Learning Disabilities and Therapeutic Riding

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The term "learning disabilities" is all embracing; it describes a syndrome, not a specific person with a specific problem. Individuals with learning disabilities are not mentally retarded. Learning disabilities are neurologically based disorders and do not affect a person's intelligence.

The federal government defines a learning disability as a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. The disorder may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations. Learning disabilities can include conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. Learning disabilities do not include learning problems that are primarily the result of visual, hearing or motor disabilities; mental retardation; or environmental, cultural or economic disadvantage.

Riders may exhibit a wide range of traits including problems with reading comprehension, spoken language, writing or reasoning ability. Hyperactivity, inattention and perceptual coordination problems may also be evident. The most frequently displayed symptoms are:

- · short attention span
- · poor memory
- · difficulty following directions
- · inadequate ability to discriminate between and among letters, numerals and sounds
- · poor reading ability
- · eye-hand coordination problems
- · difficulties with sequencing
- disorganization
- · numerous other problems that may affect all the sensory systems

(Information provided by National Information Center for Children and Youth with Disabilities, P.O. Box 1492, Washington, DC 20013, 1-800-695-0285 and the Learning Disabilities Association of America, 4156 Library Road, Pittsburgh, PA 15234, (412) 341-1515.)

Medical Considerations

To effectively serve individuals with learning disabilities, particularly children, the operating center instructor or therapist may need to obtain assessments done by the child's occupational and physical therapists, as well as the educational assessment and the individualized education plan (IEP) from the child's school. An assessment by an adapted physical education specialist, if available, is also helpful. These assessments will not only describe the learning disabilities, but also the sensory and motor problems, which will permit center personnel to choose the most appropriate horse, equipment, program focus, environment and riding session.

Therapeutic riding professionals and adapted physical education instructors most often address the associated sensory and motor problems. The horse can be helpful in either direct treatment sessions with a health professional or in instructional situations. The horse needs to be symmetrical and rhythmic in his movement. The sensorimotor input provided by the horse's movement can help the individual's central nervous system "organize" itself, improving coordination, body awareness, midline orientation, right-left direction and many other problems. A therapist may help target the specific sensorimotor problems to address and help choose horse and equipment; or direct treatment may be needed.

The horse can also help improve the rider's sensorimotor difficulties and the learning problems by providing a means of improving awkward movement. It is thought that our early learning of good

movement skills is closely related to our self-concept and self-confidence. Poor movement and clumsiness makes play difficult. Children with learning disabilities and motor dysfunction are ostracized by their peers, made fun of and picked last - or not at all - for group games. Thus, socialization skills are impaired as well. The horse can act as a great "equalizer," providing sensorimotor input and opportunities to practice many skills in a non-threatening way and equally with others.

For more reading, see "Neurological Rehabilitation," chapter nine, written by Sharon Cermack and Anne Henderson. This book, edited by D. Umphred, was published in 1985 by CV Mosby.

- Liz Baker, Medical Committee Chairman

A Review of Relevant Literature

Although most therapeutic riding centers serve riders with learning disabilities, there appears to be no published scientific evidence to document the procedures and/or results of therapeutic riding as a modality to enhance the learning environment. However, centers have shared these procedures and successes with each other in written text. (See the following selected reference list)

The lack of science-based information regarding therapeutic riding in education programs is a critical void in efforts to expand therapeutic riding and educate the public about its effectiveness. Many centers have been successful in attracting riders from primary and secondary schools, both public and private. Operating centers associated with school systems should work with appropriate school personnel to report the results of the therapeutic riding program in peer-reviewed scientific journals that are read by education professionals. These publications will become the base of information to which all of us can refer when discussing opportunities with principals, superintendents and school boards.

The Research Committee can help by providing you with forms to get clearance to study human subjects. We can also help you design your project and analyze the data. Please contact Research Committee Chairman Warren Evans at 3310 Belmont Circle, College Station, TX 77845; email address: j-evans@tamu.edu.

References

Bieber, N. 1980. "The Integration of a Therapeutic Equestrian Program in the Academic Environment of Children with Physical and Multiple Disabilities." *New Perspective on Our Lives With Companion Animals*, 448-459

Daniels, Jane; Freeman, D.; Houghton, James. 1994. "The Effects of an Equine Environment on the Behavior of School-Leavers." Eighth International Therapeutic Riding Congress. Author's address: Ambury Park Centre for Riding Therapy, P.O. Box 59-141, Mangere Bridge, Auckland, New Zealand.

Douglas, D.N.; Douglas, R.D.; Douglas, D.M. 1976. "Educational Objectives in Riding." *National Center for Therapeutic Riding Horsemanship Manual*, P.O. Box 42501, Washington, DC 20015.

Douglas, R.D. 1982. "A Role for Therapeutic Riding in Special Education." *Therapeutisches Reiten* '82. *Kuratorium fur Therapeutishches Reiten*, 358-370. Fourth International Therapeutic Riding Congress. Author's Address: P.O. Box 42501, Washington, DC 20015.

Gang, M. 1983. "Heilpadagogisches Reiten Education with Riding." Reinhardt. Munchen; Basel. Hauser, Gundula. 1994. "Vaulting in Remedial Education and Edu Kinesthetic." Eighth International Therapeutic Riding Congress. Author's address: Sonderschule fur Schwerstbehinderte, Kinder Schwarzingergasse 4, 1-1020, Wien, Austria.

Homberg, C.; Zobel, H.; Baum, D. 1982. "Pedological (Educational) Aspects in Therapeutic

Riding. *Therapeutishches Reiten* '82. 393-398. Kuratorium fur Therapeutisches Riding. Fourth International Therapeutic Riding Congress. Author's address: Landesschule fur Korperbehinderte, Melanchthon strasse 11, 5600 Wuppertal 2, FRG.

Kittridge, M.V. 1981 "The Beneficial Use of the Horse for the Emotionally Impaired and Learning Disabled. *NARHA News 9 (1)* North American Riding for the Handicapped Association (Out of Print).

Nedelmann, H. 1967. "Therapeutishes Reiten Mit Spastisch Gelahmten Kindern" ("Therapeutic Riding With Spastic Children") *Das Behinderte Kind*. 3. 14-17.

Nedelmann, H. 1966. "Therapeutishes Reiten Mit Spastisch Gelahmten Kindern" ("Therapeutic Riding With Spastic Children") *Reiter-Revue International*. 9 (3) 102-103.

Nelson, Y. 1982. "Effective use of Horsemanship Courses for Slow Learners." *Therapeutisches Reiten '82* 429-434. Kuratorium fur Therapeutisches Reiten. Fourth International Therapeutic Riding Congress. Author's address: Fortune Center, Nr. Christ Church, Dorset, England BH23 8EE.

Winter, N.H. 1975. "The Influence of Riding on the Learning Disabled." *The Chronicle of the Horse*, 38 (21) 23.

Winter, N.H. 1975 "The Influence of Riding on the Learning Disabled." *NARHA News* 3 (2) 5-7. North American Riding for the Handicapped Association. (Out of print).

NOTE: Some references include the author's address where it was available. However, these addresses may not be current. To receive a copy of the article listed, please show the reference to your local librarian and request an interlibrary loan search. - Dr. J. Warren Evans, Research Committee Chairman