MULTIDISCIPLINARY TEAM. Prior to 1975, school psychologists* were the primary, if not only, persons involved in the regulation of special education* diagnosis, placement, and review. With the advent of Public Law 94-142* and its state-level corollary mandates, the decision-making process for assessment and placement into special education programs became a team or group task. Consequently, multidisciplinary teams were formally incorporated as a part of special educational procedures. Section 121 a.532(e) of Public Law 94-142 states that "the evaluation is made by a multidisciplinary team or group of persons, including at least one teacher, or other specialist, with knowledge in the area of suspected disability." These multidisciplinary teams have been referred to as child-study teams, evaluation and placement committees, planning and placement committees, school-appraisal teams, assessment teams, dismissal committees, and evaluation and placement committees. The rationale for multidisciplinary teams is based on the belief that group decision making provides safeguards against individual errors in judgment and benefits students by providing broader input and greater accuracy in assessment, classification, and placement decisions. The educational decision-making team typically comprises parents, teachers, counselors, speech pathologists, nurses, social workers, school psychologists, administrators, medical doctors, and any other professional or individual who can provide information to assist in the best possible placement/educational delivery system to a student.

See also PUPIL PERSONNEL SERVICES; RELATED SERVICES; TEAM; TEAM APPROACH.

REFERENCES

Fenton, K. S., R. K. Yoshida, J. P. Maxwell, and M. T. Kaufman. (1979). Recognition of team goals: An essential step toward rational decision-making. *Exceptional Children* 45, 638–644.

Kaiser, S. N., and R. W. Woodman. (1985). Multidisciplinary teams and group decision-making techniques: Possible solutions to decision-making problems. *School Psychology Review* 14, 457–470.

Ross, R. P. (1995). Best practices in implementing intervention assistance teams. In A. Thomas and J. Grimes (Eds.), *Best practices in school psychology—III* (pp. 227–237). Washington, DC: National Association of School Psychologists.

Yoshida, R. K. (1980). Multidisciplinary decision making in special education: A review of issues. *School Psychology Review* 9, 221–226.

Kelly J. Griffith

MULTIPLE BASELINE. Multiple baseline is one type of single-case research design. Consistent with all single-case designs, the objective is to demonstrate that the observed change in behavior is related to the implementation of the intervention procedure rather than extraneous events. This relationship, known as functional control, is shown by the repeated change of the target behavior only at the time when the intervention is put in place.

A multiple baseline design begins by determining the different dimensions

across which the intervention will be implemented. This can be different subjects, settings, or behaviors within the same subjects. Baseline behavior rates are established across each dimension, and then the intervention is implemented sequentially in one baseline (dimension) at a time. Data are collected each day across all baselines. Because the behavior change occurs only when the intervention is started for each student, the intervention is viewed as having a functional (causal) relationship to the behavior change.

See also ABAB DESIGNS; MULTITRAIT-MULTIMETHOD MATRIX; QUALITATIVE RESEARCH; TREATMENT INTEGRITY.

REFERENCES

Kazdin, A. E. (1982). *Single-case research designs: Methods for clinical and applied settings.* New York: Oxford University Press.

Steege, M. W., and Wacker, D. P. (1995). Best practices in evaluating the effectiveness of applied interventions. In A. Thomas and J. Grimes (Eds.), *Best practices in school psychology—III* (pp. 625–636). Washington, DC: National Association of School Psychologists.

Edward S. Shapiro

MULTISTATE ASSOCIATION MEETINGS. Multistate association meetings describe professional gatherings of school psychologists* from more than one state in a geographic region. Due to distance and cost, many school psychologists are unable to attend national conferences. Also, associations with a smaller membership may find it difficult to conduct a diversified, high-quality state conference. By pooling financial resources, several associations have sponsored quality state conferences within driving distance of all members. Three such regional associations are presented as examples.

Kansas–Missouri–Oklahoma–Arkansas form the Central-State Conference, founded in 1982. Originally, Nebraska and Iowa also were part of the region. Meetings are held annually.

Oregon–Washington–Idaho, Tri-Sate Conference, originated in 1983 and meets every other year. Financial obligations are shared, and members from the three state associations present and assist with all organizational activities.

Alabama–Mississippi–Tennessee, Mid-South Conference, was established in 1988 as a result of a National Association of School Psychologists (NASP) regional meeting in which members expressed an interest in sponsoring a regional conference on an every-other-year basis.

See also STATE ASSOCIATION.

Gerald J. Spadafore

MULTITRAIT-MULTIMETHOD MATRIX. The multitrait-multimethod matrix is an experimental design* used to investigate the construct validity of measures by examining, simultaneously, convergent and discriminant validity. For tests to demonstrate construct validity, they must not only correlate highly

with measures to which they should theoretically relate but also not correlate significantly with measures that are theoretically dissimilar. Convergent validity refers to the high correlations and strong relationships that should exist between different tests designed to measure the same (or similar) construct or trait. Discriminant validity refers to the low correlations and nonsignificant relationships that should exist between different tests designed to measure different constructs or traits. Campbell and Fiske (1959) indicated that tests may be deemed invalid if they correlate too highly with tests developed to measure a different construct.

Multitrait refers to examining two or more traits or hypothetical constructs, while multimethod means examining two or more methods used to measure those traits or constructs (Campbell and Fiske, 1959). Data generated through these correlational methods are summarized in a correlation matrix where reliability estimates of the separate measures are placed along the principal diagonal (see Anastasi, 1988; Campbell and Fiske, 1959; Cohen et al., 1988). Other correlation coefficients presented in the matrix include convergent validity coefficients, correlations between different traits using the same method, and correlations between different traits using different methods. The highest correlations in the matrix should be the reliability coefficients of the individual measures. Validity coefficients between different methods measuring the same trait (heteromethod-monotrait) should be higher than both the correlations between different methods measuring different traits (heteromethod-heterotrait) and correlations between different traits using the same method (heterotrait-monomethod) in order to demonstrate construct validity.

If convergent validation is not obtained due to nonsignificant correlations between two different methods measuring the same trait, then three possibilities need to be examined: (1) neither method adequately measures the trait, (2) one of the measures does not adequately measure the trait, or (3) responses provided on the test relate to different characteristics not associated with the proposed trait (Campbell and Fiske, 1959).

See also TREATMENT INTEGRITY; VALIDITY.

REFERENCES

Anastasi, A. (1988). *Psychological testing* (6th ed.). New York: Macmillan.

Campbell, D. T., and D. W. Fiske. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin* 56, 81–105.

Cohen, R. J., P. Montague, L. S. Nathanson, and M. E. Swerdlik. (1988). *Psychological testing: An introduction to tests and measurement.* Mountain View, CA: Mayfield.

Gary L. Canivez

MUNSON, GRACE E. Grace Esther Munson was born near Orleans, Nebraska, on October 17, 1883, and died in Morongo Valley, California, on August 8, 1980. She completed her B.A. at the University of Nebraska (1911), M.A. at Wellesley College (1912), and Ph.D. at the University of Nebraska (1916) in

clinical psychology* and speech disorders. She was a teacher and principal in a Nebraska high school before completing her college degrees. Her career was most visible during the years she was employed in the Chicago public schools. There she worked as a school psychologist* (1918–1935), director of the Bureau of Child Study (1935–1946), and assistant superintendent in charge of special education* (1946–1949). Under her guidance, the bureau expanded in personnel and programs, including her development of the Chicago Adjustment Program, during the depression era. In retirement, she was a pioneer in the development of Morongo Valley, a remote desert community in California.

REFERENCES

Mullen, F. A. (1980). Grace Munson, Ph.D. October 17, 1883–August 8, 1980. *The School Psychologist* 35(1), 8.

———. (c. 1980). Grace Esther Munson, 1883–1980. Unpublished paper, 5 pp.

Thomas K. Fagan

MUSIC THERAPY. The development of the field of music therapy began in 1946 in response to the burgeoning populations in Veterans Administration (VA) hospitals at the conclusion of World War II. Music therapy was thought of as an activity therapy or adjunctive therapy to provide a vehicle for the patient's constructive use of time along with other activities, for example, occupational therapy.

Now, music therapy is grouped with drama, art, and dance as one of the creative arts therapies or expressive therapies. Music therapy has undergone a shift from a psychoanalytic basis to a behavioral basis because of the powerful nature of music as a stimulus and a reinforcer. Music can have either a stimulating or calming affect. By its introduction or withdrawal, music can function as a reinforcer.

During the first three decades as an organized profession, music therapists functioned primarily in institutional settings for the emotionally disturbed and the mentally retarded. Music therapists viewed the schools as a proper setting to work, with the passage of Public Law 94-142* and with music therapists' finding themselves operating more independently than during the early days of ancillary therapy employed under the direction of psychiatrists. Music could be used to teach academic, social, motor, and language skills. Used to evoke affect, as stimulus control or reinforcement, and as a vehicle to learn sequential material or behaviors, music can be applied effectively as a tool for learning with any type of disability, even deafness. Music provides a resource for integrating students with disabilities with peers who have no disabilities.

The profession is tightly regulated by the National Association for Music Therapy, which prescribes training, has developed a national certification examination, and certifies registered music therapists (RMT). Contact: National Association for Music Therapy, 8455 Colesville Road, Suite 993, Silver Spring, MD 20910.

Historical Encyclopedia of School Psychology

Edited by
Thomas K. Fagan
and
Paul G. Warden

GREENWOOD PRESS
Westport, Connecticut • London