Individuals with disabilities have been identified as one of the nation's largest populations at risk for drug use. Recent studies indicate a higher rate for alcohol and drug use among the disabled population than the general population. In an effort to identify drug use among rural disabled students, data were collected from students ages 12-18 identified as mentally retarded, learning disabled, and behavior disordered in 20 rural settings in 3 southeastern states. Based on results of the Typology of Adolescent Drug Use, each student was classified into one of eight drug use types: including polydrug use, stimulant use, periodic drug use, marijuana and alcohol use, heavy alcohol use, experimental use, light alcohol use, and no use. These categories were then collapsed to high, medium, and low drug and alcohol use. Results indicate significant drug use among disabled students in rural settings. Students appear to be at particular risk due to low self-esteem, poor resiliency skills, low academic achievement, and lack of access to drug-prevention programs. One program developed to build resilience among rural disabled students includes components such as developing social competency, developing autonomy, building ability to solve problems and make good decisions, and facilitating awareness of the dangers of using drugs. Contains 15 references and 2 tables of survey data. (LP)
Drug Use in Rural America – What You Can Do About It

Drug use among adolescents is an escalating concern. While the National Institute of Drug Abuse reports that 1 in every 11 adults in this country is an addict, numerous studies indicate that drug use among youths aged 12 to 17 is significant as well (Johnson, 1988; Thorne & DeBlassie, 1985). Individuals with disabilities have been identified as one of the nation's largest populations at risk for the development of drug use (Devlin & Elliott, 1992; Locke & Johnson, 1981). Over the last ten years, concerns over this problem have grown markedly among professionals in the fields of alcohol and drug abuse, special education, and rehabilitation. In this paper the state of current knowledge about the use of drugs and alcohol among individuals with disabilities will be examined, the results of a study focusing on the drug use patterns of disabled students in rural settings will be reported, and activities for the prevention of drug and alcohol abuse will be shared.

Drug Use Among Students With Disabilities

Johnson (1988) made reference to the fact that there are undocumented reports, particularly from urban school systems, of an increase in the number of special education referrals in which drug use is a factor involving either the referred student or others in the student's environment. The problems of these students can present a more complicated situation for the special education teacher. Situations involving drug use require special consideration in the planning phase due to the unique characteristics of these students. Johnson (1988) listed the most common characteristics of drug users as: experience of consideration stress; poor diets; psychosomatic symptoms; sleep disturbances; state-dependent learning, in which concepts and material learned while using chemicals is not available in the sober state; inability to handle social experiences; risk-taking behavior; inability to experience pleasure without a mood-altering substance; belief in the magical power of the substance; serious disturbances in moral and character development; depression and suicidal ideation along with guilt and shame; and low self-esteem and negative self-concepts (p. 29). Such factors as these can compound the physical, mental, or behavioral problems that the student already experiences as a result of his/her condition.

Drug use among persons with physical and sensory impairments has been discussed in the literature. Issacs, Buckley, and Martin (1979) compared the alcohol use of hearing impaired individuals and non-hearing impaired subjects. They randomly selected 120 hearing impaired individuals from a list of 600 names of hearing impaired persons in the Rochester, New York area. Of the 120 selected, 39 agreed to participate. The participants completed an alcohol use survey which looked at such variables as quantity of alcohol consumption, the frequency of consumption, and variability of the respondent's alcohol use. These responses were categorized into one of five levels: heavy, moderate, light, infrequent, and abstainer. Surveys were administered individually by sign language interpreters. While there were no significant differences found between the hearing impaired and non-hearing impaired samples, there was a tendency for individuals who had attended schools specifically for the deaf to be among the individuals classified as heavy drinkers.

The drug use among hearing impaired students in a senior high school was investigated by Locke and Johnson (1981). Of the 46 eleventh and twelfth grade students surveyed, 26 reported current alcohol use, and 15 reported current drug use. Ten of the respondents who reported drug use used narcotics, nine used depressants, four had a history of stimulant use, and one had used LSD. Only one student had used PCP, 21 had used marijuana, and 13 had experimented with hashish or hash oil.

The Division of Vocational Rehabilitation (1985) in the State of Wisconsin mailed 8,000 surveys to
Wisconsin residents. Forty percent returned surveys. Of the respondents who indicated that they had spinal cord injuries or disease (597), 49% were classified as moderate to heavy drinkers. Forty-four percent of the group who identified themselves as orthopedically impaired were classified as moderate or heavy drinkers, and 40% of the blind or visually impaired respondents were in the moderate or heavy drinker group. The report indicated that this was a 50% higher use rate for alcohol than the general population.

Several studies have investigated drug use among persons experiencing mental retardation. Haung (1981) compared the drinking behavior of educable mentally retarded (EMR) students and nonretarded peers in the State of Alabama. Subjects were chosen from 12 junior and senior high schools located in three Alabama school systems. One hundred ninety EMR students were randomly selected from a total population of 472 students. One hundred eighty-seven nonretarded students within the same age range were randomly selected from high schools in the same school systems. Students were asked to respond to questions concerning their use of alcohol. The students were questioned in groups of 10. More nonretarded than retarded students identified themselves as occasional users (once a month), while EMR students indicated that they drank once a week or more. Retarded students stated that they felt more peer pressure to drink, with more EMR students responding that they drank "to be with the crowd," or because "their friends drink."

Some studies have looked specifically at drug use among individuals with emotional behavioral disorders. August, Stewart, and Holmes (1983) reported the results of a four year follow-up of hyperactive (HA) and hyperactive–unsocialized aggressive boys (H–USA). Thirty percent of the H–USA group were reported by their parents to have significant drug and alcohol problems as compared to zero percent of the HA boys.

In The International Journal of Addictions, Clements and Simpson (1978) reported the results of a survey administered to 47 adolescents diagnosed as behavior disordered or socially maladjusted who were residents in a state in-patient mental health center in the midwest. All 47 adolescents reported a history of illicit drug use which included glue sniffing. Peer pressure was indicated as motivation for initial drug use.

Devlin and Elliott (1992) reported in Behavioral Disorders a significant difference in the drug use patterns of students with behavioral disorders when contrasted to the drug use patterns of their non-disabled peers. Of the 43 students identified as behaviorally disordered, 51% fell into the high category of drug use -- 30% of these students were reportedly polydrug users, approximately 5% were stimulant users, and 16% fell into the periodic drug use type. Students classified as polydrug users all reported significant use of at least one substance other than alcohol. Nine of the 43 behaviorally disordered students fell into the medium category of drug use while 12 reported light, negligible, or no drug use. In contrast, the non-disabled peer group reported 6 students falling into the high drug use category, all of whom reported the use of stimulants, inhalants, and light cocaine usage. Five of the peer group reported medium drug use, and 32 reported negligible or no use.

Drug Use Among Disabled Students In Rural Settings

Determining the nature and extent of drug use among disabled youth is hampered by the lack of research-based information across settings. The data reporting drug use of such students has primarily been the result of studies done in urban settings. This study served to collect data concerning the drug use of students identified as mentally retarded, learning disabled, and behaviorally disordered in twenty rural settings in three southeastern states. The drug use types of a controlled peer group was also surveyed. The Typology of Adolescent Drug Use (TADU) was administered to the students in their respective schools. All students were between 12 and 18 years of age. By classifying students according to their drug use type, the TADU allows the investigator to look at a student's total drug involvement rather than his/her use of single drugs. Student groups were tested by class. The TADU was read orally to each group of students. Time was allowed for students to mark each response
before the next question was read. Students were assured that their answers were anonymous.

Each student completing the Typology of Adolescent Drug Use was classified into one of eight drug use types (See Table 1). These types include Polydrug Use, Stimulant Use, and Periodic Drug Use which were categorized as high drug use. The next three types, Marijuana and Alcohol Use, Heavy Alcohol Use, and Experimental Drug Use were categorized as moderate drug use. The last two types, Light Alcohol Use and No Use were categorized as low drug use. The results of this study confirm significant drug use among disabled students in rural settings (See Tables 1 and 2).

Discussion

The significant drug involvement of students with disabilities in rural settings is in line with previously reported data concerning drug use among students with disabilities in urban settings. Such students appear to be at particular risk due to the following factors: A) low self-esteem, B) poor resiliency skills, C) low academic achievement, and D) lack of accessibility to drug-prevention programs due to being educated in separate "special education" programs. There appears to be a need for effective, systematic drug prevention programs specifically designed to include students with disabilities.

Project Prevention - A Curriculum to Prevent Drug Use Among Students With Disabilities was developed through a United States Department of Education grant and is the result of three years of research focusing on what variables build resiliency among students with disabilities. Components of Project Prevention include: developing social competency, developing autonomy, building an astute ability to problem solve or make good decisions, and facilitating an awareness of the dangers of using drugs.

Social competence is an ever present problem for students with special needs and is an area that should be under development in the special education classroom. The ability to establish positive relationships with peers and adults through good communication skills, flexibility, empathy, and a sense of humor are traits of a socially competent child. Efforts should be made to develop the skills necessary to maintain positive relationships once they have been established. Helping students to learn what characteristics make a good friend, to appropriately communicate with others through good eye contact and positive body language, and how to give and receive compliments are all lessons that facilitate social acceptance and, in turn, social competence. Activities designed to develop social competence should include role-play situations and active "hand-on" activities in which students may utilize the skills under development.

Autonomy has been described as having a sense of one's own identity so that control can be exerted over one's environment (Berline & Davis, 1989). Closely related to autonomy is self-esteem. A good sense of self-esteem is when a person holds himself or herself in high regard. Good self-esteem is necessary for the confidence needed to assuredly manipulate one's own environment instead of allowing others to be in control of one's life. This is of particular importance for students with special needs who often are lacking in self-confidence due to repeated academic failure, social rejection, and learned helplessness. Activities to promote self-esteem should include lessons with the following focus: identification of positive personal attributes, acknowledgment and acceptance of differences in people, and the ability to verbalize self-value. Activities focusing on the development of self-esteem ideally involve small and large group discussion, bulletin boards, "all about me" notebooks constructed by students and activities that celebrate the diversity of students within a classroom or school.

Problem-solving or decision-making skills include the ability to think through a situation logically in order to attempt alternate solutions to problems. Good decision-making skills are important for both cognitive and social problems. The ability to make good decisions includes not just being able to come to a decision independently but to be able to seek assistance from others to make good choices.

All students need the opportunity to make decisions within the school environment. The need to
have some control over one's life is a fundamental human need (Glasser, 1990), particularly for students enrolled in special education. While typical students may learn incidentally, many students with disabilities do not. Therefore, the steps to decision-making need to be introduced in the special education classroom and ample opportunity for practice provided.

After defining and discussing what the word "decision" means, teachers should introduce and discuss the following decision-making steps:

1. **Identify the Problem** — "What is the problem?"
2. **List Alternatives** — "What are my choices?"
3. **Think About Your Ideas** — "How am I or those around me influenced by each alternative?"
4. **Choose A Plan of Action** — "What are the consequences of my choices?"

Once these steps have been introduced and discussed, students can form small groups to apply the steps to specific problem-solving situations. Encourage students to share their decisions and to accept the decisions of the other groups when there is a difference in opinion. The following scenarios are sample situations specifically geared for upper elementary students. Alternatively, teachers can write scenarios to fit the development levels of their students.

*Your best friend invites you to spend Friday night with him or her. However, just this week your mom has mentioned how happy she is that your whole family will be together for a weekend of movies, eating, and fun. What do you do?*

The fourth component included in Project Prevention focuses on developing drug awareness. It is imperative that students be educated about the dangers of using drugs, both prescribed and illegal. Particularly important for students in special education, concrete descriptions and situations involving role-play helps information generalize to "real-world" settings. Beginning with the definition of a drug, activities and discussions should target the appropriate use of over-the-counter substances and proceed through the dangers of more illicit substances. The Institute for Substance Abuse Research (ISAR) annually publishes a Drug Abuse Digest which is a prevention guide that is available to teachers for a minimal fee. The Digest includes information on the various abused substances, along with color photographs, a glossary of slang terms, and a section on working with parents. The Digest is available through ISAR at P. O. Box 6837, Vero Beach, Florida 32961.

Fostering resiliency in students has become a challenge for special educators. The lack of packaged materials to specifically promote substance abuse among this population of students need not be a deterrent to special educators. A nurturing teacher can promote all of the traits of resiliency—social competence, good decision-making skills, autonomy, and drug awareness.


Table I

Drug Use Types According to Disability

<table>
<thead>
<tr>
<th>Categories</th>
<th>Typical</th>
<th>MR</th>
<th>LD</th>
<th>BD</th>
<th>N = 103</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>Polydrug</td>
<td></td>
<td>(6) 2.1</td>
<td>(1) 0.7</td>
<td>(3) 3.4</td>
<td>(9) 8.7</td>
</tr>
<tr>
<td>Stimulant Use</td>
<td></td>
<td>(5) 1.7</td>
<td>(5) 3.4</td>
<td>(2) 2.3</td>
<td>(2) 1.9</td>
</tr>
<tr>
<td>Periodic Drug Use</td>
<td></td>
<td>(11) 3.8</td>
<td>(9) 6.2</td>
<td>(6) 6.9</td>
<td>(4) 3.9</td>
</tr>
<tr>
<td>Marijuana and Alcohol Use</td>
<td></td>
<td>(9) 3.1</td>
<td>(3) 2.1</td>
<td>(6) 6.9</td>
<td>(6) 5.8</td>
</tr>
<tr>
<td>Heavy Alcohol Use</td>
<td></td>
<td>(13) 4.5</td>
<td>(5) 3.4</td>
<td>(4) 4.6</td>
<td>(11) 10.7</td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td>(29) 10.1</td>
<td>(14) 9.6</td>
<td>(8) 9.2</td>
<td>(9) 8.7</td>
</tr>
<tr>
<td>Light Alcohol Use</td>
<td></td>
<td>(22) 7.7</td>
<td>(13) 8.9</td>
<td>(5) 5.7</td>
<td>(21) 20.3</td>
</tr>
<tr>
<td>Negligible or No Use</td>
<td></td>
<td>(96) 67.0</td>
<td>(96) 65.7</td>
<td>(53) 61.0</td>
<td>(41) 40.0</td>
</tr>
</tbody>
</table>

Table II

Numbers of Students Falling Into The High, Medium, and Low Drug Use Categories

<table>
<thead>
<tr>
<th>Categories</th>
<th>Typical</th>
<th>MR</th>
<th>LD</th>
<th>BD</th>
<th>N = 103</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polydrug</td>
<td></td>
<td>(22) 7.7</td>
<td>(15) 10.2</td>
<td>(11) 12.2</td>
<td>(15) 14.6</td>
</tr>
<tr>
<td>Stimulants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periodic</td>
<td></td>
<td>(22) 7.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td>(51) 17.8</td>
<td>(22) 15.0</td>
<td>(18) 20.7</td>
<td>(26) 25.2</td>
</tr>
<tr>
<td>Marijuana and Alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Alcohol</td>
<td></td>
<td>(51) 17.8</td>
<td>(66) 19.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>(214) 74.6</td>
<td>(229) 68.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

74