# Building Capacity of Educators to Serve Students with TBI: A Regional Team Approach

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# Building Capacity of Educators to Serve Students with TBI: A Regional Team Approach

## *Overview*

Traumatic brain injury (TBI) was established as a category of disability under the Individuals with Disabilities Education Act in 1990. Since then, with increasing numbers of students with TBI reentering school after their injuries, or entering school after experiencing TBI in early childhood, educators in every State have become aware of the unique needs and challenges these students present. However, few educators feel prepared to meet these students' needs. Most teachers do not receive pre-service training on the effects of TBI on school performance and very few graduate programs in special education provide training in TBI.

Among the issues for which educators seek information and direct assistance are:

- establishing eligibility for special education services;
- health and medical issues in school settings;
- behavior management;
- social adjustment;
- determining appropriate academic expectations;
- identifying effective accommodations;
- employing appropriate instructional strategies; and
- planning for transition.

In Iowa, Kansas, and Oregon, assistance in these areas is provided by interdisciplinary regional teams of educators coordinated by the State Departments of Education (DOE). Originally supported by Federal funds, these States trained members of regional teams to be not only knowledgeable about TBI issues but also experienced in providing in-service training and direct consultation to their fellow educators. The teams have bridged a gap in State supported services to the emerging population of students with TBI. The success of the TBI resource team model has led to interest in other States. Currently, Tennessee, Arizona, and Hawaii are training team members.

| State | Start Date | Source of Original Funding | Number of Trained Team Members |
|---|---|---|---|
| Kansas | 1987 | Federal | 205 |
| Iowa | 1989 | Federal | 100 |
| Oregon | 1993 | Federal | 125 |
| Tennessee | 2001 | Federal | 90 |
| Arizona | 2002 | Federal | in progress |
| Hawaii | 2002 | State | in progress |

## Steps in Implementing the Model

The model calls for careful selection of team members, intensive training over a period of several months, long-term mentoring, and on-going support. This comprehensive approach is designed to assure that training will carry over into classroom practices that have a positive impact on

students. Each step is described below.

**Step 1: Conduct Needs Assessment**

Information from a broad-based needs assessment regarding educational services for students with TBI can guide the development of the model. The needs assessment provides information about areas related to TBI in which educators need training, and how teams should be recruited and organized throughout the State. The needs assessment should access both parent and school perspective, and can include both written surveys and informal interviews.

**Step 2: Recruit Team Members**

Information from the needs assessment can help determine the number, composition, and recruitment process for each team. The number of teams within a State varies widely. For example, in Iowa, one brain injury resource team was established for each of the State's 15 Area Education Agencies. In Oregon, there is one statewide team, with members located throughout the State. In all cases, the teams are multidisciplinary, and include family members and individuals with TBI.

**Step 3: Deliver Trainings**

The goal of the training is to provide team members with current information about the effects of TBI and strategies for working effectively with students, families, and teachers. Training occurs over approximately 10 full-day sessions, with topics such as: parent/school communication; behavioral intervention strategies; compensatory memory and organizational strategies; and presenting an effective in-service. Unlike traditional in-service training approaches, training for TBI team members is an interactive process, designed to increase knowledge, skills, and confidence of trainees over time.

**Step 4: Provide Mentorship and Ongoing Support to Teams**

Following the initial training phase, new team members work in teams as they plan and conduct in-service trainings and consult in classrooms. In some States, more experienced consultants have been available to provide support to new team members. This phase allows team members to "get their feet wet" while providing the necessary support to build success.

Once a cadre of team members is trained and available for consultation, team operations are maintained and supported through a central office at the department of education. Ongoing trainings occur one to two times a year. This allows team members to stay abreast of research in TBI and to maintain collegial ties. Evaluation and publicity efforts are critical for ongoing success of the model.

Objectives and a sample timeline for implementing the steps are provided below.

| | |
|---|---|
| **Objective 1** | Conduct needs assessment |
| **Objective 2** | Recruit team members |
| **Objective 3** | Deliver trainings |
| **Objective 4** | Provide mentorship and ongoing support to teams |
| **Objective 5** | Conduct evaluation of trainings and team member activities |
| **Objective 6** | Present outcomes |

| | YEAR 1 | | | | YEAR 2 | | | |
|---|---|---|---|---|---|---|---|---|
| OBJECTIVE | Summer | Fall | Winter | Spring | Summer | Fall | Winter | Spring |
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |

## Resources Needed

The resources needed to implement the resource team model include a full-time staff person, secretarial support, and funds to support training and dissemination activities. In some States, several agencies combine resources to support team activities (e.g., as in Arizona). In others, the State Department of Education fully supports the team (e.g., as in Kansas), or contracts with an institute of higher education to coordinate team operations (e.g., as in Oregon).

## Lessons Learned

States considering implementation of the TBI resource team model as a mechanism for improving services to students with TBI have the advantage of being able to draw on "lessons learned" from previous and on-going implementations in six other States.

**Advantages of the TBI Resource Team Model**

- Easily accessed resource for educators and medical personnel
- Ongoing professional development for team members
- Builds collegiality
- Builds statewide capacity
- Support for parents

- Raises awareness of TBI

**Barriers to Team Effectiveness**

- Arranging release time for training and consultation
- Wide geographic distribution of team members
- Decreased State funding allows for only minimal on-going training for team members

# Building Capacity of Educators to Serve Students with TBI: A Regional Team Approach
## *Technical Description*

### Purpose and Goal of the Model

> *"It's like my life had changed after my head injury...it was real hard to deal with people that were used to me being a different way than I was. And, there were things that they expected that I couldn't do. I wasn't in a wheelchair...and I didn't have scars on my head...(so) they couldn't see that I had some real disabilities."* Student with TBI

This report describes a multi-dimensional statewide approach to training educators to provide quality educational services to students who survive traumatic brain injury (TBI) and experience significant cognitive, behavioral, and social impairments as a result. Although the majority of the document is based on Oregon schools, it is also reflective of the experiences in implementing similar models in Kansas and Iowa.

The overarching goal of the TBI resource team is to make available to schools throughout the State, a group of well-trained peer consultants who can provide in-service training and ongoing consultation. With educators throughout the State having access to on-going support and training in the area of TBI, many of the problems schools face in serving the growing population of students with TBI can be prevented.

### History of the Model

TBI was established as a category of disability under the Individuals with Disabilities Education Act in 1990. With increasing numbers of students with TBI reentering school after their injuries, or entering school after experiencing TBI in early childhood, educators have become aware of the unique needs and challenges these students present. In response to these challenges and the staff development needs they create, the States of Oregon, Kansas, and Iowa implemented a team model of providing training and support to educators.

Team development in Oregon. In 1992, Oregon Department of Education applied for funding from the Office of Special Education Programs (OSEP) to develop, implement, and evaluate the TBI resource team model. This grant was awarded from 1993-1996. Since 1998, the Oregon Department of Education has provided support for the TBI resource team. The project has trained members of eight regional teams to be not only knowledgeable about brain injury and strategies for working with these students in school, but also experienced in providing in-service training and direct consultation to their fellow educators. These teams have bridged a gap in State supported services to the emerging population of students with TBI.

Team development in Kansas. Recognizing the need to increase educators' knowledge of TBI, the Kansas State Department of Education (KSDE) began funding the TBI project in 1987 using State Title VI, Part B funds to provide Kansas' educators with technical assistance and training in TBI. In 1991, KSDE received an OSEP Personal Preparation grant to formally establish TBI teams in districts throughout the State and to infuse a TBI curriculum into the State's pre-service

training programs. During the 4-year grant, approximately 175 TBI team members throughout the State were trained and a variety of training materials were developed. TBI team members were trained to provide consultation and technical assistance to local educators serving students with TBI, as well as provide TBI awareness training to local district personnel. Following the OSEP grant, KSDE continued to fund the TBI project maintaining a full-time statewide TBI consultant to deliver ongoing technical assistance and consultation to team members, update the training of existing team members, and establish new team members as needed. Kansas now has 247 active TBI team members who provide assistance to educators serving students with TBI and their families.

Team development in Iowa. In 1988, the Bureau of Children, Family and Community Services (formerly the Bureau of Special Education) formed a task force to identify issues and make recommendations regarding the provision of educational programs and services to students who had sustained a brain injury. The 12-member task force was composed of educators, parents, medical personnel and other advocates. The task force recommended the creation of a State consultant for brain injury, the establishment of brain injury resource teams for each of Iowa's 15 Area Education Agencies, and specialized training for each of the teams. This network of teams is the Iowa Educational Network for Children with Brain Injury. The teams are composed of multidisciplinary professionals who provide assistance and support to local school personnel and families. Each team has an established contact person to make communication easier and more efficient for medical and rehabilitation personnel, local education agencies and families. The teams participate in workshops, seminars, and conferences in order to maintain their skills as consultants and learn about new developments in brain injury. They also provide in-service presentations for parent groups, emergency medical personnel, schools and other agencies in order to create awareness of brain injury and related issues.

## Description of the Model

The TBI resource team model varies slightly across the three States, depending on geography and the structure and organization of the educational service delivery system. What follows is a description of how the Oregon teams were conceptualized and developed.

The research and development literature on best practices for students with disabilities, as well as our own efforts in adapting these practices for students with TBI (Glang, Cooley, Singer, & Tish, 1992; Glang, Todis, Cooley, Wells, & Voss, 1997) provided the foundation of the TBI resource team model. The model is designed to support schools serving students with disabilities in the general classroom with whatever assistance is required to ensure successful outcomes (Stainback & Stainback, 1984). The key features of the model are its capacity-building and regional team approaches (Glang, Todis, Sohlberg, & Reed, 1996).

The capacity-building approach of the model avoids the problems of transfer which are associated with traditional training methods. Research in the field of staff development suggests that approaches that offer "one-shot" in-services without follow-up are not effective in helping educators actually implement suggestions (Sparks, 1983; Gersten, Carnine, Zoref, & Cronin, 1986). On-site, situation-specific assistance greatly increases the likelihood that educators will

transfer skills to their instructional situation (Gersten, Morvant, & Brengelman, 1995; Glang, Gersten, & Morvant, 1995; Showers, 1984; Ylvisaker, Feeney, & Urbanczyk, 1993).

The nature of TBI suggests a regional team approach. The incidence of TBI is sudden and unexpected, and its individual effects are unpredictable. Students with TBI re-entering school present a host of challenges that may require the expertise of a variety of specialized educators. Working as a team these educators can provide schools direct, immediate, and specific information and strategies for integrating the student with TBI. Consultation from a single consultant serving an entire State or region would restrict educators' access to the support they need.

The components of the TBI resource team model are: needs assessment, team recruitment, and team training. Each is described below.

## Needs Assessment

Prior to implementing the model in Oregon, two surveys and a series of focus groups and qualitative interviews were conducted to determine the type of content and the nature of training needed. To ascertain parents' perspectives, we surveyed 31 parents of children with TBI throughout the Northwest about their child's educational experiences. The respondents identified lack of staff knowledge of TBI and its related effects (46 percent) as the primary reason they were dissatisfied with their child's school experience. In the follow-up focus groups, parents consistently reported feeling frustrated with their children's school experiences. In our statewide needs assessment of 183 educators designed to ascertain educators' knowledge about and perceptions of students with TBI (Glang et al. 1996), respondents scored moderately low on a measure of knowledge (mean score was 71 percent). When these same educators were asked to rate how prepared they felt to meet the needs of students with TBI (on a scale of 1 - 5, 1 = not at all prepared, 5 = very prepared) the average rating was between 2.6 - 3.4, or only "somewhat prepared." Ratings were consistent across behavioral, academic, social, and cognitive domains.

## Recruitment of Team Members

Members of the Oregon TBI resource team include: individuals with TBI, parents, classroom teachers, special education teachers, speech/language specialists, school counselors, physical therapists, occupational therapists, school nurses, school psychologists, and local/regional administrators.

Team members were recruited in consultation with the head administrator in each of the State's eight service regions. Some regions elected to conduct open recruitments; flyers describing the project and encouraging interested individuals to apply were distributed to schools and educational service districts in the target region. Other regions selected individuals based on their interest in TBI and their availability to travel throughout the region. Each potential team member completed an application consisting of a description of work experience and training in TBI, and a statement signed by the applicant's supervisor indicating the applicant would be released from his or her other responsibilities to attend trainings and to provide consultation on an as-needed basis to educators in his or her region.

## Training

Phase I: Initial training. The goal of the initial training phase was to provide team members with current information about the effects of TBI and strategies for working effectively with students, families, and teachers. Training topics included: overview of TBI; parent/school communication; behavioral intervention strategies; facilitating social integration; promoting academic success; compensatory memory strategies; collaborative consultation; and presenting an in-service. Workshop presenters were well-known speakers in their field of interest (e.g., special education, neuropsychology, and cognitive rehabilitation).

Each training session includes an assignment to be completed either individually or with other team members. Assignments are designed to encourage trainees to apply their knowledge directly with educators and students with TBI in school settings.

Phase II: Mentorship. Following the year-long initial training phase, new team members enter into a mentor relationship with an experienced TBI consultant. The mentor accompanies the team members as they plan and conduct in-service trainings and consult in classrooms. Mentors are available to answer questions about specific situations related to students with TBI and to refer team members to specialized services in their regions. This phase allows team members to "get their feet wet" while providing the necessary support to build success. According to many team members, this phase is the most critical (Glang & Todis, 1997).

Phase III: Ongoing support. Once team members are functioning independently, technical assistance may include problem-solving difficult cases, reviewing medical or school records, and attending team workshops or consultation activities to provide feedback. Second, a centralized administrative function, including: receiving requests for assistance and connecting schools with team consultants; creating and disseminating information about team availability and services; maintaining a Web site (www.tr.wou.edu/tbi/TEAM/) organizing trainings for local districts; and coordinating ongoing team trainings is provided. Third, intra-team networking by is promoted by sending out a monthly electronic newsletter and facilitating team gatherings. Finally, ongoing data collection and evaluation services are provided to ensure that the team model is addressing the needs of students, teachers, and families.

## Lessons Learned

### Common Ground (lessons experienced by all three States)

The team model is expedient and cost effective. It accesses the services of a highly trained cadre of interdisciplinary consultants to provide technical assistance, maintain quality of services, and promote collaboration throughout the State's educational system. The advantages and challenges of the model are listed below:

### *Advantages of the TBI Resource Team Model*

- Easily accessed resource for educators: Teachers, school-based therapists, and other school personnel can contact the statewide coordinator or local representative of the team via phone, email, or Web site and get immediate assistance.

- Easily accessed resource for medical personnel: The statewide coordinator and team members establish relationships with hospital and rehabilitation personnel so they are notified as soon as a student is hospitalized and can begin school reentry planning.

- Professional development for team members: Through their involvement in training and later, in providing consultation, team members learn new skills and information. Team members learn classroom management and instructional skills that can be used with other students with disabilities. In addition, team members learn valuable consultation and presentation skills.

- Builds collegiality: Regular team meetings and on-going professional contacts between team members foster intra-team networking.

- Builds capacity: Statewide trainings organized by the TBI team coordinator, and in-service presentations and consultation by team members, provide local educators with valuable information and skills for application in the classroom.

- Support for parents: Parent team members reach out to parents of students with TBI. Parent to parent support is helpful as parents of recently injured children negotiate the school system.

- Raises awareness: Efforts by team members to provide trainings, collaborate with hospitals and agencies, and reach out to community groups lead to increased statewide awareness of TBI.

### *Barriers to Team Effectiveness*

- Availability of volunteers: Individuals who volunteer to serve on the brain injury team tend to be ambitious professionals, eager to learn. As a result, they are often the same individuals who step forward to work on other projects and are sometimes stretched too thin, trying to serve the needs of too many different populations of students.

- Arranging release time: For some team members, it is difficult to be released from regular job duties to attend training and function as a team member.

- Dealing with "school climate": Some schools choose not to utilize the services of the TBI Resource Team. Often, this is because school staff are overwhelmed with the regular demands of school—dealing with students with more severe needs with fewer resources.

- Facing school and rehabilitation service reductions: The lack of fiscal support for school services makes it difficult for some team members to serve in their full capacity as team members

- Geographic distribution of team members: Team members often live or work a large distance from each other which makes it difficult to have regular gatherings.

- Providing ongoing support for team members: Decreased State funding allows for only minimal on-going training for team members.

**Individual Lessons from States**

Although the overlap across States is significant, there have been a variety of lessons learned that are unique to each State. In this section, we describe these differences.

Kansas. The most important element to the success of the team model is the provision of ongoing training and support for teams once they have been trained. While team members are trained to a level of proficiency in TBI, given the diversity of students with TBI, team members will often require expert assistance in dealing with individual cases. Additionally, ongoing training to update the skills of existing team members and training of new team members to replace those lost to attrition or job changes is critical. This type of ongoing support and training must be provided to keep the teams functioning effectively.

Iowa. Iowa's Educational Network for Brain Injury continues to work well, largely because of the support received from the Iowa Department of Education. The Iowa Department of Education is committed to serving low-incidence populations and has continued to provide administrative and financial support (Part B Federal Funds) to this project for over a decade. The team model is also supported by other State agencies and organizations working with individuals with brain injury. Collaborative efforts between the teams, the State consultant and the State brain injury association and other organizations have resulted in many joint projects with decreased duplication of effort.

Oregon. In Oregon, the most difficult aspect of implementing the team model has been finding a stable, long-term source of funding for TBI team activities. Current funding allows for two annual trainings, and the team coordinator is funded at only .35 FTE. Although this level of funding allows for maintenance of team activities, it is not adequate funding to expand the services of the team, and does not allow for sufficient evaluation of team functioning. See Appendix A for a summary of the evaluation data that has been collected.

## Current Projects

Arizona. In the current TBI outreach project, funded by the Office of Special Education (OSEP) (2001-2004), the Arizona school districts are working to reach with diverse populations, refine administrative structures, and training needs. The Arizona State Department of Education, and

the Arizona Governor's Council on Spinal Cord and Head Injury are working closely with a local team of educators and parents to tailor the model to the needs of that district.

The outreach plan applies the TBI resource team model in districts that represent a wide range of previous educator preparation in the area of TBI. The plan permits maximum flexibility in responding to the needs of the different districts. The project provides subcontracts to the Arizona State Department of Education to carry out outreach activities. This approach capitalizes on the work Oregon has already done to build the capacity of educators who serve the growing population of students with TBI in Arizona in a cost-effective manner.

To date a team of 40 multidisciplinary educators, parents, and individuals with TBI in the Southern Arizona region have been recruited. They met for the first time in September 2002, and as of March 2003, have completed 8 days of training. Their Phase I training will be complete in winter 2003. Training for teams in the remainder of the State begins in July 2003. It is anticipated that a trained, statewide team of TBI consultants will be in place by winter 2004.

Hawaii. The Hawaii Department of Education (DOE) supports two statewide TBI coordinators. These staff provide direct service to students and families and also coordinate training activities statewide. In the summer of 2002, the TBI Coordinators began recruiting members of a TBI resource team. The first training was held in September. Since then, the team has expanded to 15 people, and they have attended 4 days of training. Future trainings are contingent on accessing additional funding. The Traumatic Brain Injury Technical Assistance Center provided support for the Hawaii DOE in their efforts to build and sustain this team.

## Commitment

A. Staff (Roles and Responsibilities)
Staff roles and responsibilities vary according to State needs and resources. At minimum, model implementation requires a full time coordinator and part-time administrative assistant.

B. Budgetary Commitment
A sample budget is included as Appendix B and a sample timeline for model implementation follows:

| | |
|---|---|
| **Objective 1** | Conduct needs assessment |
| **Objective 2** | Recruit team members |
| **Objective 3** | Deliver trainings |
| **Objective 4** | Provide mentorship and ongoing support to teams |
| **Objective 5** | Conduct evaluation of trainings and team member activities |
| **Objective 6** | Present outcomes |

| OBJECTIVE | YEAR 1 | | | | YEAR 2 | | | |
|---|---|---|---|---|---|---|---|---|
| | Summer | Fall | Winter | Spring | Summer | Fall | Winter | Spring |
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
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| 6 | | | | | | | | |

## Maintaining the Model

Sustainability of the TBI resource team depends on several factors. First, the State Department of Education should provide a long-term source of fiscal support for ongoing team operations. This allows for on-going training for team members, regular meetings and long-term follow-up of team consultation activities. Second, it is critical that evaluation data demonstrate a positive impact of team activities on team members, as well as on recipients of consultation and training. Third, it is ideal if model activities are guided by an advisory board of family members, school professionals, partners from State agencies and medical facilities, and individuals with brain injury. This approach promotes a coordinated system of support for children and their families, and allows for cost-sharing and networking across systems. Finally, model activities are more likely to be sustained if they reflect needs identified by an ongoing assessment of needs identified by teachers, parents, and community professionals.

# Bibliography

Glang, A., Gersten, R., & Morvant, M. (1994). A directive approach toward the consultation process: A case study. Learning Disabilities Research & Practice, 9(4), 225-233.

Glang, A., Singer, G.H.S., Cooley, E.A., & Tish, N. (1992). Tailoring direct instruction techniques for use with students with brain injury. Journal of Head Trauma Rehabilitation, 7(4), 93-108.

Glang, A., & Todis, B. (1997). Providing ongoing support to educators through team-based consultation: Building capacity to serve students with TBI in inclusive settings. In G.H.S. Singer, A. Glang, & B. Todis, (Eds.) Children with Acquired Brain Injury: The School's Response. Baltimore, MD: Paul H. Brookes.

Glang, A., Todis, B., Cooley, E., Wells, J., & Voss, J. (1997). Building social networks for children and adolescents with ABI: A school-based intervention. Journal of Head Trauma Rehabilitation, 12(2), 32-47.

Glang, A., Todis, B., Sohlberg, M., & Reed, P.R. (1996). Helping parents negotiate the system. In G.H.S. Singer, A. Glang, & J.M. Williams (Eds.), Children with Acquired Brain Injury: Educating and supporting families (pp. 149-165). Baltimore, MD: Paul H. Brookes.

Gersten, R., Carnine, D.W., Zoref, L., & Cronin, D. (1986). A multifaceted study of change in seven inner-city schools. The Elementary School Journal, 86(3), 1-20.

Gersten, R., Morvant, M., & Brengelman, S. (1995). Close to the classroom is close to the bone: Coaching as a means to translate research into classroom practice. Exceptional Children, 62(1), 52-66.

Showers, B. (1984). Peer coaching and its effects on transfer of training. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

Sparks, G. M. (1983). Synthesis of research of staff development for effective teaching. Educational Leadership, 41(3), 65-72.

Stainback, S. & Stainback, W. (1984). Methodological considerations in qualitative research. Journal of the Association for Persons with Severe Handicaps, 9(4), 296-303.

Ylvisaker, M., Feeney, T. J., & Urbanczyk, B. (1993). Developing a positive communication culture for rehabilitation: Communication training for staff and family members. In C.J. Durgin, N.D. Schmidt, & L.J. Fryer (Eds.), Staff Development and Clinical Intervention in Brian Injury Rehabilitation (pp. 57-85). Gaithersburg, MD: Aspen.

# APPENDIX A
# Impact of the TBI Resource Team Model

In Oregon, evaluation data has been collected since the beginning, starting with the training team members in 1994. Analyses of these data are highlighted below.

**Evaluation Question #1: What impact does training and mentored experience have on skills, knowledge, and preparedness of team members?**

The Team Effectiveness Rating was designed to assess the degree to which in-service training prepared team members to be "experts" in effective interventions for students with TBI. Using a 5-point Likert-type scale, the 20-item questionnaire asks respondents to rate how prepared they feel to meet the needs of students with TBI across four areas (physical, social/behavioral, cognitive, and academic). Team members complete the questionnaire prior to receiving training (pre) and at the conclusion of their year-long training (post).

Table 1 below summarizes data collected from the initial team cohort, 1994-96[1]. T-test analyses revealed pre- to post increases in mean ratings of perceived competence across all four areas. Each of the increases reached statistical significance.

Table 1. Team Members' Perceived Competence Ratings

| Intervention Area | N | Pre-test | | Post-test | | t |
|---|---|---|---|---|---|---|
| | | M | (SD) | M | (SD) | |
| Physical | 45 | 3.34 | (1.35) | 3.67 | (1.27) | -2.54* |
| Social / Behavioral | 53 | 3.22 | (.90) | 3.83 | (.63) | -5.96** |
| Cognitive | 51 | 3.49 | (.93) | 4.0 | (.55) | -5.02** |
| Academic | 51 | 3.69 | (.79) | 4.12 | (.45) | -4.35** |

Note. * p< .05 ** p< .01

**Evaluation Question #2: What impact does in-service training and consultation with TBI team members have on educators who are recipients of team services?**

When team members conducted formal in-service trainings for educators and related-service providers, they asked participants to rate the degree to which the training accomplished its primary goal (e.g. provide an overview of TBI, present suggestions for academic or interventions, discuss effective compensatory techniques, etc.). Participants rated each workshop using a four point Likert-type scale. The results, summarized in Table 2 below, reflect strong positive feedback for the work of the team.

[1] Post-testing of the current cohort will be completed in March, 2001; results of these evaluations will be available in May.

| Year(s) | Cumulative # of Participants | Mean Rating |
|---|---|---|
| 1994-96 | 50 | 3.50 |
| 1999-00 | 75 | 3.33 |
| 2000-01 | 72 | 3.56 |

After completing their first 2 years of training and service on the team, members of the 1994-96 cohort were asked to rate the entire team's effectiveness in meeting the needs of educators serving students with TBI. The questionnaire used a five point Likert-type scale and asked each respondent to rate how effective the team was in providing: 1) in-service presentations in TBI, 2) written materials, 3) referrals for parents or teachers, 4) phone consultation, 5) classroom observation/problem-solving with teachers, 6) support/information for family members, and 7) assistance at IEP or other planning meeting. Mean ratings ranged between 3.68 to 4.25 (1= not at all effective, 5= extremely effective).

**Evaluation Question #3: What impact does in-service training and consultation with TBI team members have on students with TBI whose teachers receive services through the TBI Resource Team?**

Feedback received from administrators, teachers and parents provides strong positive support for the impact of the team on students, families and school staff. The excerpts below are examples:

- The TBI Regional Team serving our TBI population has been responsible for a greatly improved educational delivery system for these students. ...Both the families and the schools feel it provides expertise that provides initial planning as well as ongoing support for these children. Feedback...from (neighboring school districts) indicates that they are also very appreciative of this service.
  - *LEA Special Education Administrator*

- The services provided in our region by staff trained in your Oregon program have been highly supportive of students who have unique needs and for staff who are called upon to provide those unique services. ...Your program has been immensely helpful in educating a broad range of teachers and specialists and providing support to school staff when it is necessary to plan for meeting the needs of a student.
  - *ESD Special Education Administrator*

- I cannot begin to tell you how valuable the support we have received through the regional TBI Team has been to us. Before... I felt as if we were drowning. Now, with the support we have received and with access to much educational information provided by the team, I feel that we are once more in control of our

lives. I feel capable to help make knowledgeable decisions that will benefit (my son's) life.

- *Parent of Student with TBI*

- It was not until (my son) suffered a seizure in the middle of his SAT test at school that the school nurse was called in. Fortunately, she was part of a regional team of specialists being set up in our area to help families for victims of TBI. Our world changed almost immediately. She set up testing with the school psychologist to determine exactly what (my son's) shortcomings were. After that we were able to set up an Individual Educational Plan that guaranteed teacher compliance in accommodations for his special needs. Most important to us, we no longer felt alone in dealing with everything. We had access to professionals, people with experience in the area of TBI, and to other families dealing with the same sort of problems.

  - *Parent of Student with TBI*

## Summary

The review of the research and our previous and on-going work with the teams indicates that the model contains all of the elements of an effective approach to serving both students with TBI and their educators. However the review also reveals several gaps in our knowledge of what works for these related populations.

Evaluation results to date do not include as much information as we would like about 1) student outcomes, 2) relative effectiveness of training components and consultation strategies, 3) how building capacity of individual educators affects their ability to work with students with TBI and low-incidence disabilities, and 4) parent satisfaction with process and outcomes. These will be a major focus for the upcoming 2-year period of team operations.

# APPENDIX B
# Sample Budget

| | RATE | AMOUNT | TOTAL |
|---|---|---|---|
| **PERSONNEL** | | | |
| **SALARY (annual)** | **FTE** | | **67,500** |
| Project Coordinator | 1.0 | 50,000 | 50,000 |
| Project Administrator | 0.50 | 35,000 | 17,500 |
| **FRINGE BENFITS** | | 35% | **23,625** |
| **TRAINING (9 sessions)** | | | **23,900** |
| Honorarium | | 1,000 | 9,000 |
| Travel & Per diem | | 800 | 7,200 |
| Meeting costs (room, food, etc) | | 300 | 2,700 |
| District reimbursement for team member participation | | | 5,000 |
| **SUPPLIES (annual)** | | | **5,300** |
| General office | | | 3,000 |
| Telephone | | | 800 |
| Postage | | | 500 |
| Duplication | | | 1,000 |
| **RESOURCE MATERIALS** | | 1,000 | **10,000** |
| **TOTAL DIRECT COSTS** | | | **130,325** |