



A TEACHER'S GUIDE TO CONTROVERSIAL PRACTICES

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ABSTRACT

Information promoting controversial and unsupported interventions and therapies for students with special education needs seems to abound on the Internet. However, there are many sites that appear to offer a more balanced, evidence-based assessment of the efficacy of interventions and treatments. This article provides a guide to such sites in regard to a number of controversial treatments in order to assist teachers and families make informed decisions about the practices they adopt.

Any teacher in search of information about teaching students with special education needs who visits the Internet will immediately be confronted with a plethora of programs and therapies that are claimed to be effective. Similarly, families of these students, who are searching for help with the education and treatment of their child, are likely to locate the same range of programs and therapies. Families may then approach teachers and schools and request that particular strategies be used with their child. How do teachers and families make informed decisions about which practices to

pursue and which to ignore? The use of ineffective therapies may not only cause harm, but may mean that children do not receive interventions that are known to be effective. This article will review some of the controversial practices advocated on Internet sites (and elsewhere), and provide Internet sites that publish more sober advice on these practices.

Several authors (Herbert, Sharp, & Gaudino, 2002; McWilliam, 1999; Park, 2003; Scheuermann & Evans, 1997; Simpson, 1995; Worrall, 1990), concerned with the uptake and use of interventions and therapies that may be regarded as frauds or fads, have developed a set of indicators that may serve as warning signs that a practice has not been shown to be effective:

- The practice is supported by anecdotes and testimonies, not by the results of scientific studies reported in refereed journals.
- The practice is reported directly to the mass media and does not appear in professional, refereed journals.
- The treatment recommended does not have a logical connection to the presumed cause of the difficulty.

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- The practice is not supported by established, related bodies of knowledge.
- Proponents claim they are conspired against by the “establishment”.
- Proponents make exaggerated claims about effectiveness and may claim to cure a condition.
- Proponents may have a financial stake in the treatment.
- Those completing the assessment to determine if the treatment is suitable, are the same people who will gain financially by selling the treatment.
- Practice can only be implemented by specially trained people.
- May require the interventionist to have “faith” in the treatment.
- Proponents claim the practice cannot be properly evaluated using scientific methods.
- Marketing is based on strong emotional appeals.
- The practice should be used exclusively.
- The treatment is very intense.
- Legal action has been taken over the treatment.

There are several useful Internet sites that guide you through a set of questions, which should reveal if any of these warning signs apply to the therapy in question. These include the Autism Association of South Australia (2003) and Vanderbilt Children’s Hospital (2003).

Writers who have used these criteria have identified a number of educational and therapeutic practices as controversial and unsupported by scientific research. The

following list is drawn from a number of refereed publications: conductive education, facilitated communication, sensory integration, Doman-Delacato patterning, auditory integration therapies, Irlen lenses and coloured overlays, and multisensory environments (MSEs) or snoezelen approaches (Arendt, MacLean, & Baumeister 1988; Dawson & Watling, 2000; Herbart et al., 2002; Hogg, Cavet, Lambe, & Smeddle, 2001; Jacobson, Mulick, & Schwatz, 1995; McWilliam, 1999; New York State Health Department, 1999; Shaw, 2002; Simpson, 1995; Stephenson, 2002; Worrall, 2001). This knowledge base contained in the research literature is, however, largely inaccessible to families and practitioners who may have neither the skills nor the time and interest to search, read and understand this literature. Fortunately however, just as the Internet has brought increased access to information promoting controversial and unproved practices, it has also provided access to more balanced evaluations of these practices. The next section of this paper will briefly review some controversial therapies and include sources such as position papers, policies and fact sheets from professional organisations, special interest organisations and individuals that are readily available on the Internet. The URLs are provided in the reference list.

Auditory Integration Therapies (AIT)

This label covers strategies such as the Berard method, Samonas Sound Therapy, and the Tomatis method. The American Academy of Paediatrics Committee on Children with Disabilities (1998, Recommendations, para. 12) reviewed auditory integration training as a

therapy for children with autism and concluded that although AIT “may help some children with autism, as yet there are no good controlled studies to support its use.” More recently, The American Speech-Language Hearing Association (2004) produced both a technical report and a position paper which found that Auditory Integration training is “experimental in nature and has not yet met scientific standards as a mainstream treatment” (p.1). The American Academy of Audiology (n.d.) position statement on Auditory Integration Training states that the technique should be regarded as “purely investigational” because of the lack of published research showing its effectiveness, and that consumers should understand this before they begin treatment. The Educational Audiology Association (n.d.) supports the position taken by the American Academy of Audiology and the American Speech-Language-Hearing Association that “Auditory Integration Therapy has not been proven to be a viable treatment for any disability”.

Vision therapies

These include the use of eye exercises, filters, and coloured lenses which purport to improve a child’s reading. The American Academy of Paediatrics, the American Association for Pediatric Ophthalmology and Strabismus and the American Academy of Ophthalmology (1998) produced a joint policy statement on these approaches in relation to students with learning disabilities, especially those who have difficulty learning to read. The policy states, “Visual problems are rarely responsible for

learning difficulties. No scientific evidence exists for the efficacy of eye exercises (“vision therapy”), or the use of special tinted lenses in the remediation of these complex paediatric neurologic conditions” (Policy, para. 2). They note that studies of these practices, which claim improvements, have usually included educational remedial techniques, and these most likely explain reported benefits. The use of tinted lenses for reading difficulties purportedly caused by Scotopic Sensitivity Syndrome named by Irlen (American Optometric Association, 2003) has been assessed by the American Optometric Association (2003) who found that “there is currently no scientific research to support the ‘scotopic sensitivity’ syndrome hypothesis”, and that the use of coloured lenses requires further investigation.

Sensory Integration Therapy

Sensory Integration Therapy (SIT) was developed by Jean Ayres in the 60s and 70s, with the aim of improving the way “the brain processes and organises sensations” (Ayres, 1979 cited in Arendt et al., 1988, p.402.). The therapy involves providing sensory stimulation in various ways, such as by providing deep pressure sensations, vestibular stimulation, having students wear weighted vests, and/or use scooter boards (Arendt et al., 1988; Shaw, 2002). Arendt et al. (1988) reviewed its use with people with intellectual disability and concluded “until the therapeutic effectiveness of sensory integration therapy with mentally retarded persons is demonstrated, there exists no convincing empirical or theoretical support

for the continued use of this therapy with that population outside of a research context” (p. 409). Hoehn and Baumeister (1994) critiqued the theory and practice of SIT with children with learning disabilities and supported the findings of Arendt et al. (1988), concluding (p.348) that “the current fund of research findings may well be sufficient to declare SI therapy not only merely an unproven, but a demonstrably ineffective, primary or adjunctive remedial treatment for learning disabilities and other disorders.” More recent reviews continue to support this conclusion. Pollock (2000) concluded that its use is contentious, and Shaw (2002) concluded that there is no evidence of its effectiveness with students with autism, learning difficulties or other developmental disabilities. In a response to Shaw’s critique, Miller (2003), although supporting sensory integration therapy within a broader framework of occupational therapy, conceded that the approach remains unproven from a scientific perspective.

Doman-Delacato Patterning Treatment

This technique involves a demanding regimen of daily exercises (often carried out with a team of volunteers) that is claimed to improve neurological organisation. The Institutes for the Achievement of Human Potential who offer the program state because of the intensive nature of the program “there is no time for the child to engage in other programs or school while enrolled in the Intensive Treatment Program” (Brain Injury and Early Childhood Education Resources: IAHP, n.d., Content, para. 8). Cummins (1988) offers a review and critique

of this treatment. More recently, the American Academy of Pediatrics Committee on Children with Disabilities (1999) has issued a position paper that concluded that the efficacy is unproven and the demands on families may be harmful. This position paper was endorsed by the National Down Syndrome Congress (n.d.).

Facilitated Communication (FC)

FC is a method whereby a person is assisted to type or to use a communication device by a facilitator who may provide full support to the hand, wrist or arm, or who may provide emotional support. It has been shown that for the vast majority of users with autism or intellectual disability, the content of the communication comes from the facilitator (Jacobson et al., 1995). The American Speech-Hearing Association (1994) has produced a lengthy and thorough review that concluded that “neither the reliability nor the validity of techniques associated with facilitated communication have been demonstrated satisfactorily at this time” (p. 127). This position is supported by the American Psychological Association (1994) and the American Academy of Child and Adolescent Psychiatry (1997).

Conductive Education (CE)

CE aims to teach children with cerebral palsy or other movement disorders to achieve personal goals, increase their independence and exercise choice (Ludwig, Leggett, & Harstall, 2000). Ludwig et al. (2000) carried out a comprehensive review and concluded that the effectiveness of CE is not established for children with cerebral

palsy. They note that there are many local adaptations of conductive education, which have moved away from the full-time, intensive residential approach originally developed in Hungary, and that these adapted approaches also need rigorous evaluation. United Cerebral Palsy National (1995, 1997), in two fact sheets, similarly call for more research to demonstrate the superior efficacy of conductive education over more traditional approaches.

Multisensory Environments (MSEs) or Snoezelen

These approaches were originally designed as a leisure option for people with severe and multiple disabilities. Current proponents have gone beyond their use as a potentially enjoyable leisure option, and make a wide range of claims for the benefits of sensory stimulation as delivered by these environments (Stephenson, 2002). Unfortunately, review articles, or materials based on them, which suggest these claims are unfounded, have yet to reach Internet sites. However, two review articles (Hogg et al., 2001 and Stephenson, 2002) which, between them, located only five studies on children with intellectual disabilities and none on children with autism, suggest that the use of MSEs to achieve educational or therapeutic goals with school aged children is currently without a firm research base.

With the increasing demand for evidence based practices in medicine and in the therapies allied with special education, practitioners have a responsibility to make careful decisions about the interventions they use or endorse (Bennett

& Bennett, 2000). The URLs provided above are easily accessible and provide information that assists balanced decision making. In addition to these sites, there are other sites that provide more general advice or lead into more specific sites. A very useful bibliography of controversial practices that includes both published and Internet sources is available from Lakehead University (n.d.). A more general site, which also contains user-friendly information, along with references to the professional literature, is Stephen Barrett's Quackwatch site that is directed at quackery in general, but includes information of relevance to therapists and educators. The National Council Against Health Fraud has a newsletter, which is available online and which provides brief articles on relevant topics such as quackery in autism treatments (2001).

It is fair to acknowledge, of course, that any intervention starts as an unsubstantiated treatment before it is researched and its efficacy tested. It is also true that even a strategy with a firm research base may not work for all students in all contexts. This is one of the reasons why accepted best practice in special education involves the setting of clear outcomes and careful monitoring of student responses to interventions (Westling & Fox, 2000). The advice provided by Pollock (2000) in relation to sensory integration provides sensible guidelines for those wishing to trial unsupported therapies. She suggests that "clear, measurable, functional outcomes should be established", and then the treatment should be assessed against those outcomes after an eight to ten week trial. Similar guidance is provided by the American Speech-Language Association

(1994) in relation to facilitated communication, and they also suggest informed consent should be obtained before implementing unsupported practices.

Teachers have a responsibility to select interventions that are likely to be effective, and to monitor the impact of the interventions they do select to ensure that their students are learning. This is especially so for children with special education needs who, because they have difficulty learning, have less time to be wasted on poor interventions. Teachers can make better decisions if they are fully informed about the nature of the interventions they choose. They can also help families make fully informed decisions if they are aware of easily accessible information based on sound research. This article has attempted to provide a brief overview of more common controversial therapies, and inform readers about accessible Internet sites that counteract the claims made by promotional Internet sites.

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