, in the 18th and 19th centuries, that the most famous European zoos were founded, such as those in Vienna, London and, not least, Budapest [2].

In the twentieth century, there was a growing awareness of the extinction of animals, as many species were only found in zoos, leading to the realisation that something was wrong. This realisation led to the creation of a number of wildlife parks to conserve endangered species. Many zoos started to apply the same principle and as a consequence new animal welfare laws were introduced. What started out as a display of wealth and cruel entertainment has been transformed into organisations committed to animal conservation, working together. To achieve this goal, zoos have evolved into study and education centres with breeding and reintroduction programmes to return wild animals to their natural habitat. However, they have recognised the fact that there is no point in breeding and reintroducing animals if they continue to be threatened by hunting or if their habitat is destroyed by human activity. Therefore, zoos have tried, and continue to try today, to raise awareness about the environment, to educate people about the animals, their habitats and the problems they face. To do this, zoos try to educate visitors in a subtle way, showing them how animals live and interact with each other, often providing additional information about the animals' natural habitat and, where appropriate, the challenges they face in the wild. They try to create a personal connection between visitors and the animals. Interacting with them and creating a well-designed safari-style experience with safari-style catwalks, habitats and pavilions, underwater tunnels or paths under cages where you can see animals walking directly overhead. These experiences are unforgettable. Today's modern zoos can constantly look for alternative ways for visitors to interact and raise awareness about issues such as Holocene extinction and why so many animals live only in zoos today [10].

IV. THE TASKS OF ZOOS

The role of today's zoos has long since gone beyond mere presentation, with international legislation (the World Conservation Strategy for Zoos) making zoos essential to sustainable development, as well as providing recreational opportunities. This is ensured through the following functions:

participation in nature conservation, species and habitat protection, expertise and research, education. The aim of the zoo education process is to transfer knowledge aimed at maintaining the diversity of wildlife in such a way that it becomes an intrinsic value in the students, and as far as possible, the desired attitude formation and change of attitude can be achieved in the participants of the learning process.

In this way, the role of zoos is not only to showcase the diversity of wildlife, but also to pass on cultural heritage to future generations [4, 12].

V. ZOO EDUCATOR

In the past, zoo education consisted largely of formal education for school groups, but this concept has changed over the past 10-15 years, as has the role of zoos. Zoo education now includes all visitors. The education department is often consulted when designing new exhibits, as enclosed zoos need to provide an environment that is not only useful for the animals, but also interesting and thought-provoking for visitors. The use of signage, interpretive graphics, activity sheets and staff presentations will increase awareness and knowledge among children and adults and encourage visits to the zoo. Increasingly, education and interpretation will use modern information technology, creating a direct link to the on-site conservation programmes that zoo visitors help to support. Zoo education and interpretation will be

provided by a zoo educator, or zoo trainer, appointed by the zoo for this position [1].

A zoopedagogue is not just a teacher: she is not in a classroom, performing for a group of children of a certain age, day in, day out. The difficulties that a zoo teacher may encounter are of course not only the aforementioned, but also the daily new life situations, not least educational situations, which are no small challenge. Zoo visitors do not visit zoos to learn. The zoo educator has to make it possible for visitors to learn during a walk without even noticing. The zoo educator must have the right speaking skills, personality and even humour to engage his or her audience so that they not only listen to what he or she has to say, but also understand and absorb it. The zoo often has very large groups of people of many different ages. Age specificity is therefore almost always an issue with visiting groups. The zoo professional delivering the session must therefore be able to use appropriate language to address any age group at the same time. To do this, he or she needs to put technical terminology to one side and focus on everyday language, as the audience is not made up of professionals. You need to understand the animals, to know the species and the particular species you are talking about, in order to remain authentic. During the sessions, he can even talk about the specific habits of the species, which can bring them closer to the visitors [2].

Zoos should not teach zoology, botany and physiology to their audiences, but should raise awareness of the interconnectedness of these systems. In order to do this, zoo teachers need to undergo continuous training. He must be familiar with the latest research findings in these disciplines so that he can incorporate them into his lectures. Continuous self-training is of course essential, so that, even with today's modern IT tools, the audience can develop a system of thinking that makes it easy to incorporate virtual aids. Of course, the above is important, but there is no substitute for practical experience, not even the most rudimentary theory. Often a situation can override the theoretical foundations that were previously taken for granted. To do his job well, a zoopedagogue must constantly learn from practice, analyse his own and his colleagues' practice, and learn from the ideas and implementation possibilities of his more experienced colleagues. [2, 11].

An important feature of the work organisation in zoos is that they work continuously at the end of the week, so the educational services of the zoo also require seven days a week.

VI. TOOLS AND METHODS OF ZOOPEDAGOGY

All zoopedagogical activities are based on the live animal. Observing animals is a great experience for the visitors, and no information board or picture can replace the personal physical proximity [5].

There are two forms of zoo education: informal (non-organised) and formal (organised).

Formal education is a planned, closed system of blended learning. It takes place in a school system or on a school basis. The specific training typically sets specific input requirements. Formal education builds on an existing body of knowledge in the learning- teaching process, setting specific input and output requirements. Formal learning is characterised by a curriculum design that specifies a clear and predictable time in the classroom, requirements and knowledge elements. Formal learning is structured by subject within the school system, but outside the school system it is usually structured by subject or module.

Informal learning is much more inconspicuous than the former, but it is the most common form of learning in our lives. It can happen to us almost anywhere and at any time: while travelling, listening to the radio, in casual conversations, leafing through magazines, even while at the computer. Even while visiting the zoo. Zoo education is not limited to young children, who are one of the most important audiences, but not the only ones. Lifelong learning also applies to zoo education. Education for environmental awareness, as one of the most important messages of zoo education, must reach not only children, but also parents and grandparents. There is no better way to do this than to use informal learning opportunities to sneak it unobtrusively into the minds and daily lives of visitors. This includes information and interactive panels, visual aids, exercise sheets, publications, methodological guides, thematic tables, permanent and temporary exhibitions, demonstration gardens, dance trails and educational public programmes, shows and other demonstrations, camps, playhouses, craft programmes, which are all part of informal learning. The construction and operation of the garden itself is also part of this, because the garden represents an

idea, and the park must convey this not only on a theoretical level, but also on a practical level. If a zoo does not emphasise selective waste collection, it will be discredited if it does not advertise and emphasise the problem with signs [2, 5, 8, 15, 16].

Group or individual observation.

This method is one of the most important because in the zoo it is possible to draw conclusions from direct observation of the living animal. This helps us to keep in touch with reality, to perceive the world around us, so that we don't lose touch with reality. Information material available on the internet or on television can provide a serious insight into natural processes and environmental problems in a short time. At the same time, they exclude several crucial factors from all stages of learning: personal experience, which is an important aspect of knowledge acquisition, and observations, which are experienced in many ways by the five human senses. Guided observation, especially if sufficient time is allowed, is difficult to achieve in schools [2].

Toys.

The age distribution of upper secondary school pupils allows us to include play as a

method in a wide range of activities. This is also a basis for providing experiences and motivation. The exact activities within this can be very varied, limited only by the ideas of the teacher creating the activity. For example, role-play about animal life, behaviour and the human-animal bond; singing; drawing; arts and crafts. Of course, the list is only illustrative, the possibilities are endless. At the same time, the actual form of play is determined by the willingness and age of the group member [2].

Argue

If the occupation allows it, it should not be abandoned. In open-ended tasks and the

problems they pose, there is an opportunity to confront established positions, which may be based on different experiences or prior knowledge and therefore differ. It is important for the development of correct knowledge, points of view, communication skills and debating skills. These can all be useful in further studies. Debate is one way of practising and developing self- control [2].

VII. INFORMAL SYSTEM TOOLS METHODS

In zoopedagogy, we often read the term information system. This is nothing more than the tools that you encounter during a visit to a zoo, such as signs, posters, notices, notices, posters and text displays, some interactive games. All of these tools are information displays, with information and educational content. They are important tools for the indirect communication of information, which can be used in both formal and informal education [7].

Interactive educational game

It is one of the most effective ways to generate interest. The visitor actively explores the material on his/her own. There are simpler forms of this, such as mechanical boards (spinning, folding, flipping), which are more suitable for young pupils, who may not yet be able to solve coherent tasks perfectly. There may also be computer-controlled interactive interfaces, where interactivity is achieved by pressing a button or using a touch screen, which may be more suitable for upper secondary school students [7].

Treasure hunt type games

Often they are accompanied by a booklet or a worksheet. Solving a task shows the location of the next task, like a treasure map, and they are linked together to lead to the reward, or "treasure". They are very popular with children [2].

Petting zoo

The greatest impact of direct contact with an animal can be on a child, or even an adult. It is a completely different experience to touch an animal than to simply observe it from a distance. Of course, not every animal is suitable for display in a petting zoo. The animal on display must be reliably manageable and robust. These attractions in zoos are unmissable because of the aforementioned direct physical contact, which is the best way to teach children about animal tolerance. To protect the animals, petting zoos have areas where animals who want to be left alone can retreat, but the needs of the

animals must also be taken into account, as a noisy group of children, whether they are in upper or lower school, is tiring for the animals [7].

Sightseeing, demonstration

During feedings and demonstrations, the keeper stimulates the animals with food to perform actions and movements that visitors would not otherwise be able to observe (NAGY 2010).In such cases, visitors can see wild animals in action, even those that otherwise tend to lie lazily in the paddock for almost the entire visit. Their popularity is therefore understandable. (ACTS 2007) During the season, from March to October, the spectacle feeders can see 12 to 15 shows a day, while they care for 30 to 60 animals [8].

Camp

They provide the opportunity for longer-term or regular transfer of knowledge, which

more complex, multi-tasking tasks, or longer periods of time. The child can get a glimpse into the life of the animal, the regular or seasonal tasks that the caretakers have to cope with in order to meet the animal's needs and make its life as natural as possible [9].

VIII. THE LINK BETWEEN EXTRACURRICULAR ACTIVITIES AND ENVIRONMENTAL EDUCATION

After the family, the school is the setting for environmental education. The practical implementation of environmental education is primarily supported by the curricular content of science subjects. In primary school, environmental studies in the lower cycle and science, biology and geography in the upper cycle. This is partly understandable, since the appropriate scientific and natural science knowledge and curricular content is processed and transmitted with the help of qualified teachers. Consequently, the development of an environmentally aware approach is an educational process that permeates the whole development of the individual. Therefore, education for responsible citizenship, the development of a harmonious relationship with the environment, the promotion of value-creating and value-creating activities, the observance and compliance with amoral principles, norms and rules, the development of positive environmental attitudes, is not only a subject-specific activity, but a coherent cross-curricular process. Environmental education would be truly effective and practical if it were not confined to the classroom, but went beyond it, allowing students to make direct observations and investigations in nature. Study walks, museums, zoos, forest schools would also be seen as experiential learning environments providing direct experience. The organisation of extra-curricular activities outside the classroom requires a great deal of preparatory work on the part of teachers, which is unthinkable without a renewal of the pedagogical culture. However, out-of-school environmental education is much more effective because of the longer timeframe, the more informal atmosphere and, above all, the experience of learning. Field trips provide a significant experience for the development of environmental awareness [5].

IX. ENVIRONMENTAL EDUCATION

The concept and content of environmental education has changed as the concept of the environment has changed. The terms natural, conservation, environmental, ecological, environmental, sustainability education, education, education-education are all used. Although there are many different names, the message they convey is the same: to prepare people to adapt to current living conditions. The Stockholm World Conference on the Environment (1972) was a milestone in the history of environmental education, as the guidelines formulated there gave rise to environmental education at international level. They called for the development and introduction of educational programmes that effectively served to shape environmental awareness and to educate people to live in an environmentally friendly way, both in different types of schools and in extracurricular settings [6].

Environmental education as we know it today does not, for the time being, have much of a track record. It was first conceived a few decades ago in Western societies where the problems of urbanisation and increasing population density were already evident. Developing technology brought with it the development of transport infrastructure, which fragmented habitats and gradually eliminated them through the construction of mass factories and

agricultural activity. Nature was constantly destroyed, visibly damaged, and species disappeared and became extinct along with the habitats [5].

Environmental status indicators can also be animal organisms that, in a given habitat their presence, absence, population size and changes in population size, distribution and distribution also indicate favourable or deteriorating environmental conditions by the expansion or contraction of their area [13].

X. Educational efforts in environmental education

Lifelong learning, designed to keep adults up to date their knowledge of sustainability, and be able to transfer this to for their children, so that

they can be brought up in a new spirit. Zoos have recognised this and over the years have successfully launched programmes for environmental education, teacher training, zoo educational methodology programmes and group workshops [8].

XI. Environmental attitudes

The concept of environmental attitudes refers to the relationship between an individual and his or her environment,

The development of all the components of environmental attitudes in education is a pedagogical task. However, in addition to pedagogical influence, environmental attitudes are also shaped by non-intentional influences. These may include positive and negative examples of the society surrounding the students leaving school, their interests, the family [2].

XII. Summary

Environmental education and learning outside the traditional classroom is deeper and more lasting through personal experience and experimentation. It is not a substitute for school education, but a complement to it, emphasising and reinforcing it. Education and training in zoos harmonises well with competence-based education in schools, as there are opportunities to develop all competences. It can also be a place for lifelong learning.

Animal artefacts on display in zoos serve to preserve and organise the values of animals, and provide material for research. Last but not least, they are the basis for knowledge dissemination and environmental education. It is a classical showcase, adapted to the needs of modern man today. Their pedagogical tools, methods and working methods combine the achievements of traditional and modern alternative pedagogical trends. The tools of zoopedagogy include both formal and informal methods of education and training.

A lot depends on the personality, attitude, dedication and credibility of the zoo educator. It depends on the success of the institutions in transferring knowledge, education and training, and shaping attitudes.

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