

CLASSROOM PETS AS A WAY TO SUPPORT CHILDREN'S EDUCATION

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Abstract

The use of companion animals in various areas of human education has recently become increasingly popular. One form of educational support is the use of classroom pets. The aim of this review was to present information on the phenomenon of classroom pets. Factors influencing decisions to introduce an animal into a classroom and the choice of species were analysed. The effects of animals being present in classrooms on students' academic performance and behaviour were described. Problems associated with keeping classroom pets were also discussed. The paper was based on selected scientific literature and the authors' own reflections arising from contact with animals and teaching placements in schools. Based on the information presented, it can be concluded that keeping various animal species in classrooms is a relatively new phenomenon that continues to attract considerable interest. The main areas in which classroom pets affect children include socialisation and relationship building, development of self-esteem, and learning responsibility and respect for other living beings. The most common problems faced by classroom pet caretakers are a lack of funds for animal maintenance and the issue of caring for animals during school holidays. In conclusion, the presence of classroom pets can be beneficial provided that teachers and students are prepared to take responsibility and ensure appropriate living conditions for the animals.

Keywords: classroom pets, animal species, children's education, benefits, problems

Introduction

The deliberate use of animals, including companion animals, in various areas of human education has recently become increasingly popular. In particular, relationships between animals and children have long been recognised as an important element of children's socio-emotional and cognitive development, although they are still considered insufficiently understood (McCullough et al., 2021). According to Meadan and Jegatheesan (2010), children, especially younger ones, have a natural desire to interact with animals and show great interest in them. They enjoy observing and touching animals, and even talking to them and asking questions about them. Teachers and parents can make use of this broad interest to facilitate children's development and learning in various areas. It is believed that children find emotional comfort in relationships with animals. Endenburg and van Lith (2011) report a widespread belief that

interactions with animals are beneficial to child development, while scientific studies demonstrate positive effects of companion animals on children's socio-emotional and cognitive development.

One form of educational support is the use of classroom pets. Classroom pets are animals of various species kept in school classrooms where lessons take place. These are most often classrooms used for biology teaching, although this is not a rule. The animals are placed there by teachers or belong to students. The term is also sometimes used for animals that visit educational institutions together with their owners in order to participate in various activities. These animals diversify the teaching process and support students' personal development through interaction, care and play. Many researchers studying the effects of animals on humans classify classroom pets within "Animal Assisted Interactions", i.e. interactions involving animals (Fine et al., 2019; Łoniewska, 2024; Peregudowska, 2024; <https://petsintheclassroom.org>). The phenomenon of classroom pets occurs in various countries. Readers in Poland have also undoubtedly encountered animals in schools during their own education. It has been observed that "nature corners" and other forms of displaying animals are much more common in kindergartens and classrooms attended by younger children (Frątczak and Frątczak, 1991). In Poland, the phenomenon of classroom pets has not been studied extensively and its scale is unknown. Such studies have, however, been conducted in the United States and Canada (Zasloff et al., 1999; Rud and Beck, 2003; Daly and Suggs, 2010; Gee et al., 2015; Ganzert and McCullough, 2015; McCullough et al., 2021; Hindman, 2022).

Zasloff et al. (1999) were among the first to demonstrate, based on research conducted in California, that most surveyed teachers kept live animals in their classrooms. Where no live animals were present, classrooms contained various preserved specimens or animal exhibits. A survey conducted in 431 elementary schools in Indiana showed that 25% kept classroom pets, and in half of these schools students were allowed to bring animals to school (Rud and Beck, 2003). According to another survey conducted by Gee et al. (2015) among teachers participating in 1,400 educational programmes accredited in the United States by the National Association for the Education of Young Children, almost two-thirds reported having animals in their classrooms.

The above studies indicate a positive reception of and interest in the influence of animals on education. This review was therefore prepared to draw attention to the phenomenon in Poland. The paper was based on selected scientific literature and the authors' own reflections arising from contact with animals and teaching placements in schools.

The aim of the paper is to present information on the phenomenon of classroom pets. Factors influencing the decision to introduce an animal into a classroom and the choice of species were also analysed. The effects of animals being present in classrooms on students' academic performance and behaviour were described. In addition, problems associated with keeping classroom pets were presented.

Choosing a classroom pet

When deciding to introduce an animal into a classroom, teachers should first consider whether they are able to provide appropriate housing conditions. This is often linked to selecting a suitable species, as different animals require different levels of attention and care. It is also necessary to consider how much classroom space can be allocated to enclosures or cages. Another issue is whether the chosen animal is a social species that requires companionship or whether it can live alone. In the former case, at least two individuals of the species should be kept. Other factors that should be considered include suitable lighting and room temperature to ensure the animal's comfort. The financial aspect should also be taken into account, because purchasing

the animal, its cage and enrichment, as well as feed, entails costs (Ganzert and McCullough, 2015; <https://www.peta.org/>).

When selecting an appropriate species, teachers may also seek advice from colleagues who already have experience keeping classroom pets. According to the US study by Rud Jr. and Beck (2003), aquarium fish were the most numerous group of classroom animals in Indiana (27.5%). The next largest groups were mammals, such as chinchillas, gerbils, guinea pigs, mice, rats, hedgehogs and rabbits (26.3%); amphibians and reptiles (salamanders, frogs, toads, caecilians, iguanas, other lizards, snakes and turtles) – 22.1%; insects (ants, butterflies and their caterpillars, cockroaches, crickets and mealworms) – 11.7%; and various invertebrates (crabs, crayfish, sea anemones, snails and spiders) – 10.8%. Birds, mainly parrots, were the least common classroom animals – 1.6%.

Other studies conducted in the United States likewise indicate that fish were the most popular classroom pets, kept by 30% of the teachers responding to the survey (Ganzert and McCullough, 2015). The high popularity of fish corresponds with the findings of Clements et al. (2019), who reported very positive human interactions with aquarium fish. The next most commonly kept species were guinea pigs – 13%, hamsters – 10%, bearded dragons – 7%, and leopard geckos – 7%. Other, unspecified species accounted for a total of 33% (Ganzert and McCullough, 2015). According to Hirschenhauser and Brodesser (2023), children are capable of forming emotional bonds even with giant snails. McCullough et al. (2021), in turn, listed guinea pigs, fish, lizards, hamsters, toads, gerbils and tortoises among the animal species most commonly kept in classrooms.

Benefits of keeping classroom pets

Caring for a classroom pet is generally considered a positive experience for children. Studies conducted mainly in the United States have shown that animal care is not only enjoyable but also has educational value and contributes to the development of personality and social skills (Daly and Suggs, 2010; Endenburg and van Lith, 2011; Clements et al., 2019). Moreover, caring for an animal helps children develop values such as empathy, compassion and respect. It also broadens their knowledge of how living beings should be cared for (Hirschenhauser and Brodesser, 2013). Children naturally want to interact with animals, which appear to make no demands, pass no judgement and pose no threat in the way other people sometimes can. The child decides when to interact with the animal and when simply to observe it. In the presence of animals, children become calmer and more relaxed and also interact with their peers, for example by talking about the animal (Rud Jr. and Beck, 2003; Ganzert and McCullough, 2015; McCullough et al., 2021).

Research conducted by Zasloff et al. (1999) among elementary school teachers in northern California showed that animals, in addition to helping with science lessons and cross-curricular teaching, are important for children's overall education because they provide opportunities to convey humanistic values.

Rud Jr. and Beck (2003) described a survey on the presence of animals in elementary school classrooms in rural, suburban and urban areas of Indiana. Questionnaires were sent to 2,149 teachers from 115 schools. More than 25% of teachers reported that animals were kept in their classrooms. According to the respondents, animals helped children gain practical educational experience and also provided entertainment. The authors concluded that the educational value of classroom pets is often underappreciated and understudied, and that the survey results suggest this is a promising area for interdisciplinary research.

Daly and Suggs (2010) presented the opinions of 75 teachers. Most respondents believed that classroom pets support teaching processes and that their mere presence increases empathy and promotes students' socio-emotional development.

Ganzert and McCullough (2015) conducted surveys in the United States and Canada to investigate the extent to which classroom pets contributed to improvements in knowledge, social skills and empathy among children from preschool through eighth grade. Teachers participating in the survey and interviews were asked how they had benefited from the presence of animals in classrooms and what they considered the most important advantages. The survey showed that as many as 73% of teachers believed classroom pets helped their students learn responsibility. Seventy-one percent stated that the animals supported students in learning how to care for animals, while 66% reported that classroom pets were valuable teaching aids in core and biology-related subjects. More than half of respondents stated that animals increased students' positive perception of school and sense of comfort in the classroom, and helped children learn empathy and respect. The presence of animals also improved attendance and children's participation in school activities, which was associated with their willingness to interact with the animals.

The study by McCullough et al. (2021), conducted among third- and fourth-grade elementary school students in the United States, compared academic achievement, behaviour and social relationships between classes with classroom pets and classes without animals. A total of 591 students from 41 classrooms participated. Educational outcomes were compared, and the greatest improvements in social skills and competence as well as reading progress were recorded in classrooms where animals were kept. In addition, parents of children who had contact with classroom pets noticed improved prosocial behaviour. These findings suggest that classroom pets may provide substantial benefits for the social, behavioural and educational development of elementary school students.

Contact with animals is believed to have positive effects on young people with emotional disorders such as depression or anxiety and to improve social functioning among preschool and early elementary school children (Frątczak and Frątczak, 1991). Human–animal interaction also produces generally positive effects on motivation, well-being, emotions and the ability to maintain attention. According to many teachers, cages or aquariums with animals enrich classroom space and improve teaching processes. Classroom pets contribute greatly to greater sensitivity and affection towards nature. Through interaction with animals, children also learn responsibility and gain practical experience in how to care for them (Gee et al., 2017; Fine et al., 2019).

Hindman (2022) presents alternative ways of using classroom animals. One example is raising them from the earliest stages of life, using fertilised chicken eggs placed in an incubator from which chicks hatch. The author suggests that such activities can enrich mathematics lessons. Children could calculate the time from obtaining the eggs until hatching and track the changing number of eggs as chicks emerge. Another suggestion is to observe the transformations of butterfly larvae during metamorphosis. Such experiences can also enrich and make biology lessons more attractive.

A separate issue concerns animals used in various institutions as part of educational intervention and therapeutic activities. In these cases, animals are brought to schools by their handlers. Most commonly these are dogs, guinea pigs, rabbits, horses and even other typical farm animals. The best-known approach, however, involves supporting children's reading development by having them read to dogs – so-called “reading assistance dogs”. These activities can also be designed for children with various disabilities (Serpell, 1999; Endenburg and van Lith, 2011; Uccheddu et al., 2019). For example, Uccheddu et al. (2019) compared reading motivation and reading skills in school-aged children diagnosed with autism spectrum disorders who participated in a 10-session reading programme either with or without a dog. Children who read to a dog had 100% attendance compared with 75% attendance among children taking part in reading sessions without a dog. After completion of the programme, the children were considerably more motivated and willing to read at home, as confirmed by their parents. Kotrschal

and Ortbauer (2003) also demonstrated that the presence of a dog in the classroom three times a week for one month had a positive effect on peer integration and contributed to improved communication among children.

A positive effect of guinea pigs on the development of social competencies such as co-operation, assertiveness and self-control was also demonstrated by O'Haire et al. (2013). The authors conducted an eight-week programme involving guinea-pig-assisted activities with children aged 5–12 years. According to the authors, the presence of guinea pigs had a positive effect, potentially making students calmer and helping them feel safer in the classroom, which in turn created opportunities for greater social engagement and socio-emotional development. Loukaki and Koukoutsakis (2014), meanwhile, reported that the presence of a rabbit twice a week for six months contributed to increased communication, emotional expression and socialisation skills among children.

A bachelor's thesis addressing the topic of classroom pets was also prepared at the University of Warmia and Mazury in Olsztyn. The aim and basis of the study was to investigate whether the presence of guinea pigs during lessons affected the motivation and peer relationships of elementary school students. As part of the experiment, the author attended lessons with her guinea pigs in a third-grade class for four weeks, for one class period per week. The study did not provide a clear answer as to whether the guinea pigs improved motivation and peer relationships. However, tendencies were observed towards improved ability to initiate conversations and a reduced sense of loneliness among students (Peregudowska, 2024).

Problems associated with keeping classroom pets

The information presented above indicates that the presence of animals in classrooms has beneficial effects on educational and social processes; however, associated problems are also recognised. Responsibility for maintaining the animal most often falls to teachers because most schools lack funds that can be allocated to animal care (Ganzert and McCullough, 2015; <https://www.peta.org/>).

Another common dilemma concerns what happens to the animal during periods when school is closed. Some teachers address this issue by establishing duty rosters or reward systems for students. In such cases, children who behave well in class may be allowed to take the animal home. Another issue is the death of an animal and how to manage students' reactions. This can, however, also provide an opportunity to teach children about the passing of life in the comfortable and familiar surroundings of the classroom (<https://petsintheclassroom.org/>).

Another issue teachers must address is the welfare of the classroom animal. It is important that the chosen animal feels comfortable in the classroom environment and does not experience stress. Therefore, keeping animals that are naturally sensitive to noise or to the presence of large numbers of people is discouraged. Children's phobias and allergies must also be taken into account. In such cases, children and parents should first be asked about any possible contraindications to keeping a particular species, and an alternative should be found if necessary. It should also be recognised that animals may sometimes act as vectors of zoonoses. Accordingly, the animal should receive regular veterinary care and appropriate hygiene should be maintained during human–animal contact (Zasloff et al., 1999; Hindman, 2022; <https://petsintheclassroom.org/>; <https://www.peta.org/>).

Summary

Based on the information presented in this paper, it can be concluded that the presence of animals in classrooms is a relatively new phenomenon that continues to attract the interest of many

people seeking to explore human–animal relationships. Knowledge in this area is still considered insufficient to draw unequivocal conclusions that classroom pets have a clearly measurable effect on children. Different species can serve as classroom pets provided that their care does not cause major difficulties. The information reviewed suggests that the mere presence of animals during lessons is not sufficient for classroom pets to have a positive influence on students. Active involvement is required not only from children but also from teachers and parents. The main areas in which classroom pets may affect children are socialisation and relationship building, development of self-esteem, and learning responsibility and respect for other living beings. The most common problems faced by classroom pet caretakers are the lack of dedicated funds for animal care and the question of who will care for the animals during school holidays.

In conclusion, the presence of classroom pets can be beneficial provided that teachers and students are prepared to take responsibility and ensure appropriate living conditions for the animals. The authors believe that the topic of classroom pets is underappreciated in Poland and deserves broader interest from both researchers and companion-animal enthusiasts.

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Approved for publication: 14 May 2025

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SUMMARY

The use of pet animals in various areas of human education has recently become increasingly popular. One form of supporting education is the use of animals known as classroom pets. The aim of this review paper is to present information on the phenomenon of classroom animals. Factors influencing the decision to introduce an animal to classroom and the choice of species are analyzed. The impact of the presence of animals in classrooms on students' academic performance and behavior is also described. Additionally, the problems resulting from keeping classroom pets are discussed. The paper is based on selected scientific literature and personal reflections arising from interactions with animals and internships in schools. Based on the information presented in the paper, it can be concluded that the presence of various species of animals in classrooms is a relatively new phenomenon that still generates interest among many people. The primary area in which classroom animals impact children is socialization and relationship-building, as well as development of self-esteem and responsibility, and respect for other creatures. The most common problems faced by caretakers of classroom pets include a lack of funds for maintaining the animals and the challenge of caring for them during school holidays. In conclusion, it can be said that the presence of classroom animals is a beneficial arrangement if teachers and students are willing to take responsibility and provide the animals with appropriate living conditions.

Keywords: classroom pets, animal species, children education, benefits, problems