

Childhood Education



ISSN: 0009-4056 (Print) 2162-0725 (Online) Journal homepage: http://www.tandfonline.com/loi/uced20

Animal-assisted Activities for Students With Disabilities: Obtaining Stakeholders' Approval and Planning Strategies for Teachers

Erin Baumgartner & Jeong-il Cho

To cite this article: Erin Baumgartner & Jeong-il Cho (2014) Animal-assisted Activities for Students With Disabilities: Obtaining Stakeholders' Approval and Planning Strategies for Teachers, Childhood Education, 90:4, 281-290, DOI: 10.1080/00094056.2014.936221

To link to this article: http://dx.doi.org/10.1080/00094056.2014.936221

	Published online: 27 Jun 2014.
	Submit your article to this journal $oldsymbol{arGamma}$
ılıl	Article views: 258
α̈́	View related articles 🗹
CrossMark	View Crossmark data 🗗

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=uced20

Luis Louro/shutterstock



Obtaining Stakeholders' Approval and Planning Strategies for Teachers

Animal-human interactions have been found to have positive influences on children across the world. In particular, research supports the benefits of animal-assisted activities in addressing students' social and behavioral problems within the classroom environment. The general information about animal-assisted activities provided in this article can help teachers identify key steps in effectively using such activities to teach socially important behaviors to children with learning disabilities, emotional and behavioral disorders, and autism. The author explains that the effectiveness of animals in classrooms is dependent on strong administrative, parental, and collegial support; clear and measurable goals; well-developed instructional plans; an appropriate animal choice; well-developed health and safety procedures; and systematic plans for monitoring progress in student performance.

by Erin Baumgartner and Jeong-il Cho

Erin Baumgartner is Teacher, North Side High School, Fort Wayne Community Schools, Fort Wayne, Indiana. Jeong-il Cho is Assistant Professor, Professional Studies, College of Education and Public Policy, Indiana University-Purdue University Fort Wayne, Fort Wayne, Indiana.

hile working in a classroom for students with disabilities, I witnessed firsthand the benefits of incorporating animals into classroom instruction. My students had a wide range of disabilities and several of them experienced severe behavior problems. A local animal-assisted activity organization took an interest in our special education program and volunteered to bring various assistance animals to our school once a month. I prepared the students for unusual visitors and they waited, with much anticipation, for the first visit of two therapy dogs. Students who were normally expressionless and displayed less than desirable social skills became positively animated. Students began to understand better ways of expressing their needs as they took turns with each other to be with "Morgan" and "Samantha" and interact with them with respect. It was obvious that students felt comfortable and safe with the therapy dogs as they knew the dogs would not make fun of their reading and behaviors.

The use of therapy animals to help students with disabilities is not a new concept. Doctors and therapists have reported on the social and emotional benefits of animals for humans (Fine, 2010; Ormerod, Edney, Foster, & Whyham, 2005; Raupp, 2002). Animalassisted activities can reduce behavior problems and anxiety, improve engagement with classroom tasks, and also increase positive peer interactions and appropriate social behaviors (Fine, 2010; Thompson & Gullone, 2003). Other benefits of having animals in the classroom for students with disabilities include the reduction of reading anxiety and improved reading fluency and comprehension (Bueche, 2003; Newlin, 2003). Such animal-assisted activities have been widely used in the United States, the United Kingdom, Canada, Australia, and in Europe and Asia (Cardak, 2009; Delta Society, 2012; International Organization of Human-animal Interaction, 2012; Jalongo, Astorino, & Bomboy, 2004; Therapy Dogs International, 2012). The positive effect on children of interactions with animals has been reported throughout the world (Mallon, 1992; Ormerod et al., 2005).

Students with disabilities face a variety of challenging issues each day within their classrooms. Recent research supports the

view that the use of trained and certified animals within the classroom environment can have a positive influence on these students' social and behavioral problems (Bass, Duchowny, & Llabre, 2009; Bueche, 2003; Friesen, 2010; Newlin, 2003; Siegel, 2004). When special education teachers and related professionals hear about animal-assisted activities, they often immediately see the potential benefits and possible applications for students with significant social and behavioral problems, particularly those with autism, learning disabilities (LD), attention deficit hyperactivity disorder (ADHD), emotional and behavioral disorder (EBD), and cognitive disabilities (CD). Unfortunately, proper guidelines and resources are not readily available to provide a comprehensive picture about how to successfully gain permission from school administration and parents and how to plan for the implementation of an animal-assisted activity in their classrooms. This article provides general information about animal-assisted activities and identifies key steps that teachers need to follow for the effective implementation of such activities.

Benefits of Animal-assisted Activities

A key role for animals in education is teaching students socially important behaviors (Bueche, 2003; Friesen, 2010; Jalongo et al., 2004; Siegel, 2004). Animal-assisted activities can be beneficial to a wide variety of people within diverse circumstances, such as students of all ability levels, especially children with LD, EBD, and autism. Students with low self-esteem may be more willing to interact with animals than with their peers because animals provide non-judgmental and non-threatening responses (Newlin, 2003). Individuals work better within an atmosphere of trust, nurturance, and friendly relationships, which can be built through an animal-assisted program (Delta Society, 2012; Fine, 2010; Siegel, 2004). For example, students with EBD may display behavior problems and experience peer rejection, negative social relationships, and a lack of quality friendship (Poulin & Boivin, 1999; Walker, Ramsay, & Gresham, 2003). Having an emotional bond with an animal and practicing target social skills and appropriate behaviors with that animal would have a positive influence on the social behaviors of students with

EBD (Thompson & Gullone, 2003). In addition, a secure attachment with an animal can help students experience a sense of trust.

Student issues of nurturance, social bias, communication issues, and lack of control can be addressed through animal-assisted programs (Fine, 2010; Siegel, 2004). The use of animals also promotes responsibility, social skills, empathy, and positive self-concept (Heimlich, 2001; Thompson & Gullone, 2003). Caring for an animal can help children feel useful and needed while increasing their social participation (Siegel, 2004). When working with smaller animals, assigning responsibilities for taking care of the animal (e.g., cleaning, feeding) to one student at a time for a period of time can forge a bond between a student and an animal and teach personal responsibility. Interaction with an animal can also help students practice gentle behaviors, such as speaking in a soft voice and controlling their impulse actions so as not to startle the animal (Flom, 2005).

An animal-assisted activity can help students, including those with LD and CD, reduce reading anxiety as they work to improve reading fluency and comprehension in the presence of animals (e.g., dog) (Black, 2009; Bueche, 2003; Jalongo et al., 2004; Newlin, 2003). Studies reported beneficial effects of an animal-assisted activity on students with autism in improving social skills, motivation, and attention (Bass et al., 2009) as well as increasing interpersonal skills and the frequency of social contacts (e.g., tactile and verbal) with other individuals (Krskova, Tal-

arovicova, & Olexova, 2010). Table 1 provides reading for various animal-assisted programs. Numerous animal-assisted programs throughout the United States and across the world (see Table 2) provide resources and training opportunities for people interested in animal-assisted activities.

Six Key Approval and Planning Steps

Based on suggestions from previous literature (Friesen, 2010; Jalongo, 2005; Siegel, 2004) and experiences of special education teachers with animal-assisted activities, the following six key steps can help teachers prepare for animal-assisted activities in their classrooms.

Step 1: Gain program approval and bring administrators and parents on board. The best way to successfully obtain approval is to build a good case as to why the program should be implemented in the classroom. Teachers need to provide administrative staff with key information highlighting the benefits of the animal-assisted program, evidence of its effectiveness reported in other schools, and relevant literature and websites explaining the program and providing examples of the ways the program can be implemented for students with disabilities (Heimlich, 2001).

It is also important for teachers to clearly explain to the administrative staff the clear goals and objectives that they want to achieve for the particular classroom through

Recommended Reading

Arnold, J. (2010). Through a dog's eyes. New York, NY: Spiegel & Grau.

Black, S. (2009). Sit, stay and read. American School Board Journal, 196(12), 36-37.

Bueche, S. (2003). Going to the dogs: Therapy dogs promote reading. Reading Today, 20(4), 46.

Ekhaml, L. (2008). Animals in schools—Policies and procedures. *School Library Media Activities Monthly*, 24(9), 17-19.

Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early Childhood Education Journal*, *37*, 261-267.

Jalongo, M. R. (2005). What are all these dogs doing at school? Using therapy dogs to promote children's reading practice. *Childhood Education*, 81(3), 152-158.

Newlin, B. R. (2003). Paws for Reading: An innovative program uses dogs to help kids read better. *School Library Journal*, 49(6), 43.

Siegel, L. W. (2004). The role of animals in education. ReVision, 27(2), 17-26.

an animal-assisted program. Special funding or a grant may be available. Some organizations will charge no fee, and others will provide services for a large fee.

Administrative staff, parents, teachers, and animal handlers should have a clear idea of any liability issues involved in the implementation of animal-assisted activities (Ekhaml, 2008; Jalongo, 2005). Schools and teachers should take ordinary and reasonable precautions with animal-assisted activities, following policies and procedures regarding animals on school premises should any animal-related incidents (e.g., animal bite/scratches, animal cruelty/negligence) occur. Ekhaml (2008) stresses the importance

of well-developed policies and procedures regarding animals on school premises, since various instructional activities involving live animals may take place at schools routinely for instructional and learning purposes. These routine activities can include animal visits by veterinarians, zoo staff, and certified animal handlers and having residing small animals in science classes, library media centers, or regular classrooms (Ekhaml, 2008). For animal-assisted activities, liability insurance can be purchased through several animal therapy organizations (e.g., Therapy Dogs International, Inc., www.tdi-dog.org; Delta Society, www.deltasociety.org). Health and safety precautions that teachers can take

Animal-assisted Activity Programs and Organizations Around the World

Program Name	Organization	Website	
Animal-assisted Intervention	Society for Companion Animal Studies	www.scas.org.uk	
Tail Waggin' Tutors/ PAWS to Reading	Therapy Dogs International	www.tdi-dog.org	
Humans and Animals HALT/The University of Learning Together Tennessee		www.vet.utk.edu/halt/	
Reading Education Assistance Dogs (Project R.E.A.D)/ Reading with Rover	Intermountain Therapy Animals	http://info.therapyanimals.org	
Sit, Stay and Read	Sit, Stay and Read	www.sitstayread.org	
Humane Education: Teaching Love and Compassion	Society for the Prevention of Cruelty to Animals Los Angeles	www.spcala.com/	
The Shiloh Project	The Shiloh Project	www.shilohproject.org	
Trainings in Animal- assisted Interventions Sciety for Companion Ani Studies		www.scas.org.uk/1882/training-in-aai. html	
Various program	Norwegian Organization for Animal-assisted Therapy	www.nodat.no/	
Various programs	Pet Partners (former Delta Society)	www.deltasociety.org	
Various programs	International Association of Human-animal Interaction Organizations	http://iahaio.org	
Various programs Korea Animal-assisted Therapy/ Welfare Association		www.kaatwa.org/	
Various programs Society for the Study of Human- animal Relations		www.hars.gr.jp/english/index.htm	
Various programs	Therapy Dogs Switzerland	www.therapiehunde.ch/	

Table 2

for animal-assisted activities are addressed in Step 5.

After gaining approval from the administration, permission from parents is necessary (see Figure 1 for a sample parent permission form). When explaining to parents the benefits of using an animal-assisted program, they can personalize the information for each family, noting the ways the program could benefit their child. It is important to honor the requests of any parents, students, and staff members who have concerns regarding the use of an animal-assisted activity. The best practice should be openness, honesty, and willingness to hear how others feel about using an animal-assisted activity in classrooms.

Step 2: Decide on an optimal goal: Why have animals in your classroom? Bringing a hamster into my resource room has had many benefits. The hamster, named "Blossom," has been the focus of many lessons, involving not just science, but also math, health, and social skills. I observed that students with disabilities like to have Blossom around and will listen carefully when I reference the hamster to talk about certain scenarios that involve their behavior and my expectations. For example, when teaching health issues (e.g., hygiene) along with social skills (e.g., routines and turn taking), my students and I conducted a web search on how to take care of Blossom and developed a care plan. We found

that Blossom needs to be fed daily and her plastic cage needs to be cleaned at least once a week. We developed a set of care routines (e.g., providing water and food) where each student takes his or her turn regularly. We discussed the negative and positive consequences of following/not following the feeding schedule for Blossom's health and also discussed the need for hand washing after dealing with Blossom.

This story shows the importance of a clear purpose for an animal's presence in the classroom. Teachers need to conduct an assessment of student needs that will be addressed through an animal-assisted program. Friesen (2010) suggested that an animal-assisted activity can be a valuable form of social, psychological, emotional, and physical support for students in educational and therapeutic settings. Many students with disabilities, including those with LD, EBD, and autism, may fall into multiple categories of needs because their disabilities usually create difficulties in more than one area (e.g., emotional, social, behavioral, and motivational). For example, students with LD and EBD frequently experience negative peer interactions due to their behavior problems and poor prosocial skills (Cho, Hendrickson, & Mock, 2009; Kaukiainen et al., 2002; Nabuzoka & Smith, 1993). They may have long-term behavioral goals outlined within individualized education plans (IEPs).

Parent Permission Letter

Animal-Assisted Activity Day • Friday, December 12, 1 – 2 pm

On Friday, December 12th our class will participate in an animal-assisted activity sponsored by Animal Friends Association. This program is designed to help students gain more self-confidence and allows for social skills development. Animal Friends Association trained representatives will be bringing "Morgan" and "Samantha," two certified therapy dogs. The trainers will work with students individually and within the group setting. This is a program from which I believe all students will benefit. If you have any questions, please contact me. If you would like more information about Animal Friends Association, please feel free to visit their website.

My child assisted day program on December 12.	has permission to participate in the animal-
Parent Signature:	
Contact Information:	
Child Allergies:	
Fears Related to Animals:	

When teachers analyze student behaviors (e.g., using Antecedent-Behavior-Consequence [ABC] analysis, frequency of problematic behaviors), a specific behavior can be identified to address with the help of animal-assisted activities. A teacher's observations can be recorded in an activity log to identify and describe a student's pattern of behaviors. For example, appropriate, calm, and attentive behaviors are frequently identified target behaviors for a student with ADHD. Such behaviors can be addressed through animal-assisted activities. The teacher would discuss this potential with the handler, if appropriate. Next, a teacher would define the specific appropriate, calm, and attentive behaviors (e.g., listen to others, keep eyes on a designated task, respond to others in a calm manner) that a target student needs to master. These target behaviors should be explained and modeled by the teacher using age-appropriate materials, such as stuffed animals for younger students. More importantly, students should have multiple opportunities to practice the target skills before having an animal visitor.

It is critical that target skills for students to work on are identified before contacting an organization that provides animal-assisted activities. Table 3 shows an example performance assessment and progress monitoring chart for "Jim" and "Betsy." The target behavior for "Jim" is to establish self-

confidence when presenting materials to the class and interacting with his peers and "Betsy" needs to work on sharing and turntaking behaviors. Teachers also need to know students' strengths (e.g., "Betsy likes group activities") in order to nurture and use those strengths when improving on weaknesses (e.g., "Betsy practices sharing and turntaking behaviors to work better with her peers.").

Step 3: Establish a plan for student growth goals. Once teachers have identified the specific skills students need to work on, they should establish a detailed, systematic plan (e.g., frequency, physical arrangement of classroom, date/time of animal visits, assessment strategy/schedule) for the animalassisted activity, with clear, observable goals. Teachers should discuss and plan with the animal handler the appropriate activities through which students can practice target skills as a group or as individuals (Jalongo, 2005). Timing could be a potential issue in terms of scheduling a session with an animal and handler team, and allowing for enough one-on-one interaction time for each student with the animal(s). A possible solution for this issue would be to allow students to interact with the animal(s) together as a group. Another solution to time constraints is to set up the class in a "center" format, where students have different tasks and activities in different areas of the room and one area is

Example: Individual Student Needs Evaluation and Process Monitoring Chart

	Strengths	Weaknesses	Skills to Address	Short-term Goals	Observations
Jim	Jim enjoys independent hands-on activities, such as building and drawing.	Jim does not like to read aloud or talk in front of the class.	Confidence	Jim will confidently read a book to the class on 4 out of 5 trials over a two-week period.	Day 1. Jim read to "Ruby" (therapy animal) for 5 minutes with 24 words per minute.
Betsy	Betsy enjoys group activities, reading aloud, and math.	Betsy has a hard time sharing and letting others have a turn.	Sharing and Turn Taking	Betsy will cooperatively take turns with peers at 90% proficiency during board games with two to three peers.	Day 1. Betsy willingly took turns with three peers to be with "Ruby" (therapy animal) on 1 out of 3 occasions.

designated for an animal-assisted activity.

During the planning, teachers should also prepare students for appropriate care of animals. Before implementing an animalassisted activity in the classroom, both students and teachers should learn about appropriate and inappropriate behaviors of dealing with an animal. A set of rules should be established, explicitly modeled by the teacher, and practiced by students on multiple occasions with multiple lessons using the appropriate animal. For children of all ages, learning how to respect animals and others is critical in developing positive social relationships. When having an animal visitor, the golden rules are that students should treat the animal the way they would like to be treated (e.g., no smacking, pinching, squeezing, ear-pulling, poking), avoid teasing the animal visitor, and refrain from offering food. With a smaller animal in a cage (e.g., hamster, rabbit), students should be warned not to stick their fingers in the cage, unless permitted. An extended explanation on health and safety concerns and proactive prevention strategies is provided in Step 5.

Step 4: Choose an animal. Animals certified for therapy are safe and friendly. Various species, including dogs, cats, horses, hamsters, guinea pigs, rabbits, fish, dolphins, goats, and pigs, have provided positive interactions to a wide range of individuals (Bass et al., 2009; Ensign, 1994; Krskova et al., 2010; Siegel, 2004). Smaller therapeutic animals are more often used in school and clinic settings, due to safety and space concerns. Horses are and can become certified therapy animals, but they may be a part of a separate group of agencies specializing in occupational, physical, and speech therapies (Fine, 2010).

Dogs are the most commonly used therapy animals. In order to become a licensed therapy animal, they must pass the Canine Good Citizen (CGC) test (American Humane Association, 2011), which evaluates a dog's temperament to ensure the dog is properly socialized to handle a variety of situations and maintain self-control and discipline. During the CGC test, the dog is evaluated for the following: accepting a friendly stranger, sitting politely for petting, appearance and grooming, walking on a loose lead, walking through a crowd, sitting and going down on command, coming when called, reacting to another dog, reacting to distraction, and han-

dling supervised separation.

Once a dog has successfully completed the CGC, he or she is ready to move to the next level of more specialized training to meet the Minimum Standards for a Service Dog (Delta Society, 2012). The handler also must become certified and trained in the skills needed to visit various facilities (American Humane Association, 2012). Dogs without certification should not be used in any setting, including a school.

Each animal offers a unique resource to humans in need (Ensign, 1994). Animal handlers will be able to suggest animals that are best suited for the specific classroom goals. Many handlers would recommend starting small. Several studies have provided evidence that the use of smaller therapeutic animals, such as rabbits, hamsters, and guinea pigs, may help students with attention deficit hyperactivity disorder (ADHD) learn how to better regulate their bodies and plan out their actions (Brodie & Biley, 1999; Somervill, Swanson, Robertson, Arnett, & MacLin, 2009). Smaller animals are typically more likely to bite if they feel threatened or hurt and can respond dramatically to a loud voice and sudden movement. Students need to learn these responses, understand negative and positive consequences of their own behaviors, and practice using appropriate behaviors and voice with the small animals. Kogan, Granger, Fitchett, Helmer, and Young (1999) conducted a study with two students with EBD to investigate the effect of humananimal interactions on students' behaviors and voice expression. Through witnessing and practicing appropriate behaviors with a dog and having a meaningful discussion with the teacher and the handler about negative and positive consequences of behaviors while interacting with a dog, participants demonstrated an improvement in their overall behaviors (e.g., improved eye contact with people, increased age-appropriate behaviors, decreased distractibility) and voice expression (e.g., appropriate tone of voice).

Other issues must be considered to identify the most appropriate animals for students with disabilities. Teachers should consider the physical space needed for animals and students. For example, horses can be very beneficial for students with autism, but may not be appropriate in the classroom. Dogs are the most popular choice. However, teachers and handlers need to know that the use of dogs and other larger therapy animals can induce over-excitement among students with ADHD rather than having a calming effect (Somervill et al., 2009).

Step 5: Establish health and safety policies and procedures. Jalongo et al. (2004) report on health and safety procedures that should be considered: sanitation, safety, allergies, cultural differences, and fear of animals. Teachers need to discuss and establish these procedures with animal handlers before visits. It is also essential that teachers clearly communicate these health and safety procedures with students before each animal visit. Hand-washing before and after interaction with an animal should be emphasized to all involved individuals. Animal handlers are responsible for the general care of the animal, including feeding.

Safety of both students and animals is a top priority. Only certified, licensed, regularly evaluated dogs and handlers should be involved in the program (Jalongo, 2008; Jalongo et al., 2004). Even dogs that have been temperament tested should not be used in the classroom if they have not been certified. Through a close collaboration with an animal-assistance program, teachers should establish proper ways to best handle the animals and understand the specific safety rules that should be followed when a therapy animal is in a classroom (Friesen, 2010; Jalongo et al., 2004). Students should be well-educated about emergency procedures for a variety of incidents. For example, students should know what to do with an animal if emergency situations occur. Being aware of procedures in case of an emergency will help all involved parties, as well as animals, remain calm and safe. Animals coming into the classroom are carefully selected; the dogs, in particular, are trained and certified. However, they are still animals and need to be carefully and properly treated under close monitoring by a licensed handler.

Many people suffer from animal allergies. The animal handlers know to groom their animals to decrease dander levels before all school visits (Brodie, Biley, & Shewring, 2002; Friesen, 2010; Jalongo et al., 2004). Teachers should prepare themselves and their students for these visits as well. For example, a teacher or a student who is allergic to cats but likes being around them needs

to remember to take an allergy pill when cats come to a classroom. It also should be noted that some children have very significant allergies that cannot be moderated by a pill and may require an environment that is clean and free of the allergen. A teacher who wishes to include animals in his or her classroom should involve parents and pediatricians of children with medical conditions in a careful analysis to determine if an animal can be accepted in the classroom. Jalongo (2004) suggested that an animal-assisted activity with a dog can be held in a large auditorium with a good ventilation system or outdoors to minimize any allergic reactions. Teachers also can consult parents and pediatricians to determine if a brief interaction with a dog in the classroom would be an option. If a student has animal allergies severe enough to prevent participation in an animal-assisted activity, teachers should plan an alternative activity for that child (just as they would for a child who was not permitted to attend a field trip).

Cardak's study with Turkish students (2009) found that students tend to be less afraid of smaller animals, such as snakes and spiders, due to lack of knowledge about the potential dangers posed by these animals. It may not be appropriate to have some reptiles visit the school, however, due to the possibility of infection with salmonella. And even smaller furry animals may cause allergic reactions in children. An adult (a teacher or a handler) should closely supervise interactions between animals and students and provide reminders about proper hand-washing and sanitization procedures to prevent possible health hazards. Flom (2005) described various safety strategies (e.g., do not stroke the animal's face, only its back; do not tease) that students need to be taught for preventing aggressive behaviors by smaller animals. Students can wear gloves to protect themselves from possible bites.

Possible issues related to student phobias and cultural inhibitions should be carefully considered when planning and implementing animal-assisted activities in classrooms (Friesen, 2010; Jalongo et al., 2004). Teachers need to understand students' comfort levels, what experience they have had with animals, their behaviors, and their general interests. Many people fear dogs, especially big dogs. Prior to the animal visits, these fears should

be recognized and discussed with the children and their parents, and a modified or an alternative activity should be in place if needed. In time, with a willing student, this fear can be gradually eased through a controlled, safe, nurturing, and calm environment that provides frequent, brief exposure to a dog. Newlin (2003) suggested that a teacher should sit closely with the student, the dog, and its handler until the student feels comfortable and monitor any changes of the student behaviors.

Some cultures see dogs as unclean or nuisances and other cultures use animals strictly for protection and may view dogs as violent. Again, teachers must understand that students can have different views and experiences when it comes to animals and should arrange for modified or alternative activities to make sure all students receive the educational services they deserve.

Step 6: Document and measure student growth. While students may consider animal-assisted programs as "fun" and "exciting," they do provide an important service and reach students with different ability levels. To monitor student progress toward goals and short-term objectives on their target skills and to validate the continuous use of the program, teachers and animal handlers need to regularly document and evaluate student growth and modify the goals and objectives accordingly to respond to student needs. Teachers and animal handlers should use multiple measures when gathering data on student behaviors and emotional status. Direct observation data (e.g., frequency, duration, latency, interval) can be collected for monitoring progress toward mastery of specific goals and objectives (Krskova et al., 2010; Spinelli, 2011). A simple checklist or rating scale can be used to effectively and efficiently report on how often the student displays a target behavior; how the student makes progress in terms of skill development (e.g., no skill, emerging, mastery); and how well the student generalizes the target skill in various settings, with various people, and under different circumstances (Spinelli, 2011). Anecdotal notes of any changes in student behaviors should be recorded to monitor student growth (e.g., Day 4—"Betsy willingly took turns with three peers to be with Ruby, a therapy dog, on 2 out of 4 occasions.").



Conclusion

The use of animals in classrooms has become a popular method for providing instructional services to students with unique social, behavioral, and emotional needs. The mere presence of animals can enhance learning environments. The use of trained and certified animals within the classroom setting has the power to motivate students with disabilities to learn socially important behaviors in a positive and risk-free environment. The effective implementation of an animal-assisted activity for students with disabilities largely depends upon strong administrative, parental, and collegial support; clear and measurable goals; well-developed instructional plans; an appropriate animal choice; welldeveloped health and safety procedures; and systematic plans for progress monitoring of student performance.

References

American Humane Association. (2011). *Humananimal interaction*. Retrieved November 20, 2012, from http://www.americanhumane.org/interaction/programs/animal-assisted-therapy/Bass, M. B., Duchowny, A. C., & Llabre, M. M. (2009). The effect of therapeutic horseback rid-

- ing on social functioning in children with autism. *Journal of Autism & Developmental Disorders*, 39(9), 1261-1267. doi:10.1007/s10803-009-0734-3
- Black, S. (2009). Sit, stay and read. *American School Board Journal*, 196(12), 36-37.
- Brodie, J. S., & Biley, C. F. (1999). An exploration of the potential benefits of pet-facilitated therapy. *Journal of Clinical Nursing*, 8(4), 329-337. doi:10.1046/j.1365-2702.1999.00255.x
- Brodie, J. S., Biley, C. F., & Shewring, M. (2002). An exploration of the potential risks associated with using pet therapy in healthcare settings. *Journal of Clinical Nursing*, 11, 444-456. doi:10.1046/j.1365-2702.2002.00628.x
- Bueche, S. (2003). Going to the dogs: Therapy dogs promote reading. *Reading Today*, 20(4), 46.
- Cardak, O. (2009). Students' ideas about dangerous animals. *Asia-Pacific Forum on Science Learning and Teaching*, 10(2).
- Cho, J., Hendrickson, J., & Mock, D. (2009). Bullying status and behavior patterns of preadolecents and adolescents with behavioral disorders. *Education and Treatment of Children*, 32(4), 655-671.
- Delta Society. (2012). *Health benefits of animals*. Retrieved November 20, 2012, from http://www.deltasociety.org/page.aspx?pid=315
- Ekhaml, L. (2008). Animals in schools—Policies and procedures. School Library Media Activities Monthly, 24(9), 17-19.
- Ensign, A. (1994). The therapeutic value of animals. *PAM Assistance Center: Repeater*, 86, 1-9.
- Fine, A. (Ed.). (2010). *Handbook of animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed.).

 San Diego, CA: Elsevier.
- Flom, B. L. (2005). Counseling with pocket pets: Using small animals in elementary counseling programs. *Professional School Counseling*, 8(5), 469-471.
- Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early Childhood Education Journal*, *37*(4), 261-267. doi:10.1007/s10643-009-0349-5
- Heimlich, K. (2001). Animal-assisted therapy and the severely disabled child: A quantitative study. *Journal of Rehabilitation*, 67(4), 48-54.
- International Organization of Human-animal Interaction. (2012). List of IAHAIO member organizations. Retrieved November 24, 2012, from http://iahaio.org/pages/membership/listofmembers.php
- Jalongo, M. R. (2005). What are all these dogs doing at school? Using therapy dogs to promote children's reading practice. *Childhood Education*, 81(3), 152-158.
- Jalongo, M. R. (2008). Beyond a pets theme: Teaching young children to interact safely with dogs. *Early Childhood Education Journal*, *36*(1), 39-45. doi:10.1007/s10643-008-0272-1
- Jalongo, M. R., Astorino, T., & Bomboy, N. (2004). Canine visitors: The influence of therapy dogs on young chil-

- dren's learning and well-being in classrooms and hospitals. *Early Childhood Education Journal*, 32(1), 9-16.
- Kaukiainen, A., Salmivalli, C., Lagerspetz, K., Tamminen, M., Vaufas, M., Maki, H., & Poskiparta, E. (2002). Learning difficulties, social intelligence, and self-concept: Connections to bully-victim problems. *Scandinavian Journal of Psychology*, 43, 269-278.
- Kogan, L. R., Granger, B. P., Fitchett, J. A., Helmer, K. A., & Young, K. J. (1999). The human-animal team approach for children with emotional disorders: Two case studies. *Child & Youth Care Forum*, 28(2), 105-121.
- Krskova, L., Talarovicova, A., & Olexova, L. (2010). Guinea pigs—The "small great" therapist for autistic children, or do guinea pigs have positive effects on autistic child social behavior? *Society and Animals*, 18(2), 139-151. doi:10.1163/156853010X491999
- Mallon, G. P. (1992). Utilization of animals as therapeutic adjuncts with children and youth: A review of the literature. *Child and Youth Care Forum*, 21, 53-67.
- Nabuzoka, D., & Smith. P. K. (1993). Sociometric status and social behavior of children with and without learning difficulties. *Journal of Child Psychology and Psychiatry*, 34(8), 1435-1448.
- Newlin, B. R. (2003). Paws for reading: An innovative program uses dogs to help kids read better. *School Library Journal*, 49(6), 43.
- Ormerod, E. J., Edney, A. T. B., Foster, S. J., & Whyham, M. C. (2005). Therapeutic applications of the human-companion animal bond. *Veterinary Record*, 157(22), 689-691.
- Poulin, F., & Boivin, M. (1999). Proactive and reactive aggression and boys' friendship quality in mainstream classrooms. *Journal of Emotional and Behavioral Disorders*, 7(3), 168-177.
- Raupp, D. C. (2002). The "furry ceiling": Clinical psychology and human-animal studies. *Society and Animals*, 10(4), 353-358. doi:10.1163/156853002320936809
- Siegel, L. W. (2004). The role of animals in education. *ReVision*, 27(2), 17-26.
- Somervill, J., Swanson, A., Robertson, R., Arnett, M., & MacLin, O. (2009). Handling a dog by children with attention-deficit/hyperactivity disorder: Calming or exciting? *North American Journal of Psychology*, 11(1), 111-120.
- Spinelli, C. G. (2011). *Classroom assessment for students in special and general education* (3rd ed.). Upper Saddle River, NJ: Merrill/Practice Hall.
- Therapy Dogs International. (2012). *About Therapy Dogs International*. Retrieved November 20, 2012, from www. tdi-dog.org/About.aspx
- Thompson, K. L., & Gullone, E. (2003). Promotion of empathy and prosocial behaviour in children through humane education. *Australian Psychologist*, *38*(3), 175-182.
- Walker, H. M., Ramsay, E., & Cresham, F. M. (2003). *Antisocial behavior in school: Evidence-based practices* (2nd ed.). Belmont, CA: Wadsworth Publishing.