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ABSTRACT

The purpose of this digest is to summarize major portions of the literature on assessment in counseling and therapy. In this collection of 32 digests, assessment is used to refer to assessment of clients as well as evaluations of program and counselor effectiveness. Recognized professionals have written about topics that are grouped into nine broad areas: (1) Assessment in Counselor Education and Evaluation--at all levels; (2) New Forms of Assessment--including performance assessment; (3) Assessment of Traits--particularly abilities, interests, self-concept, and temperament; (4) Assessment for Diagnosis--especially for children with disabilities; (5) Assessment in Career Development--focusing on different facets of the measurement of career interest; (6) Social Context of Assessment--addressing fair and ethical practices; (7) Modifications for Special Assessment Circumstances--such as computers and for children with disabilities; (8) School Psychologist's Roles in Assessment; and (9) Assessment Professionalism--including the need to look at research on evaluation and assessments. The document includes ERIC searches on assessments in counseling and therapy and an ERIC/CASS resource pack, containing information on submitting documents to ERIC and using the ERIC system. (JE)

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995

Overview of Assessment in Counseling and Therapy

William D. Schafer

The wide range of individual differences among persons with whom counselors deal on a day-to-day basis places extraordinary demands on counselors to understand their clients and their clients' concerns throughout all phases of their work. Assessments are fundamental to those understandings. That there exists a wealth of literature on a wide scope of topics about assessment in counseling and therapy should not be surprising. The purpose of this digest series is to summarize major portions of that literature. Recognized professionals have written about topics that are grouped here into nine broad areas. This forward gives an overview of the authors' explorations of those topics.

(1) Assessment in Counselor Education and Evaluation

Counselors' understandings about assessment are fundamental to effective use of those techniques. Focusing on school settings, Impara compares assessment knowledge of school counselors, principals, and teachers with each other and with existing standards, concluding that all three groups show uneven skills across important assessment topics. The historical debate over school counselors' uses of assessments is reviewed by Schafer, who also describes needed skills based on a review of job analyses of school counselors. These skills are associated with three roles: pupil assessment, program evaluation, and using basic research. Juhnke considers mental health counselors' uses of assessment. He describes some assessment techniques that can be used along with testing, including qualitative assessment approaches, behavioral assessments, and use of past records. He concludes that combinations of assessment methods, used continuously, will best promote effective treatment strategies.

There are two levels of certification for counselors. One is certification of counselor education programs. Bobby and Kandor describe the process used by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) to compare programs in higher education with existing standards. The other is individual certification of counselors. The strengths and weaknesses of various types of information used in voluntary certification processes are summarized by Clawson. He suggests ways in which the National Board for Certified Counselors (NBCC) may modify its methods to incorporate new data sources in its national certification program.

Delivery of service should be evaluated for both formative and summative purposes. Again, there are two levels of evaluation. Assessment of the performance of individual counselors is discussed by Loesch, who considers multiple data sources and problems in the areas of validity and generalizability associated with them. Gysbers describes ways in which school guidance programs are being evaluated using information from three areas: program standards, job descriptions, and results.

(2) New Forms of Assessment

At both individual and institutional levels, assessment techniques are being used in new ways with greater and greater frequency and are being evaluated against new criteria, such as the consequences of their use for educational and other programs. Popham describes some of these new forms of assessment and considers roles counselors can play in order to use and help others use them more effectively.

There are two basic types of assessment that are receiving more emphasis. One of these is performance assessment. Stiggins summarizes how to develop and evaluate performance assessments and relates this form of assessment to the roles of counselors. The other is portfolio assessment. Arter, Spandel, and Culham describe the many uses of portfolios, how those uses can be made most effective, and some issues that need to be resolved about their use, particularly in high-stakes applications. Roeber relates new systems of assessment to the school reform movement at the national, state, and local levels. He challenges those involved in assessment policy to coordinate their efforts both to assist schools and to document their effectiveness.

3) Assessment of Traits

Individuals differ from one another in more ways than we will ever be able to assess. The focus here is on abilities, interests, self-concept and temperament. Harrington describes fifteen abilities and considers the use of self-estimates as a promising means to enhance self-awareness. Hansen reviews the historical development of assessments of interests, describes the approaches used in major existing inventories, and explores uses of computers in interest assessment.

While abilities and interests are assessed routinely in most educational settings, self-concept and temperament are evaluated more often for research purposes or when in-depth understanding of an individual is needed. The nature of self-concept as a trait is considered by Strein, who also describes some commonly used self-concept

measures. He offers cautions for counselors to consider in using existing assessments. Teglasi reviews ways in which temperament has been conceptualized and how those conceptualizations have been expressed in existing measures. She also relates temperament to personality and points out the need for refinement of both the construct of temperament and its assessment in educational and mental health contexts.

(4) Assessment for Diagnosis

Assessment plays a crucial role in delivery of special services to individuals. Vacc and Ritter note that all children are entitled by law to appropriate and free educational and other services regardless of their disabilities. They describe trends in assessment for diagnosis at the preschool level and roles various professionals, including mental health practitioners, play in the process. Once children enter school, screening generally focuses on diagnoses different from those at the preschool level. De La Paz and Graham discuss identification of disabilities in elementary grades through high school. They highlight increased use of better screening procedures and pre-referral interventions as promising ways to address problems of misclassification.

(5) Assessment in Career Development

In career development, both individual and environmental exploration are needed to help individuals lead full, productive lives. Using the premise that a career is a way to implement a self-concept, Prediger attempts to formulate a coherent understanding about the design of assessment components in programs for career development. Hartung focuses on modern approaches to assess career indecision and choice status. Problems of stereotyping by gender are discussed by Farmer, who concludes that counselors bear responsibility for gender-fair career development in order to implement the exploration validity of career interest measurements.

Employability assessment is an area that has received markedly increasing attention in recent years. Saterfiel and McLarty describe assessment of employability skills and discuss several examples that expand on attempts to identify what those skills are. Uses of portfolios to capitalize on the development of understandings about employability in designing and evaluating career development programs are considered by Lester and Perry.

(6) Social Context of Assessment

Throughout all assessment applications, it is important to engage in fair and ethical practices with respect to persons, both individually and in groups. Schmeiser reviews several ethical statements that pertain to assessment, raises issues about their enforcement, and offers some suggestions about including ethics in the education of professionals. Sedlacek and Kim describe ways in which assessments are commonly misused in multicultural settings and how professionals can guard against these misuses, as well as areas of needed research. In the context of performance assessments, Lam differentiates two orientations to fairness: equality and equity. He concludes that each view has both positive and negative ramifications.

(7) Modifications for Special Assessment Circumstances

Special circumstances is used here to describe both measurement conditions and individual needs. Sampson identifies five ways in which computers may be incorporated into assessment and discusses their benefits and limitations. He concludes that counselors should play a major role in shaping applications of computer technology in their fields of practice.

Implications of the Americans with Disabilities Act for assessment are described by Geisinger and Carlson. Most of these are in the areas of test selection, administration, and interpretation. Some practical suggestions for counselors are discussed.

(8) School Psychologists' Roles in Assessment

Rosenfield and Nelson review historical roles for school psychologists in assessment. They differentiate current practices into three areas: making entitlement/classification decisions, planning interventions, and evaluating outcomes. They argue for greater emphasis on collaboration. Echoing that emphasis, Smith describes advantages of collaboration between school psychologists and counselors; broader, multidisciplinary teams are also considered.

(9) Assessment Professionalism

Plake and Conoley describe materials produced by the Buros Institute of Mental Measurements, including publications, symposiums, library collections, CD-ROM's, and a desk reference series for the individual practitioner. Drake and Rudner offer an assessment-oriented tour of the information superhighway. They describe opportunities that are available through selected listserves, gopher sites, and an ERIC e-mail resource and, in a user-friendly way, take us through how to do it.

Kapes describes how to locate and evaluate career assessment instruments. He reminds us that the user is responsible for the final judgment about whether a particular instrument is appropriate.

As we read research and test reviews, we should be aware of the need to be critical consumers of the information. Thompson describes three prevalent inappropriate practices that we should be alert for: ascribing reliability to tests, confusing statistical significance with practical importance, and using stepwise selection of variables in multiple regression (and other) contexts.

Final Note of Appreciation

Many thanks are due the authors of these digests. Active professionals are used to writing tersely, but hardly ever under such a stringent length limitation for such a broad topic as each one of these digests represents. Several agonized phone calls and e-mail messages over the last couple of months attest to both frustration and perseverance on the part of the authors. Meeting stringent deadlines was also necessary. That so many busy professionals accepted and met this challenge is testimony to the spirit of research dissemination that characterizes our profession and is fostered by the ERIC clearinghouses.

It has been a pleasure to serve as a guest editor in the ERIC/CASS digest series program. I hope you, the consumer, feel your time reading these digests is time well spent.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-1

Assessment Skills of Counselors, Principals, and Teachers

James C. Impara

There are several methods one might use to determine the level of skills and knowledge of educational practioners in the area of student assessment. One method is to survey various groups of education professionals and ask them to self-report on the extent of their knowledge (or their confidence) in skills associated with student assessment. This is the approach typically taken by researchers who have investigated the topic among counselors (Elmore, Ekstrom, & Diamond, 1993), principals, and teachers (Fennessey, 1982; Infantino, 1976). A second way to undertake research in this area is to develop a test of assessment skills and knowledge and administer it to groups of counselors, principals, and teachers. This approach was used by Impara, Divine, Bruce, Liverman & Gay (1991) and by Impara and Plake (in press). A third method, particularly suitable for teachers, is to examine the tests they develop and infer their knowledge of principles of test construction (Gullickson & Ellwein, 1985); this method provides only limited information about their knowledge of assessment skills.

A precursor to measuring the assessment skills of educational professionals is identifying the skills to be measured. This might be done by undertaking a job analysis, e.g., asking counselors, principals, and teachers what assessment skills and knowledge they need to perform their job. Another way is to seek appropriate professional standards that might define the scope and level of assessment skills and knowledge needed.

Standards for Assessment

The major, and most general, standards are the *Standards for Educational and Psychological Testing*, (American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME), 1985). More directly relevant to assessment skills are the standards that have been (or are being) developed by professional organizations responsible for certifying or otherwise imposing some degree of control or direction over the profession. Among the standards developed for counselors that are relevant to assessment are: Responsibilities of Users of Standardized Tests (American Association for Counseling and Development (AACD)/Association for Measurement and Evaluation in Counseling and Development (AMECD), 1989); *Ethical Standards* (AACD, 1988) (currently under revision); and the CACREP Accreditation Standards (Council for Accreditation of Counseling and Related Educational Programs, 1994).

In a joint endeavor the American Federation of Teachers (AFT), NCME, and the National Education Association (NEA) produced the *Standards for Teacher Competence in Educational Assessment of Students* (1990). In a follow up to that effort the American Association of School Administrators (AASA), National Association of Elementary School Principals (NAESP), National Association of Secondary School Principals NASSP), & NCME have drafted the *Competency Standards in Student Assessment for Educational Administrators*. (these standards should be available from the participating organizations by mid 1995)

The Research Findings on Skills and Knowledge of Educational Professionals

Elmore et al. (1993) surveyed counselors, in-part to collect information related to the measurement dimensions of the *Ethical Standards* (AACD, 1988). The questionnaire asked counselors about their level of confidence associated with undertaking various assessment activities. The results indicated that many counselors feel highly confident about using test results (69%), selecting tests (67%), administering tests (90%), and interpreting test scores (72%). Counselors also reported high levels of confidence in using test norms (72%), using statistics like the mean, standard deviation, and correlation (67%), using test reliability and validity information (59%), and using the standard error of measurement (58%) (Elmore et al., 1993, p.118).

Impara et al. (1991) investigated the extent that elementary and secondary teachers' interpretation of a standardized test score report from a state testing program was aided by the interpretative information provided by the scoring service. They found that teachers who had the interpretive information made fewer errors responding to test questions based on the score report than did teachers who did not have the benefit of interpretive information. (14 of 17 correct vs. 12 of 17 correct) The most difficult items for all the teachers related to interpreting percentile bands. Some teachers, especially those at the secondary level, commented that they did not have to know how to interpret test scores because they could rely on the school counselors to interpret and explain test scores to students.

In a later study, Impara and Plake (in press) obtained responses from over 900 Virginia educators (balanced about equally among counselors, principals, and teachers at both elementary and secondary levels) on a test developed using as test specifications the *Standards for*

Teacher Competence in Educational Assessment of Students (AFT, NCME, & NEA, 1990). Counselors' strengths were associated with items relating to test selection, validity, communication of assessment results and ethical practices. Unlike both principals and teachers, counselors showed particular strength in their basic understanding of the concept of reliability and measurement error, and their ability to interpret scores from standardized tests. In contrast to counselors, both principals and teachers more often confused reliability and validity.

Principals showed strength in understanding the bases for selecting an assessment strategy and the methods for determining validity. Most principals also answered correctly items addressing communication of test results, but (like teachers and counselors) were less proficient in the interpretation of standardized test results. Finally, principals' scores were very high on the items measuring the recognition of ethical practices.

Although teachers' strengths were similar to those identified for principals and counselors, many teachers (about 37%) did not understand the correct interpretation of grade equivalent scores. All respondents had problems understanding how to combine scores from individual assessments, e.g., several tests, into a single summary grade. As in Impara et al. (1991), many teachers, especially those in secondary schools, indicated they rely on counselors to provide interpretations of standardized tests.

In terms of the overall performance of the different levels of professionals in this study, the counselors at both elementary and secondary levels and the elementary principals received higher scores than did either the teachers or secondary principals. It is clear that teachers rely on counselors and that this group of professionals is expected to serve in a consulting role to other professionals within the school in many matters of testing and assessment, especially when dealing with formal testing programs. In elementary schools where counselors are least likely to be available, principals may need to serve in the same consultative capacity as counselors do in high schools, so they, too, must be adequately prepared to assist teachers in matters related to formal testing programs. As a group, however, none of the professionals surveyed are well prepared in the development and use of assessments at the classroom level.

Summary and Conclusions

The findings from Elmore et al. (1993), Impara, et al., (1991) and Impara & Plake (in press) parallel each other and those from the self-report studies reported by other researchers in that many educational professionals have some knowledge of assessment practices, ranging from principles of test development and use to the practices associated with the use and interpretation of standardized and teacher-made tests. The skill levels associated with many important student assessment principles is, however, not consistent with the Standards adopted by professional organizations.

The various standards that have been developed and endorsed by the professional associations in education are important documents and they provide excellent guides for the professional development of educators who work with assessment information on a regular basis. Clearly the assessment skills and knowledge of counselors, principals, and teachers are lacking in some important areas while in other important areas these educational professionals are highly skilled and knowledgeable.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-2

Assessment Skills for School Counselors

William D. Schafer

Perhaps the most controversial area within counselor education is that of assessment. Following Shertzer and Linden (1979), assessment is used here to mean methods or procedures that are employed to obtain information that describes human behavior. The purpose of this digest is to describe school counselors' roles in the area of assessment. Following an historical review of testing in counseling, some findings of a study by Schafer and Mufson (1993) that described roles employers require school counselors to perform are discussed. Conclusions are related to improving quantitative literacy in counselor education.

Historical Perspective

Knowledge needed by counselors to obtain evidence, evaluate its usefulness, and interpret its meaning have long been and continue to be debated. According to Minor and Minor (1981), that debate arose, in part, from the adoption of a humanistic perspective by many counselors and counselor educators, leading to a de-emphasis of models of counseling that entail quantitative assessment. In the 1960's, tests were viewed positively and were used primarily to identify students of outstanding abilities (Zytowski, 1982). However, in the early 1970's, Goldman (1972) suggested, using a well-known metaphor, that the marriage between tests and counseling had failed. At about that time, courts prohibited some established tests for certain purposes and legislatures passed bills to regulate aspects of the use of standardized tests. The validity and practical utility of all testing and appraisal techniques were questioned and negative consequences of "labeling" were emphasized.

Yet assessment remained commonplace in schools. Consider these findings in a survey by Engen, Lamb, and Prediger (1981) and reported by Zytowski (1982): 93% of secondary schools administered at least one test to all students; 76% administered achievement test batteries; 66% administered academic aptitude or intelligent tests; and 16% administered inventories of school or social adjustment or personality tests. By the 1980's, vocational guidance, according to Zytowski (1982), had become a unifying force between counseling and testing.

Zytowski (1982) described several changes that had been made in tests, themselves, and in their uses in counseling. One of these was an erosion of reliance on predictive validity and an accompanying emphasis on convergent and discriminant validity, along with construct validity. He also described the value of an assessment in terms of its ability to guide and motivate a professional toward seeking additional information for decision making. De-formalizing assessment, another change, included increased use of one-item measures, informed self estimates, and card sorts or inventories in which quantified outcomes are less important than is the process the client engages in. Computers had become more instrumental in testing, from primarily scoring and score reporting to actual test administration and providing immediate feedback. Availability and interest in computer testing have clearly increased in the decade since Zytowski's summary appeared.

The counseling community has become more aware of ethical issues in testing. An American Counseling Association (ACA) statement titled Responsibilities of Users of Standardized Tests (RUST), published in 1978 and revised in 1989, urges awareness of differing purposes for testing and reminds us to consider the limitations of tests for any purpose and to evaluate the costs of not testing or using alternative methods of gathering the information needed.

Job Descriptions of School Counselors

In their study of skills needed by school counselors, Schafer and Mufson (1993) reviewed job analyses conducted by five school districts in five different states. They found a natural division of the job role expectations of school counselors into six areas: counseling (individual and group), pupil assessment, consultation, information officer, school program facilitator, and research and evaluation. There are assessment-intensive aspects of each of these.

The counselor's major function in the school is to counsel students individually and whenever practical in small or large groups. The counselor also is responsible for identifying students with special needs. These activities include interpreting test scores and non-test data.

Pupil assessment includes scheduling and preparing for testing, scoring them or sending them out for scoring, recording results, and scheduling for interpretation. Counselors are also responsible for assisting students in evaluating their aptitudes and abilities through interpreting standardized tests. They may be expected to advise teachers who need to understand psychological evaluations and who are interested in improving their content-referenced testing skills.

The third function is that of a consultant. The counselor consults with and advises teachers, parents, and administrators in guidance matters and test score interpretation. In some schools the counselor helps teachers with psychological evaluations and content-referenced testing

and advises school committees in selection of tests.

The function of information officer includes informing parents, teachers, and staff about counseling services, informing employers and colleges about students according to school policy, and ensuring two-way communication between school and home. Many of these activities involve test interpretation.

The fifth function is administrative, including school administration and counseling administration. Within school administrative, the counselor is responsible for administering tests. Within counseling administrative functions, the counselor is expected to analyze guidance services. Also, the counselor is often asked to participate in decisions about the instructional curriculum.

The sixth function is research and evaluation. The counselor may be responsible for evaluating the school guidance program. The counselor is also expected to read and interpret literature to apply research findings to everyday counselees' situations and to improve his or her skills continuously through evaluation of counseling techniques.

The counselor responsibilities identified by Schafer and Mufson (1993) would likely be found in the large majority of school districts across the nation. Within the area of assessment, roles include test interpreter, test developer, evaluator of programs, consultant, and researcher. Several studies reviewed by Schafer and Mufson (1993) were supportive of these roles.

Assessment Skills Required by School Counselor Roles

The roles that have been identified imply that counselors should have certain skills related to assessment. Schafer and Mufson (1993) organized these into three areas: doing pupil assessment, doing program evaluation, and using basic research.

Doing pupil assessment includes: types of assessment; assessment systems and programs; test administration and scoring; test reporting and interpretation; test evaluation and selection; design, analysis, and improvement in instrument development; formal and informal methods of assessment; methods for using assessment in counseling; administrative uses of assessment; computer-based applications; and ethics of using assessments.

Doing program evaluation includes: needs assessment; formative and summative evaluation; sources of evaluation research invalidity (instrumental, internal, and external); choosing evaluation designs; choices of and computational methods for descriptive and inferential statistics; writing evaluation proposals and reports; disseminating information; and research ethics.

Using basic research includes: locating and obtaining relevant research reports; reading and summarizing research reports; evaluating validity of instruments and research designs; and purpose and assumptions of common inferential statistical procedures.

Conclusions

Schafer and Mufson (1993) generated aspects of school counselors' roles that are related to assessment. They also generated a list of assessment-related content areas in the CACREP standards that pertain to school counselor education programs. In order to study the fit of these two lists, for each job-definition role, they reviewed those CACREP content areas that seemed supportive of it. They concluded that these CACREP skills, conscientiously presented in a counselor education program, would in most areas constitute an adequate preparation for a beginning-level school counselor.

Focusing on the role of test interpreter, however, Goldman (1982) found little research evidence that tests as they have been used by counselors have made much of a difference to the people they serve. He felt the reasons are that counselors have not been prepared adequately to understand psychometric evidence, and that the predictive validity of test information is inadequate to support individual interpretation. He suggested that schools and other institutions should reduce the use of standardized tests and replace them with less formal and less quantitative methods. However, the implications for assessment in counselor education programs of such a shift are unclear. It seems unlikely that formal assessment methods will disappear from schools.

Perhaps, as Daniels and Altekruse (1982) observed, lack of integration of assessment and counseling rests on counselor educators' failure to provide integrating guidelines in both assessment and counseling coursework. Among other recommendations, they concluded that counselor educators should become more responsible for teaching assessment content as well as for demonstrating its interrelations with counseling in their other courses. Shertzer and Linden (1982) have suggested that a more systematic approach to counselor education at both the preservice and the inservice levels can produce professionals who are more sophisticated in the practice of assessment and appraisal. The same seems true in the areas of program evaluation and basic research.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

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1995 EDO-CG-95-3

Mental Health Counseling Assessment: Broadening One's Understanding of the Client and the Clients Presenting Concerns

Gerald A. Juhnke

Assessment has experienced a resurgence in recent years both in the United States and abroad (Piotrowski & Keller, 1992; Watkins, 1994). Some continue to use the terms assessment and testing interchangeably. Both are vitally important to the counseling process (Lambert, Ogles, & Masters, 1992). Yet, assessment is broader in scope than testing. Typically, assessment includes gathering and integrating information about a client in a manner that promotes effective treatment (Cohen, Swerdlik, & Smith, 1992). This can be accomplished by using testing in conjunction with other methods, such as qualitative techniques, behavioral assessments and review of past client records. Testing should not be used as the only source of information about a client (Anastasi, 1992).

Corroborating data from a number of sources helps create a more thorough understanding of the client and his or her presenting concerns. The counselor can then interpret these data and formulate hypotheses related to the client's strengths and weaknesses. Data gathered and the hypotheses formed, thereby, contribute to the creation of an effective counseling strategy. This digest discusses how counselors can use assessment as a continuous process throughout treatment. It also reviews three common forms of assessment techniques which can be used in conjunction with testing.

Continuous Assessment

Vacc (1982) notes, "Assessment in counseling should be viewed not as a one-time prediction activity but rather as continuous throughout the counseling process..." (p.40). Continuous assessment influences the direction of treatment in two ways. First, presenting concerns and client circumstances are not static. Goals identified by the client during the initial assessment often must be modified or re-ordered to meet new and urgent client needs. Continuous assessment apprises the counselor of possible new and urgent needs which have arisen since the initial assessment. These needs can then be addressed through the counseling process. Second, assessment can aid in evaluating the efficacy of treatment. Upon entering treatment, an initial assessment establishes the client's baseline of functioning. Continuous assessment allows comparisons between this initial base-line and the client's current functioning. Improvements suggest treatment efficacy and the benefit of continuing the current treatment course. Reduction in functioning or a lack of improvement, however, suggests a need to alter treatment. Continuous assessment, therefore, is important, because it keeps the counselor apprised of the client's ever changing needs and indicates treatment efficacy.

Qualitative Assessment

Qualitative assessment techniques are compatible with the belief that "...assessment activities should not stand outside the change process; rather, they should blend into treatment strategies to guide self-discovery and to inform clients" (Drum, 1992, p. 622). Unlike standardized tests, qualitative assessments often consist of games or simulation exercises that are flexible, open-ended, holistic, and nonstatistical (Goldman, 1992). Typically a debriefing follows the qualitative assessment experience. Clients can process what they learned from the experience immediately within the counseling session.

One commonly used qualitative assessment experience is called, "The Life Line" (Goldman, 1992). The intent of this experience is to help clients reflect upon significant past events which have influenced them. Clients draw a horizontal timeline on a blank sheet of paper. They are then asked to recall past significant experiences, relationships, events or wishes which have influenced their lives, and to plot these along the timeline. The result gives the counselor detailed information about significant events in the client's developmental history.

Similarly, role plays can serve as a qualitative assessment experience. For example, a mental health counselor may ask a client to role play a recent anxiety provoking experience (e.g., an argument with a supervisor, receiving a speeding ticket, etc.). The role play provides the mental health counselor with a sample of the client's behaviors. As the role play is being demonstrated the counselor can query the client regarding possible negative self-talk (e.g., I'm so stupid, he'll never listen to me, etc.). Understanding the self-talk used by a client can help the counselor generate effective intervention ideas. Clients can also practice new counselor-directed behaviors or self-talk (e.g., I'm intelligent, he'll want to listen to me) within the counseling session through role plays.

Another qualitative assessment technique that can provide valuable information is a photograph safari. Depending upon the presenting concerns, the counselor may request that the client bring to the session photographs of the client's family-of-origin or childhood. The counselor and client can jointly review these photographs.

Particular attention should be paid to: (a) those present in the photographs; (b) those consistently absent from the photographs (e.g., Are the client's siblings always included in the photographs but the client absent?); (c) common themes of the photographs (e.g., Are all the pictures taken on the family farm? Are pictures only taken during certain holidays?); (d) proximity to significant others posing in the photographs (e.g., Is the client consistently posed beside the client's father? Is the client consistently standing apart from other family members?); and (e) emotions displayed on family member faces (e.g., Does the client consistently pout or appear angry in photographs?). Such qualitative assessment techniques can promote insight for the client and therapeutic direction for the counselor.

Behavioral Assessment

Counselors using behavioral assessments are most interested in recording manifest behaviors. Emphasis is placed upon identifying antecedents to problem behaviors and consequences that reduce their frequency or eliminate them (Galassi & Perot, 1992). Both indirect and direct methods are used for behavioral assessments. Indirect methods of behavioral assessment might include the counselor interviewing the client or talking to significant others about the reported problem behavior. Indirect behavioral assessment provides important information about the client and the client's presenting concerns, but the information obtained may be contaminated by misperceptions or biases about the client or the client's behaviors. More direct methods reduce the probability of misperceptions or biases, and might include counselor observation of the client or client self-monitoring. A behavioral problem checklist or procedures especially designed to record the client's concerns directly (e.g., recording the frequency, duration and intensity of marital arguments) can be used to help clarify possible antecedents to behavioral problems and record what subsequent interactions result in their discontinuance.

Past Records

Reviewing previous client records (e.g., counseling, school, police, medical, military, etc.) help the mental health counselor identify important patterns which the client may be unaware of or disinclined to discuss readily (e.g., problems with authority figures, self-injurious behaviors occurring after the ending of significant relationships, etc.). These records can be a vital source of information. Often a review of previous counseling records will indicate what types of treatment were attempted. Previously ineffective treatments can be ruled out, and treatment regimes found helpful reimplemented.

Concomitantly, past records link the client's history to the presenting concern. A counselor can gain increased clarity of the immediate concern based upon an improved understanding of previous stressors or transitions leading to the client's current condition. The Counselor can then address the cause(s) of the symptoms rather than the symptoms, themselves.

Summary

Assessment provides direction for treatment and aids in the evaluation process. Although many methods can be employed to promote a thorough assessment, no one method should be used by itself. Ultimately, it is the counselor's responsibility to gain sufficient information regarding the client and the client's presenting concerns to establish an effective treatment strategy. Using a combination of assessment techniques increases the likelihood of positive interventions and promotes successful treatment.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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CACREP Accreditation: Assessment and Evaluation in the Standards and Process

Carol L. Bobby and Joseph R. Kandor

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) was organized in 1981 as the accrediting agency responsible for reviewing and evaluating counseling and student affairs practice in higher education programs against a set of nationally recognized standards. Its incorporation as an independent body was the culmination of years of work by the American Counseling Association (ACA) and its divisions to define the knowledge and skills required for entry into the profession and to advocate that these requirements be implemented by the preparation programs offering counseling and student affairs practice degrees. Striving to foster excellence in its organizational development, CACREP sought an external review and evaluation of its own accrediting practices by the Council on Postsecondary Accreditation (COPA) and was awarded recognition status by this body in 1987. This recognition has been maintained and was recently transferred to the Commission on Recognition of Postsecondary Accreditation (CORPA) in a recent restructuring of the recognition function.

As a CORPA recognized accrediting agency, the CACREP accreditation process must incorporate a pattern of review that includes integral self-study of the program against nationally accepted criteria, followed by an on-site visit by an evaluation team, and a subsequent review and accreditation decision rendered by a central governing group. This pattern illustrates the important role that assessment and evaluation play in every accreditation agency's process. The purpose of this digest is to explore the specific levels of assessment and evaluation involved in the CACREP accreditation process, as well as to provide an overview of curricular experiences in assessment and evaluation.

Assessment and Evaluation in the CACREP Review Process

The CACREP review process is a multi-level assessment and evaluation process with four basic levels of review occurring simultaneously. These levels are: 1) the program's internal assessment and evaluation of how the CACREP standards are implemented; 2) an external review of the program by CACREP to determine compliance with the standards; 3) regular and systematic program evaluation based upon the program's own mission and objectives; and 4) regular and systematic evaluation of CACREP's accreditation process based upon its mission and objectives. As a voluntary activity, a program's participation in the CACREP review process speaks to a high level of commitment to quality assurance in program delivery to students.

An Overview of the Accreditation Review Process

The first two levels listed above are integral to the CACREP accreditation process, as they involve the three general requirements of self-study, on-site evaluation, and final decision review that are common to all accrediting agency reviews. Within these three general requirements, however, are many points at which assessment and evaluation occur. During the internal review, a program begins to examine itself against the CACREP eligibility requirements and standards. Following a preliminary review of the accreditation standards, a program will need to assess resources such as faculty support, institutional support, administrative support, budgetary support, clinical facilities, library and research facilities and services, and student enrollments to determine if the benefits of pursuing accreditation at this time can be balanced with the costs and potential need to reallocate resources. If the answer is yes, the program begins a more formal internal evaluation of how each of the CACREP standards is perceived to be met. The results of this evaluation are compiled in a self-study report, appended with supporting documentation, and submitted to CACREP for an external review.

The external review also requires several steps. First is an initial review of the self-study report by a subcommittee of CACREP's governing board. If the reviewers concur that the self-study adequately addresses the eligibility requirements and standards, a site visit is recommended. The next phase of review involves sending a team of trained volunteers to the campus to validate the responses provided in the self-study report. The team spends a minimum of three days at the program's campus evaluating the program against the standards by reviewing additional documentation, visiting relevant facilities and sites, and interviewing students, graduates, faculty, administrators and clinical supervisors. At the completion of the on-site visit, the team members submit a report to CACREP that reflects their evaluation of the program's compliance with the standards. Programs are then allowed to review the team's report and respond to the relative accuracy of its content.

The final step of the external review entails an evalua-

tion of a program's compliance with the standards by CACREP's governing body, the Board of Directors. At this point in the process, the Board has access to the original self-study report, the team's report, the program's response to the team's report, and all appended documentation. A thorough review of all documents occurs and a decision is rendered to award or deny accreditation to the program.

Program Evaluation Requirements

In addition to the internal and external evaluation that occurs as part of the CACREP accreditation review process, a program seeking accreditation must document its own process of regular and systematic program evaluation. According to Section VI: Evaluation in the Program of the CACREP Standards, such evaluations should include:

1) developmental, systematic assessment of each student's progress throughout the program with consideration given to academic performance, professional development, and personal development;

2) internal and ongoing reviews by program faculty of curricular offerings, objectives, professional trends, student learning outcomes, and types of students seeking admission to the program;

3) external review through follow-up studies with graduates of the program to assess their perceptions and evaluations of major aspects of the program;

4) assessment of perceptions about the program among employers of graduates, field placement supervisors, and cooperating agency personnel, and;

5) assessment of faculty by currently enrolled students.

These criteria insure that evaluation become an important component of every CACREP accredited program and that the evaluation involves multi-levels of assessment.

Evaluation of CACREP

The fourth level of evaluation important to the CACREP accreditation process involves evaluating the evaluators; that is, CACREP's examination of itself through internal and external review mechanisms. Just as programs seeking accreditation are required to complete a self-study report that addresses a program's compliance with standards, CACREP must periodically review itself against a set of criteria that represent good accrediting practices. Documenting compliance with these criteria is the basis for receiving and maintaining status as a recognized accrediting agency. Similar to the CACREP process, the recognition process entails a series of review steps before final decisions are rendered.

In addition to this review process, CACREP has also put into place a series of procedures to allow for regular and systematic review of its activities. A complete review of the CACREP standards must occur every seven years. It is at this time that CACREP seeks comment from educators, practitioners, administrators, supervisors, students, graduates, employers, and the public regarding the content of its curricular, clinical, institutional, and program requirements. Rationales for recommended changes with an assessment of the impact of the recommended changes are reviewed by a committee, and drafts with recommended changes circulated for further comment. The process entails a series of draft review and comment periods prior to final adoption of revised standards. The process ensures that the standards remain responsive to the needs of a dynamic and changing society.

Other avenues of evaluation include assessing a program's satisfaction with the conduct of the on-site team visit, as well as the program's perceptions of both the site visitors' and CACREP staff's understanding of the philosophy of accreditation and knowledge of the standards. CACREP staff have also conducted periodic research on issues such as inhibitors to seeking accreditation and the frequency with which certain standards are cited for noncompliance in the final accreditation review.

Curricular Experiences in Assessment and Evaluation

Within a CACREP program, students must complete coursework related to assessment and evaluation. Standard II.J.6-Appraisal and Standard II.J.7- Research and Program Evaluation in the CACREP Accreditation Standards and Procedures Manual (1994) outline the specific curricular experiences required of every student in the program.

Appraisal includes studies that provide an understanding of individual and group approaches to assessment and evaluation. Research and program evaluation requires studies that provide an understanding of types of research methods, basic statistics and ethical and legal considerations in research.

Within doctoral programs, students must receive curricular experiences that represent an extension of the requirements for appraisal and evaluation outlined above (Doctoral Standard II.A). The program must also provide the doctoral student with advanced preparation in design and implementation of quantitative and qualitative research and methodology (Doctoral Standard II.C.4) and models and methods of appraisal (Doctoral Standard II.C.5).

Summary

The concepts of assessment and evaluation are significant throughout the CACREP accreditation process and standards. Assessment and evaluation remain at the heart of the practice and procedures used by CACREP to ascertain whether a program will achieve or be denied accredited status. Furthermore, the accreditation standards themselves require that not only are students provided knowledge and skills in the areas of assessment and evaluation, but that programs regularly and systematically assess these types of curricular offerings, along with other aspects of program operations.

The importance of CACREP undergoing periodic evaluation of its own accrediting practices and standards should not be underestimated. It is the combination of results from each of the various levels of evaluation described in this paper that allow for quality assurance in program development while simultaneously embracing change so that entering professionals will have the knowledge and skills necessary to deal with our rapidly changing society

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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The Role of Assessment in Counselor Certification

Thomas Clawson

Certification of professional counselors is presently viewed in two realms, that of state regulation and of national voluntary credentialing. Many states use the term certification in two contexts, school counselor certification and certification to practice counseling privately for a fee. In this digest, we will consider national voluntary certification only.

The first national certification began in 1972 with the incorporation of the Commission for Certification of Rehabilitation Counselors. In 1979, the National Academy for Certified Clinical Mental Health Counselors began certifying counselors trained in the specialty of clinical mental health counseling. Soon after, in 1984, the National Vocational Guidance Association (now the National Career Development Association)began certifying career counselors. In 1983, the National Board for Certified Counselors (NBCC) began certification for general practice counselors. And, as this digest is being written, the International Association of Marriage and Family Counselors is beginning a certification process. Clinical mental health counselors and career counselors have merged with the National Board for Certified Counselors to become a specialty certification of the general practice of counseling.

Across the realm of certifications in the counseling profession is the common thread of assessing individual counselors, training, supervision, experience, and knowledge; the similarities across the processes are remarkable.

Methods of Assessment

Counselor certification begins with individuals providing certification boards with a portfolio of data pertaining to their training, supervision, experience, and knowledge. All are areas of difficulty in quantifying or qualifying.

Training

Training is perhaps the easiest certification area to assess but even in evaluation of coursework, a variety of factors are evident. Most academic training reviews require determination of term (semester, trimester, quarter) hours awarded for graduate study in regionally accredited institutions. Course titles of counseling and related disciplines number in the thousands. Certification boards must categorize courses by reviewing catalogue course descriptions or syllabi. While quantifying transcript review appears to be a simple task, it consumes a great proportion of portfolio review time.

A further complication in determining appropriate training appears when certifying boards accept nontraditional education. Processes must be developed that compare home study and other methods of delivery with traditional campus experiences. This may be done by designating which areas of study must be delivered by traditional professor/student/classroom methods and which courses may safely use nontraditional techniques such as distance learning. In counseling, the most important training dynamic is the demonstration of theory-to-practice transference. Topics requiring application of skills to counselees, such as group, individual, or family counseling and assessment of individuals or groups indicate the need for close supervision by a professor.

Supervision

Supervision duration is easily assessed if certification boards can define supervision and supervisors clearly. Then accurate reporting of supervision by supervisors establishes an hour total to judge against a standard number of hours. As the concept of certification has matured the qualification and definition of supervision has advanced. Defining and assessing supervision, however, is probably the least sophisticated and standardized certification area assessed at present. Bernard and Goodyear (1992) point out that as models of supervision grow the research and practice will bring forth clearer definitions.

Experience

Experience is easily quantified for assessment once standards and permutations are set. For example, certification boards may set a year or hour experience requirement and also set ways to accumulate hours of supervised experience at less than full time employment. Again, as certification evolves the ways of achieving experience have become more strict. In counseling, this is probably a result of the maturation of the profession.

Knowledge

Knowledge is relatively simple to assess if the universe of the information to be assessed is small. Counseling information included in the eight core areas of the Council for Accreditation of Counseling and Related Educational Programs are as follows: 1) Human growth and development; 2) Social/cultural and family foundations; 3) The helping relationship (including counseling theories); 4) Group dynamics, processes, and counseling; 5) Lifestyle and career development; 6) Appraisal of individuals; 7) Research and evaluation; and 8) Professional orientation. These core areas are an example of the discipline producing more and more information as the research and literature base of counseling grows. Therefore, sampling the relevant knowledge base becomes an

increasingly difficult task. All counselor certification examinations employ multiple-choice, single-answer formats and range from 100 to 250 items per form.

Because the practice of counseling involves application of information to action, examination constructors face the task of applying knowledge data to cases or situations. The standard beginning point for this application is the job analysis or study of behaviors used in a profession. Most counselor certification exams are based upon comprehensive job analyses of practicing counselors. The National Organization for Competency Assurance requires state-of-the-art job analyses as a prerequisite for accreditation of certification programs (National Organization for Competency Assurance, 1993). Professional examinations which are not based upon comprehensive study of the necessary behaviors needed for professional practice are suspect even before reliability and validity statistics are gathered.

Job Analysis

Shimberg and Rosenfield (1980) identify the general purpose of job analyses as: a process that seeks information from a large number of incumbent practitioners regarding the most important aspects of the job; and the knowledge and skills needed to perform the job in a safe and effective manner (p.14).

Fine (1986) continues that job analyses can also provide definition of the behaviors needed to practice, knowledge and abilities needed in training curricula, and relevant assessments of performance (p. 55).

Loesch and Vacc (1993) describe job analyses as having multiple facets to obtain a picture of a profession. Three major categories of decisions must be considered in conducting a job analysis: a) conceptual; b) procedural; and c) analytical. Conceptual decisions as a basis for a credentialing examination is intended to allow for development of a "test blueprint." Procedural decisions include research methodology, type of examination format, and item generation technique. Analytical decisions involve the statistical and methodological treatment of the list of professional behaviors generated (pp.5-6).

So, job analysis is not directly applied to the individual applicant for certification, but to a large group of practicing professionals. It is the precursor to assessment of certificants and, indeed, essential for logical application of certification criteria.

Continuing Training

Continuing training is an ongoing assessment process that begins, for certification purposes, after credentialing is achieved. Most certifying boards require continuing education as a part of recertification. Some require both continuing education and re-examination periodically. The NBCC requires twenty clock hours of continuing education per year over each five year certification period. All certificants must attest to continuing their training.and submit to random inspection.

Recommendations

Every national program certifying counselors uses multiple-choice examinations as part of the application requirement. While this method can assess information retention readily, it does not lend itself to measuring counseling skills and application of theory to skills. Recent revisions of the National Counselor Examination for Licensure and Certification (NCE) have included more applied items. Future modifications should include methodologies that assess skills better. Tape simulations, computer applications, branching answer format, in vivo review, and case scenario models all may be included in future revision. These modifications, of course, have expense implications, which has been the major force in retention of multiple choice formats in counselor certification.

In an emerging profession such as counseling, an examination which is not undergoing change will soon be obsolete. Monitoring professional practice, research, and literature, as well as advances in examination development and theory are essential to a good assessment program.

The Clinical Mental Health Counselor Academy of the NBCC has always required a tape sample of counseling with a current counselee. This method requires extraordinary time expenditure by applicants for certification as well as tape reviewers. Each tape is reviewed by clinical counselors to assure clinical counseling skills. Clearly this process demands the most scrutiny of reliability (interrater in this case) of all NBCC processes. Ongoing reliability checks of tape review processes are a must. More research will no doubt help delineate better methods of judging tape samples.

Since NBCC has been gathering data on counselor behavior and examination statistics for over twelve years, the time has come to begin releasing these assessment data for use by those with interest in the profession. Such a process is now occurring beginning with the release of all data regarding the most recent and comprehensive job analysis performed within the counseling profession.

Requiring supervision for certification continues to generate a need for better definitions of supervision and qualification of supervisors. In a profession depending upon performance, supervision of pre-service and in-service counseling is essential. Not only will standards need to be developed further but some more quantifiable measures of supervision must emerge.

Summary

While counseling is an emerging profession, the NBCC has kept pace with national mandates for state-of-the-art assessment techniques. Present methods are constantly being modified in light of assessment advancements. Use of presently unreported data my lead to further positive steps in selecting certificants.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Assessment of Counselor Performance

Larry C. Loesch

Assessment of counselor performance is directly linked to assessment of counseling outcome because, presumably, counseling outcome is contingent upon counselor performance. Thus, the assessment of counseling outcome literature is the general context for the more specific literature on assessment of counselor performance, and the same major themes are evident in both arenas. Historically, counselor performance has been assessed, either directly or *vis-a-vis* outcome, primarily in regard to actual *counseling* service rendered through assessments by counselors themselves, their clients, or external evaluators. However, recently, non-counseling activities also have been assessed as part of the overall evaluation of counselor performance.

Many methodologies have been used to assess counselor performance, including assessments such as interviews, linguistic content analyses, simulations, self-reports, applications of behavioral criteria, and rating scales. The focus of these assessments has ranged from the global to the specific. Rating scales are the most commonly used method, but no assessment procedure has emerged as most psychometrically appropriate, reliable, valid, or effective.

Counselors' Self-Assessments

The (Rogerian) premise that effective counseling necessitates substantial emotional congruence between counselor and client is widely espoused in the counseling profession. The highly personal nature of such emotional congruence suggests that the counselor is the best person to assess it. Thus, a variety of methods, such as "learning diaries," self-rating scales, or audiotaped "introspective dialogues," have been used to allow counselors to indicate the degree to which they have achieved emotional congruence with their clients.

Counselor self-assessments are popular among counselors, and arguably valuable, for purposes of self development and improvement. However, because of their subjectivity, their results rarely have been generalizable. Also, the methodologies generally have not withstood psychometric scrutiny. Therefore, counselor self-assessments are not widely used for effective assessment of counselor performance.

Assessments by Clients

Because counseling is *for* the client, it is a reasonable assertion that the client is the person best able to assess the degree to which the counselor has performed effectively. The credence of this assertion is evident in that client assessment of counselor performance is widely used and many methodologies have been developed to facilitate it. In general, clients have been requested to assess counselor performance in regard to the counselor being or behaving in a helpful way or the degree of the client's personal change.

A counselor's "helpfulness" has been most frequently assessed by clients through use of post-counseling "debriefing" interviews or rating scales. Typically assessed is the client's perceptions of the counselor's personal dynamics (e.g., degree of caring) or actions or behaviors which were helpful. The focus has often been on the latter, but some suggest it should be on the former (Herman, 1993).

Some rating scales have been developed to allow clients to assess counselors' personal dynamics. However, most are intended to allow client evaluation of the extent to which the counselor engaged in behaviors (particularly verbalizations) presumed or established to be related to counseling effectiveness. Some of these instruments have been shown to have quite good psychometric properties. Quality issues aside, however, use of rating scales completed by clients is one of the two most common methods of assessment of counselor performance.

Client self-assessment of change as an indicator of counselor performance typically has involved commentary, ratings, or self or other reported behavior changes. Unfortunately, however, these procedures have been used only infrequently for assessment of counselor performance, probably because the best data are obtained some time after counseling has been terminated.

Assessments by External Evaluators

Assessment of counselor performance by persons external to the counseling relationship is by far the most frequently used approach. The obvious advantage of such assessments is greater objectivity. In addition, external assessments usually are psychologically and behaviorally less intrusive, particularly if the assessments are applied

to audio or video tape-recorded counseling. External assessments also may be more practical because they are more easily applied to different types of counseling (e.g., individual, group, or family) or specific counseling contexts (e.g., see Ponterotto, Rieger, Barrett, & Sparks, 1994).

A wide variety of external assessment methodologies have been employed, including some only infrequently used in the counseling profession such as content analyses, critical incident techniques, or computer simulations (McLeod, 1992). However, rating scales again are the most frequently used assessment method. Rating scales have been developed to assess many different aspects of counselor performance, but most are focused upon the frequency and/or effectiveness of counselors' use of specific and behaviorally defined counseling skills.

The results of external assessments of counselor performance have been used in the context of both formative and summative evaluations. In the formative context, rating scales completed by counselors' supervisors, peers-in-training, or professional colleagues are often used on some regularly scheduled basis to provide process or skill development feedback to the counselors assessed. In the summative context, results from rating scales completed by supervisors, colleagues, or researchers are often used for program or personnel evaluation or research purposes.

Assessment of Non-Counseling Functions

The most recent trend in assessment of counselor performance has been to broaden the perspective on what it means to be an effective counselor, that is, to acknowledge that there is more to being a good counselor than just counseling skill (Bell, 1990). Assessments within this perspective encompass both actual counseling performance and other activities in which professional counselors engage. Assessments in the latter regard typically address activities such as diagnosis, case management, treatment planning, consultation, professional development, research, materials development, and interprofessional communications. These non counseling components of counselor performance are typically assessed through use of rating scales by external evaluators. However, alternatives such as portfolio assessment or service recipient evaluations apparently are gaining favor.

Conclusion

It has long been recognized that good assessment involves multiple measurements of whatever is being assessed, and this principle has been recognized in regard to the assessment of counselor performance (Ridgway, 1990). There are literally hundreds of assessment instruments and techniques available to assess various facets of counselor performance. Therefore, it is not difficult to fulfill the multiple measurement criterion. Ironically, however, some experts have suggested that there are *too many* measures of counselor performance, a problem resulting from the many situation-specific assessment devices that have been developed. Most of these assessments are not derived from clearly defined constructs, are narrow in focus, and lack psychometric quality. Thus, comparability across measurements is restricted and generalizability across situations is limited.

The assessment of counselor performance will be enhanced when assessments are clearly and cogently described (Meier & Davis, 1990) and are used within an effective conceptual (evaluation) scheme (Lambert, Ogles, & Masters, 1992). Even more importantly, however, truly effective counselor performance assessment will be achieved when the assessments used fulfill accepted psychometric quality criteria (McLeod, 1992).

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-7

Evaluating School Guidance Programs

Norman C. Gysbers

"Demonstrating accountability through the measured effectiveness of the delivery of the guidance program and the performance of the guidance staff helps ensure that students, parents, teachers, administrators, and the general public will continue to benefit from quality comprehensive guidance programs" (Gysbers & Henderson, 1994, p. 362). To achieve accountability, evaluation is needed concerning the nature, structure, organization and implementation of school district/building guidance programs; the school counselors and other personnel who are implementing the programs; and the impact the programs are having on students, the schools where they learn, and the communities in which they live. Thus, the overall evaluation of school district/building guidance programs needs to be approached from three perspectives: program evaluation, personnel evaluation, and results evaluation (Gysbers & Henderson, 1994).

Guidance Program Evaluation

Guidance program evaluation asks two questions. First, is there a written guidance program in the school district? And second, is the written guidance program the actual implemented program in the buildings of the district? Discrepancies between the written program and the implemented program, if present, will come into sharp focus as the program evaluation process unfolds.

To conduct program evaluation, program standards are required. Program standards are acknowledged measures of comparison or the criteria used to make judgments about the adequacy of the nature and structure of the program as well as the degree to which the program is in place. For example, here is a program standard:

> The school district is able to demonstrate that all students are provided the opportunity to gain knowledge, skills, values, and attitudes that lead to a self-sufficient, socially responsible life. (Gysbers & Henderson, 1994, p. 481)

To make judgments about guidance programs using standards, evidence is needed concerning whether or not the standards are being met. In program evaluation such evidence is called documentation. Using the standard listed above, evidence that the standard is in place might include the following:

- a developmentally appropriate guidance curriculum that teaches all students the knowledge and skills they need to be self-sufficient and lead socially responsible lives.
- yearly schedule that incorporates the classroom guidance plan (Gysbers & Henderson, 1994, p. 482).

Documentation of such evidence could include:

- guidance curriculum guides
- teachers' and counselors' unit and lesson plans
- yearly master calendar for the guidance program
- curriculum materials (Gysbers & Henderson, 1994, p. 482)

Sometimes the program evaluation process is called a program audit. The American School Counselor Association, for example, uses the term audit in its program evaluation materials. The Association has developed guidelines for a program audit for secondary schools (ASCA, 1986), for middle/junior high schools (ASCA, 1990b), and for elementary schools (ASCA, 1990a).

Guidance Program Personnel Evaluation

Personnel evaluation begins with the organizational structure and activities of the guidance program in a school district. A major first step is the development of job descriptions that are based directly on the structure and activities of a school district's guidance program.

Using the Missouri Comprehensive Guidance Program framework for example, the job description of a school counselor would include the following key duties: implementing the guidance curriculum; counseling individuals and small groups concerning their educational and occupational plans; counseling individuals and small groups with immediate needs and specific problems; consulting with parents and teachers; referring students to appropriate community agencies; coordinating, conducting, and being involved with activities that improve the operation of the school; evaluating and updating the guidance program; and continuing professional development (Starr & Gysbers, 1993). (For examples of job descriptions of other guidance personnel including director of guidance, career guidance center technician, and high school registrar see Gysbers & Henderson, 1994, 422-428).

Guidance program personnel evaluation is based directly on their job task descriptions and usually has two parts: a formative part (supervision) and a summative part (evaluation). The job task description identifies the performance areas to be supervised and evaluated. Gysbers and Henderson (1994) have developed an extensive listing of job task descriptors for school counselors grouped under the basic guidance program components

of guidance curriculum, individual planning. responsive services, and system support plus the areas of professional relationships and professional responsibilities.

Program Results Evaluation

Having established that a guidance program is operating in a school district through program evaluation, and having established through personnel evaluation that school counselors and other guidance program personnel are carrying out the duties listed on their job descriptions 100% of the time, it now is possible to evaluate the results of the program. Johnson (1991) suggested that there are long-range, intermediate, immediate, and unplanned-for results that need consideration. According to Johnson, long-range results focus on how programs affect students after they have left school. Usually long-range results are gathered using follow-up studies. Intermediate results focus on the knowledge and skills all students may gain by graduation from participating in the guidance program. Immediate results are the knowledge and skills students may gain from participating in specific guidance activities. Finally, the possibility of unplanned-for results that may occur as a consequence of guidance activities conducted as a part of the guidance program also need to be taken into account.

For the purposes of this digest, illustrations of immediate and intermediate results evaluation using the structure of the Missouri Comprehensive Guidance Program Model (Starr & Gysbers, 1993) are presented in the form of two research questions. First, do students master guidance competencies as a result of their participation in the Guidance Curriculum Component of the Model (immediate evaluation)? Second, do students develop and use career plans as a result of their participation in the Individual Planning Component of the Model (intermediate evaluation)?

Immediate Evaluation -- Guidance Competency Mastery

Do students master guidance competencies? Johnson (1991) outlined the following procedures to answer this question for immediate results. First the competencies to be mastered need to be identified. Second *what* results (what students should be able to write, what they may be able to talk about, or what they may be able to do) are specified. Then *who* will conduct the evaluation is decided. This is followed by *when* the evaluation is done. Then *criteria* are established so that judgments can be made about students' mastery of guidance competencies. Finally, *how* all of this is done is specified.

Do students master guidance competencies? Another way to conduct immediate evaluation, to measure mastery of guidance competencies, is the use of a confidence survey. In this format, guidance competencies are listed and students are asked to rate how confident they are that they have mastered these competencies. The confidence survey can then be used as a pre-post measure. Gain scores can be obtained and related to such measures as academic achievement and vocational identity. (Gysbers, Hughey, Starr, & Lapan, 1992; Gysbers, Lapan, Multon, & Lukin, 1992; Lapan, Gysbers, Hughey, & Arni, 1993).

Intermediate Evaluation -- Career Plans

Do students develop and use career plans? In making judgments concerning the career plans of students, criteria need to be identified as to what makes good plans. Four criteria are recommended; plans need to be comprehensive, developmental, student-centered and student-directed, and competency based.

Based on these criteria, one way to evaluate students' career plans is to judge the extent to which the activities included in the Individual Planning Component of the guidance program lead to the development of plans that meet these criteria. A second way is to make judgments about the adequacy of the plan contents. Finally, a third way is to judge their use. Do students actually use their career plans in planning for the future?

Summary

In order to fully evaluate comprehensive school guidance programs, three forms of evaluation are required. First, the program must be reviewed using program standards, evidence, and documentation to establish that there is a written guidance program in a school district and/or building and that the written program is the implemented program. Second, guidance program personnel need job descriptions derived directly from the program so that evaluation forms can be developed and used for formative and summative personnel evaluation. Third, results evaluation that focuses on the impact of the guidance and counseling activities in the guidance curriculum, individual planning, responsive services, and system support components of a comprehensive guidance program is mandatory.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-8

New Assessment Methods for School Counselors

W. James Popham

The nature of classroom assessment is changing. Teachers today are being urged to rely less on traditional tests, such as those containing multiple-choice, true-false, and essay items. Instead, teachers are being encouraged to embrace innovative measurement methods, including performance tests and portfolio assessments. School counselors, if they are proactive, can help make sure that the newer assessment approaches teachers are beginning to adopt will be used in a manner that benefits students.

Many classroom teachers have never completed a formal measurement course during either their preservice or inservice classwork (Schafer & Lissitz, 1987). Not surprisingly, therefore, many teachers test their students using the same assessment procedures that they encountered during their own student days. That assessment approach is essentially a "test 'em as I was tested" strategy. It works pretty well as long as teachers are employing fairly traditional assessment methods because most teachers have been on the receiving end of more than a few of those traditional tests. But what happens when teachers try to use assessment procedures with which they have had no experience?

That is the area in which school counselors can make a meaningful contribution to the assessment acumen of the teachers with whom they work. In this digest a strategy will be described whereby student service personnel can play a leadership role in familiarizing classroom teachers and school administrators with both the payoffs and the perils of emerging classroom assessment methods.

A Special Role for Counselors

As a rule, school counselors are far more conversant with educational measurement concepts than are classroom teachers. Counselors have usually completed courses in testing (Schafer & Lissitz, 1987), and thus are not intimidated when someone talks about a validity or reliability coefficient. And all counselors know that a standard deviation is really not some sort of routine psychosis. Their familiarity with measurement procedures places counselors in a special position of perceived competence. That is, many teachers regard school counselors as experts when it comes to measurement—and that expertise is thought to include the new forms of measurement that teachers are now being urged to use. Consequently, many classroom teachers will be turning to counselors for guidance regarding the nontraditional assessment approaches they are often being told to employ. If school counselors want to make a contribution to dealing with this assessment issue, they will need to get up to speed immediately with respect to the most common of the new assessment methods, namely, performance tests and portfolios.

There are a number of books that have recently been published dealing with the innards of performance testing and portfolio assessment (e.g., Airasian, 1994; Marzano et al., 1993; Popham, 1995; Stiggins, 1994). By consulting one or more of these texts, and by focusing on their performance tests and portfolios sections, it will be possible for most counselors to acquire sufficient understanding of those two assessment approaches rapidly so that they can provide solid support for teachers. In addition, there are several digests in this special ERIC/CASS series (by Arter, by Lester and Perry, and by Stiggins) that are specifically devoted to these newer assessment approaches. Those digests provide not only useful insights regarding those assessment methods, but also identify a series of references for further reading.

To illustrate the kinds of understandings that school counselors need to acquire if they are to help their teacher colleagues deal with recent assessment advances, let us briefly consider performance tests. A performance test typically presents a task to students that calls for a relatively complex constructed response from students in the form of, for instance, an oral report or, perhaps, some sort of written analysis. Students' constructed responses must then be scored so that teachers can make accurate inferences about the degree to which their students possess the knowledge and/or skills assessed by the performance test.

What counselors need to know about performance assessments is: (1) how to construct the tasks for such tests; (2) how to score students' responses to those tasks; and (3) how to judge whether the performance test is a good one, that is, whether it contributes evidence that allows a teacher to make an accurate inference about a student's abilities.

Counselors should also understand the difficulty of devising and scoring such performance tests. As anyone who has scored many students' written compositions will agree, the judgment of students' composition skills is quite difficult. And yet, because we have had more than a decade's worth of experience in scoring students' writing samples, educators have worked out some fairly ser-

viceable scoring procedures for judging students' written compositions. However, with many of the newly devised performance tasks, the difficulty of generating consistent and accurate scoring procedures is considerable. This is because of the distinctiveness of the tasks involved and, more importantly, due to our lack of experience in appraising students' responses to such tasks. Teachers need to know about such practical obstacles—and a knowledgeable counselor can inform teachers about those problems.

Let's also consider portfolios. There's much more to portfolio assessment than merely dumping a collection of student work into a manila folder. By reading about portfolio assessment, for example, counselors will learn ways of scoring the diverse student products typically found in portfolios. Counselors will also discover that many portfolio specialists believe the most significant payoff of portfolio assessment is its contribution to the student's development of self-evaluation skills. In order to foster such self-evaluation growth, the criteria for appraising portfolio products must be crisply spelled out by teachers and provided to students well in advance of the portfolio's preparation.

Portfolio conferences between the teacher and student, or even between two students, usually play a significant role in portfolio assessment strategies. Counselors will need to learn how to help teachers plan for and carry out such portfolio conferences. Counselors, obviously, need to become knowledgeable about the chief features of portfolio assessment.

The level of sophistication that a school counselor must acquire regarding portfolios and performance tests need not be off-puttingly high. Most classroom teachers do not really care about the psychometric nuances of performance tests or portfolio assessments when such schemes are employed in a statewide accountability program (e.g., Koretz et al., 1994). What classroom teachers do need to know are the nuts and bolts of performance testing and portfolio assessment as well as the strengths and weaknesses of those new assessment methods. It really should not take counselors more than a few hours of serious reading, followed by an hour or two of semi-serious thinking, to prepare themselves so they can help classroom teachers regarding these newer assessment approaches.

Whether the counselor's assistance is rendered on an individual, ad hoc basis or in a formal workshop setting will depend on the local situation. But whether a formal or informal professional development scheme is employed, a school counselor who proactively prepares to provide guidance regarding performance and portfolio assessment will clearly be in a position to supply such assistance. Counselors who do not know about portfolios or performance tests will not be able to help.

One of the eight national goals for U.S. education authorized in 1994 by the Goals 2000: Educate America Act deals with the importance of continuing professional development for teachers. Specifically, the Goals 2000 legislation calls for teachers to remain abreast, among other things, of "emerging forms of assessment." Counselor-supplied succor regarding recent assessment advances would be most timely.

Summary

Because educators are being urged to add performance testing and portfolio assessment to their classroom assessment repertoires, many teachers will need assistance in acquiring the ability to implement such measurement techniques. School counselors can play a key role in promoting better use of these new assessment procedures if they acquire a reasonable degree of knowledge about such measurement procedures, then dispense that knowledge to the teachers with whom they work. More knowledgeable use of new classroom assessment strategies will lead to more accurate assessment-based inferences about students and, as a consequence, more defensible instructional decisions by teachers.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-9

Sound Performance Assessments in the Guidance Context

Richard J. Stiggins

Not since the development of the objective paper and pencil test early in the century has an assessment method hit the American educational scene with such force as has performance assessment methodology in the 1990s. Performance assessment relies on teacher observation and professional judgement to draw inferences about student achievement. The reasons for the intense interest in an assessment methodology can be summarized as follows:

During the 1980s important new curriculum research and development efforts at school district, state, national and university levels began to provide new insights into the complexity of some of our most valued achievement targets. We came to understand the multidimensionality of what it means to be a proficient reader, writer, and math or science problem solver, for example. With these and other enhanced visions of the complex nature of the meaning of academic success came a sense of the insufficiency of the traditional multiple choice test. Educators began to embrace the reality that some targets, like complex reasoning, skill demonstration and product development, *require*—don't merely permit—the use of subjective, judgmental means of assessment. One simply cannot assess the ability to write well, communicate effectively in a second language, work cooperatively on a team, and complete science laboratory work in a quality manner using the traditional selected response modes of assessment.

As a result, we have witnessed a virtual stampede of teachers, administrators and educational policy makers to embrace performance assessment. In short, educators have become as obsessed with performance assessment in the 1990s as we were with the multiple choice tests for 60 years. Warnings from the assessment community (Dunbar, Kortez, and Hoover, 1991) about the potential dangers of invalidity and unreliability of carelessly developed subjective assessments not only have often gone unheeded, but by and large they have gone unheard.

Now that we are a decade into the performance assessment movement, however, some of those quality control lessons have begun to take hold. Assessment specialists have begun to articulate in terms that practitioners can understand the rules of evidence for the development and use of high quality performance assessments (e.g. Messick, 1994). As a result, we are well into a national program of research and development that builds upon an ever clearer vision of the critical elements of sound assessments to produce ever better assessments (Wiggins, 1993).

The purpose of this digest is to provide a summary of those attributes of sound assessments and the rules of evidence for using them well. The various ways the reader might take advantage of this information also are detailed.

The Basic Methodology

The basic ingredients of a performance assessment may be described in three parts (Stiggins, 1984): (1) the specification of a performance to be evaluated, (2) the development of exercises or tasks used to elicit that performance and (3) the design of a scoring and recording scheme for results. Each contains subelements within it.

For example, in defining the performance to be evaluated, assessment developers must decide where or how evidence of academic proficiency will manifest itself. Is the examinee to demonstrate the ability to reason effectively, carry out other skills proficiently or create a tangible product? Next, the developer must analyze skills or products to identify performance criteria upon which to judge achievement. This requires the identification of the critical elements of performance that come together to make it sound or effective. In addition, performance assessors must define each criterion and articulate the range of achievement that any particular examinee's work might reflect, from outstanding to very poor performance. And finally, users can contribute immensely to student academic development by finding examples of student achievement that illustrate those different levels of proficiency.

Once performance is defined, strategies must be devised for sampling student work so skills or products can be observed and evaluated. Examinees might be presented with structured exercises to which they must respond. Or the examiner might unobtrusively or opportunistically watch performers during naturally occurring classroom work in order to derive evidence of proficiency. When structured exercises are used to elicit performance,they must spell out a clear and complete set of performance responsibilities for examinees. In addition, the examiner must include in the assessment enough exercises to sample the array of performance possibilities in a representative manner that is large enough to lead to confident generalizations about examinee proficiency.

And finally, once the desired performance is described and exercises have been devised, procedures must be spelled out for making and recording judgments. These scoring schemes, somestimes called rubrics, help the evaluator translate judgments of proficiency into ratings. The assessment developer must select the level of detail to be reflected in records, the method of recording results, and who will be the observer and rater of performance.

Sound Performance Criteria.

Quellmalz (1993) offers a set of specific guidelines for the development of quality performance criteria. These reflect important aspects of skill demonstration that judges are to look for and evaluate—they represent important attributes of quality products.They are devised through a thoughtful analysis of samples of high quality performance and comparison to samples of inferior performance. Out of this comparison come an un-

derstanding of the keys to academic success in the context for which the assessment is designed. Quellmalz advises us that criteria should: be significant, specifying important performance components; represent standards that would apply naturally to determine the quality of performance when it typically occurs; be generalizable—that is, applicable to a class or tasks— not apply to only one task appropriate continuum from low-to high-level achievement; communicate clearly to and be able to understood by all involved in the performance assessment process, including teachers, students, parents and community; hold the promise of communicating information about performance quality that provides a basis for the improvement of that performance. (p 320)

The attributes of quality performance that form the basis of judgement criteria should be couched in the best current thinking about the keys to academic success as defined in the professional literature of the discipline in question.

Sound Performance Exercises

Baron (1993) provides guidance in the development of sound exercises. These spell out the achievement to be demonstrated by the examinee, the conditions under which the demonstrations will take place and the criteria that will serve as the basis for evaluation of performance. In short, they focus the examinee sharply on the task at hand. Baron advises that these questions be used to determine exercise quality: when students prepare for my assessment tasks and I structure my curriculum and pedagogy to enable them to be successful on these tasks, do I feel assured that they will be making progress toward becoming genuine or authentic readers, mathematicians, writers, historians, problem solvers, etc.; do my tasks clearly communicate my standards and expectations to my students; are some of my tasks rich and integrative, requiring students to make connections and forge relationships among various aspects of the curriculum; do some of my tasks require that my students sustain their efforts over a period of time (perhaps even an entire term!) to succeed; do my tasks require self-assessment and reflection on the part of students; are my tasks likely to have personal meaning and value to my students; and do some of my tasks provide problems that are situated in real-world contexts and are they appropriate for the age group solving them?

Effective Scoring and Recording

The basis of the effective application of performance assessment methodology is thoroughly trained raters relying on sound performance criteria to observe and evaluate student responses to quality exercises (Stiggins, 1994). It is rarely the case that raters can automatically judge student performance merely as a matter of their prior professional development. Training—or at least a systematic verification of qualifications to rate performance—is essential in all contexts in which quality assessment results are the goal.

One test of the quality of ratings is interrater agreement. A high level of degree of agreement is indicative of objectivity of ratings. Another test of quality is consistency in a particular rater's judgments over time. Ratings should not drift but rather should remain anchored to carefully defined points on the scoring scale. A third index of performance rating quality is consistency in ratings across exercises intended to be reflective of the same performance—an index of internal consistency. When these standards are met, it becomes possible to take advantage of the immense power of this kind of assessment to muster concrete evidence of improvement in student performance over time.

There are three design decisions to be made by the performance assessment developer with respect to scoring schemes: the level of specificity of scoring, the selection of the record keeping method, and the identification of the rater. Scores can be holistic or analytical, considering criteria together as a whole or separately. The choice is a function of the assessment purpose. Purposes like diagnosing weaknesses in student performance that require a high resolution microscope require analytical scoring.

Recording system alternatives include checklists of attributes present or absent in performance, rating scales reflecting a range in performance quality, anecdotal records that describe performance or mental record keeping. Each offers advantages and disadvantages depending on the specific assessment context.

Raters of performance can include the teacher, another expert, students as evaluators of each other's performance or students as evaluators of their own performance. Again, the rater of choice is a function of context. However, it has become clear that performance assessment represents a powerful teaching tool when students play roles in devising criteria, learning to apply those criteria, devising exercises, and using assessment results to plan for the improvement of their own performance—all under the leadership of their teacher.

Performance Assessment in the Guidance Context

The ongoing guidance and counseling function in the school could bring student service personnel into contact with performance assessment methodology in three important ways. Very often, other education professionals regard counselors as sources of expertise in assessment and may bring request for opinions about the value of this methodology, or they may ask for help in the design and development of performance assessments.

Or counselors might be invited to serve as raters of student performance in specific academic disciplines. If and when such opportunities arise, thorough training is essential for all who are to serve in this capacity. If the teachers issuing this invitation have developed or gleaned from their professional literature refined visions of the meaning of academic success, have transformed them into quality criteria and provide quality training for all who are to observe and evaluate student performance, this can be a very rewarding professional experience. If these standards are not met, it is wise to urge (and perhaps help with) a redevelopment of the assessment.

The third and final contact for counselors is as an evaluator of students within the context of the guidance function, observing and judging academic or affective student characteristics. In this case, the counselor will be both the developer and user of the assessment and must know how to adhere to the above mentioned standards of assessment quality.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-10

Portfolios For Assessment And Instruction

Judith A. Arter, Vicki Spandel and Ruth Culham

Portfolios are scarcely a new concept, but renewed interest, fueled by the portfolio's perceived promise for both improving assessment and motivating and involving students in their own learning, has recently increased their visibility and use. The definition of a portfolio varies some, but there seems to be a general consensus that a portfolio is a purposeful collection of student work that tells the story of student achievement or growth. (Portfolios are not folders of all the work a student does.) Within this limited definition there are portfolio systems that: promote student self-assessment and control of learning; support student-led parent conferences; select students into special programs; certify student competence: grant alternative credit; demonstrate to employers certain skills and abilities; build student self-confidence; and evaluate curriculum and instruction.

Because there is no single correct way to "do" portfolios, and because they appear to be used for so many things, developing a portfolio system can spell confusion and stress, much coming from not realizing that portfolios are a means to an end and not an end in themselves. More specifically, confusion occurs to the extent there is lack of clarity on: (a) the purpose to be served by the portfolio, and (b) the specific skills to be developed or assessed by the portfolio.

It is important to keep in mind that there are really only two basic reasons for doing portfolios--assessment and instruction. Assessment uses relate to keeping track of what students know and can do. Instructional uses relate to promoting learning--students learn something from assembling the portfolio.

Instructional Uses

The perceived benefit for instruction is that the process of assembling a portfolio can help develop student self-reflection, critical thinking, responsibility for learning, and content area skills and knowledge. (It is important to point out that most of the evidence to support these claims comes from logical argument and anecdotes. There exists very little "hard" evidence that demonstrates the impact of portfolios on students.)

These benefits aren't automatic; they have to be built into the portfolio system. Suppose you are a teacher of writing. You want students to improve their ability to write, and become skilled self-assessors to improve their writing. Using portfolios, what things would need to be in place? First, students need time and instruction in writing. But in addition, you and they need a clear and explicit vision of what it means to write well. How can students become skilled self-assessors if they don't know the target at which they are aiming?

This vision is often expressed using criteria that define writing performance across a range of proficiency levels. Clear criteria might specify, for instance, that a strong piece of writing would have elaborated ideas, rich with vivid details; or an introduction that draws the reader in while setting up what is to follow; or engaging, expressive voice. These criteria, which describe what it means to write well, not only serve as a guide to revision, but they provide students with a vocabulary for thinking, talking and writing about writing. Students who internalized these criteria could use them to revise their work, reflect on it, and set goals. The student could then use a portfolio to create a collection of best writing, or diverse writing (poetry, exposition, persuasive essays, journalism, stories), or a process portfolio showing how one piece evolved from brainstorming through publication, or a growth portfolio showing how her revision skills had improved.

Ironically, the instructional benefits of portfolios are not dependent on the portfolios. Close examination of work, comparison over time, identification of strengths and weaknesses through good criteria that define quality, goal setting, connecting personal best or favorite work with who students are becoming as learners: all can occur when the vision for success is clearly defined. What is really important is not the portfolio itself so much as what students learn by creating. Students can review and reflect on their work regularly whether or not they make a portfolio. The portfolio is a means to the end, not the end itself.

A classic example of an instructional portfolio system is the Arts PROPEL secondary creative writing, visual arts and music portfolios in Pittsburgh Public Schools. The goals are to increase achievement levels and have students take control of their own learning through systematic reflection on work and goal setting. (See Yancey, 1992; Camp, 1992; and ASCD, 1992, for additional discussion of instructional uses.)

Assessment Uses

The perceived benefits for assessment are that the collection of multiple samples of student work over time enables us to (a) get a broader, more in-depth look at what students know and can do; (b) base assessment on more "authentic" work; (c) have a supplement or alternative to report cards and standardized tests; and (d) have a better way to communicate student progress to parents. Large-scale assessment (assessment outside of and across classrooms) tends to focus on reasons (a) and (b). Teachers tend to like portfolios for reasons (c) and (d). We will look at three common assessment uses of portfolios and then discuss some assessment issues.

Certification of Competence. A "passportfolio" shows readiness to move on to a new level of work or employment. For example, the Science Portfolio is an optional part of the Golden State Examination (California State Department of Education, 1994), a large-scale assessment for high school students. It is produced during a year of science and contains a "problem solving investigation," a "creative expression" (presenting a scientific idea in a unique and original manner), a "growth through writing" that demonstrates progress in understanding a scientific concept over time, and self-reflection that enlarges on the entries. Performance criteria have been developed to judge each

type of entry.

A higher stakes large-scale example is associated with "Certificate of Mastery" efforts in several states. Plans in Oregon call for portfolios to illustrate student progress toward (in the lower grades) or mastery of (by about grade 10) the state's eleven major goals for students.

Tracking Growth Over Time. A growth portfolio is a chronological collection that shows how skills, attitudes, etc. have changed over time. Early works are contrasted with later pieces. A large-scale example comes from Juneau, Alaska--The Integrated Language Arts Portfolio used in the primary grades. The portfolio is designed to replace report cards and standardized tests as ways to demonstrate growth and achievement. Growth is tracked using "developmental continuums," which describe stages of development for reading, writing, speaking, and listening. Student status on the continuum is marked at several designated times during the school year. Teacher judgments of developmental stage are backed up with samples of student work.

Accountability. Accountability uses relate to demonstrating to the community the impact of the education. A large-scale example is Vermont's grade 4 and 8 math portfolios. Students place 5 to 7 items in their portfolio to demonstrate their competence as problem solvers. The work is assessed using performance criteria for problem solving and math communication. An example at the classroom level is student-led parent conferences in which students prepare portfolios in order to demonstrate to parents what they have learned. (See Little & Allen, 1988, for an example.)

Assessment Issues. Assessment uses of portfolios, especially large-scale, high-stakes uses (for example, high school graduation), are not without controversy. Some of these issues are: 1.What is the extent to which we need to "standardize" the portfolio process, content, and performance criteria so that results are comparable? 2. Is it feasible to accurately and consistently assess student skills through portfolios? Won't this be costly? (Rand Corporation's 1992 study of the Vermont portfolio system provides an intriguing analysis of this issue.) 3. How do we get teacher buy-in? After all, teachers will be responsible for making sure that portfolios get assembled properly. 4. Will the conclusions we draw about students from their portfolios be valid? The work may not really be the students' best, or may be someone else's entirely. There are, as yet, no definitive answers to these questions, although many fear that high-stakes uses of portfolios will destroy their instructional usefulness.

Consensual Points of View

There appear to be several points on which most people agree:

Portfolios are a means to an end, not an end in themselves. The user must have a clear vision of what the "end" is.

Purpose will influence all other design and use decisions. Consider the two major purposes examined above. Portfolio systems that have assessment as the primary purpose tend to: be more structured (there is more uniformity as to the items that are placed in the portfolio and the times at which they are entered); develop performance criteria primarily to allow "raters" to judge student status and monitor student growth; result in portfolios that belong to the institution; use self-reflection to gain insight about student achievement and progress; and require more time and skills for teachers to manage. Portfolios that are used for instruction tend to: belong more to the student; be less structured; develop performance criteria for use by students for self-reflection; treat student self-reflection as essential for learning; and require more time and skills for students to manage. Once the purpose is clear, questions about what goes in, who decides, use of criteria, and how self-reflection is used are much easier and more logical.

There must be a clear vision of achievement targets for students. Ask this important question: What is my vision of success for my students? If you can answer this question *very clearly* you will find the process of creating portfolios much easier.

There must be student involvement in the portfolio process. Student involvement includes selecting portfolio content, developing criteria for success, and self-reflection. Even those portfolios closest to the "assessment" end of the continuum recognize the benefit from involving students in the process. If teachers put portfolios together for students, not only is this a tremendous burden for them, students learn nothing from the process. Some authors even take the position that if any other use takes precedence over instruction, portfolios will fall victim tothe same issues as past large-scale assessment attempts.

Clear and complete performance criteria are essential. For assessment purposes, we use criteria to generate scores or grades for students. However, the major value of criteria is that they assist us to articulate a clear vision of our goals for students and a vocabulary for communicating with students about these targets. Students could be partners in their development.

Conclusion

Strong portfolio systems are characterized by a clear vision of the student skills to be addressed, student involvement in selecting what goes into the portfolio, use of criteria to define quality performance and provide a basis for communication, and self-reflection through which students share what they think and feel about their work, their learning environment and themselves.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Emerging Student Assessment Systems for School Reform

Edward Roeber

Currently, much discussion is taking place about the quality of American schools, the skills needed by students, and the ways we should be assessing these achievements. Student assessment is viewed nationally as the pivotal piece around which school reform and improvement in the nation's schools turn. For example, student assessment is the key piece of Goals 2000, as well as other federal legislation such as the Elementary and Secondary Education Act (ESEA).

The result is that substantially more assessment is likely to occur in our nation's schools, and to take place in areas traditionally not assessed (such as the arts), using assessment strategies (such as performance assessments and portfolios) not typically used. States and local districts are reconsidering the models for systems of assessment and how assessment at the state and local levels can be coordinated to achieve the reforms desired in education.

Why is School Reform Occurring?

Widespread belief that schools are not helping all students achieve at the levels that are needed, has spurred efforts to reform our schools. Concerns have been raised that the ways we teach students, as well as assess them, do not lead students to acquire needed knowledge or skills, nor help them apply and use their knowledge and skills appropriately. At the national and state levels, content standards containing the types of knowledge, skills and behaviors now believed needed for all students to achieve at high levels are being developed. Starting with such efforts as the National Council of Teachers of Mathematics' Curriculum and Evaluation Standards for School Mathematics (NCTM,1989), content standards are being developed in the arts, civics, economics, English, foreign languages, geography, health education, history, physical education, science, and social studies.

School reform is also motivated by the belief that there are competencies needed for graduates to enter the workforce successfully. The Secretary's Commission on Achieving Necessary Skills developed generic competencies and foundation skills that all workers will need in the future (U.S. Department of Labor, 1991). They include flexible problem solving, respecting the desires of the customer, working well on teams, taking responsibility for one's own performance, and continuous learning; and have been developed to guide the efforts of educational reform in the direction helping more students to make the transition to work successfully.

Collectively, these standards represent substantial challenges for the American schools. They imply that all students will need to achieve at much higher levels. New strategies for assessment are also implied by these content standards.

How Does Reform of Assessment Fit School Reform?

Student assessment is at the top of the list of things to tinker with by policymakers at the national and state levels, since it is viewed as a means to set more appropriate targets for students, focus staff development efforts for the nation's teachers, encourage curriculum reform and improve instruction and instructional materials in a variety of subject matters and disciplines (Darling-Hammond & Wise, 1985). Assessment is important because it is widely believed that what gets assessed is what gets taught, and that the format of assessment influences the format of learning and teaching. (O'Day & Smith, 1993). The hope of policy makers is that changes in assessment will not only bring about the needed changes in students, but also in ways schools are organized (Linn, 1987, Madaus, 1985). Interest in performance assessment has also been justified on the basis that using such measures will promote educational equity (National Center on Education and the Economy, 1989). Student assessment carries a heavy load these days!

Of course, outside pressure external on testing programs can be ignored or resisted by local educators (Smith and Cohen, 1991). There is also ample evidence of the distortions in teaching that external testing programs can create (Shepard & Smith, 1988). Rather than encourage reform of teaching, inappropriate teaching to the test may occur (as opposed to teaching to the domain covered by the test). Rather than creating opportunities for all students to learn to high levels, even new forms of assessment may lead to tracking and limiting opportunities for some students (Darling-Hammond, 1994; Oakes, 1985.)

Assessment reform should occur along with professional development, instructional development, and other strategies designed to assure that all of the changes are mutually supported. Coordination of assessment reform at the national and state levels with assessments at the local level is also important, so that each will present a coherent view of student performance, not simply be "stuck" together.

Types of Assessments

New content standards may require different assessment methods. Among the assessment techniques now being considered are short-answer, open-ended; extended-response, open-ended; individual interviews; performance events; performance tasks in which students have extended time; projects; portfolios; observations; and anecdotal records, in addition to multiple-choice exercises. A broader

repertoire of techniques is increasingly being used.

School Improvement Strategies

The information about student achievement needed at various levels of the educational system is different. Parents have different needs that teachers, who in turn, have different needs than school principals. District administrators need broader, system-wide information, while at the state level, there is concern about equity across districts and identification of state priorities. Nationally, policy makers are concerned about differences between states and how competitive American students are with their peers in other countries.

Improving student achievement can take place at each of these levels. Teachers work with an individual student in a classroom, or revamp classroom-wide instruction based on an assessment. At the school level, educators use school information to set long-and-short-range objectives and decide how to accomplish these. At the district level, educators target particular areas of the curriculum for attention. At the state level, incentives for improving instructional programs may be most important. School reform occurs at all levels of the educational system.

Useful Assessment Designs

Typically, student achievement is measured with available student test data, often using information from district or state testing programs. Information collected less formally in classrooms is not typically included in school improvement plans, even though such information could provide valuable insights into student learning.

The nature of information needs should form the basis for an assessment design. In a top-down model, policymakers develop an assessment design that meets their needs, hoping the data may be useful by persons at lower levels. An alternative is to build the assessment system needed at the local level, aggregating the information upwards to the district, state and national levels.

Another model, based on the assumption that multiple approaches will allow different users' needs to be met, is to develop a comprehensive assessment system using different assessment formats to meet different users' needs. Various assessment strategies can be implemented together at the different levels to provide for the different information needs in a coordinated, coherent manner (Darling-Hammond, 1994).

For example, local districts can adopt a portfolio system for improving instruction, while the state carries out matrix-sampling across important standards. The information collected by the state can become part of the student's portfolio, thereby strengthening the portfolio's quality. The state could also provide opportunities for teachers to learn to score the open-ended written and performance assessments, thereby enhancing teachers' capabilities of observing and rating student performances in their classrooms.

In this case, the elements of the system at the different levels build on and support the elements at other levels. It is also anticipated that information collected at the different levels can be reported in a more understandable manner, since the same standards apply in different ways.This assessment model enhances the reforms of schools so many desire.

Summary

This is indeed a time when American schools are being challenged to provide opportunities for students to achieve at much higher levels. Assessment is viewed as one of the essential elements in assisting schools to address the standards now deemed to be important in a manner that will help all students to achieve them. The major challenge for assessment is to implement these additional assessments in a coordinated manner so that the amount of assessment is supportive of the changes needed, not overly burdensome to teachers or students. Models for coordination assessment at the state, district and classroom levels appear most promising.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Assessment of Abilities

Thomas F. Harrington

This digest recommends assessing all of a person's abilities, not just some. It also discusses self-report in the context of ability assessment. The term aptitude often is used also in defining ability, and sometimes these terms are used interchangeably. Ability as used here follows Anastasi's (1988) concept of "developed abilities." Her viewpoint is that "all ability tests - whether they be designed as general intelligence tests, multiple aptitude batteries, special aptitude tests, or achievement tests - measure the level of development attained by the individual in one or more abilities" (p.413).

What are the Major Abilities?

In 1976, Harrington and O'Shea identified 14 abilities found in U. S. Department of Labor publications and began assessing them in a self-report format. They reviewed 113 concurrent validity studies composed of vocational/technical programs, college and university majors, and employees in different jobs, and concluded that a high degree of agreement existed between the participants' self-reports on the 14 abilities and job analysts' findings of abilities required for job performance. Later, in 1992, Harrington altered the listing by adding organization and reading ability and collapsing computational with mathematical (Harrington & O'Shea, 1993). The 15 major abilities thus identified were:

- reading
- language
- numerical/mathematical
- clerical
- technical/mechanical
- spatial
- manual
- scientific
- interpersonal
- leadership
- musical/dramatic
- organizational
- persuasive
- social
- artistic

Technical ability is a broader term that integrates many mechanical abilities. Retitling this ability acknowledges past research that shows a clear gender differentiation for mechanical ability. Schools and society should address such biases for certain abilities.

Scientific ability, a hybrid involving conceptualizing, memory, and perhaps interest in the area, requires early identification because of the hierarchical way the ability is nurtured and developed within our educational system. Developing scientific ability after little exposure is more difficult for people in their late teens and early adulthood than at a chronologically earlier age. The critical dimension is a person's exposure and identification with the unique subset of skills as being doable for him or her. Self-efficacy beliefs or feelings of adequacy, both of which can be part of the ability construct, need examination.

Readers will find the above abilities in the literature but with different names. In a summary of 25 years of research, Prediger (1992) reported the same major skills, except that he identified literary rather than the musical/dramatic ability listed above. Lowman (1991) included in his literature review 11 of the above abilities as having career relevance. He did not list four of the abilities as major abilities - scientific, reading, social, and persuasive. Instead he cited intelligence as more predictive for science occupations. He wrote, "Interpersonal skills or social intelligence appears not to be a unidimensional construct" (p. 109). He set forth a taxonomy of social demands, however, that clearly differentiates interpersonal from helping skills, which require the ability to understand the behavior and feelings of others. Lowman expressed that personal factors are most important in predicting sales performance. So science, social, and persuasive domains were recognized but were not attributed as primary abilities. Reading and language were cited among the small number of factors found in the verbal factor.

Common existing tests measure six to eight of the abilities listed in the first column, above. This narrow band of abilities emerged from the multi-aptitude measures, mostly developed in the late 1940's. Job analysts, on the other hand, identify many of the aptitudes listed in the second column as necessary abilities for some jobs. Unfortunately, young people are evaluated on these abilities and educators seldom identify them for self exploration.

It should be mentioned that knowledge of an individual's ability profile may be of moot value. Hunter (1986), after reviewing hundreds of studies, wrote "... cognitive ability predicts job performance in all jobs ... including the so-called 'manual' jobs as well as 'mental' jobs" (p. 340). He continued, "Cognitive ability predicts job performance in large part because it predicts learning and job mastery. Ability is highly correlated with job knowledge and job knowledge is highly correlated with job performance" (p. 354).

If They are Important, Why Haven't Tests of These Abilities Been Available?

The regression model, which minimizes the number of tests used in predicting success, has dominated the field of ability measurement. Goldman (1972), among others, pointed out that multiple aptitude batteries have limited differential predictive value and they do not offer much

more than an intelligence or academic ability test. He felt that multiple aptitude tests have little to offer in counseling clients in their decision making and career planning. He wrote, "The main contribution of tests in counseling is not making predictions but facilitating the clarification of self concept" (p. 219). The National Commission on Testing and Public Policy (1990) also called for the transformation of testing in America from a gatekeeper to that of a facilitator. The Commission stated testing programs must change from an over reliance on objective tests to alternative forms of assessment that help people become aware of and develop their talents. With most state plans for career development calling for students to record data about their abilities, a longer list of abilities is relevant for life planning.

What is self-report methodology and how does its validity compare with the traditional approach?

Three different self-report assessment formats have been used. One is simply a listing of abilities with definitions and directions to indicate those areas you feel are your best or strongest. A second approach is to apply a Likert scale to a group of designated abilities. For example, in comparison to others of the same age, my art ability is excellent, above average, average, below average, or poor. Another approach is, for each ability, to provide different examples of the ability's applications on which individuals rate their performance level from high to low, and subsequently these are summed to obtain a total score. Whereas most multiple ability testing situations need several hours, the time required for the above formats ranges from 10 to 45 minutes.

Self-report assessment is cheaper and less time intrusive on a school's schedule. How do the approaches compare regarding validity? Ghiselli's (1973) summary of the average validity coefficients of different kinds of aptitude tests used to predict proficiency in the eight major occupational categories of the General Occupational Classification System shows that the coefficients are typically in the .20's and rarely go above the .30's. The average validity coefficient for prediction of proficiency on the job was .22. In a review of 55 self-evaluation of ability scales, Mabe and West (1982) reported a range of correlation coefficients from -.026 to .80, with a mean coefficient of .29 (depending on the meta-analytic method used).

More recently, Westbrook, Buck, Sanford, and Wynne (1994) demonstrated that it is possible to get acceptable reliability and validity coefficients for self ratings which approach the size of the validity coefficients reported for objective measures of ability. Their comparative measure was the *Differential Aptitude Test* (DAT). In another study based on the common criterion of self-reported abilities of employees, Harrington and Schafer (in press) compared the abilities required for jobs from *Guide for Occupational Exploration* (GOE) job analysis data with the *General Aptitude Test Battery's* (GATB) *Occupational Aptitude Patterns* (OAP). The GOE and OAP average percentages were compared in order to evaluate which was more consistent with workers' self expressions of their abilities. Across the 51 occupations studied, 49 of the GOE averages were larger versus one in which the OAP average was larger. It was concluded that the GOE analysis data are more congruent with worker-identified job abilities than the GATB analyses.

Conclusion

Current use of self-assessment methodology taps more ability areas than existing ability or aptitude tests cover. Alternative testing approaches have been called for which enhance self discovery and awareness. Some recent self-report studies show at least comparable validity with more traditional approaches. Some researchers are advocating the self-assessment methodology which can substantially cut loss of instructional time and cost, evaluate hard-to-assess constructs, and deliver information most people feel is useful for self knowledge and career planning. Philosophically, the process of self evaluation fits the belief that individuals are in the best position to assess since they have access to a large data base on their own successes and failures in their abilities. Most misgivings about the methodology seem to center around beliefs that individuals have a tendency to be lenient and are not objective enough in their self analysis to provide accurate self reports.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Interest Assessment

Jo-Ida C. Hansen

The assessment of interests through the use of interest inventories is big business in the field of testing today. Although publishers closely guard their data on the number of inventories given, an estimate of 3,000,000 administrations per year probably is conservative. The first formal assessment of interests using a published inventory occurred in 1927 with the appearance of the *Strong Vocational Interest Blank*. Since that time, the *Strong* has survived numerous revisions and continues to be a popular and widely used interest inventory.

Interests were assessed prior to 1927 using, basically, four techniques. The earliest of these techniques was *estimation*, which simply involved asking an individual to indicate her or his feelings towards an activity. Because estimates were not always accurate, individuals often were encouraged to *try-out* activities as another method for assessing their interests. Obviously, try-outs could be quite time-consuming and costly, and *rating scales* and *checklists*, precursors to interest inventories, were developed to identify interests more systematically. The interest inventories that we use today differ from early checklists and ratings in that they use statistical methods to summarize responses to pools of items representing various activities and occupations (Hansen, 1984).

Definition of Interests

The definition of interests, as used by inventory developers, researchers, and counselors, typically reflects five components that may be characterized as determinants: personality, motivation or drive, expression of self-concept or identification, heritability, and environmental influences (e.g., learning and socialization; Hansen, 1990).

One of the most popular theories for describing interests and their relationship to jobs, people, and environments is that of John Holland. Holland (1985) states that both people and environments can be divided into six vocational personality types or some combination of the six types: Realistic (outdoors, mechanical), Investigative (science, math), Artistic (art, language, music), Social (helping, teaching), Enterprising (selling, business) and Conventional (details, clerical). Holland's theory has had a tremendous impact on the fields of career counseling and interest assessment, and many interest inventories include scales that measure interests related to Holland's six types.

Purpose of Interest Assessment

Interest assessment is used in a variety of applied and research settings for several different purposes. Career exploration, that leads to decisions such as choosing a major, selecting a career, or making mid-career changes, probably is the most popular and frequent use of interest assessment. Within this context, college and high school counseling services are the most typical providers of interest assessment and career counseling experiences. However, employment agencies, vocational rehabilitation services, social service agencies, corporations, consulting firms, and community agencies such as the YW or YMCA also provide career counseling opportunities that incorporate interest assessment.

Researchers use objective assessments to operationalize the construct of interests in studies that investigate variables relevant to understanding the world of work. Current trends in vocational psychology research include analyses of a) the structure of interest; b) the relationship of interests to other psychological variables such as personality, satisfaction, and success; and c) the role that interests play in career development.

To a lesser extent, interests are assessed for use in selection and classification evaluations. In some instances, assessed interests, which add valuable data to career choice predictions, are used even after selection to help an employee find the right position within a particular organization (Hansen, 1994).

Current Interest Assessment Inventories

Numerous inventories designed to assess interests have been published. The available choices range from those inventories that measure a small number of relatively broad interests and are self-administered and hand-scored to those that report over 200 scores and must be scored by computers (Kapes & Mastie, 1994).

The *Self-Directed Search (SDS)* and the *Unisex Edition of the ACT Interest Inventory (UNIACT)* are based on John Holland's theory of vocational personalities and assess the six types that Holland hypothesizes. The *SDS* is self-administered, self-scored and self-interpreted while the *UNIACT* is computer scored and uses a computer-generated narrative report to relate the scores to a World-of-Work Map.

The *Vocational Interest Inventory (VII;* 8 scales), the *Career Occupational Preference System Interest Inventory*

(*COPS*; 14 scales), the *Ohio Vocational Interest Survey (OVIS;* 23 scales), and the *Jackson Vocational Interest Survey (JVIS;* 34 scales) feature basic interest scales that are composed of homogeneous groupings of items often identified by cluster or factor analysis. With the exception of the *COPS-R* and the *JVIS*, which can be hand or computer-scored, all of these inventories are scored by computer. Typically these inventories measure some configuration of basic interests such as mechanical activities, athletics, nature, science, military activities, mathematics, aesthetics, social service, teaching, clerical activities, religious activities, business management, persuading, selling, health, or language.

The *Campbell Interest and Skill Survey (CISS)*, the *Kuder Occupational Interest Survey (KOIS)*, the *Career Assessment Inventory (CAI)*, and the *Strong Interest Inventory (SII)* all require computer scoring and include over 100 different measures of interests. The large number of scales allows these inventories to present profiles that include: a) global measures of interests similar to those that represent Holland's six types; b) basic interest scales composed of homogeneous groupings of items (e.g., scales that measure an interest in mechanical activities, medical service, or selling); and c) scales that measure the interests of specific occupational groups such as engineers, physicians, journalists, guidance counselors, buyers, and accountants.

The choice of the appropriate inventory to use with a particular population depends on factors such as their age, the purpose of the interest assessment, the amount of time available for testing and interpretation, and the funding available to purchase materials and pay for scoring. Generally, the smaller the number of scales offered by the inventory, the less expensive the materials and scoring will be.

Computers and Interest Assessment

The option now exists to use personal computers for every phase of interest assessment, including administration of the inventory, in-house scoring of the scales, production of the profile, interpretation of the results, and integration of the assessed interests into computerized career counseling sequences (Hansen & Sackett, 1993). The most important advantage of using personal computers in interest assessment is in-house scoring that eliminates the need to mail answer sheets to a scoring service for processing, thus reducing the lag between inventory administration and interpretation of the results. A second advantage is the financial savings realized through the use of interactive computerized career guidance programs. Although these programs do not eliminate the need for counselors to work with clients, computers do provide an effective mechanism for identifying and conveying routine information and data to the client.

Summary

The assessment of interests originally developed as an outgrowth of efforts in education and in industry to supplement special and general abilities information about individuals. However, the most powerful uses of interest assessment continue to be in the context of other data, such as values, reinforcers, abilities, personality, and biographical information, that captures the life experiences of an individual. As both education and industry have discovered, the integration of a variety of information, including the assessment of interests, can contribute effectively to improving individual and institutional decision-making.

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Assessment of Self-Concept

William Strein

Self-concept is one of the most popular ideas in psychological literature. The ERIC database includes over 6000 entries under the "self-concept" descriptor. Unfortunately, self-concept is also an illusive and often poorly defined construct. Reviews of literature have found at least 15 different "self" terms used by various authors (Strein, 1993). Terms such as "self-concept," "self-esteem," "self-worth," "self-acceptance," and so on are often used interchangeably and inconsistently, when they may relate to different ideas about how people view themselves. Accordingly, definition is the first consideration in the assessment of self-concept. Before attempting to assess self-concept, counseling practitioners or researchers must first clarify for themselves what they mean by "self-concept" and then choose a method or instrument consistent with that definition.

Global Versus Domain-Specific Models

Perhaps the most important distinction that differentiates various conceptualizations is whether self-concept is viewed as an overarching, global characteristic of the person, or as a set of self-evaluations specific to different domains of behavior. The global view, sometimes conceptualized as "self-esteem" or "general self-concept," is the older and probably the more common view among counselors and therapists (Strein, 1993). Items comprising the *Rosenberg Self-Esteem Scale* (Rosenberg, 1965) capture the essence of the global self-concept idea, and continue to be used frequently in research. *The Piers-Harris Children's Self-Concept Scale* (Piers, 1984) and the *Tennessee Self Concept Scale* (Fitts, 1991), both commonly used instruments, are also rooted in the global tradition, although each also provides domain-specific scales.

In contrast to the traditional model of global self-concept, multifaceted models stress self-evaluations of specific competencies or attributes, for example, academic self-concept, physical self-concept, and so on. Although some theoretical models are hierarchical, with global self-concept at the apex, most of these models stress the distinctiveness of various self-concept facets. Extensive empirical research in developmental and educational psychology over the past 15 years has strongly supported the multifaceted view. Consistent with research findings, most published self-concept measures now emphasize domain-specific self-concepts. The clearest example of measures based on the multifaceted view is Marsh's (1992) set of scales *(Self-Description Questionnaire I, II, or III)* covering ages seven to young adult.

Methods of Self-Concept Assessment

Self-concept is inherently phenomenological, that is, it refers to the person's own view of him- or herself. In fact, one leading scholar in the field (Wylie, 1974) has argued that comparisons to external events are not particularly relevant in the assessment of self-concept. Accordingly, self-concept is almost always assessed through self-report. Four commonly used self-report methods are described below (Burns, 1979).

Rating scales are the most frequently used type of instrument. Most of the currently published instruments are of this type. Rating scales typically are composed of a set of statements to which the respondent expresses a degree of agreement or disagreement. Five- and seven-point Likert scales are common. Typical items might be "I am good at math" or "On the whole, I am satisfied with myself." Responses are then summed to form a score for a specific scale (e.g., math self-concept) or a measure of global self-concept.

Checklists involve having respondents check all of the adjectives that they believe apply to themselves. Because the adjectives have been assigned to a category, such as "self-favorability," based on either rational or empirical criteria, the person's choices can be tabulated to form a self-concept measure. Checklists provide interesting qualitative information, but have two shortcomings. First, responses are dichotomous (yes/no); there is no way for the respondent to indicate degree of agreement. Second, the categorization of the adjectives is done by an external party, without knowing what exact meaning the adjective has for the individual.

Q-sorts have been used extensively in self-concept research but are seldom used by practicing counselors because they are time-consuming and require considerable commitment from the client. In brief, the Q-sort technique involves having the person sort cards that contain self-descriptors (e.g., "I am strong") into a pre-defined number of piles ranging from "most like me" to "least like me." Typically, 100 or more cards would be used and each pile can contain only a pre-determined number of cards. Both quantitative and qualitative methods can be used to evaluate the results of the sorting task.

In *free-response* methods respondents typically complete partial statements (e.g., I feel best when...). Although some sets of these sentence-completion tasks have been published formally, complete with quantitative scoring

schemes, responses more frequently are evaluated qualitatively. Free-response methods are seldom used in self-concept research but have favor with many counselors because the open-ended, qualitative nature of the task lends itself to facilitating discussion with the client. The rather low reliability of such methods, however, argues against interpreting the results as a *measure* of self-concept.

Although most of the self-concept measures compare the person's response against some set of norms, one researcher (Brahm, 1981) successfully used a *criterion-referenced approach* in which the child's self-efficacy beliefs were assessed repeatedly in reference to an external criterion of accuracy. Brahm argues that this assessment approach integrates self-concept with mastery learning more effectively than does the traditional norm-referenced self-concept scale. Although this is a promising idea, it remains undeveloped.

Considerations in the Assessment of Self-Concept

Counselors or others who wish to assess self-concept must keep several considerations in mind, including demand characteristics of self-report measure, technical adequacy of the assessment procedure, and whether the assessment is being used for research or clinical purposes. Self-report measures make several requirements of the respondent (Burns, 1979). First, the person must have a sufficient level of self-awareness. Young children may lack confidence but may not be consciously aware of their own perceptions. Second,self-report measures also require substantial verbal competence, a skill that can not be assumed. Third, even children are aware that some responses are more socially acceptable than others. The accuracy of self-reports is often decreased by this "social desirability" response tendency.

Technical quality of self-concept instruments demands serious consideration. Reliability and validity coefficients for personality tests are frequently considerably lower than for performance measures, such as those for cognitive ability. For some of the older self-concept measures internal consistency reliabilities, especially for subscales, are only in the .70 range. Some newer instruments, however, attain internal consistency coefficients in the .90's. To help in choosing a test, prospective test users should consult technical manuals and test reviews carefully before making a final choice.

Finally, most empirically scored self-concept measures were developed more for research than for clinical use. Normative samples are seldom anywhere near as useful as for tests of achievement or ability. Information relating test scores to problem behavior is virtually absent. Counselors should use scores from self-concept measures very cautiously when working with individual clients.

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Assessment of Temperament

Hedwig Teglasi

Temperament refers to basic dimensions of personality that are grounded in biology and explain individual differences in the developmental process rather than universal dynamics. While these dimensions show continuity over time, they are subject to change with maturation and experience. The view of behavior as a function of the organism and of the environment is basic to psychology. Accordingly, temperament serves as a mechanism to explain how individuals contribute to their own development in a given environmental context. Harmony between persons and their surroundings is produced through bidirectional interplay between inborn, temperamental attributes and external demands, supports, and circumstances.

Temperament is generally identified with: a) the components of personality that are biological in origin (e.g., Buss & Plomin, 1984); b) traits that are relatively stable, cross situationally consistent, and evident throughout the age span and diverse cultures (Rothbart & Derryberry, 1981); and c) the style (how) rather than the content (what) or purpose (why) of behavior (Thomas & Chess, 1977). In contrast, personality serves as a central organizer of behavior that influences the expression of temperamental traits. Thus, personality determines the specific content and purpose of behavior.

Temperament is currently an active area of research with documented applicability to a variety of developmental and mental health outcomes such as conscience formation, peer interaction, behavior problems, school achievement, psychopathology, and vulnerability as well as resistance to stress. Given that temperamental extremes constitute risk factors, specific temperament dimensions can be flagged as early precursors of impaired adjustment.

Although the importance of the construct is well established, unresolvedconceptual issues and problems with measurement limit the applicability of this knowledge by practitioners. The many choices of dimensions identified as separate elements, how they should be combined, and their proper measurement given these choices constitute a continuing debate. Reviews of available instruments document their problems including inconsistent stability, low interrater reliability, and questions about construct validity (Slabach, et al., 1991). Nevertheless, increasing use of temperament scales call for research to elaborate and refine conceptualizations to develop improved measures, and to incorporate temperament constructs in theories of personality as well as in the design of prevention and intervention strategies.

What is the Structure of Temperament?

The nine-dimensional model of Thomas & Chess (1977) has been the basis for the development of the most popular measures of temperament in the United States. The nine dimensions are: mood, approach-withdrawal, intensity, threshold, rhythmicity, distractibility, attention span, persistence, and adaptability. However, substantial overlap found among some of these dimensions has led to questions about their validity as separate constructs. Factor analyses suggest (see review by Martin, et al., in press) that these nine dimensions separate into five robust factors and two factors that are less consistent across measures and ages. The five robust factors are: inhibition (approach-avoidance), negative emotionality, adaptability, activity level, and task persistence. The two less consistent factors are: threshold and biological rhythmicity. The five robust dimensions emerging from the factor analytic study of childhood temperament resemble the Big Five factors identified in the study of adult personality and suggest a temperamental underpinning to personality.

Buss and Plomin (1984) emphasized the two criteria of early appearance and heritability as defining properties of temperamental traits and developed a measure based on the following three dimensions: emotionality, activity, and sociability (EAS). Factor analysis of a selected set of items from the EAS and the nine-dimensional model (ages 1-6) suggested the following factors: emotionality, soothability, activity, attention span, and sociability (Rowe & Plomin, 1977).

Rothbart and Derryberry (1981) defined temperament as constitutionally based individual differences in reactivity and self-regulation (influenced over time by heredity, maturation, and experience). Reactivity refers to the activation of motor, affective, autonomic, and endocrine systems. Self-regulation refers to the processes that modulate reactivity such as attention, approach-withdrawal, inhibition, and self-soothing. This framework broadens the possibility of identifying temperament dimensions to include those that do not appear within the first years of life. Furthermore, this approach promotes the application of research in areas such as emotion and cognition to refine temperament dimensions. In developing a series of temperament questionnaires for various ages, Rothbart and her colleagues identified as many as 15 dimensions of temperament, some of which are refinements of those previously identified such as emotionality (see Goldsmith & Rothbart, 1991).

What Issues Remain in Assessing Temperament?

One problem in the assessment of temperament is that measures for older children have been either upward extensions of temperament constructs and scales derived from observations on infants and toddlers or based on biological models without regard to development. An emphasis on early appearing traits precludes the consideration of characteristics that may be genetically programmed to emerge later in time and disregard

of developmental processes excludes from consideration age-related variation in the expression of temperament. Developmental changes in the elicitors of temperamental responses such as fear or pleasure have been studied in the early years through contrived laboratory situations, but such prototypical situations at later ages remain to be determined.

Response parameters need to reflect the greater complexity and differentiation of behavior with development. Commonly assessed response parameters in laboratory studies with young children have been duration, latency, and intensity. However, other parameters that tap the greater organization of behavior with development might entail modulation, self-regulation, or attunement to context Furthermore, age and rater differences in the meaning of specific items on scales have not been investigated.

How Are Temperament and Personality Related?

Despite efforts to distinguish between temperament and the more general concept of personality, the contrast between them is obscured by the following (see Prior, 1992): a) a common descriptive vocabulary; b) overlapping concepts; and c) failure of empirical data to differentiate between temperament and personality on the basis of biological factors.

The concept of self-regulation, widely studied as a personality variable, has also been regarded as a temperamental trait. Self-regulation as a personality construct appears to be defined in general terms encompassing the manner in which an individual thinks, feels, acts, and reacts. The temperament view refers to the basic processes involved in optimizing stimulation, alertness, and affective arousal.

Needed is an explanation of how the basic response styles identified as temperamental traits express themselves in larger units of functioning such as self-regulation in the broader sense. Temperament contributes to the coherence of the individual's current functioning and to both continuity and lawful changes in the developmental process. The individual's current state (personality) can be framed in terms of unfolding processes (continuous interaction between person and environment) that led to its development.

How do temperament dimensions exert their influence?

The mechanisms by which temperament dimensions exert their influence on broader areas of functioning are less well understood than the traits themselves. Martin (1994) reviewed two possible causal linkages between temperamental dispositions and children's common problems in educational settings that focus on the interplay of temperament with the environment:

1) Some components of the environment strengthen temperamental dispositions because the environment that is actually experienced is linked with those predispositions in three ways: a) on average, children share 50% of their own genetic make up with each of their parents who then provide environments that are influenced by their own genetic backgrounds; b) children's behavioral styles (i.e., temperaments) elicit responses from others in the environment in ways that strengthen their disposition; and c) children actively seek environments that are in harmony with their predispositions.

2) Temperament acts as a predisposition to (or buffer against) risk in the context of stressful conditions. According to this model, the role of the environment varies with the degree of predispositional risk.

A third possibility, that temperament influences the perception and synthesis of life experiences, is suggested by research on the impact of emotion on information processing and memory. Similarly, attentional processes, considered by many as temperamental, would be expected to have a very basic impact on the interpretation of information. Over time, the cumulative influence of temperament on the understanding of experiences (social and task) shapes the individual's inner world including views of relationships and expectations about events. These inner structures corroborate and amplify the original predispositions. Strategies to intervene must be aimed at altering the processes set into motion by the individual's temperamental dispositions.

Conclusions

Temperament is a compelling framework within which to study the contribution of individual differences to the developmental process. The documented association of temperament traits with diverse outcomes linked with normal development and psychopathology have left no doubt about the value of this construct. Future refinements in definitions and measurement as well as a better understanding of how temperament exerts its influence will promote greater application of these concepts to designing programs for prevention and intervention in mental health and educational settings.

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Assessment of Preschool Children

Nicholas A. Vacc and Sandra H. Ritter

Assessment of Preschool Children

With the enactment of the *Education for All Handicapped Children Act* (PL 94-142) of 1975 and its amendments (PL-99-457 of 1986 and PL 101-476 of 1990), all children are entitled to appropriate free education and related services regardless of disabilities. As a result, major strides have been made toward providing services for developmentally delayed children. These services include transportation, case management, family training and counseling, home visits for counseling, health services, medical services for diagnostic purposes, nursing services, nutrition services, occupational therapy, physical therapy, psychological services, social-work services, special classroom instruction, adapted physical education, audiology, and speech-language pathology. To gain access to these services, children who are suspected of having developmental or physical disabilities have to be referred to trained and qualified individuals or multi-disciplinary teams for assessment in cognitive, physical, language and speech, psychosocial, and self-help areas.

Young children, however, are difficult subjects to assess accurately because of their activity level and distractibility, shorter attention span, wariness of strangers, and inconsistent performance in unfamiliar environments. Other factors that may affect a child's performance include cultural differences and language barriers, parents not having books to read to their child and a child's lack of interaction with other children. Consequently, assessment of infants, toddlers, and young children requires sensitivity to the child's background, and knowledge of testing limitations and procedures with young children.

Current Trends

Assessment, differentiated from test administration and interpretation, is usually a comprehensive process of gathering information about a child across developmental areas. Benner (1992) reported several continua along which assessments fall: (a) norm-referenced to criterion-referenced, product oriented to process oriented assessment; (b) formal to informal assessment, direct to indirect assessment; (c) standardized tests to handicap-accommodating tests; and (d) single-discipline approach to team approach. The present trend in preschool assessment is toward the latter perspective of each continuum with strengths being emphasized rather than deficits.

Thus, current trends in preschool assessment include a move away from a "single assessor" model to an environmental model which is designed for the individual child. Through a team approach, children are evaluated with family members present, and factors of the home and social environment are taken into consideration. Because of the increased situation-specificity of developmental tests, which can be administered by professionals other than practicing psychologists, their use is increasing (Niemeyer, J. A., personal communication, August 19, 1994).

It has been recommended that norm-referenced tests, such as intelligence tests which historically have been used as a measure of ability and as an entrance criterion for programs such as Head Start, be replaced with assessments based on multiple theoretical perspectives (Niemeyer, J. A. personal communication, August 19, 1994). A more holistic evaluation of the child can be obtained by integrating tests of cognitive ability with other measures such as assessment of social and motor skills development.

Characteristics of Preschool Assessment

In identifying appropriate interventions at the preschool level, there is less focus on testing and more on evaluating the individual child. Some of the more important characteristics are as follows:

Criterion referenced and process oriented

Criterion-referenced tests allow each child to be assessed as an individual. Comparing the child with developmental milestones and selecting areas to reinforce allows interventions to be specifically tailored to a child. Attention is given to the *process* of the interactions (i.e., whether the assessment is being conducted in a way that optimizes the child's demonstration of abilities).

Informal, indirect, and naturalistic evaluations

Informal, relaxed settings where the child can be as much at ease as possible are recommended when doing assessment. Assessing a child within the context of his or her community and the interacting social systems, and taking into account the family's needs, resources, and concerns affect both the evaluation and possible interventions. One of the most important developments in this area is Trans-disciplinary Playbased Assessment (Linder, 1993), during which the child engages in play with a familiar person and the interactions of the child with the adult are observed by a team. The assessment is constructed so that the team can communicate with the play facilitator concerning unobserved skills (e.g., can the child stack three blocks). The combination of informal playbased assessment and more directed and structured ac-

tivities provides greater opportunity for a high level of performance (Bagnato & Neisworth, 1994).

Handicap accommodating assessments

Standardized assessment procedures present problems when a child has a handicap that impedes test performance even though the area being examined is not related to the handicap. Attention is being directed toward developing assessment procedures that accommodate for handicaps and provide a more accurate evaluation of the child.

Multi-disciplinary/trans-disciplinary approach

Because single discipline evaluations provide a "snapshot" from a limited perspective, assessments involving more than one discipline are recommended. Options include multi-disciplinary, inter-disciplinary, and trans-disciplinary assessments. Multi-disciplinary teams are based on the medical model where many disciplines evaluate individually and provide reports to a central figure. Inter-disciplinary team members assess the child individually and then convene to discuss findings and form joint recommendations. With a trans-disciplinary team, representation of all disciplines that are needed for a child (e.g., occupational therapy, speech therapy, medical doctor, nutritionist) are present, and the child is observed and discussed by all at the same time, thus providing an evaluation of the total child.

The Role of Mental Health Practitioners

Many current methods for preschool assessment are designed to be convenient for both the assessors and the families, and to have all individuals involved with a child participate directly in the evaluation process. Improvement is fostered when a holistic concept of the child is provided through a multi-disciplinary or trans-disciplinary assessment that is part of a larger set of conditions which promote change, such as family system interventions (AAHE, 1992). In many instances, the mental health practitioners (e.g., counselors) will not be directly involved in the test administration, but will work with the family during the process. In particular, mental health practitioners can provide information on testing, legal requirements, and the merits and limitations of preschool assessment methods. It is helpful for the parents to know that the principles of good assessment practice reflect a multi-dimensional, integrated understanding of learning, explicitly stated purposes, experiences that lead to results, and continuous intervention and re-evaluation. Mental health practitioners who are actively involved as part of the assessment team evaluating a referred child need to be familiar with the different assessment methods and their limitations, as well as current assessment trends and the reasoning behind them. This is especially important given that as few as 10% of tests administered to preschool children have been reported as appropriate to screen that population (Wortham, 1990). If mental health practitioners are not participants in the assessment process but are in the position of working with a child or the family after an assessment has been completed and a referral has been made, they need to evaluate whether the instruments employed, the assessment environment, and the way in which the evaluation was administered were appropriate for the particular child.

Summary

Major changes in the level of interest and evaluation methods employed in preschool assessment have occurred in the past decade. The current trend is toward an ecological, child-centered approach which includes trans- or multi-disciplinary evaluations. Such approaches evaluate the "total child" rather than a specific area.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-17

Screening for Special Diagnoses

Susan De La Paz and Steve Graham

Congress enacted Public Law 94-142, *the Education for All Handicapped Children Act*, in November, 1975. It requires that all children with disabilities receive a free and appropriate public education. Determining who has a disability and who is eligible for special services, however, is not an exact science. It is complicated by vague definitions and varying interpretations of how to identify specific handicapping conditions (Hallahan & Kauffman, 1991). Nevertheless, recent government figures indicate that 7 percent of children and youth from birth to 21 are identified as having a disability that requires special intervention (Hunt & Marshall, 1994).

While practices differ greatly both across and within states (Adelman & Taylor, 1993), screening is an important part of the assessment process mandated by Public Law 94-142. Screening for the purpose of special diagnoses begins at birth and continues throughout the school years. In the first few years of life, most forms of screening center around developmental norms for physical, cognitive, and language abilities. Many children with severe disabilities (cerebral palsy, spina bifida, Down's syndrome, autism, severe sensory impairments, or children with multiple disabilities, for example) are identified early in life by physicians and other health professionals. However, other children, such as those with learning disabilities, attention deficit disorders, behavioral problems, and so forth, are usually not identified until they start school.

School-Based Screening

Most public schools periodically "screen" large groups of students, typically between kindergarten through third grade, to identify children who may have a disability (as yet unidentified) or may be at risk for school failure. For example, a student with an extremely low test score on a standardized achievement test administered to all first graders in a school may become the focus of further inquiry to determine the validity of the screening observation and, if warranted, to determine the causes of the child's difficulties. This may lead to a recommendation to conduct a formal evaluation to decide if the child has a specific, identifiable disability. In addition to systematically "screening" students, children with a "suspected" disability may also be identified through referrals by parents, teachers, or other school personnel. Typically, a child who is having academic or behavioral problems in the classroom may be referred for further testing to determine if a disability is present. Before testing for diagnosis begins, however, the school must obtain consent from the child's parents to do the evaluation.

While most children with a disability are identified by third grade, some are not identified until the upper elementary grades or even junior or senior high school. In some instances, a problem does not become evident until the demands of school exceed the child's skills in coping with his or her disability. In other cases, the disability may not occur until the child is older. For instance, a disability may be acquired as a result of a traumatic brain injury or as a result of other environmental factors. A disability may also not be identified until a child is older because the procedures used for screening, referral, testing, and/or identification are ineffective.

Problems and Solutions for School Screening

It is important to understand that there is no standard or uniform battery of tests, checklists, or procedures to follow for the identification of most students with disabilities. While there is a basic structure to the identification process, there is considerable variability in how students may come to be identified, including the types of tests used in screening and the processes by which they are referred.

Critics have argued that the procedures used to identify children and youth with special needs have resulted in over- as well as under-identification of students with disabilities. As several studies have shown, a referred child almost always qualifies for special education (Christenson, Ysseldyke, & Algozzine, 1983). Over-identification has been particularly problematic in the area of learning disabilities (Hunt & Marshall, 1994), as approximately half of all students receiving special education services are identified as learning disabled! In contrast, students with behavioral disorders appear to be under-identified, particularly children who are compliant and nonaggressive but suffer from problems such as depression, school phobia, or social isolation (Walker et al., 1990).

To remedy problems of over- and under-identification, educators have begun to institute several changes in the screening and referral process. One approach has involved the development of better screening procedures. For example, Walker and his colleagues (1990) devised a screening process, the Systematic Screening for Behavioral Disorders, that relies on a three-step process. Teachers (1) rank-order students along specified criteria and then (2) use checklists to quantify observations about the three highest-ranked students. Then, (3) other school personnel (for example, school psychologists or counselors) observe children whose behaviors exceed the norm for the teacher's classroom. Referrals are made for further evaluation only after the three-step process is completed.

A second common practice aimed at improving the identification process involves the use of prereferral interventions (Chalfant, 1985). These interventions have been developed to reduce the number of referrals to special education and provide additional help and advice to regular education teachers. Before initiating a referral for testing for special diagnosis, teachers first attempt to deal with a child's learning or behavioral problems by making modifications in the regular classroom. If these modifications fail to address the difficulties the child is experiencing adequately and the teacher believes that special services may be warranted, then the referral process is set into motion. Currently, 34 of 50 states require or recommend some form of prereferral intervention (Sindelar, Griffin, Smith, & Watanabe, 1992).

Two of the more common prereferral intervention approaches include Teacher Assistance Teams, (TATs), and collaborative consultation. Both approaches involve professionals helping regular educators deal with students who have problems in their classroom; however, they differ in an essential way. TATs typically consist of a team of three teachers with the referring teacher as the fourth member. The TAT model provides a forum where teachers meet and brainstorm ideas for teaching or managing a student. In contrast, most collaborative consultation models employ school specialists (resource room teachers, speech-language clinicians) who work directly with the referring teacher to plan, implement, and evaluate instruction for target students in the regular classroom.

Summary

Screening procedures are an important part of the assessment process to identify children and youth who have disabilities. Such procedures must be used with care, however, as they provide only a preliminary sign that a child has a disability. Additional testing is required to affirm or disprove the presence of a handicapping condition. If a disability is identified during follow-up assessment, the focus shifts to providing the student with an appropriate education.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-18

Assessment in Career Counseling

Dale J. Prediger

"In choosing an occupation one is, in effect, choosing a means of implementing a self-concept" (Super, 1957, p. 196). What might be called "Super's Dictum" has an antecedent in ancient Greek thought: "Know Thyself." It was formulated in the early days of the career development revolution that eventually swept away square-peg-square-hole thinking about assessment. Current thinking regarding the role of assessment in career development and counseling represents an extension of Super's Dictum and a revitalization of trait and factor theory.

Since the content of assessment in career counseling (e.g., interests, abilities, career certainty) is well-covered by other digests in this series (also see Kapes, Mastie, & Whitfield, 1994), this digest focuses on the process--specifically, the contribution of assessment procedures to career exploration and planning. (Super's Dictum on choosing an "occupation" encompasses the *trial occupational choices* characterizing exploration and planning.) Because these career development tasks are experienced by everyone, this digest addresses assessment for the many (e.g., via career planning courses) rather than intensive, problem-focused career counseling.

Basic Considerations

1. Trait and Factor Theory: The Foundation for Assessment

Assessment procedures used in career counseling have their roots in tests used for diagnostic screening and personnel selection (hiring). As a result, the "test 'em and tell 'em" approach to test use and the focus of scores on arbitrary decision points (e.g., helping Pat choose a career at 10:20 a.m. on Tuesday, March 17th) were major problems at one time. Trait and factor theory was and continues to be blamed for these problems. However, there is nothing inherently wrong with assessing human traits. Indeed, assessment is part of human nature; for millennia, we have "sized-up" strangers and acquaintances. Misinterpretations and misapplications of trait and factor theory are now widely recognized and there have been several recent attempts to place trait assessment into the context of career development theory (e.g., see Chartrand, 1991; Rounds & Tracey, 1990).

2. Self-Concept: The Basis for Career Choice

According to Super's Dictum, an occupation gives one the chance to be the kind of person one wants to be; hence, career choices are based on self-concepts projected into career options. It follows that a major task in career counseling is to elicit and inform self-concepts---not a simple process (Betz, 1994) unless one prioritizes components according to career relevance. Faulty self-concepts are likely to result in flawed plans and choices. Herr and Cramer (1992) said it this way: "The major concern in a career [development] model is the clarity and accuracy of the self-concept as the evaluative base by which to judge available career options" (p. 155).

3. Assessment: A Primary Means for Self/Career Exploration

Given today's complex array of career options, one of the most difficult developmental tasks persons face is the identification and exploration of options congruent with their characteristics. Assessment can provide focus to career exploration. In the process of assessment and career exploration, counselees will develop insights about themselves and the work world that will inform their self-concepts. In a nutshell, the major role of assessment in career counseling is *self/career exploration*--a complementary process.

4. Transformation of Assessment Data: Requirement of Helpful Assessment

Assessment data (standard scores, percentile ranks, etc.) must go through a series of transformations if they are to be helpful in career counseling. First, data must be transformed into counseling information--i.e., career options worthy of exploration. Next, a short list of options must be transformed into action--i.e., self-evaluated activities and experiences. Finally, self-evaluations and self-concepts must be transformed into career plans. Because of the research and technology involved (see below), counselors should require that test publishers take primary responsibility for the first transformation. Counselors and counselees share responsibility for the other two.

5. Data-Information Transformation: Bridge to Reality

In a 30-year-old text on test interpretation fundamentals (many of which are ignored today), Goldman (1971) described the following three models for transforming assessment data into counseling information--for "bridging the gap" between a score and its real-world implications.

Clinical interpretations: Bridge for those with time. The labor-intensive clinical interpretation model (see Goldman, 1971, for specifics) is shaky at best--unless counselors are very well trained and have a light load. It is often supported by little more than a list of scores; a vague understanding of measurement error, "validity coefficients," and "hit rates"; specific knowledge about a few occupations and a mystical reliance on counselor/counselee intuition. While intuition can contribute to assessment for career counseling, counselors should expect publishers of assessment instruments to help them "bridge the gap" between scores and their implications.

Success predictions: Bridge to nowhere. Presumably, the prediction model can forecast levels of occupational success. Presumably, a counselor can say (for example): "Pat, based on your test scores, chances are about 59 out of 100 that you will be moderately 'successful' as a counseling psychologist and 27 out

of 100 that you will be highly 'successful.' Now, as for flight attendant and pediatrician, . . ." Unfortunately, research indicates that so-called "actuarial methods" can never provide predictions of occupational success for enough occupations and with enough precision to be of use in career exploration (e.g., see Goldman, 1994; Prediger, 1974). Nevertheless, the latest claim is that success predictions based on general mental ability (formerly called IQ) can be provided *and compared* across nearly all occupations. This is despite the facts that: (a) "success" is defined differently from occupation to occupation (b) defensible measures of level of success are often unavailable (e.g., for counseling psychologist, pediatrician); (c) predictor-success correlations are available for relatively few occupations; and (d) when available, prediction errors are large.

Attempts to predict occupational choice are also unwarranted. Besides, what counselor would want to say (for example): "Pat, chances are 73 out of 100 you will become a nurse, [etc.]"? According to Zytowski (1994), the prediction model "is the failed relationship" (p. 222) between tests and career counseling.

Similarity estimates: Bridge to the work world. The similarity model ("you look like a person who") can be used to survey the work world in order to identify occupational options warranting exploration. (For over 60 years, interpretations of the Strong Interest Inventory Occupational Scales have been based on this model.) The goal of the similarity model is *not* to predict level of success or to find the "ideal career." Rather, the goal is to say (for example): "Pat, here are some occupations that attract people who are similar to you in several important ways. You may want to check them out." Research shows that observed differences among career groups are of sufficient magnitude to provide focus to career exploration (e.g., see Prediger, 1974; Rounds & Tracey, 1990; Zytowski, 1994). Counselors should expect publishers of assessment instruments to provide them with an interpretive bridge based on similarity model research. Improvised, armchair "structured searches" should be questioned.

6. Informed Self-Estimates: Key to Ability Assessment

Unfortunately, test scores are seldom available for many work-relevant abilities--e.g., sales, leadership/management, organization, creative/artistic, social interaction. Too often, work-relevant abilities that can't be assessed by paper-and-pencil tests are ignored. But career exploration based only on abilities for which there are tests not only misses important abilities, it does not take account of the powerful role of self-concepts in occupational choice (recall Super's Dictum). Ability self-estimates bring work-relevant self-concepts to the attention of the counselee and the counselor. Elsewhere, I have discussed how *informed* self-estimates of abilities can be used to facilitate self/career exploration (Prediger, 1994). To be accurate, self-estimates must be informed by experience--including the ability *estimates* provided by test scores, if they are available.

7. Comprehensive, Articulated Assessment: A Goal

Career development theory makes it hard to defend career exploration based only on interests, only on abilities, or only on job values (e.g., see Lowman, 1993). Nevertheless, some counselors still take a piecemeal approach to career assessment--e.g., interests in Grade 9; abilities 3 years later. Counselors may also face the problem of interpreting interest, ability, etc. assessments based on different norms, profile formats, and work world structures. Some publishers are responding to these problems with comprehensive, articulated assessment programs. Counselors should expect nothing less.

8. Development of Possibilities into Realities: A Requirement

One of the career counselor's primary functions is to help counselees develop career possibilities into realities--that is, to facilitate personal growth (e.g., building the abilities needed for a preferred career path). In conjunction with other information about the counselee, assessment information can suggest where growth would be helpful and how it can be effected.

Summary

Trait and factor theory,(now "person-environment fit theory") has been revitalized by career development theory. Recognition of the importance of the self-concept in career exploration provides the basis for a closer relationship between assessment and counseling.

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Assessing Career Certainty and Choice Status

Paul J. Hartung, Ph.D.

Career certainty refers to the degree to which individuals feel confident, or decided, about their occupational plans. The construct proves elusive to explain clearly unless considered in terms of the larger domain of career decision making and, specifically, career indecision. Research has yielded a variety of instruments useful for assessing career indecision. These instruments typically include a measure of career certainty by using one or two items that in part comprise a larger inventory that surveys career choice status. These measures give counselors important practical tools for appraising clients' career choice status as a step in assisting clients to alleviate their career indecision. Measures of career certainty and indecision also provide researchers with a means of determining the efficacy of career counseling interventions.

Parsons (1909) pioneered the study and assessment of career certainty and career indecision. In his work, he classified people into career-decided (i.e., certain) and career-undecided (i.e., uncertain) groups. Some years later, Williamson (1937) discounted empirically the then widely-held belief that certainty of vocational choice predicts scholastic achievement. As part of his research, Williamson asked students reporting definite vocational choices to rate themselves as very certain, certain, or uncertain about their choices. Research such as Williamson's that used Parsons' dichotomous model to study career-decided and career-undecided groups produced mixed and inconsistent results. Some studies found that decided and undecided people showed significant personality or performance differences, whereas other studies found no differences between these two groups (see Slaney, 1988a for a review). As one way of resolving these inconsistent findings, researchers reconceptualized undecided people as comprising different sub-types and turned to developing psychometric instruments that would assess degree of and reasons for career uncertainty. Work by Savickas (1992) suggests that these measures now constitute two generations of instrument development.

First-Generation Measures

First-generation measures of career choice status yield total indecision scores. Such instruments, although not multidimensional by design, have generated considerable research on identifying multiple subtypes of undecided people and developing differential interventions for each type.

Initially called the Types Questionnaire, the *Career Decision Scale* (CDS; Osipow, Carney, Winer, Yanico, & Koschier, 1976) ranks as the prototypical first-generation measure. The original title of the CDS reflected the purpose of the instrument to scale various decisional problem types and to measure antecedents of career indecision. Although predated by other measures, such as the *Vocational Decision Making Difficulty* scale (VDMD; Holland, Gottfredson, & Nafziger, 1973), the CDS represents the earliest published attempt to assess level of and reasons for career indecision.

The CDS emerged from work beginning in a graduate seminar and evolved from an initial 14 items to its current 19-item format. Items one and two comprise the Certainty Scale and assess respondents' decidedness about, respectively, their career and academic major choices. Respondents rate themselves on these two items according to their levels of certainty and perceived comfort with and ability to implement their choices. Items 3-18 make up the Indecision Scale which assesses reasons for career indecision and correlates negatively with the Certainty Scale. Item 19 offers an open-ended response opportunity to clarify or elaborate on responses to the 18 preceding items. Osipow et al. (1976) designed the CDS primarily for high school and college students although, as Slaney (1988a) notes, it has been adapted successfully for use with graduate students, medical students, and non-traditional female college students. Extensive evidence exists for the reliability as well as the construct and concurrent validity of the measure (Slaney, 1988b). Counselors use the CDS to efficiently gauge clients' levels of decidedness, reasons for indecision, and to plan specific interventions based on item responses.

Many researchers have conducted factor-analytic studies of the CDS to determine whether its items scale different dimensions of indecision. If the CDS proved to measure different dimensions of indecision then counselors could use it to identify not only general indecision levels but also specific barriers to making career decisions. These factor analytic studies have fueled much debate about the utility of the CDS for this purpose. The dispute over the validity of the CDS as a multidimensional mea-

sure has produced a second generation of career certainty and career indecision measures.

Second-Generation Measures

Recent years have witnessed the emergence of a new age of career choice status measures. These measures differ significantly from earlier instruments in that researchers developed these later measures explicitly to assess multiple dimensions of career indecision. In so doing, these measures expanded Parsons' original model by operationally defining indecision as a multidimensional construct.

A revision of the *Vocational Decision Scale, the Career Decision Profile* (CDP; Jones, 1989) typifies measures designed specifically to scale different dimensions of career indecision and career choice status. Jones (1989) based the CDP on his and a colleague's earlier vocational decision status model. He showed in his initial validity study of the CDP that the vocational decision status model, consisting of three dimensions, "provides a clearer picture of career indecision than current unitary approaches" (p. 477). The CDP assesses respondents along the dimensions of (a) decidedness, or degree of certainty about choice, (b) comfort, or degree of contentment with decisional status, and (c) reasons, or basis for being decided or undecided.

The CDP Decidedness Scale contains two items on which respondents rate themselves using an 8-point scale. The first item contains content about having an occupational field in mind. The second item concerns having decided on an occupation to enter. Two additional items comprise the CDP Comfort Scale and contain content related to feeling at ease with or worried about career choice. Counselors can pair a client's scores on the scales of Decidedness and Comfort to profile a client' s choice status as decided/comfortable, decided/uncomfortable, undecided/comfortable, undecided/uncomfortable. Four additional scales, each containing three items, assess respondents' reasons for their career uncertainty. These scales include (a) Self-Clarity, which concerns having knowledge about one's own interests, abilities, and so on, (b) Knowledge About Occupations and Training, which taps world-of-work knowledge, (c) Decisiveness, which measures ability to decide independently and resolutely, and (d) Career Choice Importance, which gauges feelings about the significance of work and making a career choice. Counselors can use these scales to identify specific barriers that prevent a client from reaching a career-decided state.

Summary and Conclusion

Since Parsons (1909) first classified people into career-decided and career-undecided groups, counseling researchers and practitioners have worked to formally assess career choice status. These efforts have yielded two generations of instruments useful for gauging clients' levels of and reasons for indecision as well as degrees of certainty about their career choices. Surveying clients in terms of their choice status continues to help researchers understand the complexity of career indecision and choice status. It also aids practitioners in planning appropriate career counseling interventions.

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ERIC DIGEST

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Gender Differences in Adolescent Career Exploration

Helen S. Farmer

Career exploration is a developmental stage identified by career development theorists (Super, 1990) and occurs typically during adolescence when boys and girls try out various work roles in part time work, volunteer work, or in school/community activities. Exploration tasks also include gaining an increasing awareness and understanding of the self, of abilities, interests, values, and needs. Jordaan (1963) indicated that exploration is the first of three substages leading to realistic career choice. Exploratory behavior follows the stage of tentative choice and is a time when a person wants to know as much as possible about themselves and about the world of work in order to make the best choice. This digest focuses on gender differences in the role of assessment in the exploration process. Career assessment texts, such as those of Walsh and Betz (1994) and Walsh and Osipow (1994), contain excellent chapters on gender bias in career assessment. In particular, the Gottfredson chapter in Walsh and Osipow provides extensive suggestions on how assessment may be used to stimulate career exploration that is gender fair.

Gender Differences in Career Exploration

Girls have been found typically to explore careers from a narrower set of career options than do boys. Gottfredson (1981) demonstrated how this occurs based on occupational sex role socialization. Girls and boys learn early which occupations are suitable for them and which ones are not. There have been concerted efforts on the part of educators, counselors, and the media to reduce occupational sex role stereotypes (Klein, 1985). Career education programs and classes in high school have attempted to reduce stereotyping in a variety of ways, including exposure to a wider variety of work environments, role models in nontraditional occupations, class discussion of issues related to occupational stereotyping and assessment of occupational interests in a gender neutral or sex fair way (Klein,1985). Increases in the participation of women in occupations nontraditional for them have occured since the Educational Equity Act, and Equal Employment Legislation were passed in 1972. For example, women represented less than 1% of engineers in1970, but, in 1990, women represented 17% of employed engineers (National Science Foundation, NSF, 1994). However, women are still seriously underrepresented in the higher paid, higher prestige, and better paying occupations, such as high level managers (i.e., CEO's), medical specialties involving surgery, the physical sciences and technical occupations (NSF, 1994). Occupational sex role socialization is still influencing the career exploration process for girls and boys.

Gender Differences in Career Interest Assessment

The most frequently used measures to aid in career exploration during adolescence are the career interest inventories. There are basically two kinds of interest measures, those based on empirical occupational scales such as the Strong Interest Inventory (SII), and those based on homogeneous scales such as the Self Directed Search (SDS) and the Kuder Occupational Interest Survey (KOIS). The former reflect the interests of persons currently in an occupation, that is , the status quo, and do not serve to stimulate exploratory behavior as well as the homogeneous scaled inventories, which provide, for each interest, a measure of how similar a person's interests are to a set of items that all assess that interest (for example, artistic interest). The concept of "exploration validity" based on the extent to which an interest inventory stimulates the person to explore career options that might otherwise not be explored is relevant to the gender issues discussed in this digest. Interest inventories were criticized in the 1970's because they typically used sexist language and items that were biased toward men and yielded scores that rarely encouraged girls to explore occupations nontraditional for their gender (Diamond,1975). The National Institute of Education (NIE) issued guidelines for reducing sex bias in interest measurement (Diamond, 1975) and these guidelines were effective in stimulating the publishers of the most frequently used career interest measures to revise their instruments to make them more sex fair (i.e., Strong Interest Inventory(SII), Harmon, Hansen, Borgen, & Hammer,1994; Kuder Occupational Interest Survey (KOIS), Kuder & Zytowski,1991; and The Self Directed Search(SDS), Holland, Fritzsche, & Powell,1994). Sex bias was defined in the NIE Guidelines (Diamond, 1975) as "any factor that might influence a person to limit--or might cause others to limit--his or her consideration of a career solely on the basis of gender." These guidelines further suggested that administration of an interest inventory be accompanied by an orientation dealing with possible influences from the environment, culture, early socialization, traditional sex role expectations of society, home-versus-career conflict, and the experiences typical of women and men as members of various ethnic and social class groups on men's and women's scores. Such orientation should encourage respondents to examine stereotypic "sets" toward activities and occupations and should help respondents to see that there is virtually no activity or occupation that is exclusively male or female (Diamond,1975, pp. xxvi-xxvii). Interest inventories that extend exploration of occupations beyond those the client has already considered into

fields not typical for their gender would be viewed as responsive to the NIE Guidelines. Which interest inventories in 1994 best meet this exploratory validity criterion?

During the period from the early 1970's to the mid 1980's most interest measures met the criteria set down by the NIE Guidelines to eliminate sexist language, to use the same form of the test for both sexes; to provide scores on all occupational scales for both sexes with an explanation of which norms were used to develop the scale, and to use items that equally reflected the experiences/activities familiar to both sexes.

Not surprisingly, perhaps, career interest inventories such as the Self Directed Search (Holland, et al. 1994) still obtain significantly higher scores for women on Social scales (i.e., those related to people and service oriented occupations) and significantly higher scores for men on Realistic scales (i.e. those related to technical,skilled trades, engineering occupations). Hansen, Collins, Swanson, and Fouad (1993) assessed sex differences in Holland's hexagon ordering of career interests as measured by the SII and found that the distance between interest types was significantly different for men and women when samples were matched for occupation and level. These authors found that women's scores on Investigative and Realistic scales were highly correlated and that the structure of Holland's Hexagon was significantly different for men and women. The SII (Harmon et al., 1994) Manual suggests the use of this inventory to facilitate career exploration for the non-college bound youth, but not for the college bound. Since evidence of gender differences continue to be found for career interest measures it seems imperative to revive the NIE Guidelines orienting women clients to the effects of their socialization on their scores. In the latest version of the SDS the Assessment Booklet gives the following advice to users after they have obtained their SDS scores: "Remember that results are affected by many factors in your background. For example, because society encourages men and women to aspire to different vocations women receive more Social, Artistic and Conventional codes than men, while men receive more Investigative, Realistic and Enterprising codes. Yet we know that almost all jobs can be successfully performed by members of either sex. If your codes differ from your Occupational Daydream codes keep these influences in mind. You may decide to stick with your Daydreams" (Holland,1994, p. 12). It would be interesting to know what kind of SDS scores a person might obtain if they received this message **before** taking the inventory, consistent with NIE Guidelines.

Summary

The NIE Guidelines for reducing sex bias in interest measurement (Diamond, 1975) were followed to a large extent by both interest measurement test developers and publishers in the decade following their publication. The concept of "exploration validity," the extent to which an interest inventory stimulates the person to explore career options that might otherwise not be explored has been widely adopted. However, the continuing evidence that gender differences exist in career interest measurement strongly suggests that such assessment is accompanied with counseling. The NIE Guidelines (Diamond, 1975) suggesting that exploration during adolescence should expand beyond the social learning experiences of an individual, and beyond their expressed interests, to include exposure to other career options that sex equity legislation has opened up to women should be followed if career exploration is to become more gender fair.

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Assessing Employability Skills

Thomas H. Saterfiel and Joyce R. McLarty

The term *employability skills* refers to those skills required to acquire and retain a job. In the past, employability skills were considered to be primarily of a vocational or job-specific nature; they were not thought to include the academic skills most commonly taught in the schools. Current thinking, however, has broadened the definition of employability skills to include not only many foundational academic skills, but also a variety of attitudes and habits.

In fact, in recent usage, the term *employability skills* is often used to describe the preparation or foundational skills upon which a person must build job-specific skills (i.e., those that are unique to specific jobs). Among these foundational skills are those which relate to communication, personal and interpersonal relationships, problem solving, and management of organizational processes (Lankard, 1990). Employability skills in this sense are valued because they apply to many jobs and so can support common preparation to meet the needs of many different occupations.

The concept of employability skills originated with educators, primarily those working on programs specifically designed to facilitate employment (e.g., vocational rehabilitation, Job Training Partnership Act). Employers, although the primary determiners of the skills that will actually enable an individual to acquire and retain a job, have traditionally focused on job-specific skills (e.g., those needed to spot weld or prepare a sales report). Assessments for employment, where used, most frequently have consisted of general ability and personality tests supplemented by job-specific assessments (e.g., work samples).

In recent years, that picture has changed dramatically with ever growing numbers of employers assessing foundational skills, primarily in reading and mathematics, prior to hiring (Greenburg, Canzoneri, and Straker, 1994). This is probably due to the joint effects of an increasing demand for these skills on the job and employer dissatisfaction with the levels of those skills demonstrated by applicants. Even today, however, educators show greater interest in employability skills assessment than do employers. This is possibly due to employer concerns about the legal implications of any assessment that might have adverse impact (a detrimental effect on hiring rates) on gender or ethnic minority groups (Uniform Guidelines, 1978).

Much of the current impetus to teach and assess employability skills results from concerns about this country's ability to compete in the world economy. Seminal work by Carnevale (Carnevale, Garner, and Meltzer, 1990) was followed by efforts by both public and private agencies to address the strongly felt need to improve the work-related skills of those entering the workforce. The work begun by the Department of Labor and its Secretary's Commission on Attaining Necessary Skills (SCANS) is continuing, with plans to validate the skills they identified (U.S. Department of Labor, SCANS, 1992). Development of assessments for these skills will follow this effort.

American College Testing's Center for Education and Work, through its Work Keys System, has developed large-scale assessments for seven employability skill areas: Reading for Information, Applied Mathematics, Listening, Writing, Locating Information, Applied Technology, and Teamwork. Assessments for additional skill areas are currently in development (American College Testing, 1994). The state of Ohio combined its job-specific Ohio Compentency Assessment Program (OCAP) tests with the Work Keys assessments for a comprehensive assessment of foundational and specialized skills. The state of Tennessee is involving its high school seniors in the Work Keys System to help it meet the employability skills needs of all its students.

Other notable efforts include the C^3 project in Fort Worth, Texas (Fort Worth Independent School District, 1992) and the portfolio development and evaluation undertaken by the state of Michigan (Michigan Occupational Information Coordinating Committee, 1992). These projects are distinguished by extensive use of business input for development and implementation. Although neither of these projects currently offers assessments for use by outside agencies, both are sources of valuable information on the development of employability skills.

Of the many other efforts to provide employability skills assessments, the largest group focus on the basic literacy level, as did the earliest work on employability skills. Educational Testing Service, building on the work of the National Adult Literacy Study funded by the U.S. Department of Education, publishes tests measuring

lower-level reading, mathematics, and document literacy. Additionally, tests once used only for assessing lower-level adult skills for academic purposes have now also been pressed into service to meet the growing demand for employability skills assessment (e.g., TABE, CASAS).

When selecting an approach for assessing employability skills, several criteria must be kept in mind. First, the validity of an employability skills assessment rests on job analysis: a clear and validated relationship should exist between the assessment and the skills required for one or more jobs. This relationship should be based on a systematic analysis of the skills and skill levels required for the job(s) in question. It is not sufficient to observe, for example, that "reading" is required for the job; one must know which tasks require reading and the type and level of reading skill needed. The assessment must clearly mirror the nature of the skill required, and the score attained on it must accurately reflect the examinee's level of that skill.

Second, the skill assessed should be teachable. Assessment of "intrinsic abilities" is valuable both for employers attempting to predict future job performance and for counselors working with students to identify jobs suited to their interests, values, and self-concepts. However, the essence of employability skills is preparation for the job, so the focus of employability skills assessments should be directed to those aspects of the relevant skills that can be taught. Since not all employability skills can be neatly packaged in the traditional academic disciplines, educators must make special efforts to ensure that they teach all the needed employability skills.

The degree to which preparation for the workforce (i.e., employability skills development) and preparation for postsecondary education are congruous has been under considerable discussion. It is too early to determine whether integrated preparation for both provides as good a preparation for each as separate programs or, if not, at what point in a student's career separate programs should begin. Institutions using separate programs for preparation generally begin that differentiation at grade 10 or 11.

Finally, each assessment must be evaluated in the context of its purpose. If employers are going to use the scores to make personnel decisions, the employability skills assessment must meet strict reliability and validity standards, sufficient to provide a sound legal defense. This requires painstaking attention to the psychometric quality of the instrument, to the standardization of the administration, and to the accuracy of the scoring. However, if the purpose of the assessment is to guide instruction, relevant psychometric criteria are more relaxed. The advantage of assessments which employers may use for personnel decisions is that the results are of immediate use to the examinees in making the transition to the workforce. The advantage of assessments used only for low-stakes purposes is that they may be constructed with greater emphasis on providing instructionally relevant experiences to students. It is also important to recognize that assessment instruments are needed to support the information needs both of school-age students as they enter the workforce and of adults making transitions into, or within, the workforce at later stages in their lives.

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Assessing Career Development with Portfolios

Juliette N. Lester and Nancy S. Perry

The assessment of career development is a relatively new concept. In general, ideas of appropriate methods for assessing student achievement and mastery of any set of competencies are shifting. Criterion-referenced tests, which measure performance relative to a specified set of standards or tasks, are gaining favor, for example, over norm-referenced tests, which measure how an examinee performed in relation to others. At the same time, support for internal accountability, that is, determining what is worth knowing and assuring that students know it, is increasing. One response to this has been an increased use of portfolios that provide a medium for assessing student work and invite them to become responsible partners in documenting their learning. Through portfolios, students compose a portrait of themselves as able learners, selecting and presenting evidence that they have met the learning standards for individual classes and for broader learning tasks (Wolf, LeMahieu & Eresh, 1992). A student portfolio may be described as "a purposeful collection of student work that tells the story of the student's efforts, progress, or achievement in a given area. This collection must include student participation in selection of portfolio content; the guidelines for selections; the criteria for judging merit; and evidence of student self-reflection" (Arter and Spandel, 1992, p.36).

As career development becomes an increasingly important component of educational systems, the issues of measurement and accountability are raised. This digest focuses on the use of portfolios in assessing career development.

Career Development Goals

In today's workplace, employment security is becoming "employability security" (Kanter, 1991, p.9) -- the knowledge that one has the competencies demanded in a global economy and the ability to expand and adjust those competencies as requirements change. The challenge of preparing our young people for this new workplace has generated legislative efforts to stimulate educational reform directed at creating "world class" education and a comprehensive system for helping American youth make a smooth transition from high school to productive, skilled employment and further learning. The *Goals 2000: Educate America Act* establishes eight national education goals and two national councils -- one to stimulate the development of voluntary academic standards and the other to identify essential occupational skills. The *School to Work Opportunities Act of 1994* is a strategy to implement the purpose of the *Goals 2000: Educate America Act*, that is, helping all Americans to reach internationally competitive standards through educational reform.

Career development is a major component of the *School to Work Opportunities Act (STWOA)*. Career guidance and counseling, which are interventions in the career development process, are recognized as essential in helping students to choose their career (educational) pathway. Section 102 of the *STWOA* states that "The school-based component of a School-to-Work Opportunities program shall include ... career awareness and career exploration and counseling (beginning at the earliest possible age, but not later than the 7th grade) in order to help students who may be interested to identify, and select or reconsider, their interests, goals, and career majors, including those options that may not be traditional for their gender, race or ethnicity." The Act also provides grants to states to plan for and implement school-to-work opportunities systems.

Renewed interest in career development has led to an equal demand for accountability. This prompts several questions. What do we want our students to know and be able to do as a result of a career development process and how will we know that they have achieved it? This legislation has placed the onus on school systems to provide the programs to help students make informed career decisions, and to provide opportunities for students to take responsibility for their career development. How will they know they have achieved these outcomes?

Two major endeavors can help schools to meet the double need of accountability and assessment. First, state and professional associations, as well as national leaders, practitioners, and career development experts, collaborated to develop the National Career Development Guidelines (NOICC, 1989). The National Career Development Guidelines offer a comprehensive, competency-based approach to career development that states, educational institutions and other organizations can use in developing effective career guidance programs. The Guidelines offer the processes, content and structure for such programs. More importantly, they provide the standards or competencies for career development at four different levels--elementary, middle/junior high, high school, and

postsecondary/adult. The competencies fall within three areas of career development -- self-knowledge, educational and occupational exploration, and career planning. The Guidelines, already being used in over 40 states as standards or as the basis for establishing career development standards, provide nationally validated competencies that can be used in assessment.

The second significant effort has been the work of the Secretary's Commission on Achieving Necessary Skills (SCANS). In the Commission report, *What Work Requires of Schools* (U. S. Department of Labor, 1991), five areas of competencies based on a three-part foundation are delineated. Of the 36 specific skills or qualities noted, over half are commonly included in a career guidance program. This report validates the integration of career guidance and counseling into educational programs and supplies a complementary set of standards by which a career development process can be measured.

Assessment Through Portfolios

The essential criteria for measuring the accountability of a career guidance program are available. Since self-assessment and reflection are important to developing personal responsibility in career decision-making, a portfolio that sets standards and also allows for reflection emerges as the instrument of choice. Until now, most efforts to document career development have been through career planners. Career planners are usually the end product of a career development process and, as such, are appropriate for secondary education or higher but not for the student at the awareness or exploratory stages. They also do not typically provide for the self-reflection essential to an individual's ownership of the process.

Get A Life: Your Personal Planning Portfolio (ASCA, 1993), designed through collaboration between the American School Counselor Association and the National Occupational Information Coordinating Committee, is one instrument that sets standards and allows for self-reflection. The portfolio is divided into four sections -- self-knowledge, life roles, educational development, and career exploration and planning. Each section contains competency files and personal files. The National Career Development Guidelines for the middle and high school levels are used as competencies for both program and individual assessment. Program planners can analyze the comprehensiveness of their programs by evaluating their activities in relation to the expected student outcomes contained in the Guidelines. Individuals can determine if they have met the career development competencies through the programs offered. Within the competency file, a sign-off ascertains the strategies and the date on which each competency was addressed. In some schools, students make the decision whether, in fact, the activity or strategy presented did help them to master the competency. The personal files are a set of guiding questions that help students to reflect on their learning. The portfolio is an organizational tool that allows the owners to collect information about themselves to use in making personal, educational and career decisions. At the same time, the students are introduced to the idea that the process is lifelong, and that they must become "career negotiators" (Bailyn, 1992), taking responsibility for their own development.

Summary and Conclusion

Recent efforts to improve education have led to a new look at assessment. As pedagogy has changed to focus on learner-centered education, the need to make assessment an integral, on-going part of instruction has become obvious. Concurrently, Federal initiatives to promote educational reform have required the provision of career development opportunities and have demanded accountability in this area. The portfolio concept is one way to meet this challenge by giving students ownership of their work and standards by which they can be measured. States and local districts must define the career development standards they wish to implement, allow students the opportunity to take responsibility for their career development, offer the necessary career guidance and counseling to support student learning, and assess both the program and the individual to assure that the expected outcomes are being achieved. The portfolio provides the format for the process and documentation of career development while giving individuals and programs standards for assessment.

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Ethics in Assessment

Cynthia B. Schmeiser

Every profession has distinct ethical obligations to the public. These obligations include professional competency, integrity, honesty, confidentiality, objectivity, public safety, and fairness, all of which are intended to preserve and safeguard public confidence. Unfortunately, all too often we hear reports in the media of moral dilemmas and unethical behavior by professionals. These reports naturally receive considerable attention by the public, whose confidence in the profession is undermined with each report.

Those who are involved with assessment are unfortunately not immune to unethical practices. Abuses in preparing students to take tests as well as in the use and interpretation of test results have been widely publicized. Misuses of test data in high-stakes decisions, such as scholarship awards, retention/promotion decisions, and accountability decisions, have been reported all too frequently. Even claims made in advertisements about the success rates of test coaching courses have raised questions about truth in advertising. Given these and other occurrences of unethical behavior associated with assessment, the purpose of this digest is to examine the available standards of ethical practice in assessment and the issues associated with implementation of these standards.

Existing Ethical Standards

Concerns about ethical practices in assessment are not new. As early as 1972, the National Council on Measurement in Education (NCME), the Association for Measurement and Evaluation in Guidance (AMEG), and the American Association for Counseling and Development (AACD is now known as theAmerican Counseling Association) developed a position paper on the responsible use of tests that was intended to ensure that tests are given, and examinees are treated, fairly and wisely (AMEG, 1972). Later in the 1970s, AACD developed a statement on the responsibilities of the users of standardized tests, a document that was revised as recently as 1989 (AACD, 1989). Both of these early documents recognized the need to positively influence the practices of those who use tests in ways that promote responsible use. These statements have been followed by the development of ethical standards by a number of other organizations having an interest, or directly involved, in assessment. These standards address assessment practices and related issues for various professionals: psychologists (American Psychological Association, 1992); counselors (American Association for Counseling and Development, 1988; 1989); educational researchers (American Educational Research Association, 1992); teachers (American Federation of Teachers, National Council on Measurement in Education, National Education Association, 1990); measurement specialists (American Educational Research Association, American Psychological Association, National Council on Measurement in Education 1985; Joint Committee on Testing Practices, 1988); educational evaluators (Joint Committee on Standards for Educational Evaluation, 1988); evaluators of educational programs (Joint Committee on Standards for Educational Evaluation, 1994); college admission counselors (National Association of College Admission Counselors, 1988); and others. The National Council on Measurement in Education is considering the adoption of a Code of Professional Responsibilities in Educational Measurement in the fall 1994. All of these codes vary widely in their scope: some include technical standards that the professionals should meet in their practice, but all of them include some statements about ethical responsibilities that are intended to guide the behavior of professionals as they use assessments in their practice. The codes that focus exclusively on ethics that have been adopted by professions are intended to clarify the expectations of professional conduct in various situations encountered in practice and to affirm that the profession intends and expects its members to recognize the ethical dimensions of their practice. The fact that all of these standards exist is evidence that these organizations are seriously concerned and committed to promoting high *technical* standards for assessment instruments and high *ethical* standards for individual behavior as they work with assessments.

In recent years, there have been increasing discussions in the professions about how to make sure that proper ethical conduct is not only advocated as an ideal but also practiced. Yet, even once a code of ethics has been adopted, each organization has had to struggle with issues of both enforcement and education.

To Enforce or Not To Enforce?

Whether a code of ethics will be enforced and how it will be enforced has been a dilemma for most organizations. Even with the codes cited earlier, there is a great deal of variability in the approaches taken by the adopting organizations to enforce the codes. There appears to be at least four general approaches to enforcement.

First, some organizations have no formal enforcement of their codes; the standards are designed to increase the awareness of their members as to what constitutes ethical practice and to serve as an affirmation of exemplary conduct. Organizations like AERA and NCME have no formal enforcement mechanism, typically have no sanctions attached to membership in the organization, and membership is not tied to a credential in any way.

Second, some organizations enforce their codes of eth-

ics at the local level. The national organizations delegate enforcement to affiliated state societies that have adopted the national code in whole or in part as their state society's code of ethics. This type of enforcement is used, for example, by the legal profession in that the American Bar Association's ethical codes serve as model legislation for state bars to use in creating and enforcing their own codes.

Third, some organizations enforce their codes at the national level. The ways in which enforcement is handled at the national level varies significantly. Organizations like the American Counseling Association and the American Psychological Association have established special divisions or committees as enforcement arms. Other organizations have established trial boards that adjudicate disciplinary charges and impose discipline; in other organizations, local chapters refer cases to the national ethics committee for adjudication and possible discipline.

The fourth model involves enforcement at both the national and local level. For instance, the American Medical Association might take disciplinary action against a member when the state medical association to which the physician belongs requests or consents to such action. At this time, however, there does not appear to be an assessment-related organization that uses this type of enforcement.

The approach taken by a professional organization to enforce its code of ethics is usually directly related to the purpose of the code and the requirements for practice. If membership in the organization is voluntary, it is difficult to establish a formal means of discipline and enforcement. Certainly, membership in such an organization could be revoked, but it would not prevent the member from practicing. By contrast, when membership in the professional organization is tied to a credential or a designation of some type, then establishing a formal means of discipline and enforcement (such as formal/informal reprimands, revocation of designation, or expulsion from the profession) is easier to establish and implement.

To Educate

Nearly all organizations that have adopted a code of ethical assessment practices engage in educational activities that are intended to promote a greater understanding of what constitutes ethical assessment practice. Educational activities are particularly important since a code of ethics is not a set of givens, but rather a frame of reference for the evaluation of the appropriateness of behavior. Case studies can serve as particularly effective illustrations of how ethical issues may be analyzed and how judgment may be used to evaluate behavior. Other effective educational approaches include open forums for discussions of ethical issues, disseminating realistic problems that involve judgments about appropriateness of behavior, and group learning activities that pose ethical dilemmas that are analyzed and evaluated by groups of professionals. Regardless of the approach taken, dissemination of the codes supported by real-life examples of ethical dilemmas are effective ways of promoting an understanding of ethical assessment practice.

Summary

Promoting ethical practices in assessment is considered to be a very important goal of the organizations involved in assessment. Codes are intended to increase the awareness of ethical practice among their memberships and to promote ethical uses of assessment in various contexts: teaching, counseling, evaluation, research, among others.

The level of enforcement that each organization takes is directly tied to the character of membership in the organization, whether it is voluntary or tied to a credential or designation. Clearly, the more stringent the requirements are for membership in an organization, the easier it is for that organization to establish a more formal means of discipline and enforcement.

Educating others to understand and to engage in ethical practices is a critical goal. Illustrations of good and bad practice within realistic assessment contexts and discussions of ethical dilemmas are excellent ways of promoting ethically responsible practice in assessment.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-24

Multicultural Assessment

William E. Sedlacek and Sue H. Kim

Assessment includes the use of various techniques to make an evaluation; multicultural assessment refers to the cultural context in which the assessment is conducted, namely one in which people of differing cultures interact. One can argue that all assessments are conducted and interpreted within some cultural context, but only recently have the cultural assumptions underlying such assessments been acknowledged (Sue & Sue, 1990). The fields of counseling and therapy traditionally have relied heavily upon the use of assessment techniques to gather information about clients in order to indicate appropriate directions for treatment. Measures to assess personality, cognitive abilities, interests, and other psychological constructs have been utilized in a variety of different counseling and education settings. Although many of the measures most widely used have established reliability and validity only within White racial samples, these measures often are used inappropriately and unethically with populations from different cultures.

This digest identifies four common misuses of assessments in multicultural contexts, describes some of the ways in which multicultural assessments can be improved, and suggests topics for future research in the area of multicultural assessment.

Common Misuses of Assessments in Multicultural Contexts

1. *Assuming that labeling something solves the problem.* Sedlacek (in press, a) has called this the "Quest for the Golden Label" problem. Using new terms (e.g., multicultural, diversity) does not mean we are doing anything operationally different with our measures. Westbrook and Sedlacek (1991) found that although labels for nontraditional populations had changed over forty years, the groups being discussed were still those without power who were being discriminated against in the system.

2. *Using measures normed on White populations to assess non-White people.* Sedlacek (in press, a) discussed what he called the "Three Musketeers" problem, namely that developing a single measure with equal validity for all is often the goal of test developers. However, if different people have different cultural and racial experiences and present their abilities differently, it is unlikely that a single measure could be developed that would work equally well for all.

3. *Ignoring the cultural assumptions that go into the creation of assessment devices.* Helms (1992) argued that cognitive ability measures are commonly developed from an unacknowledged Eurocentric perspective. Until there is more thought given to the context in which tests are developed, work comparing different racial and cultural groups using those measures will be spurious.

4. *Not considering the implications of the use of measures with clients from various racial and cultural groups.* Professionals may not be adequately trained in determining which measures are appropriate to use with particular clients or groups. Sedlacek (in press, a) has called this the "I'm OK, you're not" problem in that very few professionals receive adequate training in both instrument development and an appreciation of multicultural issues.

Suggestions for Improving Multicultural Assessments

1. *Concentrate on empirical and operational definitions of groups, not just labels.* Sedlacek (in press, b) has suggested that if members of a group receive prejudice and present their abilities in nontraditional ways, they can be considered "multicultural." He suggested the use of measures of racial attitudes and noncognitive variables in making this determination.

2. *Identify measures specifically designed for multicultural groups.* Sabnani and Ponterotto (1992) provided a critique of "racial/ethnic minority-specific" instruments and made recommendations for their use in different assessment contexts. Prediger (1993), in a compilation of multicultural assessment standards for counselors developed for the American Counseling Association, recommended that a determination be made that the assessment instrument was designed for use with a particular population before it is used.

3. *Encourage the consideration of cultural factors in the earliest conceptual stages of instrument development.* Helms (1992) called this a "culturalist perspective" in assessment. Sedlacek (in press, a) noted a lack of developmental multicultural thinking as new instruments are developed. Multicultural groups are usually "throw ins" after the fact to see how their test results compare with those of the population on which the test was normed. He called this

the "Horizontal Research" problem in developing assessment measures.

4. *Increase opportunities for an exchange of information between those with quantitative training in instrument development and those with an interest and expertise in multicultural issues.* Currently there is little overlap in these two groups. Helms (1992) felt it was important not to assume that there are enough professionals of color to do this work. Many individuals from majority racial and cultural groups will need to develop such measures as well. Conventions, workshops, coauthored articles, and curricular reform in graduate programs are but a few examples of what could be done.

Topics for Future Research on Multicultural Assessment

Research on the validity and reliability of measures for specific multicultural groups is needed (Helms, 1992; Sabnani & Ponterotto, 1992). This includes studies of attributes that may be more important for multicultural groups than for others. Noncognitive variables, such as handling racism or having support of a cultural or racial group, have been shown to be particularly useful for members of nontraditional groups and should be studied further. Additional research on the utility of defining nontraditional groups broadly to include diversity based on age, physical disability, sexual orientation, etc. (Sedlacek, in press, a), or to concentrate on the major racial and cultural groups, e.g., African Americans, American Indians, Asian Americans, and Hispanics; (Sue, Arredondo, & McDavis, 1992) should be conducted.

Summary

More valid assessments for multicultural populations would help counseling professionals better serve their clients and improve the lives of many people whose backgrounds and experiences may differ from those of White clients. Four common misuses of assessments in multicultural contexts were presented here, as were ways to counteract those misuses. Concentrating on empirical and operational definitions of multicultural groups rather than relabeling was the first suggestion discussed. Using measures specifically designed for multicultural groups was recommended as the best solution to the problem of using instruments normed on White populations. Developing new measures from a "culturalist perspective" was the recommended way to counter a lack of multicultural thinking in instrument development. Creating more opportunities to bring together those with training in instrument development and those with multicultural interests was seen as a way to improve the quality of multicultural assessments by professionals.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Fairness in Performance Assessment

Tony C.M. Lam

Performance assessment is the type of educational assessment in which judgments are made about student knowledge and skills based on observation of student behavior or inspection of student products (see the digest by Stiggins in this series). Education reformers have hailed policy that pushes performance assessment as manna (miraculous food) from above, feeding teachers and students "wandering in a desert of mediocrity" (Madaus, 1993, p.10). They claim that by replacing selection response tests such as multiple-choice tests with performance assessment, our schools will improve, and all ailments in student assessment, including the affliction of unfairness, will be cured. Unfortunately, although the pedagogical advantages of performance assessment in supporting instruction that focuses on higher order thinking skills are obvious, research has consistently indicated unresolved logistic and psychometric problems, especially with score generalizability (Linn, 1993). In addition, there is no evidence suggesting that assessment bias vanishes with performance assessment (Linn, Baker, & Dunbar, 1991).

Bias & Fairness

Consonant with the unified conceptualization of validity (Messick, 1989), assessment bias is regarded as differential construct validity that is addressed by the question: To what extent is the assessment task measuring the same construct and hence has similar meaning for different populations? The presence of bias invalidates score inferences about target constructs because of irrelevant, non-target constructs that affect student performance differently across groups. These irrelevant constructs are related to characteristics, such as gender, ethnicity, race, linguistic background, socioeconomic status (SES), or handicapping conditions, that define the groups. For example, ability to read and understand written problems is a biasing factor in measuring mathematics skills because it is irrelevant to mathematics skills and it affects Limited English Proficient (LEP) and native English speaking students' performance differently on a mathematics test.

Assessment for its intended purpose is unfair if 1) students are not provided with equal opportunity to demonstrate what they know (e.g., some students were not adequately prepared to perform a type of assessment task) and thus the assessments are biased; 2) these biased assessments are used to judge student capabilities and needs; and 3) these distorted views of the students are used to make educational decisions that ultimately lead to limitations of educational opportunities for them. Despite a common definition of assessment fairness in reference to assessment bias, the approach and methods used to assure fairness are nevertheless determined by one's choice of either one of two antithetical views of fairness: equality and equity.

Equality

The equality argument for fairness in assessment advocates assessing all students in a standardized manner using identical assessment method and content, and same administration, scoring, and interpretation procedures. With this approach to assuring fairness, if different groups of test takers differ on some irrelevant knowledge or skills that can affect assessment performance, bias will exist.

Traditional tests with selection response items have been criticized as unfair to minority students because these students typically perform less well on this type of test than majority students. However, no evidence is yet available to substantiate the claim that performance assessment can in fact diminish differential performance between groups (Linn et. al., 1991). Although the use of performance assessment can eliminate some sources of bias, such as testwisness in selecting answers that are associated with traditional tests, it fails to eliminate others, such as language proficiency, prior knowledge and experience, and it introduces new potential sources of bias: 1) ability to handle complex problems and tasks that demand higher order thinking skills (Baker & O'Neil, 1993); 2) metacognitive skills in conducting self-evaluation, monitoring thinking, and preparing and presenting work with respect to evaluation criteria; 3) culturally influenced processes in solving problems (Hambleton & Murphy, 1992); 4) culturally enriched authentic tasks; 5) low social skills and introverted personality; 6) added communication skills to present, discuss, argue, debate, and verbalize thoughts; 7) inadequate or undue assistance from parents, peers, and teachers; 8) lack of resources inside and outside of schools; 9) incompatibility in language and culture between assessors and students; and 10) subjectivity in rating and informal observations. (A strategy for reducing the influence of extraneous factors in rating that also supports integration of curricula is to employ multiple scales for different attributes embedded in the performance. For example, essays on social studies can be rated on subject matter knowledge, writing quality, and penmanship.)

With equality as the view of fairness, the strategy for reducing bias is to employ judgmental review and statistical analysis to detect and eliminate biased items or tasks. Recognizing the technical difficulties in statistical investigation of bias in performance assessment, Linn et. al. (1991) asserted that "greater reliance on judgmental reviews of performance tasks is inevitable" (p.18).

Equity

Fair assessment that is equitable is tailored to the individual student's instruction context and special background such as prior knowledge, cultural experience, language proficiency, cognitive style, and interests. Individualization of assessment can be implemented at different levels in the assessment process,

ranging from choice of assessment approach (e.g., a project instead of a test), content (e.g., selecting a topic to write an essay on, allowing translation), administration (e.g., flexible time, allowing a dictionary), scoring (e.g., differential weighting), and interpretation (e.g., using a sliding grading scale).

By assessing students using methods and administration procedures most appropriate to them, bias is minimized because construct-irrelevant factors that can inhibit student performance are taken into consideration in the assessment design. For example, in place of a paper-and-pencil word problem test in math to be administered to the class, a teacher could give the test orally to a LEP student, rephrasing the questions and using the student's native language if necessary. When assessment content is customized, congruence between assessment and instruction for all students is enhanced. And, by adjusting scoring and grading procedures individually based on student background and prior achievement, fairness is directly addressed.

Performance assessment, with its ability to provide students with rich, contextualized, and engaging tasks, can allow students to choose or design tasks or questions that are meaningful and interesting to them, can make adjustments based on student experiences and skills, and can test student individually "to insure that the student is fully examined" (Wiggins, 1989, p.708). These characteristics of performance assessment are indeed the major thrusts of equitable assessment. However, it is the individualization strategy and *not* the performance task, that produces bias-free scores. If multiple versions of a multiple-choice test were written for students with varying learning experiences and backgrounds, and the test administered individually with opportunities for students to defend and explain their answers, similar results could be achieved. The persistent gap between majority and minority student performance on accountability tests, even after the introduction of performance-based sections, may be attributable partially to the fact that these tests are standardized.

The major difficulty in individualized performance assessment is assuring comparability of results. Student performance is not consistent across different contexts and topics in writing assessment, and across different experiments and assessment methods in science (see Miller & Legg, 1993). Attempts to develop tasks that are functionally equivalent have been scarce and unsuccessful. For example, it is difficult to construct comparable tasks of equal difficulty in writing assessment (Miller & Legg, 1993); methods of translating a test into another language and establishing the equivalence of scores are not well known and are used sporadically (Hambleton & Kanjee, 1993); and for constructed response exams that allow students to choose a subset of questions, it is not common in tryouts to have representative examinees answering all combinations of the questions (Wainer, Wang, & Thissen, 1994). Procedures for equating scores from disparate assessments are just as problematic. As noted by Linn & Baker (1993), "some desired types of linking for substantially different assessments are simply impossible" (p.2).

Other pitfalls in assuring equity in performance assessment through individualization strategies can also be noted. If students are delegated the responsibility of determining how they should be assessed, such as choosing an essay topic, picking out best work, or assigning points, individual differences in this metacognitive ability can become a source of bias. Furthermore, for any form of assessment, differential scoring and interpretation (such as the use of differential standards) encourage low expectations for the coddled students, and ultimately lessen their competitive edge when entering the workforce.

Summary & Conclusion

In dealing with the issue of fairness in performance assessment, we are confronted with some dilemmas. On the one hand, assuring equality in performance assessment through standardization enables comparisons of student performance and simplifies administration processes; however, it loses task meaningfulness and creates difficulty in avoiding bias. On the other hand, assuring equity effectively reduces bias and enables rich, meaningful assessment, but it introduces difficulty in administration and in comparing student performance, causes a potential side effect of poorly equiping students for the real world, and can be unfair to students with low awareness of their own abilities and quality of performance. Although standardized assessment is encouraged because it is a requirement for reliability, which is a necessary condition for validity, the hermeneutic approach to score interpretation supports contextualized and non-standardized assessment, and argues that validity can be achieved without reliability (Moss, 1994).

There is currently little research devoted to examining and promoting fairness in performance assessment. However, the urgency to build this knowledge base should not surpass the much needed research on, and efforts to develop, sound and practical performance assessments. When dealing with the issue of fairness in assessment, validity must be considered concurrently. How much better off are we with assessments that are equally invalid for all groups (fair but invalid) than assessments that are invalid for some groups (valid but unfair)?

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Computer-Assisted Testing in Counseling and Therapy

James P. Sampson, Jr.

Computer-assisted testing (CAT) in counseling and therapy is becoming increasingly common due to dramatic improvements in cost-effectiveness and increased counselor familiarity with computer applications. The assumption underlying the use of CAT is that the effectiveness of counseling is improved by allocating repetitive computational and instructional tasks to the computer, thus allowing counselors to more fully focus on interpersonal tasks, such as helping clients understand the role of testing in counseling and helping clients integrate the self-knowledge obtained in testing into a concrete plan for behavior change. The potential benefits of CAT, however, need to be evaluated against the potential limitations of this technology.

Computer-Assisted Testing Options

The following options exist for using computer-assisted testing in counseling and therapy:

1) Test administration via: a) keyboard input by the client from items presented on the computer display, with alternative input options available for physically disabled clients; or b) client completion of a specially prepared test answer sheet that is then optically scanned for computer input; or c) client completion of a traditional test answer sheet with keyboard input by a clerical staff person.

2) Test scoring via the computer (local or remote).

3) Test score profile generation via the computer.

4) Narrative interpretive report generation via the computer with reports available for both the client and practitioner if appropriate (the narrative report may also include the test profile).

5) Videodisc-based generalized test interpretation provided to the client immediately following test administration (Sampson, 1990a, p 452-453).

Potential Benefits of Computer-Assisted Testing

Computer-assisted testing can enhance test administration, scoring, interpretation, and integration. Test administration and scoring may be enhanced due to the standardization inherent in computer functioning. Each test taker receives an identical presentation of test items and response sets (with the exception of adaptive testing where each test taker receives a unique minimum selection of items necessary to achieve a valid result). Greater standardization of item presentation eliminates errors caused when a test taker gets out of sync between the answer sheet and a printed test item (Byers, 1981). The availability of adaptive devices allows persons with a disability to complete tests with minimal staff assistance (Sampson, 1990b). Test results can be more valid since staff members have less of an opportunity to influence client responses. Test scoring is enhanced due to reduced computational errors.

Test interpretation may be enhanced by providing the counselor with an expanded and consistent knowledge base to assist in the interpretation of test data. Computer-based test interpretation (CBTI) is typically based on research data and clinical experience. Roid and Gorsuch (1984) described four approaches to CBTI: 1) descriptive interpretations; 2) clinician-modeled interpretations (renowned clinician type); 3) clinician-modeled interpretations (statistical model type); and 4) clinical actuarial interpretations. Counselors can use CBTI to support or challenge their judgments about the nature of client problems and potentially effective intervention strategies.

Test integration may be enhanced by including computer-assisted instruction as part of CAT. Clients can be better prepared to use their test results by being more aware of basic concepts and the general nature of their scores. Relieved of presenting repetitive test interpretation information, counselors have more time to explore clients' perceptions of their test data and the implications of the test data for behavior change. The computer can be used to deliver both text-based and interactive video-based instruction (Sampson, 1990a).

Potential Limitations of Computer-Assisted Testing

Computer-assisted testing can limit, as well as enhance, test administration and interpretation. Although paper-and-pencil and computer administration of tests often produce equivalent results, variations in results have sometimes been found to exist. French (1986) recommended that the equivalency of results from different types of administration modes needs to be established for each instrument. Establishing equivalency will reduce the likelihood that computer administration is influencing the nature of test results. Scoring errors represent another potential limitation for computer-assisted test ad-

ministration. Most (1987) noted that, "The computer itself does not contribute error, but the complex nature of computer programming and the difficulty involved in reading computer programs or code makes it easy to make program errors which are difficult to find" (p. 377).

Concerns have been raised about the validity of computer-based test interpretation. Eyde and Kowal (1987) found differences in CBTI reports generated from a single set of scores from one instrument. Differences also were noted in their study between the CBTI reports and the judgments of a clinician. Eyde and Kowal (1987) stated, "Buyers should be aware of the limitations of computer products and remind themselves that computer output is only as good as the data behind the decision rules used to produce the interpretation" (p. 407). Ethical concerns also exist about counselor misuse of CBTI. Unqualified counselors may be more likely to use CBTI reports to compensate for a lack of training and experience. By using CBTI to replace rather than supplement counselor judgement, counselors become more dependent on the potentially dubious validity of some CBTI software and are less likely to integrate data from valid CBTI reports effectively with other sources of client data due to their lack of background knowledge.

Recommendations

Counselors should become familiar with existing CAT applications (see Krug, 1993; Walz, Bleuer, & Maze, 1989) and the various professional standards that relate to CAT. Counselors then should carefully select and effectively implement valid software that is subsequently evaluated in terms of service delivery impact.

Conclusion

The use of CAT can either enhance or limit the effectiveness of testing in counseling and therapy. Having an open mind about the potential of this technology and a willingness to change needs to be matched with good critical thinking skills and a healthy skepticism for any innovation promising substantial benefits from minimal efforts. It is the responsibility of counselors to guide the design and use of this technology.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Testing Students with Disabilities

Kurt F. Geisinger and Janet F. Carlson

The assessment of students with disabilities has taken on considerable importance since the passing of the *Americans with Disabilities Act (ADA)* of 1990, although most of the requirements for assessing students were previously justified legally based upon Section 504 of the *Rehabilitation Act* of 1973. Generally, the best methods for assessing students with disabilities coincide with legally defensible methods for this activity. Under *ADA*, a "disability is defined as (a) a physical or mental impairment that substantially limits one or more life activities, (b) a record of such an impairment, or (c) being regarded has having an impairment despite whether or not the impairment substantially limits major life activities" (Geisinger, 1994, p. 123). *ADA* requires that assessment of individuals with disabilities be performed with any reasonable accommodations being made. The word, "reasonable", of course, is ambiguous and differs depending upon the circumstances of the assessment.

The considerations involved in assessing students with disabilities are presented below under three related activities: test selection, test administration, and test interpretation. Additional considerations are noted at the conclusion of this digest.

Test Selection

When counselors assess either an individual with a disability or a group of individuals including those with disabilities, we must consider test selection. We must ask questions regarding prospective instruments that address the assessment's suitability for use with students with disabilities. Most important, we should consider whether individuals with like disabilities were included in the normative and validation samples. Whether there are specialized administrative procedures and forms, such as large-type test forms for individuals with visual disabilities or untimed administrations for individuals with learning disabilities, is also important.

In some cases, where no measures of a given attribute are available with adapted administrations, a counselor might consider how easily he or she can adjust an instrument for use with test takers who have a disability. When published instruments are adapted, however, interpretations of their results should be tentative. Should there be planned test administrations or specialized administrative procedures for those with common disabilities, we also need to determine whether the testing instrument has norms available for those with various common disabilities--or in specialized cases, for the specific disability with which the counselor is concerned. Are there parallel interpretive guides for evaluating the assessment results for those with specific disabilities and for those who have taken specialized administrations of the assessment? Finally, are these specialized interpretive guides, if available, based upon empirical reliability and validation research?

If positive answers to the above questions are not found, a counselor should consider whether the use of an unvalidated instrument is justified. When counselors adapt a measure themselves (e.g., reading an assessment to a test taker when normal administration calls for the test taker to read the test questions), they are essentially using an unvalidated instrument. As such, we must ask whether this instrument is likely to yield useful information over and above that which is already available from non-test sources. The answer to this question is likely to differ based upon the nature of the decision for which the assessment is being used.

Test Administration

The most important question for a counselor regarding test administration to a student with a disability is whether the student can be appropriately and meaningfully assessed using the conditions under which the instrument was standardized. We should consider students' backgrounds, skills, abilities, and other characteristics if we are unsure. If such an evaluation does not answer the question adequately, one should seek advice from colleagues or the test publisher. Professionals who work frequently with students with disabilities, such as special educators, may be especially helpful, even if they are not experts on assessment. Ask such individuals about the kinds of tasks students with the kinds of disabilities, backgrounds, skills, abilities, and other characteristics are able to perform. Then evaluate the test materials against these tasks. It may be especially helpful to talk with professionals who know the student. When talking with professionals who do not know the individual, provide an assessment of the degree of severity of the disability.

Some assessments offer specialized administrations for individuals with common types of disabilities. These assessments tend to be either those oriented specifically for use with students with disabilities or those in widespread use, such as frequently used college admissions measures. Some accommodations permit continued ad-

ministration in group settings; others require individual administration. For example, assessments may be available in improved type, large-type, Braille, and audiocassette versions for those with visual disabilities. "Time limits can be enforced, extended, or waived altogether. Test takers may be given extra rest pauses, a reader, an amanuensis (a recorder), a sign language interpreter, a tape recorder to register answers, convenient test taking locations and assessment times, and other accommodations as needed to meet their particular requirements" (Geisinger, 1994, p. 124). Accessibility to the assessment site also needs to be considered.

Under rare circumstances, it may be necessary for a counselor to adapt a professionally developed assessment device for administration to a specific student. Such procedures should be performed only when no valid measure exists for the given assessment. If a counselor makes an adaptation, he or she must be aware that the scoring, norms, and interpretation are compromised and cannot be used validly. To the extent that the adaptation is extremely minor, of course, it may fall within normal variation of test administrations. However, any serious adaptation does jeopardize the value of using a published measure.

Test Interpretation

When interpreting the results of an assessment of a student with a disability who nevertheless took the assessment under standardized conditions, we can employ the normal judgment process, although we also should follow any advice provided in the test manual. It is particularly advisable to check whether any validation studies using populations including students with the disability in question have been performed. Similar caveats apply when employing a standardized adaptation, such as an untimed administration or the use of a Braille version.

When a counselor has performed an adaptation of an assessment or uses a locally derived adaptation, then extreme caution should rule, as far as test interpretation is concerned. The modified assessment simply is not the same measure as the original version for which norms and validation results exist. In general, results from such a measure are best interpreted by developing hypotheses as opposed to making decisions (Phillips, 1994).

The goal of any interpretation of a modified assessment should be an expected result on the comparable standardized assessment. "We wish to know how the person taking an adapted form of a test would have performed if he or she could have taken the test under standardized conditions, assuming that the disabilities did not exist" (Tenopyr, Angoff, Butcher, Geisinger, & Reilly, 1993, p. 2).

Additional Issues

Several special issues related to the assessment of students with disabilities deserve mention. First, some information on the extent and severity of a student's disability should be acquired before an assessment either is selected or administered. Such information may help guide the counselor in making these decisions.

It also may be appropriate to choose and administer measures that assess compensatory skills used by persons with disabilities. It makes little sense, for example, to administer an assessment of graph-reading ability to a student with a severe visual disability. It would be more useful to determine how such students consider graphical information (e.g., via textual analysis with material written in Braille) and provide a direct assessment thereof.

Those purchasing assessment instruments should carefully evaluate all measures to determine the degree to which they have been used with and adapted for students with disabilities. If one is disappointed with the robustness of a measure (Geisinger, 1994) when it is used with students with disabilities, let the publisher know. With enough input, they may become more interested in making needed changes. Relatedly, when one discovers measures, administrative modifications, or interpretive strategies that are well-suited for use with students with disabilities, share the results. Such findings are too important to keep secret.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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The School Psychologist's Role in School Assessment

Sylvia Rosenfield and Deborah Nelson

Psychological services for children originated within a diagnostic testing model. Psychometric techniques were developed to assess individual children's cognitive-intellectual, personality and academic functioning. Today, testing techniques have achieved a high degree of prominence and testing is a major industry.

Recently, however, assessment in the field of school psychology has been changing and reshaping itself to meet the demands of public policy and litigation, the requirements of an increasingly diverse student population, and the constant shifting of educational concerns. There have been, as well, continual refinements in the concepts and technology of measurement (Taylor, Tindal, Fuchs, & Bryant, 1993). These changes have challenged all school professionals to modify their assessment practices in order to adapt to them. However, within the schools, it remains true that there are few others with training, experience and expertise in assessment comparable to that of school psychologists.

Traditionally, school psychology has emphasized diagnosis and classification of individual students, and school psychologists have acted as gatekeepers for special services. But as the current ethical, political, legal and educational context has evolved, there has been a re-ex amination of the purposes and applications of data gathered during the assessment process (Taylor, et.al., 1993). In a position paper on the *Role of the School Psychologist in Assessment* (1994), the National Association of School Psychologists endorsed the proposition that assessment practices must be linked to prevention and intervention to provide positive outcomes for students. Thus, there is an increasing emphasis on information that is "useful in designing, implementing, monitoring, and evaluating interventions" (Reschly, Kicklighter, & McKee, 1988, p. 9-50). Moreover, it is suggested that school psychologists assist both local education agencies and state education agencies in restructuring schools in positive ways. One of the constant elements in the school restructuring movement is the call for greater accountability at every level, which has resulted in "innovative thinking about alternative forms of assessment" (Stiggins & Conklin, 1992, p.3).

This broader, more outcome based approach to the use of assessment in schools has had an impact on the assessment practices of school psychologists. Currently, there are at least three major purposes of school psychological assessment: informing entitlement/classification decisions, planning interventions, and evaluating outcomes.

Assessment Purposes

Entitlement/Classification Decisions

Although, historically, the school psychologist has been the professional to develop an individual diagnosis of a referred student using psychoeducational tests, that role became even more routinized as a result of the 1975 federal legislation, P.L. 94-142, requiring testing for classification prior to delivering services to children with handicapping conditions. However, there have been recent changes in the field of special education, with pressure increasing for inclusive placements in regular education classrooms even for students with severe and profound disabilities. These pressures arose from research demonstrating limitations of the traditional classification, labeling, and placement procedures, many of which relied upon school psychologists' testing of students referred for problems. Challenges to the norm referenced tests used to justify the classification and placement decisions arose for many reasons, including "lack of data to support the use of certain types of tests..., litigation related to the discriminatory nature of other types..., and the general feeling that most tests did not provide educationally relevant information" (Taylor, et.al., 1993, p. 114).

Since federal law and related state regulations still, . most cases, require labeling for funding purposes, norm-referenced psychoeducational assessment will likely continue in the schools to fulfill the legal mandate. However, currently there is an emphasis upon improving the technical characteristics of the most commonly used tests to answer growing concerns about the soundness of many of these instruments. In addition, several basic constructs underlying these tests have been revised, and new constructs of cognition and neuropsychological and psychological processes, such as memory and metacognition, are finding their way into new test construction and revisions of older instruments (Taylor, et al, 1993). How useful these new and revised tests and their underlying constructs are remains open for further study, although there continue to be weak or nonexistent links to interventions for most psychoeducational tests (Macmann & Barnett, 1994). In addition, as requirements for eligibility for funding are modified, the use of tests for these purposes will also evolve

Assessment Linked to Intervention

Perhaps the most far-reaching change in the role for school psychologists has been an increased emphasis on

linking assessment and intervention, so that information from the assessment process leads directly to intervention strategies rather than just to a diagnostic label and alternative placement for the student. School psychologists have moved from relying upon standardized/norm referenced testing practices to frequent use of more natural and dynamic forms of assessment that impact directly on classroom instructional delivery and behavior management. The importance of this shift arises from the current state of classroom assessment. While the instructional and management decisions that teachers make about their students have been recognized as critical to important outcomes, relatively little attention has been paid to the quality and process of classroom assessment in research or practice. This has been true in spite of evidence that teachers are concerned about the quality of their own assessments, and have limited knowledge of assessment methodologies and their use in instructional decision making (Stiggins & Conklin, 1992). Increasingly, school psychologists have become involved in developing and delivering behavioral and curriculum-based assessment procedures useful for classroom decision making to assist teachers.

A recent development has been the growth of curriculum-based assessment methods that use direct observation and recording of student performance in the classroom curriculum itself to gather information for instructional decisions. Two major forms of this type of assessment are the curriculum-based assessment for instructional design (CBA-ID) model (e.g., Gickling & Rosenfield, in press), and the curriculum-based measurement (CBM) model (e.g., Deno, 1986). CBA-ID was designed to assist teachers in planning instruction for individual students, whereas CBM was developed primarily to assess pupil progress in the classroom. The information derived from these techniques are used by school psychologists consulting with teachers to support them in developing interventions related to instruction and classroom management (Rosenfield, 1987). These classroom based models of assessment are also used by prereferral and support teams designed to provide assistance to teachers and students.

Outcome Evaluation

School reform has created a focus on the outcomes of education. Psychologists are involved in discussions of a possible national test to be given to all students, and state assessments aligned with state content standards are in the process of development. Many of these will be performance assessments, which still have serious technical issues that need to be resolved (Ysseldyke, 1994). School psychologists have a role in helping school personnel understand and use the results of these external assessments.

At the local level, outcome assessment is also changing. Reform in regular and special education often involves the creation of new programs. School psychologists can bring their assessment expertise to the school reform agenda by helping school systems and individual schools evaluate the effectiveness of different programs and organizational changes designed to meet specific goals. School psychologists can provide assistance in systems change efforts, including needs assessment prior to program implementation, as well as on-going monitoring of program implementation and effectiveness along a broad array of outcome dimensions, depending upon the goals of the school personnel. Conducting research and evaluation to answer important questions about effective programs is an additional assessment role in which many school psychologists can participate.

Summary

School psychologists can play a unique role in schools because of their assessment expertise. Traditionally, they have been most involved in individual psychoeducational assessment for classification and labeling purposes, but the limitations of this form of assessment for building intervention strategies has led many school psychologists to broaden their role. Techniques linking assessment to interventions are being demonstrated by school psychologists as they consult with teachers to enhance the classroom performance of students. Further, school reform initiatives have required more program evaluation at the building and system level, and school psychologists are engaged in these activities as well. Assessment is an important task in the schools, and school psychologists can increase their impact on school effectiveness by contributing their expertise in this domain at many levels.

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ERIC® CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Cooperation Between School Psychologists and Counselors in Assessment

Douglas K. Smith

The role of school psychologists and counselors in assessment is well established and is a frequent research topic. For example, a review of the ERIC database from 1987 to 1994 revealed 64 entries for "assessment and school psychology" and 622 entries for "assessment and counseling." Similar results were obtained for a review of the *Psychological Abstracts* database with 146 entries for "assessment and school psychology" and 924 entries for "assessment and counseling " However, studies that explored the joint role of counselors and school psychologists in assessment could not be located. With the current emphasis on collaboration in schools and the use of a pupil services model to deliver services of counselors, school psychologists, school social workers and school nurses, it is important to examine ways in which school psychologists and counselors can work together in the assessment process.

School Psychologists and Assessment

While the assessment activities of school psychologists emphasize services to children and youth, usually within a school setting, the assessment activities of counselors frequently cover a wider age range and emphasize the adult population. The assessment of individual students is both the traditional and the major role of school psychologists (Fagan & Wise, 1994). In fact, surveys of school psychologists continue to show that the majority of their time is centered on assessment activities. A recent survey (Smith, Clifford, Hesley, & Leifgren, 1992) indicated that the typical school psychologist devoted 53% of his or her time to assessment with the assessment of intellectual ability being the primary focus. Techniques that are used emphasize structured, standardized formats with an emphasis on quantitative rather than qualitative approaches (Smith & Mealy, 1988; Smith, Clifford, Hesley, & Leifgren, 1992). In general, the school psychologist's involvement in assessment begins with a student who has been referred by a parent or teacher for academic or behavioral difficulties. As part of the assessment process, an individual test of intelligence and an achievement test are likely to be administered. Additional data that are collected may include behavioral observations, rating scales completed by teachers and parents, and interviews with the student and with the student's parents and teachers.

Counselors and Assessment

As Hood and Johnson (1991) note, "assessment is an integral part of counseling...[and] provides information that can be used in each step of the problem-solving model" (p. 11). In general, assessment information is used to clarify concerns of clients, to plan programs or interventions and evaluate their effectiveness, to provide career planning information, and to assist clients in undertanding themselves. Thus, counselors, especially in school settings, are more likely than school psychologists to be involved in developmental assessment approaches that are holistic in nature, are qualitative rather than quantitative, and emphasize developmental norms. These approaches may include checklists or rating scales, unfinished sentences, writing activities, decision-making dilemmas, games, art activities, story-telling and bibliotherapy techniques, self-monitoring techniques, role-play activities and play therapy strategies (Vernon, 1993). Surveys of counselors in different counseling settings including counseling agencies, secondary schools, and private practice indicate that counselors use a variety of test instruments with an emphasis on interest inventories, personality inventories, and aptitude tests (Hood & Johnson, 1991).

Both school psychologists and counselors are involved in the assessment process with differing emphases and orientations that are complementary to each other. School psychologists often emphasize the use of quantitative approaches to measure ability and academic skills while counselors often utilize developmental as well as qualitative approaches to assess personality characteristics, interests, and aptitudes. The two approaches, when combined, can offer a more comprehensive picture of a student than either approach alone.

Multidisciplinary Teams and Collaboration

With the advent of Public Law 94-142 (the *Education of All Handicapped Children Act*) and the *Individuals with Disabilities Education Act (IDEA)*, emphasis was placed on a multidisciplinary approach to assessment and

placement activities for students referred for possible disabilities. Multiple sources of information, multiple procedures and multiple settings are required in order to develop a comprehensive understanding of students' needs and abilities. The basis for such an approach is collaboration among professionals including regular education teachers, special education teachers, administrators, pupil services personnel, and parents.

Collaboration, of course, is not a new concept. Sullivan (1993) describes it as "a reform movement that has been gaining in momentum over the past five years" (p. 1) and suggests that it was created as a response to the fragmentation in service delivery that often occurs in educational and mental health settings. Both benefits and obstacles are associated with collaboration. A major benefit of collaboration is the opportunity to create a more comprehensive approach to service delivery. It facilitates development and sharing of new perspectives on how students can be served and promotes improved communication among those working with students. Collaboration can also foster an emphasis on prevention and can create more effective services by reducing duplication. In order for collaboration to be successful, however, it must receive support at all levels and participants must display cooperation and trust (Sullivan, 1993).

Recommendations for Collaboration

Counselors and school psychologists have much to offer in the assessment of students and both sets of professionals should be members of multidisciplinary assessment teams. Counselors contribute skill in developmental assessment approaches and provide a holistic view of the student. In addition, their expertise in interpersonal assessment and career/vocational assessment is valuable in program planning, especially for adolescents. School psychologists' contributions include expertise in the assessment of cognitive and academic skills and the development of classroom interventions. Their background in behavior management and educational psychology along with training in psychological assessment provides a unique perspective for program planning.

The increased focus on involving families in prevention and intervention programs offers counselors and school psychologists the opportunity to collaborate in a number of ways. Activities in which the two sets of professionals can work together include family counseling, parent training, and the development and implementation of behavior management programs in the home. The assessment skills of both specialties can also be utilized to develop evaluation procedures to examine the effectiveness of programs.

Within the school setting itself, a number of opportunities exist for counselors and school psychologists to work together. These include developing support groups for students, working with classroom teachers to implement developmental guidance materials and curriculum within the classroom, and developing aggression/violence prevention programs and curricula. By utilizing the unique assessment training and expertise of counselors and school psychologists we can develop a more accurate picture of the whole student and his or her specific needs. In this way more effective intervention and prevention programs can be developed and implemented.

Summary

Both counselors and school psychologists are trained in assessment with somewhat differing emphases and areas of expertise. The multidisciplinary approach to assessment required by P. L. 94-142 and *IDEA* is especially suited for the two groups of assessment professionals to work together in a collaborative manner. In this way a more complete picture of students' needs can be developed and service delivery can be enhanced.

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ERIC® CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

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Using Buros Institute of Mental Measurements Materials in Counseling and Therapy

Barbara S. Plake and Jane Close Conoley

Assessment use is a cornerstone of successful counseling. Information from assessments is used for making initial diagnostic decisions, to assess client readiness for clinical interventions, for monitoring progress during the counseling process, and for assessing therapeutic outcomes at the conclusion of the counseling program. Therefore, counselors' needs for information about assessment devices and approaches are very high. Tests are being published at a remarkable rate; it is a challenge for the practicing counselor to stay well informed about new approaches and revisions of well known tests (APA, 1990; Rudner and Dorko, 1989).

Buros Institute of Mental Measurements

Established over 50 years ago by Oscar K. Buros, the mission of the Buros Institute is to improve tests and testing practices by providing candidly critical reviews of instruments. The Institute fulfills this mission, in part, by publishing several reference works that contain descriptive and quality information about commercially available tests. In addition, the Institute publishes a topical series and sponsors symposia on specific assessment areas. Through access to products and programs of the Buros Institute, counselors can make more informed assessment selection decisions and stay current with assessment practices in the field.

Mental Measurements Yearbook and Tests in Print Series

The Mental Measurements Yearbook (MMY) and *Test in Print (TIP)* Series serve as companion resources for locating and evaluating commercially available tests. The *MMY* is hierarchically organized. Each new volume contains information about new or revised tests made available since the last publication. *TIP*, on the other hand, is comprehensive, providing descriptive information about currently available tests. In addition, *TIP* is a cumulative index to test information in the *MMY* series.

The Mental Measurements Yearbook contains descriptive information about tests, including test author, publisher, publication date (including dates of revisions), purpose of the test, categorization of the test, target populations/age ranges, price lists, reported scores, and availability information for users' documents such as manuals. For most tests, evaluations of the quality and utility follow descriptive information. Typically, two independent reviewers prepare critical analyses. Another useful feature of the information in the *Mental Measurements Yearbook* is the accompanying listing of journal references associated with each test.

Uses of the MMY Series for Counseling Practices

Information contained in the *MMY* can aid counselors in many ways (Claiborn,1991; Plake, Conoley, Kramer and Murphy, 1991). By referencing the categorization system developed by the Institute, counselors can locate tests appropriate for their purpose. These categories indicate the test's general purpose, such as Achievement, Behavior Assessment, Developmental, Education, Fine Arts, Intelligence and Scholastic Aptitude, Mathematics, Multi-Aptitude Batteries, Neuropsychological, Personality, Reading, Science, Sensory-Motor, Social Studies, Speech and Hearing, and Vocations.

Tests can also be identified through the score index. If, for example, a counselor wants to assess client self-esteem, referencing the score index will yield tests that provide a self-esteem score. The descriptive and evaluative information for those particular tests in the *Yearbook* will assist the counselor to identify the possible assessment instruments best suited for the client characteristics and clinical purpose.

The critical evaluations prepared by independent expert reviewers also assist the counselor by providing thorough, thoughtful analyses of the quality and utility of the test. Not only are these reviews helpful in making informed decisions about the usefulness of the test for the particular situation, but they also communicate current thinking in the field about the construct the test is designed to assess. Therefore, the reviews serve a continuing education purpose for practicing counselors by assisting the counselor in keeping current with theory and assessment developments.

It is sometimes important for counselors to be able to articulate and defend their assessment choices to a variety of audiences. The descriptive and evaluative information about an instrument, prepared by experts in the field, can serve as a definitive reference that has been shown to be useful for legal purposes. Although not designed for litigation, these reviews are potentially useful in court hearings when questions pertaining to assessment selection are raised. In addition, these reviews can

provide objective evidence for such purposes as quality assurance reports and evaluations or audits of counseling practices or programs.

Other Products and Programs from the Buros Institute

In addition to the *Mental Measurements Yearbook* and *Tests in Print Series*, the Institute sponsors other products and programs that are potentially valuable for counselors and therapists.

Buros-Nebraska Symposium and Series on Measurement and Testing. One notable program is the Buros-Nebraska Symposium on Measurement and Testing. At these symposia, key people in the field are invited to make presentations and to lead discussions on issues relevant to assessment. The Buros-Nebraska Symposium Series is approved by American Psychological Association as a sponsor of continuing education credits. Counselors can acquire APA-approved CEU's through attendance. The presentations are edited and produced into volumes that are published in the Buros-Nebraska Series on Measurement and Testing. Occasionally, additional chapters are included in the volumes in order to more fully represent the topical area. Two recent symposia are of particular relevance to counseling practice: Family Assessment and Multicultural Assessment.

Oscar K. Buros Library of Mental Measurements. Located at the University of Nebraska, the Oscar K. Buros Library of Mental Measurements is also a useful resource for counselors and therapists. Counselors can inspect tests and ascertain their appropriateness for particular clinical purposes before purchasing. The tests reviewed for the *MMY* and *TIP* Series are located in the Institute's Library and are available for public inspection. Tight restrictions are placed on access for secure tests and all copyright materials are protected from dissemination through strict policies and procedures. However, the library is a significant resource of tests useful for counseling purposes.

Electronic Access to Test Review Information. The Eleventh MMY was also produced as a CD-ROM, searchable both through the traditional indices and by search algorithms. This product also provides a comprehensive master index to the location of test information in the *Mental Measurements Yearbook* and *Test in Print Series*. The institute is investigating other options for providing electronic access to test information.

Buros Desk Reference (BDR) Series. A new product from the Institute, the BDR is targeted for the individual practitioner. Descriptive and evaluative information about tests most frequently used in particular fields is located in a single volume. The first product in this series, *Buros Desk Reference :Psychological Assessment in the Schools*, contains evaluative information for the over 100 tests most frequently used by school psychologists, counselors, and counseling psychologists.

Summary

Products and programs from the Buros Institutes of Mental Measurements serve test information needs of counselors and therapists. The *Mental Measurements Yearbook and Test in Print* Series contain information about availability, quality, and utility of assessment devices. Counselors can identify tests potentially appropriate for their clinical practice and stay up-to-date on assessment of psychological constructs and educational outcomes through use of these volumes. In addition, the Institute sponsors topical symposia and volumes targeted at specific audiences; these can provide cutting-edge assessment information to counselors and therapists. Test users can also inspect instruments on-site at the Buros Library of Mental Measurements.

The counseling process is multi-faceted and complex. Tests and other specific assessment approaches are useful in assisting counselors in making appropriate clinical decisions; the Buros Institute's mission is to support well-informed assessment decisions. The Institute's products and programs point counselors toward reliable, valid, state-of-the art measurement practice in efficient, effective ways. In this way the counselor's goal to serve the client is enhanced.

Further information about the Institute or any of the products mentioned in this digest is available by writing to the Buros Institute, 135 Bancroft Hall, University of Nebraska, Lincoln, NE 68588-0348.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1995 EDO-CG-95-31

Internet Resources for Guidance Personnel

Liselle Drake and Lawrence M. Rudner

With tens of thousands of information providers and millions of users, Internet is an enormous and growing resource for guidance counselors and other personnel service professionals. The task for busy professionals is to be able to rapidly identify Internet resources so they can be efficiently incorporated in their work.

In this digest, we identify Internet resources of particular interest to the guidance community. In particular, we identify listservs of interest, identify the offerings of several gopher sites, show you how to access ERIC on the Internet, and describe the AskERIC e-mail service. The novice user is referred to the excellent, well-known electronic books referenced at the end of this digest.

Listservs

Listservs are electronically facilitated discussion forums of participants who share a common interest. You e-mail a thought, question, or response to the forum and the listserv software re-transmits your e-mail to the entire mailing list.

Some listservs of interest to guidance personnel are:

ICN - International Counselor Network — Comprised of counselors, counselor educators, teachers, and graduate students, this listserv contains discussions regarding mental health issues. Subscribe to: ICN_request@ctrvax.vanderbilt.edu

YOUTHNET - This is a discussion list for therapists and other service providers working with youth. Subscribe to: listserv@indycms.iupui.edu

BEHAVIOR - Behavioral and Emotional Disorders in Children - This list discusses psychological disorders in children. Subscribe to: listserv@asuacad.bitnet

VOC-NET - This is the U.C. Berkeley general discussion list and bulletin board on current trends in vocational education. Subscribe to: listserv@cmsa.berkeley.edu

DSSHE-L - Disabled Student Services in Higher Education — The scope of this list encompasses career counseling for students with disabilities; the removal of barriers, both architectural and attitudinal, for the disabled; testing and other academic accommodations; and legal issues pertaining to the *Americans with Disabilities Act*. It is appropriate for all counselors. Subscribe to: listserv@ubvm.cc.buffalo.edu

TRDEV-L - Training and Development Discussion List - This forum for the exchange of information on the training and development of human resources aims to stimulate research collaboration and assistance in T&D for the professional and academic communities. Subscribe to: listserv@psuvm.psu.edu

AERA-E - American Educational Research Association Division E: Counseling and Human Development— This forum discusses recent research and research ideas. Subscribe to: listserv@asuacad.bitnet

To subscribe to a listserv, send e-mail to the listserv address with a one line message: SUB listname yourname. For example, to subscribe to AERA-E, you would send e-mail to listserv@asuacad.bitnet. The one line message would be SUB AERA-E Liselle Drake. To unsubscribe, the message would be UNSUB AERA-E.

Gopher Sites

Gophers are menu-driven systems providing access to a wide range of information. Via Internet and Gopher software, you literally connect to computers across the world to obtain information. Often the information is in the form of text files. The information can also be in the form of searchable databases, directories, software, and graphics. Some Gopher sites of interest to the guidance community include:

Arizona State University — Containing the largest listing of educationally relevant gophers, the ASU Gopher is an excellent starting point. There are pointers to the Best of the Internet for Educators and to a large assortment of electronic journals and newsletters, including *Journal of Counseling and Development, Journal of Distance Education and Communication, Psychology*, and *Rasch Measurement Transactions*. Also, by following the path to Electronic journals at CICNET/Electronic Serials/, the counselor can access the full-text issues of the journal, *Conflict Resolution Consortium*. Gopher to info.asu.edu, select ASU Campus Wide Information/ College of Education/Electronic Journals/.

National Parent Information Network — NPIN provides information and communication capabilities to parents and those who work with them. NPIN offers full-text documents, brochures and other publications which it has gathered from all ERIC components, the National Urban League, the Illinois Parent Initiative, the National PTA, the North Central Regional Education Laboratory, and the Family Literacy Center. NPIN's "Short Items for Parents" are equally suitable for parent educators and counselors in that their scope encompasses issues of discipline, self-esteem, special needs and health of children according to the children's age and developmental lev-

els. The weekly newsletter "Parent News" is another notable offering. Gopher to gopher.prairienet.org, select Education/ERIC/NPIN/.

The U.S. Department of Education's Gopher — USDE posts an extremely large collection of full text material and information. Of particular interest is A Teacher's Guide to the U.S. Dept. of Education, with selections for "Services and Resources" which offers resources for Drug Free Schools and Communities, Bilingual Education/Minority Language Affairs, Special Education Programs and Literacy Resource Centers. Gopher to gopher.ed.gov.

The Child, Youth and Family Education and Resources Network — CYFERNET describes its mission as "...to develop and deliver educational programs that equip limited-resource families and youth who are at risk for not meeting basic human needs, to lead positive, productive, contributing lives." CYFER offers resources for, and statistics about, child-youth-family development and programs, including full-text versions of pertinent journals and newsletters. Gopher to cyfer.esusda.gov.

ERIC Clearinghouse on Assessment and Evaluation — The ERIC_AE Gopher features a wide range of current essays about assessment and evaluation, a special Test Locator Service, and pointers to places on the Internet where you can search ERIC databases. Of special interest is the Test Locator (see Doolittle, Halpern, and Rudner, 1994). ERIC/AE, the Educational Testing Service (ETS), the Buros Institute, and Pro-Ed (publishing) have collaborated to produce several searchable testing databases. Featured is the ETS Test Collection containing descriptions of over 10,000 educational and psychological measures. Gopher to gopher.cua.edu and select Special Resources/ERIC Clearinghouse on Assessment.

The Library of Congress — LC offers the Machine-Assisted Realization of the Virtual Electronic library. Choose: Search LC Marvel Menus/Search LC Marvel Menus using Jughead and enter the search terms of your choice (e.g., dyslexia, cancer). Gopher to marvel.loc.gov

The Cornucopia of Disability Information — CODI offers 22 menu items of services covering a broad range of information for people with disabilities and for those who work with them. Gopher to val-dor.cc.buffalo.edu

The ERIC Clearinghouse on Instructional Technology — AskERIC maintains a large Gopher site providing access to a wide range of material. Of particular interest are the AskERIC Infoguides. Each Infoguide includes pertinent ERIC document citations and various Internet resources, such as appropriate listservs and pointers to gopher/ftp sites. Some relevant titles are School Counseling 1 & 2, AIDS Education, Child Abuse, Disabilities, Disabled Students, Hotlines_Helplines, Sex Education, Special Education, and Vocational Education. Gopher to ericir.syr.edu.

Because Gopher is so popular, most large computer centers make Gopher available to their dial-up users. Often you can access Gopher at the system prompt by typing Gopher and the gopher address. For example, to access the AskERIC Gopher from a VAX computer you would type GOPHER ERICIR.SYR.EDU from the $.

ERIC DATABASES

ERIC Abstracts Database - The entire contents of the Resources in Education and Current Index to Journals in Education are available though several Internet sites. You can Gopher to suvm.syr.edu and select database/ERIC/or gopher to gopher.uic.edu and select Library/Databases/ERIC.

ERIC Digest File — Digests are 1500 word reports that synthesize research and ideas about emerging issues in education. They are designed to help members of the educational community keep up-to-date with trends and new developments. Digests typically either serve as an introduction to a topic, provide current information of a factual nature related to a topic, define and describe a controversial topic, provide specific, concrete examples of how practitioners can apply research results in practical settings, report on the current status of research in an area, or summarize an existing review and synthesis publication. These are one of the most popular items on the entire Internet. Gopher to gopher.cua.edu and select ERIC Clearinghouse on Assessment/Search ERIC/, or gopher to gopher.ed.gov and select OERI/ERIC/Search Digests/.

AskERIC E-MAIL SERVICE

AskERIC is a personalized Internet-based service for educators and professionals allied with education support services. E-mail them a question and within 48 hours they will provide you with a response. Responses include full-text resources, ERIC database searches, learned opinions, and pointers to other resources. Send your e-mail to askeric@ericir.syr.edu

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Electronic Frontier Foundation (1993). Big Dummy's Guide to the Internet, [Online]. Available Gopher:vega.lib.ncsu.ed Directory /library/reference/guides, File: Guide.txt

Kehoe, B.P (1992). Zen and the Art of the Internet: A Beginners Guide to the Internet, (2nd. Ed.), [Online]. Available FTP (Telnet): quake.think.com Directory:pub/etext/1992, File: Zen10.text

Polly, J.A. (1992). Surfing the Internet: an Introduction, (2nd.Ed.),Online].AvailableGopher:vega.lib.ncsu.edDirectory: library/reference/guides, File: Surfing.txt

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ERIC DIGEST

1995 EDO-CG-95-32

Locating and Evaluating Career Assessment Instruments

Jerome T. Kapes

For the purpose of both locating and evaluating career assessment instruments, there are three primary sources. Best known among these are the Buros Institute's publication *Tests in Print* and its comparison set of reviews in the *Mental Measurements Yearbooks (MMY)*. A second source, which first became available in 1983-84, is *Tests and Test Critiques (TC)*. Both include a listing and brief description of most tests commercially available in English speaking countries (i.e., *Tests in Print* and *Tests*) as well as periodically published volumes of test reviews (i.e., *MMY* & *TC*)

The third source, which is published by the National Career Development Association, is *A Counselor's Guide to Career Assessment Instruments*. This book, first published in 1982 and every six years since, contains reviews of the most prominent career assessment instruments as well as brief descriptions of most others commercially available. In addition, this book also includes chapters on selecting, evaluating, using, and interpreting career relevant tests.

There are a number of other sources that focus on specialized aspects of career assessment. Also, certain journals publish test reviews or articles that provide evidence of the quality of specific career assessment instruments. These qualities typically are evaluated under the categories of norms, reliability and validity. The American Educational Research Association (AERA), American Psychological Association (APA) and National Council on Measurement in Education (NCME) jointly publish *Standards for Educational and Psychological Testing*, which provides guidance for both test publishers and users of all types of tests (AERA, APA & NCME, 1985). In addition, the American Counseling Association (formerly the American Association for Counseling and Development, 1989) has produced its own guidelines, *Responsibilities of Users of Standardized Tests*, which provides additional help for users in counseling situations.

Much information is available to help locate and evaluate career assessment instruments, but it is the users who must employ these resources to make their own judgments about the appropriateness of a particular instrument for a specific situation. The purpose of this digest is to help users locate and organize information that will improve their evaluations.

Locating Instruments

Although *Tests in Print IV* (1994) and *Tests* (1991) are the most comprehensive listings of all tests, those wishing to locate a career assessment instrument may find it more useful to consult *A Counselor's Guide to Career Assessment Instruments* - 3rd Edition (Kapes, Mastie and Whitfield, 1994). This recent edition contains reviews of 52 prominent instruments along with an Additional Instruments chapter which briefly describes an additional 245 instruments. The entire 297 instruments are listed alphabetically in a User's Matrix that categorizes each entry by Characteristics (achievement, aptitude, interest, values/satisfaction/environments, career development/maturity, personality) and Use level (elementary, junior high/middle school, senior high, 2 or 4 year college, adult education/ training, business and industry/employment, disabled or disadvantaged). Those interested in locating a test for a specific purpose can use this matrix to identify instruments that may be appropriate.

If the instruments selected in the initial search are among the 52 with a complete review, the user can consult the reviews to further narrow the choice. Each entry includes a section of publisher-provided information that includes target population, statement of purpose, titles of subtests, scales and scores, forms and levels, date of most recent edition, languages available, time, norm groups, results reported, format, scoring, computer software, costs, comments, and published reviews. The review section is divided into the following headings: Description, Use in Counseling, Technical Considerations, Computer-Based Version (if available), Overall Critique, and References. If the instruments on which further information is needed are not among the 52 reviewed, the Additional Instruments chapter can be consulted to obtain the publisher, date and intended population on any of the 245 additional instruments. In addition, citations for all reviews published in the *Mental Measurements Yearbooks*, *Test Critiques*, previous editions of *A Counselor's Guide* as well as several other sources are listed. A brief description for each test is also included.

For those instruments not reviewed in *A Counselor's Guide* (3rd edition) or for a second opinion, the reader can consult one or more reviews cited in either the Additional Instruments chapter or at the end of the publisher information. If a *Mental Measurements Yearbook (MMY)* is to be consulted, it is necessary to know both the volume (Sixth, 1965 through Eleventh, 1992) and test number. The *MMY* entries typically contain brief publisher information along with two independent reviews. The reviews themselves are not divided into sections and tend to focus primarily on psychometric characteristics. Additional references are also provided.

To access *Test Critiques (TC)*, it is also necessary to

know the volume (Volume 1, 1984 through Volume 10, 1994). Each of these entries are written by a single reviewer and are divided into five categories (Introduction, Practical Applications/Use, Technical Aspects, Critique, and References). In addition to *MMY* and *TC* it may also be useful to consult the first (1982) and second (1988) editions of *A Counselor's Guide* or any of the other sources listed in the chapter on Sources of Information about Testing and Career Assessment in the third edition, which is an annotated bibliography of sources.

Evaluating Instruments

Many sources exist that could aid a user to evaluate the potential usefulness of a career assessment instrument. The previously mentioned AERA, APA and NCME (1985) document provides guidance for both test publishers and users in the form of essential, conditional and secondary standards. The standards, for example, call for a technical manual to be made available by the publisher so that any user can obtain information about the norms, reliability and validity of the instrument as well as other relevant topics. It should be pointed out that, although the publisher typically provides evidence of this type from studies conducted with subjects for whom the instrument is intended, it may be necessary for the user to obtain data from other sources that better reflect the use intended for a particular application. This can be done from studies published in the literature (e.g., in the *Measurement and Evaluation in Counseling and Development* journal or the *Career Development Quarterly*) or from studies conducted on data collected by the user.

In addition to the technical qualities of norms, reliability and validity, there are many other qualities of a career assessment instrument that need to be evaluated before selection for a particular use. In his chapter in *A Counselor's Guide* on "Selecting a Career Assessment Instrument," Mehrens covers many of these, including types of scores and interpretation materials, appropriateness for various groups and a host of practical issues (e.g., qualifications of users, time, costs, and publisher support). In addition, he provides a "Test Evaluation Outline" that is included here to assist the user to systematically identify and collect all information necessary to conduct an adequate evaluation (Mehrens, 1994, p. 29):

1. State your purpose for testing
2. Describe the group that will be tested (for example, age or grade)
3. Name of test
4. Author(s)
5. Publisher
6. Copyright date(s)
7. Purpose and recommended use as stated in the manual
8. Grade/age levels for which the instrument was constructed
9. Forms: Are equivalent forms available? What evidence is presented on the equivalence of the forms?
10. Format: comment on legibility, attractiveness, and convenience
11. Cost
12. Content of test and types of items used
13. Administration and timing requirements
14. Scoring processes available (e.g., machine scoring)
15. Types of derived scores available
16. Types and quality of norms
17. Adequacy of reliability evidence presented in the manual
18. Validity evidence
19. General quality of administrative, interpretative and technical manuals
20. Comments about the instrument by outside reviewers

Summary

There are many sources to aide in locating and evaluating career assessment instruments. The primary sources are *A Counselor's Guide to Career Assessment Instruments*, the *Mental Measurement Yearbooks*, and *Test Critiques*. The AERA, APA and NCME Standards provide guidance to publishers and users on the qualities of norms, reliability, and validity as well as many other considerations that affect test use. However, the bottom line is that the user is responsible to make the final judgment about the appropriateness of a particular instrument for a specific use.

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ERIC CLEARINGHOUSE ON Counseling And Student Services

ERIC DIGEST

1994 EDO-CG-95-33

Inappropriate Statistical Practices in Counseling Research: Three Pointers for Readers of Research Literature

Bruce Thompson

The research literature provides important guidance to counselors working to keep abreast of the latest thinking regarding best practices and recently developed counseling tools. However, in my work as a former editor of *Measurement and Evaluation in Counseling and Development*, and as Editor of *Journal of Experimental Education and of Educational and Psychological Measurement*, I have noticed some errors that seem to recur within the research literature read by counselors. The purpose of this digest is to highlight a few of these errors, and to provide some helpful references that further explore these problems. In "buying" the ideas presented within publications, as in buying more tangible products, the old maxim of *caveat emptor* does indeed remain useful.

1. Insufficient Attention to Score Reliability

Pedhazur and Schmelkin (1991, pp. 2-3) recently noted that, "Measurement is the Achilles' heel of sociobehavioral research... [I]t is, therefore, not surprising that little or no attention is given to properties of measures used in many research studies." In fact, empirical studies of the published literature indicate that score reliability is not considered in between 40 and 50 percent of the published research. And, similarly, in doctoral dissertations we occasionally even see scores being analyzed that have reliability coefficients that are *less* than *negative* one (Thompson, 1994)!

The failure to consider score reliability adequately in substantive research is very serious, because effect sizes and power against Type II error are both attenuated by measurement error. Thus, prospectively we may plan and conduct studies that could not possibly yield noteworthy effect sizes, given that score unreliability inherently attenuates effect sizes. Or, retrospectively, we may not accurately interpret the effect sizes in completed studies if we do not consider as part of our interpretation the reliability of the scores we are actually analyzing.

Consumers of published research should generally expect authors to analyze the reliability of the scores in their own data. It is not sufficient even to report reliability coefficients from test manuals or from other research, because tests are *not* themselves reliable (i.e., tests are not imprinted both with ink and with reliability during the various stages of the printing process). Score reliability is influenced by various facets of the measurement process, including when, how, and to whom the test was administered. Thus, it becomes an oxymoron to speak of "the reliability of the test," because such a telegraphic shorthand way of speaking is also an incorrect way of speaking, i.e., makes an inherently untrue assertion.

Partly because this shorthand way of speaking is so common, too few researchers recognize that *reliability is a characteristic of scores* and not of tests. Because *scores* possess or lack these characteristics, different sets of scores generated by even the same measure may each have different reliabilities.

These telegraphic ways of speaking become problematic if we come unconsciously to ascribe literal truth to our shorthand, rather than recognizing that our jargon is sometimes literally untrue. As noted elsewhere:

> This is not just an issue of sloppy speaking--the problem is that sometimes we unconsciously come to think what we say or what we hear, so that sloppy speaking does sometimes lead to a more pernicious outcome, sloppy thinking and sloppy practice (Thompson, 1992, p. 436).

Readers of published research should expect authors only to offer assertions that they reasonably believe are true, and thus we should not condone use of the language, "the test is reliable." Furthermore, we should expect authors of published research to offer empirical evidence that the scores they are actually analyzing have reasonable measurement integrity.

2. Overreliance on Tests of Statistical Significance

The business of science is identifying relationships that recur under stated conditions. Unhappily, too many researchers at least unconsciously incorrectly assume that the *p* values calculated in statistical significance tests evaluate the probability that results will recur (Carver, 1993).

To get a single estimate of the *p*(robability) of the sample statistics, the null hypothesis is posited to be exactly true in the population. Thus, statistical significance testing evaluates *the probability of the sample statistics for the data in hand, given that null hypothesis about the related parameters in the population is presumed to be exactly true.* This is *not* a test of result replicability, i.e., is *not* a test of whether roughly equivalent effect sizes would be detected in subsequent studies conducted under similar conditions!

In fact, the requirement that statistical significance testing must presume an assumption that the null hypothesis is true in the population is a requirement that an untruth be presumed. As Meehl (1978, p. 822) notes, "As I

believe is generally recognized by statisticians today and by thoughtful social scientists, the null hypothesis, taken literally, is always false." Similarly, Hays (1981, p. 293) points out that "[t]here is surely nothing on earth that is completely independent of anything else [in the population]. The strength of association may approach zero, but it should seldom or never be exactly zero."

And positing an untruth about the population has a very important implication. Whenever the null is not exactly true in the sample(s), then the null hypothesis will always be rejected at some sample size. As Hays (1981, p. 293) emphasizes, "virtually any study can be made to show significant results if one uses enough subjects."

Although statistical significance is a function of several different design features, sample size is a basic influence on statistical significance. Thus, statistical significance testing can create a tautology in which we invest energy to determine that which we already know, i.e., our sample size.

Consumers of published research should expect authors to never say "significant" when they mean "statistically significant." Since statistical significance does not evaluate result importance, always using the phrase "statistically significant" when referring to statistical tests helps somewhat to avoid confusing statistical significance with the issue of importance. As Thompson (1993) emphasized:

> Statistics can be employed to evaluate the probability of an event. But importance is a question of human values, and math cannot be employed as an atavistic escape (a la Fromme's *Escape from Freedom)* from the existential human responsibility for making value judgments. If the computer package did not ask you your values prior to its analysis, it could not have considered your value system in calculating *p*'s, and so *p*'s cannot be blithely used to infer the value of research results. Like it or not, empirical science is inescapably a subjective business. (p. 365)

Second, it is important to expect authors reporting statistical significance to supplement these tests with analyses that do focus on result importance and on result replicability. With respect to result importance, authors should be expected to report and interpret effect sizes. Even the recently published fourth edition APA style manual acknowledges that probability values reflect sample size, and thus encourages all authors to provide effect-size information.

With respect to result replicability, authors should be expected to report actual, so-called "external" replication studies, or to conduct "internal" replicability analyses (Thompson, 1993, 1994b). The later include cross-validation, the jackknife, and the bootstrap. These analyses, unlike statistical significance tests, do inform judgment about whether detected relationships replicate under stated conditions.

3. Stepwise Methods Should Not Be Used

Stepwise analyses are used with some frequency in published research, almost always to bad effect (cf. Thompson, 1994a). There are three problems. First, the computer packages use the wrong degrees of freedom in computing statistical significance in these analyses, and the incorrect degrees of freedom systematically bias the tests in favor of yielding statistical significance that is bogus. Second, not only does doing *k* steps of analysis *not* yield the best predictor set of size *k*, it can occur that *none* of the predictors entered in the first *k* steps are even among the best predictor set of size *k*. Third, because the linear sequence of entry decisions can be radically influenced by sampling error, thus throwing the whole sequence of decisions off track at any step, and because so many decisions are made along the way of a stepwise analysis, stepwise analyses often produce results that are very unlikely to replicate!

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Assessment in Counseling & Therapy

ERIC Database Searches

Assessment in Counselor Education and Evaluation

New Forms of Assessment

Assessment of Traits

Assessment for Diagnosis

Assessment in Career Development

Social Contest of Assessment

Modifications for Special Assessment Circumstances

School Psychologists' Role in Assessment

Assessment Professionalism

For each focus area, an in-depth search of records entering the ERIC database from 1982 through September 1994 was performed using SilverPlatter. Boolean searching techniques were employed, primarily using controlled terms listed in the *Thesaurus of ERIC Descriptors*.

Assessment in Counselor Education and Evaluation

AN: EJ466512
AU: Fong,-Margaret-L.
TI: Teaching Assessment and Diagnosis within a DSM-III-R Framework.
PY: 1993
JN: Counselor-Education-and-Supervision; v32 n4 p276-86 Jun 1993
AB: Presents teaching model of the assessment process and the diagnostic skills of behavioral observation, initial interview, mental status examination, categorizing symptom patterns, and the use of decision trees. Model represents structured skill to teaching diagnosis within framework of the Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R). (Author/NB)

AN: ED358139
AU: Schafer,-William-D.; Mufson,-Dolores
TI: Assessment Literacy for School Counselors.
PY: 1993
NT: 22 p.; Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993).
AB: Education for school counselors in the area of assessment was studied in an effort to develop recommendations to improve the quantitative literacy portions of counselor education programs. To identify skills needed by school counselors, information was obtained from the Educational Research Service (an independent non-profit corporation) from studies done in the following districts: (1) Harlendale Independent School District (Texas); (2) Patchoque-Medford Public Schools (New York); (3) Petersburg Public Schools (Virginia); and (4) Solanco School District (Pennsylvania). A study done by the Montgomery County Public Schools (Maryland) was added. In the areas of pupil assessment and research and evaluation as described by these five school districts, a spectrum of responsibilities is evident that expands from basic standardized test interpreter to test developer, evaluator of programs, consultant, and researcher. The current status of counselor preparation for the basic roles of student assessment, program evaluation, and basic research was considered through a review of the standards used by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Comparing the CACREP defined skills with counselor roles, a list of principles is presented to serve as a guide for counselor education in the assessment area. (SLD)

AN: EJ437236
AU: May,-Therese-M.; Scott,-Kathleen-J.
TI: Assessment in Counseling Psychology: Do We Practice What We Teach?
PY: 1991
JN: Counseling-Psychologist; v19 n3 p396-413 Jul 1991
AB: Surveyed training directors of American Psychological Association approved counseling psychology programs and internship sites to determine extent of training in psychological assessment procedures. Found that clinical interview was most widely used procedure, vocational assessment was changing, different procedures were emphasized in academic and field training, and proficiency in different assessment procedures was expected at different points in training. (Author/PVV)

AN: EJ429343
AU: Balleweg,-Bernard-J.
TI: The Interviewing Team: An Exercise for Teaching Assessment and Conceptualization Skills.
PY: 1990
JN: Teaching-of-Psychology; v17 n4 p241-43 Dec 1990
AB: Teaches students how to conduct assessment interviews and conceptualize client problems. Student teams interview the instructor who role plays a client. Students receive feedback and are asked questions designed to develop hypotheses concerning the nature and etiology of the problem. Examines advantages of this approach. (NL)

AN: EJ406556
AU: Terry,-Linda-L.
TI: Systemic Assessment of Families through Individual Treatment: A Teaching Module.
PY: 1989
JN: Journal-of-Marital-and-Family-Therapy; v15 n4 p379-85 Oct 1989
AB: Describes an instructional module, "Family Therapy Without the Family," which prepares family counseling trainees for conducting a systemic assessment in individual treatment. Module assists trainees in development of questioning which elicits information about relational behavior and which generates sufficient data to develop a systemic hypothesis. (Author/ABL)

AN: EJ337302
AU: Hutchinson,-Roger-L.; Bottorff,-Richard-L.
TI: Selected High School Counseling Services: Student Assessment.
PY: 1986
JN: School-Counselor; v33 n5 p350-54 May 1986
AB: Notes that as the public mandate for accountability increases, it becomes more necessary for counselors to evaluate their performance. Recommends using student evaluations of counseling needs and expectations to assess counseling programs' effectiveness. (Author/ABB)

AN: EJ324947
AU: Myers,-Jane-E.; Peterson,-Terrance-L.
TI: Assessment of Older Persons: Training and Resources.
PY: 1985
JN: Measurement-and-Evaluation-in-Counseling and-Development; v18 n3 p128-31 Oct 1985
AB: A survey of counselor education training programs and test publishers indicates that some training in assessment with older persons is being done, although available instruments are limited. (Author)

AN: EJ301079
AU: Anderson,-Teresa-K.; And-Others
TI: Self-Reported Assessment Practices of School Psychologists: Implications for Training and Practice.
PY: 1984
JN: Journal-of-School-Psychology; v22 n1 p17-29 Spr 1984
AB: Investigated the assessment views and practices of 145 school psychologists. Results indicated that respondents are predominantly behavioral and cognitive behavioral in orientation; spend most of their professional time in the public schools; and engage in a great deal of assessment, particularly behavioral assessment and projective testing. (JAC)

AN: EJ277713
AU: Loganbill,-Carol; Stoltenberg,-Cal
TI: The Case Conceptualization Format: A Training Device for Practicum.
PY: 1983
JN: Counselor-Education-and-Supervision; v22 n3 p235-41 Mar 1983
AB: Presents a training device to facilitate counselor conceptualization of client psychological functioning. Conceptualization is defined as the counselor's synthesis of cognitive behavioral, emotional, and interpersonal aspects of the client's intrapsyche dynamics. Presents a specific case conceptualization format, along with an explanation of each of its components. (Author/RC)

AN: EJ264039
AU: Vacc,-Nicholas-A., Ed.; Bardon,-Jack-I., Ed.
TI: Assessment and Appraisal: Issues, Practices, and Programs.
PY: 1982
JN: Measurement-and-Evaluation-in-Guidance; v15 n1 p9-127 Apr 1982
AB: Contains 16 articles presenting issues and practices concerning assessment and appraisal as they relate to counselors. Addresses specific areas of concern to counselors and provides commentaries differing in style and emphasis. Includes discussions of issues and an integration of many practices and procedures. (RC)

AN: ED274856
AU: Yerian,-Jean-M.
TI: Improving Vocational Guidance and Counseling at Virginia Commonwealth University by Developing Career/Vocational Assessment Programs. Vocational Guidance and Counseling Project. Final Report.

CS: Virginia Commonwealth Univ., Richmond.
PY: 1986
NT: 56 p.
AB: The quality and quantity of assessment programs used at the Career Planning and Placement Department of Virginia Commonwealth University were improved, especially as such programs relate to two special needs groups. The two groups were freshmen in the humanities and sciences who lack clear vocational identity and adults who need to understand assessment in the context of life planning. Various career/vocational assessment instruments were purchased for use at Virginia Commonwealth University. A library of instruments that could be accessed by other services' staffs was established. Inservice activities were designed and implemented to teach counseling staff and faculty the career assessment process. Career assessment programs using the instruments were designed and implemented for the two target groups. They include a self-assessment program designed to help traditional-age college students assess their interests, skills, and values; a group designed for adult students and alumni that focuses on identification of strengths and on career enhancement; and SIGI (System of Interactive Guidance and Information) Plus orientation workshops. (Appendixes include fliers, articles, outlines of the career assessment programs, and evaluations.) (YLB)

AN: ED221492
AU: Meyerson,-Roberta-C.
TI: Evaluating Trainees in the Counseling Practicum.
PY: 1981
NT: 15 p.; Paper presented at the Annual Colloquium of the Council of Graduate Students in Education (1981).
AB: A study was made to determine the procedures which supervisors and instructors of counseling practica currently use to evaluate the counseling effectiveness of masters and doctoral level practicum students. Inquiry was also made about the solutions adopted when a student is considered ineffective. The survey elicited responses from 89 individuals, most of whom served in the dual capacities of practicum intructors and individual supervisors, and represented a broad range of counseling approaches. The survey questions pertained to: (1) formal and informal assessment procedures in practica; (2) strategies for dealing with trainees whose counseling was evaluated as incompetent or ineffective; and (3) the relative importance of certain aspects of trainee professional development. Over half of the respondents indicated that trainees were graded on a pass/fail basis. The respondents indicated that they used indirect and subjective methods of student evaluation, such as audio- or video-taped counseling sessions, observation of student attitudes and behavior in supervision, and student self-reports of progress with clients. In response to a question on how they dealt with students who were rated as unsatisfactory, most indicated that these trainees were given "incompletes" and offered some type of remedial experience to assist them in developing skills in their areas of deficiency. Most of the respondents checked more than one option which they used in handling ineffective trainees. Over half of the respondents ranked counseling interview skills as the most important aspect of professional development for their practicum students. (JD)

New Forms of Assessment

AN: EJ478696
AU: Sormunen,-Carolee
TI: Portfolios: An Assessment Tool for School-to-Work Transition.
PY: 1994
JN: Business-Education-Forum; v48 n4 p8-10 Apr 1994
AB: Portfolio assessment can be used effectively to evaluate a student's performance in a course, to evaluate a student's performance in a program, and to evaluate an entire program or any of its components. (JOW)

AN: ED368760
AU: Vernetson,-Theresa, Ed.
TI: Selected Papers from the Spring 1993 Breivogel Conference at the University of Florida on Alternative/Portfolio Assessment.
CS: Florida Educational Research and Development Council, Inc., Sanibel.
PY: 1993
JN: Florida-Educational-Research-Council Research-Bulletin; v25 n1 Fall 1993
NT: 187 p.
AB: This edition of the "Research Bulletin" is a compilation of papers presented at the annual William F. Breivogel Conference in 1993. The conference theme was alternative and portfolio assessment. Papers were grouped into assessment in general, portfolio assessment, and alternative assessments and curriculum questions. The selected papers include: (1) "Perspectives on Alternative Assessment: What's Happening Nationally" (Thomas H. Fisher); (2) "Scoring the New Standards Project: 5 on a 6 Point Scale" (Lee Baldwin, et al.); (3) "Can Test Scores Remain Authentic when Teaching to the Test?" (M. David Miller and Anne E. Seraphine); (4) "Managing Classroom Assessments: A Computer-Based Solution for Teachers" (Madhabi Banerji and P. Charles Hutinger); (5) "Historical Roots of Current Practice in Educational Testing" (Annie W. Ward and Mildred Murray-Ward); (6) "The Portfolio: Scrapbook or Assessment Tool" (Jonnie P. Ellis, et al.); (7) "Addressing Theoretical and Practical Issues of Using Portfolio Assessment on a Large Scale in High School Settings" (Willa Wolcott); (8) "The Effective Use of Portfolio Assessment within Preservice Teacher Education: The University of Florida's Elementary Proteach Program" (Lynn Hartle and Paula DeHart); (9) "Portfolio Assessment in Teacher Education Courses" (Lyn Wagner, et al.) ; (10) "Modeling Alternative Assessment in Teacher Education Classrooms" (Mary Elizabeth D'Zamko and Lynn Raiser); (11) "An Analysis of Curriculum Domains: Implications for Assessment, Program Development, and School Improvement" (Linda S. Behar); (12) "Assessing Approaches to Classroom Assessment: Building a Knowledge/Skill Base for Preservice and Inservice Teachers" (Lehman W. Barnes and Marianne B. Barnes); and (13) "Assessing Mathematical Problem Solving from Multiple Perspectives" (Mary Grace Kantowski, et al.). (SLD)

AN: EJ476204
AU: Callison,-Daniel
TI: The Potential for Portfolio Assessment.
PY: 1993
JN: School-Library-Media-Annual-(SLMA); v11 p30-39 1993
AB: Describes the use of mapping and portfolio assessment by school library media specialists to document changes in student reading, writing, and information use patterns. Topics discussed include new curriculum designs in language arts and social studies; information literacy; comparing earlier and later work; and student reflection. (Contains 37 references.) (LRW)

AN: EJ475635
AU: Metzger,-Elizabeth; Bryant,-Lizbeth
TI: Portfolio Assessment: Pedagogy, Power, and the Student.
PY: 1993
JN: Teaching-English-in-the-Two-Year-College; v20 n4 p279-88 Dec 1993
NT: Special Issue: Assessment.
AB: Offers a brief history of portfolio assessment, addresses question teachers should consider when implementing portfolios, and gives a classroom scenario using portfolios.

Describes the impact of portfolio grading on students, discussing power issues and student attitudes, and increasing student power. (SR)

AN: EJ471471
AU: Hamm,-Mary; Adams,-Dennis
TI: Portfolios: A Valuable Tool for Reflection and Assessment.
PY: 1992
JN: Journal-of-Experiential-Education; v15 n1 p48-50 May 1992
AB: Proposes the use of portfolios containing representative student work gathered over time as a method to improve understanding of students' work, development, and growth. Provides an example of portfolio assessment in a graduate class on mathematics problem solving for teachers. (KS)

AN: ED362731
AU: Hayes,-Betty, Comp.; Kretschmann,-Karen-Johnson, Comp.
TI: Portfolio Assessment: An Annotated Bibliography of Selected Resources.
CS: Madison Area Technical Coll., Wis.
PY: 1993
NT: 25 p.
AB: This annotated bibliography lists and summarizes the key points of 33 resource materials that focus specifically on portfolio assessment. Compiled in Spring 1993 as part of a demonstration project funded by the Wisconsin State Board of Vocational, Technical, and Adult Education, the bibliography is intended to serve as a tool for use in developing a portfolio assessment process for adult basic skills students. Included among the topics discussed in the works cited are the following: assessment and accountability in a whole literacy curriculum, joint teacher-student assessment through the use of portfolios, impacts of portfolios on teachers' instruction and students' self-understanding, portfolio assessment in mathematics, aggregation of portfolio data, family portfolios as a tool for documenting changes in parent-child relationships, employability skills portfolios, and portfolio assessment for language minority students. A list of the 77 journal articles, 3 bibliographies, and 7 newsletters reviewed during the process of compiling the annotated bibliography is included. (MN)

AN: ED360648
AU: Fairchild,-Ruth
TI: Going beyond Assessment: Turning Portfolios into Tools for Student Reflection.
PY: 1993
NT: 13 p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (44th, San Diego, CA, March 31-April 3, 1993).
AB: To research the implications of portfolio assessment for student learning and teacher methodology, a teacher examined the interplay of reflection and evaluation in her expository writing class of 12. In a semester-long intermediate-level class, students wrote a draft of a paper each week, with each paper then going through multiple drafts. Students were also asked to write reflective notes on the backs of their drafts describing how they thought the draft had turned out, sharing ideas they had for the next draft, and asking for specific feedback from the instructor. Although many students were hesitant and unsure of what to say at first, once begun, the note-writing activity became a valued part of the kind of dialogue that can make a class a community of writers. The samples of reflective writing from students included evaluative language; therefore, students were encouraged to collaborate to develop evaluative criteria. As a result, they began to build their vocabulary about writing and the criteria to evaluate it. (Sample criteria lists are appended.) (NH)

AN: EJ465259
AU: Hunter,-Barbara; And-Others
TI: Technology in the Classroom: Preparing Students for the Information Age.
PY: 1993
JN: Schools-in-the-Middle; v2 n4 p3-6 Sum 1993
AB: When preparing middle-level students for the information Age, educators must consider staff-development needs in the areas of computer technology and portfolio design; classroom restructuring for project-based curriculum; integrated subject disciplines; and alignment of the portfolio approach to school, district, state, and parental expectations for performance and/or achievement. Electronic portfolio assessment is a promising development. (MLH)

AN: ED359352
AU: Fingeret,-Hanna-Arlene
TI: It Belongs to Me. A Guide to Portfolio Assessment in Adult Education Programs.
CS: Literacy South, Durham, NC.
PY: 1993
NT: 79 p.
AB: This guide is designed to introduce adult literacy educators to the concept of portfolio assessment and to provide some guidance about how to incorporate portfolio assessment into adult literacy education work. An introduction describes what a portfolio is and provides an overview of the four major areas of reflection and decision making that make up the portfolio assessment process. The teacher must: (1) decide whether portfolio assessment is consistent with his or her own individual approach to instruction and assessment; (2) plan portfolio assessment; (3) implement portfolio assessment; and (4) evaluate the process and revise it for future use. The next section focuses on the process of clarifying the philosophy and approach to instruction and deciding if portfolio assessment is consistent with the instructional program. The next two sections look at the processes of planning and implementing portfolio assessment, highlighting adult literacy educators' and students' experience. This is followed by a discussion of impacts, administrative issues, and recommendations for the field, including national and local support mechanisms, training for trainers in portfolio assessment, incorporation of portfolio assessment into the indicators of program quality, and improved professional support and working conditions. Appendixes include sample forms and tools that programs and educators have created for portfolio assessment, and a 22-item selected annotated bibliography. Contains 46 references. (YLB)

AN: ED355599
AU: Aitken,-Joan-E.
TI: Empowering Students and Faculty through Portfolio Assessment.
PY: 1993
NT: 33 p.; Paper presented at the Annual Meeting of the Central States Communication Association (Lexington, KY, April 14-18, 1993).
AB: As part of a state-mandated assessment process, faculty and students need innovative approaches which can empower them to learn, grow, and change in the classroom. The University of Missouri-Kansas City Department of Communication Studies uses three types of student portfolios: (1) a university-wide portfolio of the student's work in all courses for a given semester; (2) a course portfolio that reflects what goes on behind individual tests and assignments; and (3) a student selected portfolio of work evaluated by a professional in a student's prospective area of employment. More than assessment tests and statistics, these portfolio assessments give students and faculty crucial control and insights regarding the learning process. (Three figures presenting the form used by the department for student portfolios, the form used for faculty feedback, and the protocol for student portfolio and interview assessment are included; 18 references, and a survey instrument and teacher comments from the English department about course portfolios are attached.) (Author/RS)

AN: ED354385
AU: Imel,-Susan
TI: Portfolio Assessment in Adult, Career, and Vocational Education. Trends and Issues Alerts.
CS: ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.
PY: 1993
NT: 4 p.
AB: An outgrowth of the educational reform movement is interest in alternative forms of assessment. One response to the call for increased rigor in measuring learner progress has been the suggestion that assessment should be restructured to resemble real life, with learners taking more responsibility for assessing their own progress. Portfolio assessment is a frequently mentioned form of alternative assessment that encourages development of self-assessment skills. Portfolios of learner work form the basis for this method of assessment. The collection of student work must include student participation in selection of portfolio content, guidelines for selection, criteria for judging merit, and evidence of self-reflection. The following are strengths of portfolio assessment: learners share in the responsibility for assessing their work, data are gathered and evaluated continuously over the course of the learning project, learners have the opportunity to learn about their own learning, and learners

develop an expanded view of what is learned. Issues associated with portfolio assessment are as follows: the need for additional resources, development of knowledgeable teachers, and assessment of portfolio information, including establishing standards and criteria and establishing validity and reliability of results. (Annotations of 20 print resources are provided.) (YLB)

AN: ED342819
AU: Popp,-Robert-J.
TI: Family Portfolios: Documenting Change in Parent-Child Relationships.
CS: National Center for Family Literacy, Louisville, KY.
PY: 1992
NT: 29 p.
AB: The National Center for Family Literacy (NCFL) is addressing problems of evaluation of family literacy programs through portfolio assessment. Beginning in fall 1991, 15 programs began using portfolios to document parent-child interactions. This guide provides a description of the introduction of portfolio assessment into these programs and presents a method for overcoming problems and analyzing contents of the portfolios. The project will continue to evolve as teachers and parents collaboratively decide how portfolios will be used. NCFL portfolios document changes in knowledge and beliefs about parent-child relationships and changes in parenting practices. Different formats are used, ranging from file folders to videotapes and computer disks. Additions to the portfolio are made once a month in teacher-family conferences. Evaluation of the Portfolios is ongoing at these meetings. Specific questions that teachers might have are addressed, and problems that centers have encountered so far are described. As the use of portfolios unfolds, the NCFL will update this guide. One figure and a 28-item list of references are included. (SLD)

Assessment of Traits

AN: EJ483028
AU: Achtnich,-Martin; Filho,-Jos-Ferreira
TI: The Berufsbildertest: Vocational Pictures.
PY: 1994
JN: Career-Development-Quarterly; v42 n3 p262-70 Mar 1994
AB: Describes Berufsbildertest, or Vocational Pictures Technique (VPT), technique constructed on theory that behaviors of choice are evoked by eight different factors of human needs or inclinations: softness, power, social conscience, show, reason, mind or spirit, matter, and orality. Explains usefulness of test in career counseling and presents descriptions of two examples of its use in career assessment. (Author/NB)

AN: EJ482588
AU: Pittenger,-David-J.
TI: The Utility of the Myers-Briggs Type Indicator.
PY: 1993
JN: Review-of-Educational-Research; v63 n4 p467-88 Win 1993
AB: The Myers Briggs Type Indicator (MBTI) is evaluated using a unified view of test validity that requires that validity be considered from an approach requiring many sources of corroboration. A review of available literature suggests insufficient evidence to support the tenets and claims about the utility of the MBTI. (SLD)

AN: EJ480724
AU: Dowd,-E.-Thomas; Sanders,-Daniel
TI: Resistance, Reactance, and the Difficult Client.
PY: 1994
JN: Canadian-Journal-of-Counselling; v28 n1 p13-24 Jan 1994
AB: Describes effect of client resistance and reactance in counseling and methods for assessing these phenomena. Conceptualizes client symptoms as ego-syntonic, where symptom is consonant with client's self-image, or ego-dystonic, where it is not. Uses concepts in deriving counseling strategies for working with difficult clients according to model that crosses high and low reactance with ego syntonicity-dystonicity. (Author/NB)

AN: EJ460892
AU: Spokane,-Arnold-R.
TI: Are Career Counselors Really Guilty of Malpractice? A Critique of the Inter-Domain Theory.
PY: 1993
JN: Journal-of-Counseling-and-Development; v71 n5 p555-57 May-Jun 1993
AB: Responds to previous article by Lowman on the Inter-Domain Model of career assessment and counseling. Asserts that Lowman's proposal may be detrimental to current practice. Examines interrelationships between interests and personality; between interests and ability; and among interests, ability, and personality. Concludes that counselors are assessing wisely. (NB)

AN: EJ460891
AU: Lowman,-Rodney-L.
TI: The Inter-Domain Model of Career Assessment and Counseling.
PY: 1993
JN: Journal-of-Counseling-and-Development; v71 n5 p549-54 May-Jun 1993
AB: Presents summary of Inter-Domain Model applied to career assessment and counseling, which formally encompasses three major categories of variables: occupational interests. abilities, and personality characteristics. Reviews requirements of a theory of career assessment and discusses major components of the Inter-Domain Model. (Author/NB)

AN: EJ417929
AU: Johnson,-Samuel-D., Jr.
TI: Applying Socio-Identity Analysis to Counseling Practice and Preparation: A Review of Four Techniques.
PY: 1990
JN: Journal-of-Multicultural-Counseling-and Development; v18 n3 p133-43 Jul 1990
AB: Reviews four training strategies for applying

socioidentity analysis to multicultural counseling; the Clarification Group (C Group); the Personal Dimensions of Difference Self-Inventory (PDD); the Multifactor Needs Assessment; and the Cultural Grid. Each highlights a slightly different aspect of the complex matrix of relationships that define the temporal, cultural, contextual, behavioral, and developmental aspects of the counseling relationship. (TE)

AN: EJ363258
AU: Dilley,-Josiah-S.
TI: Applications of Jungian Type Theory to Counselor Education.
PY: 1987
JN: Counselor-Education-and-Supervision; v27 n1 p44-52 Sep 1987
AB: Describes Carl Jung's theory of psychological type and the Myers-Briggs Type Indicator (MBTI), an instrument to assess Jungian type. Cites sources of information on the research and application of the theory and the MBTI. Explores how knowledge of type theory can be useful to counselor educators. (Author)

AN: EJ355267
AU: Childers,-John-H., Jr.
TI: Processing Parts of a Client's Personality: Identification, Dialogue, and Integration.
PY: 1987
JN: American-Mental-Health-Counselors Association-Journal; v9 n2 p70-76 Apr 1987
AB: Introduces a counseling strategy that facilitates a client's ability to identify parts of his or her personality, establish dialogue between these parts, and allow the parts to work together in psychological congruence. Discusses the concept in which the strategy of parts processing might be an appropriate intervention. (Author/NB)

AN: ED329818
AU: Hood,-Albert-B.; Johnson,-Richard-W.
TI: Assessment in Counseling: A Guide to the Use of Psychological Assessment Procedures.
CS: American Association for Counseling and Development, Alexandria, VA.
PY: 1991
NT: 289 p.
AB: The purpose of this book is to provide information about the various psychological assessment procedures that are specifically relevant for practicing counselors and human development professionals. The book deals with the use of such tests in the counseling process and includes illustrative case studies. It emphasizes the selection, interpretation, and communication of psychological test results. It also emphasizes the importance of integrating test results with other information about the client. The psychological tests selected are those that are most often used by counselors and human development professionals in their daily practice. Section 1 presents basic concepts of psychological assessment. Section 2 covers cognitive assessment and the various tests that assess intelligence, academic aptitude, and academic achievement. The third section deals with procedures used by counselors to assist clients in making decisions regarding their careers and life plans. In section 4, personality assessment is considered. The final section deals with professional practices and considerations. Excerpts from documents outlining ethical and test standards particularly appropriate to counselors and human development professionals in their use of assessment procedures are reproduced in the appendix. (ABL)

AN: ED291049
AU: Krieshok,-Thomas-S.
TI: Assessment of Adolescent Career Interests and Values.
PY: 1987
NT: 15 p.; Paper presented at the Annual Convention of the American Psychological Association (95th, New York, NY, August 28-September 1, 1987).
AB: A broader perspective of vocational assessment based largely on Super's formulations of the career development process, calling for greater attention to role salience and career maturity is described. The most promising development in career planning in recent years, the application of information processing theory to career decision making, is discussed. The following changes in emphasis are predicted about what should be included in vocational assessment and in the methods used to accomplish assessment: (1) process variables

and assessment methods will become more crucial; (2) assessment tools placing a greater emphasis on articulating one's personal constructs will be used; and (3) counselors will move away from interest assessments to more detailed and ideographic examinations of skills used in performing specific functions and values which delineate the work environment. (ABL)

AN: ED265452
AU: Griggs,-Shirley-A.
TI: Counseling Students through Their Individual Learning Styles.
CS: ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich.
PY: 1985
NT: 140 p.; For a similar document on counseling college students, see CG 018 779.
AB: The major purpose of this monograph is to provide counselors in elementary and secondary schools with information on learning style to enable them to diagnose the learning style of each student, utilize counseling interventions that complement individual learning style preferences and consult with teachers and parents regarding the accomodation of student learning style preferences in the classroom and at home. Application of the learning style approach is described as involving: (1) assessing the learning style of each student; (2) identifying patterns within the counseling caseload for grouping students according to learning style preferences; (3) interpreting learning style requirements of students for counseling purposes and applying complementary counseling approaches; and (4) evaluating student outcomes as a result of using the learning style model. Case studies are provided to assist counselors in applying the model at the elementary and secondary school levels. The learning style needs of special populations (gifted, physically disabled, school dropouts) are described. Descriptions of counseling programs that use learning preferences in counseling are provided. Research studies are outlined that show evidence that using the learning style approach in teaching and counseling results in improved academic achievement, more positive attitudes toward school, and selected developmental gains, such as increased career awareness. (Author/ABB)

Assessment for Diagnosis

AN: EJ466512
AU: Fong,-Margaret-L.
TI: Teaching Assessment and Diagnosis within a DSM-III-R Framework.
PY: 1993
JN: Counselor-Education-and-Supervision; v32 n4 p276-86 Jun 1993
AB: Presents teaching model of the assessment process and the diagnostic skills of behavioral observation, initial interview, mental status examination, categorizing symptom patterns, and the use of decision trees. Model represents structured skill to teaching diagnosis within framework of the Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R). (Author/NB)

AN: EJ450912
AU: Ganschow,-Leonore; And-Others
TI: Speech/Language Referral Practices by School Psychologists.
PY: 1992
JN: School-Psychology-Review; v21 n2 p313-26 1992
AB: A total of 951 school psychologists responded to a survey about language learning disabilities and speech/language referral practices. Findings suggest limited training about speech and ianguage disorders and a need to develop greater awareness of appropriate assessment measures among school psychologists. (SLD)

AN: EJ409803
AU: Kanchier,-Carole
TI: Career Education for Mentally Handicapped Adolescents.
PY: 1990
JN: Journal-of-Career-Development; v16 n4 p269-81 Sum 1990
AB: Career education for trainable and educable mentally handicapped adolescents begins with assessment of medical and psychomotor problems, social maturity, intellectual capacity, academic achievement, manual dexterity, personality, interests, and employment potential. Assessment should be integrated with appropriate career counseling and training. (SK)

AN: EJ371585
AU: Snipe,-Rosetta-M.
TI: Ethical Issues in the Assessment and Treatment of a Rational Suicidal Client.
PY: 1988
JN: Counseling-Psychologist; v16 n1 p128-38 Jan 1988
AB: Notes that rational client's decision to commit suicide may present complex ethical issues for therapist. Presents and discusses three-month account of therapy with client, from perspective of ethical values and principles upon which assessment and treatment decisions were made, and complex ethical dilemmas encountered as therapist juxtaposed client's autonomy with irreversibility of potential death by suicide. (Author)

AN: EJ365659
AU: Lewis,-Lisa; Sinnett,-E.-Robert
TI: An Introduction to Neuropsychological Assessment.
PY: 1987
JN: Journal-of-Counseling-and-Development; v66 n3 p126-30 Nov 1987
AB: Outlines the historical developments, current perspectives, and clinical applications of neuropsychology in evaluation, remediation, and ongoing counseling of clients and their families. Discusses assessments which allow identification of patients whose cognitive deficits have been underestimated or overestimated by other diagnostic procedures, providing clinically relevant information about potential for and specific means to promote recovery. (Author/KS)

AN: ED333272
AU: Fisher,-Gary-L.; Harrison,-Thomas-C.
TI: Assessment of Alcohol and Other Drug Abuse with Referred Adolescents.
PY: 1990
NT: 17 p.; Paper presented at the Annual Meeting National Association of School Psychologists (22nd, San Francisco, CA, April 17-22, 1990).
AB: Adolescents with alcohol or other drug problems may be referred to school

psychologists for assessment and may demonstrate symptoms similar to handicapping conditions such as learning disabilities or emotional disturbances. School psychologists who work with these students need to have assessment techniques that will help them determine the probability that referred adolescents have alcohol or other drug problems. In this document, procedures in the referral and testing process which can assist the school psychologist in assessing the likelihood that alcohol and other drug use and abuse contribute to the academic and behavioral problems of adolescents are presented. Pre-referral questionnaires, initial interviews, behavioral observations, and assessment devices are discussed, along with suggestions for referring substance abusing adolescent and implications for the training of school psychologists. A brief overview of the extent of alcohol and other drug use among adolescents is included. Standardized assessment devices discussed include the Michigan Alcohol Screening Test, the Questionnaire on Drinking and Drug Abuse, the Life Skills Training Student Questionnaire, and the Substance Abuse Subtle Screening Inventory. The document concludes with the recommendations that course work in the alcohol and other drug field be included in the training of school psychologists and that such training be required for recertification. (NB)

AN: ED314909
AU: Rustin,-Lena
TI: Assessment and Therapy Programme for Dysfluent Children. Manual, and Parent's Workbook, Children's Workbook and Assessment Booklet.
PY: 1987
NT: 157 p.
AB: The purpose of this program is to simplify and objectify the process of data-gathering and behavior modification involved in diagnosing and treating stuttering and related dysfluency problems. Following an introduction, the assessment process is described; this involves a complete evaluation of the child's speech and language and an assessment of the family's lifestyle and environment. An intensive, 10-day intervention program is then presented, with daily therapeutic plans for both children's group sessions and parents' group sessions. The sessions emphasize brainstorming, therapeutic games, problem solving, discussions, parent/child agreements, and homework. To ensure maintenance of fluency, follow-up sessions are proposed. Appendixes include discussion guidelines, games and exercises, and completed sample pages from the companion workbooks for parents and children. The original workbooks, and the Assessment Booklet, are also included with this document. The complete program package also includes an audiocassette giving examples of fluency techniques. (PB)

AN: ED294123
AU: Tjeltveit,-Alan-C.
TI: The Assessment and Treatment of Persons with Concurrent Substance Abuse and Other Psychopathology: The Importance of Problem Interactions.
PY: 1987
NT: 47 p.; Paper presented at the Annual Convention of the American Psychological Association (95th, New York, NY, August 28-September 1, 1987).
AB: Clients with concurrent substance abuse and other psychopathology constitute an often neglected patient population which presents significant assessment and treatment challenges. Proper treatment requires a careful assessment of issues not always addressed in standard substance abuse or mental health treatment settings. Psychologists with expertise in the psychology of addiction and psychopathology are needed to develop and implement effective approaches to working with such patients. Assessment issues which need to be addressed include the nature and severity of both types of problems, but also the presence and nature of interactions between concurrent problems. This document addresses some of the assessment and treatment questions posed by the client presenting with concurrent substance abuse and psychopathology. It sets forth a way of classifying concurrent problems, including a taxonomy of types of interactions between substance abuse and other psychological problems. To facilitate such an assessment, a set of assessment categories is proposed. Common treatment options for persons with concurrent problems are discussed. Optimal treatment strategies for persons falling into the various assessment categories are considered,

with a particular emphasis on the treatment of problem interactions. (Author/NB)

AN: ED285057
AU: Abbey,-Joan-M.
TI: Adolescent Perpetrator Treatment Programs: Assessment Issues.
PY: 1987
NT: 43 p.; For related paper, see CG 020 100.
AB: The value of early identification of sexually aberrant behaviors and intervention with sexually deviant minors is obvious from a community safety perspective. Early intervention also appears to have value from the offender's perspective. A research review revealed several common themes with implications for both assessment and treatment. Most theoreticians agree that the onset of deviant sexual behavior usually begins around puberty; that such behaviors tend to be chronic if there is not effective intervention; and that juvenile sex offenders tend to be loners and underachievers with low self-esteem and poor social skills. Abusive family histories, the development of cognitive distortions, male socialization patterns, and organic biomedical problems have all been associated with sexually deviant behavior. A major assessment task is to determine whether the behavior is situational or symptomatic of unresolved issues in psychosexual development. Models helpful in assessing juvenile perpetrators have been developed by Groth and Loredo, the Sexual Behavior Clinic, and the University of Washington's Juvenile Sex Offender Program (JSOP). Various theoretical orientations have their own specialized treatment recommendations. Psychodynamic, biomedical, social psychology, and social learning perspectives all contribute to knowledge about how to help the sexually deviant youth. (A typology of adolescent sexual offenders, a chart of preconditions for sexual abuse, various sex offender program forms, juvenile sex offender decision criteria and other assessment information from the JSOP, and guidelines for assessing sexual abuse in juvenile cases are appended.) (NB)

AN: ED285056
AU: Doll,-Beth
TI: A Protocol for the Assessment and Treatment of School Phobia.
PY: 1987
NT: 38 p.; Paper presented at the Annual Meeting of the National Association of School Psychologists (19th, New Orleans, LA, March 4-8, 1987).
AB: This paper addresses the problem of school phobia, one of the most common childhood anxiety disorders. It presents four case studies of preadolescent school phobia involving two girls and two boys in grades four through seven. Several features of effective strategies for the assessment and treatment of school phobia which have emerged from the four case studies are discussed, including: (1) the importance of the family-child interaction; (2) the possibility that strictly behavioral observations may lead to inaccurate conclusions about the nature or extent of the phobia; and (3) the importance of incorporating self-management strategies into the treatment. A protocal is presented, based on the case studies and the strategies listed, which suggests a family-based consultation system rather than a child-based intervention. Assessment procedures discussed include the use of parent and child interviews, rating scales, anxiety ratings, and behavioral records; treatment procedures focus on goal setting, reinforcement, self-monitoring, relaxation training, support for the child, and parent education. It is noted that use of this protocol in the four case studies resulted in remission of the symptom of school refusal in every case. The protocol outlined in this report should address the distortions seen in family interactions and provide both child and family with effective ways of coping with the symptom of school refusal. (NB)

Assessment in Career Development

AN: ED357279
TI: Evaluation of Career-Development Student Competencies and Career-Development Programs. A Bibliography.
CS: Florida State Univ., Tallahassee. Center for Instructional Development and Services.
PY: 1990
NT: 40 p.
AB: This bibliography has as its focus the process of evaluating student competencies for career development, as well as the evaluation of career development programs. It is intended primarily for use in career development programs for grades K-12. Twenty-one citations from ERIC and other databases include project descriptions, evaluative reports, journal articles, position papers, tests, and materials for educational administrators. One article, representative of current wisdom in the field, is reprinted: "Selecting and Using Tests of Career Skills" (Arthur Kroll, Linda Pfister). The annotations describe the following: (1) career development guidelines for program review and planning; (2) evaluation and assessment instruments to measure program effectiveness; and (3) individual competencies for student career development. Each entry in the annotated bibliography has these components: title, date, author, developer, availability, annotation, and format. (YLB)

AN: ED355376
AU: Kapes,-Jerome-T.; And-Others
TI: Career Assessment Instruments for Vocational Students with Special Needs.
PY: 1992
NT: 30 p.; Paper presented at the American Vocational Association Convention (St. Louis, MO, December 7, 1992). For related documents, see ED 341 823, ED 344 068, and ED 345 035.
AB: This paper reviews the 12 career assessment instruments that have been found to be most used in Texas with students with special needs. Two tables list the instruments along with the opinions of users concerning their qualities. The reviews follow a standard outline. Each review is one to two pages in length and provides this information: title, publisher, population, purpose and description, administration and scoring, scales/scores, norms, reliability and validity, comments, and cost. These instruments are reviewed: Apticom; Career Ability Placement Survey (CAPS); Career Occupational Preference System (COPS); Differential Aptitude Test (DAT); McCarron-Dial System (MDS); Occupational Aptitude Survey and Interest Schedule--Second Edition (OASIS-2); Prevocational Assessment Screen (PAS); The Pictorial Inventory of Careers (PIC); Reading Free Vocational Interest Inventory (R-FVII); Social and Prevocational Information Battery--Revised (SPIB-R); Talent Assessment Program (TAP); and Wide Range Interest Opinion Test (WRIOT). (YLB)

AN: EJ456857
AU: Watkins,-C.-Edward, Jr.
TI: What Have Surveys Taught Us about the Teaching and Practice of Vocational Assessment?
PY: 1993
JN: Counseling-Psychologist; v21 n1 p109-17 Jan 1993
AB: Reviews survey articles about vocational assessment that have appeared from 1935 through 1991. Identifies nine points that summarize what surveys have told about the teaching and practice of vocational assessment. Notes that Strong Interest Inventory dominates field as most frequently used and recommended vocational assessment procedure. (Author/NB)

AN: EJ451190
AU: Super,-Donald-E.; And-Others
TI: Developmental Career Assessment and Counseling: The C-DAC Model.
PY: 1992
JN: Journal-of-Counseling-and-Development; v71 n1 p74-80 Sep-Oct 1992
AB: Discusses Career-Development Assessment and Counseling model, which implements current development theory and uses innovative assessment measures and improved counseling methods to improve vocational and life career counseling. Focuses on assessment, treating

interests and preferences as basic status data to be viewed in light of career maturity, salience of life roles, and values sought in life as moderator variables. (Author/NB)

AN: EJ445470
AU: Farley,-Roy-C.; And-Others
TI: Effects of Client Involvement in Assessment on Vocational Development.
PY: 1992
JN: Rehabilitation-Counseling-Bulletin; v35 n3 p146-53 Mar 1992
AB: Experimentally evaluated impact on clients' vocational development of two structured programs designed to involve clients in process of translating assessment data into implications for vocational preparation and occupational choice. Findings from 75 vocational rehabilitation clients revealed that participation in Occupational Choice Strategy and Know Thyself programs tended to enhance vocational development among experimental group members compared to controls. (NB)

AN: EJ428143
AU: McBride,-James-L., Jr.; Muffo,-John-A.
TI: Student Needs Assessment Raises Implications for Career Services.
PY: 1991
JN: Journal-of-Career-Planning-and-Employment; v51 n2 p63-67 Jan 1991
AB: Surveyed students' (n=489) perceptions of career search, including modes of service delivery preferred, importance of common career goals, and degree of help needed. Found that students preferred traditional modes of service delivery, ranked enjoying work and co-workers as most important goals, and expressed medium-to-strong need for information or assistance regarding service typically found in career planning and placement. (PVV)

AN: EJ425236
AU: Gunning,-Laurie; And-Others,-Eds.
TI: Special Issue--Using Career Assessment Instruments.
PY: 1991
JN: Career-Planning-and-Adult-Development Journal; v7 n1 p3-56 Spr 1991
NT: Available from Career Planning and Adult Development Network, 4965 Sierra Road, San Jose, CA 05132.
AB: This special issue includes the following: "Introduction"; "Interest Inventories: Which One, Why, and for Whom?"; "Recent Reports from the Committee to Screen Career Guidance Instruments"; "Assessment of Career Specialty Interests in Business and Medicine"; "Using Career Interest Inventories with Multicultural Clients"; and "A Comparative Study of the Interest Patterns of Black and White Athletes". (SK)

AN: EJ422341
AU: Hohenshil,-Thomas-H.; Brown,-Michael-B.,-Eds.
TI: Special Issue: Current Practices in Career Assessment.
PY: 1991
JN: Career-Planning-and-Adult-Development Journal; v6 n4 p2-44 Win 1990-91
AB: Includes "Introduction" (Hohenshil, Brown); "Overview of Career Assessment Methods and Models" (Hohenshil, Solly); "Career Interest Assessment Techniques" (Levinson, Folino); "Aptitude Testing in Career Assessment" (Capps, Heinlein, Sautter); "Personality Assessment in Career Counseling" (Brown); (Computerized Techniques in Career Assessment" (Brown); "Considerations Regarding Career Assessment for Special Groups" (Maddy-Bernstein); and "Career Assessment: Projections for the Future" (Ryan, Cole). (SK)

AN: EJ400027
AU: Corbishley,-M.-Ann; Yost,-Elizabeth-B.
TI: Assessment and Treatment Dysfunctional Cognitions in Career Counseling.
PY: 1989
JN: Career-Planning-and-Adult-Development Journal; v5 n3 p20-26 Fall 1989
NT: Available from CPAD Network, 4965 Sierra Road, San Jose, CA 95132.
AB: Restructuring constraining thoughts is an important step in career counseling. A collaborative approach enables counselors to assist clients in (1) recalling distressing situations, (2) determining associated thoughts and feelings, (3) discovering underlying beliefs, (4) summarizing the thoughts, and (5) examining

the relationship between beliefs, negative feelings, and behavior. (SK)

AN: EJ370016
AU: Westbrook,-Bert-W.
TI: Suggestions for Selecting Appropiate Career Assessment Instruments.
PY: 1988
JN: Measurement-and-Evaluation-in-Counseling and-Development; v20 n4 p181-86 Jan 1988
AB: Makes six suggestions for selecting appropriate career assessment instruments in the areas of proper training, use of the right kind of standards, deciding what information is needed, getting written documentation about tests under consideration, careful evaluation of instruments, and becoming familiar with issues in career assessment. (ABL)

AN: EJ365737
AU: Manzi,-Peter-A.
TI: Skills Assessment in Career Counseling: A Developmental Approach.
PY: 1987
JN: Career-Development-Quarterly; v36 n1 p45-54 Sep 1987
AB: Discusses rationale, techniques, and application of skills assessment. Recommends ways of using skills assessment at different stages of career development. Suggests need to recognize value of skills assessment in career counseling. Notes importance of skills assessment in career counseling when it is used to promote career growth and development of individuals facing major life transitions. (ABL)

AN: ED337653
TI: California Career Assessment Model Manual. Draft.
CS: Comprehensive Adult Student Assessment System, San Diego, CA.
PY: 1991
NT: 129 p.
AB: This model is an updated version of the California Agency-Based Vocational Assessment Model Draft developed in 1986. The first section of the manual summarizes the background of career assessment, defines the process, and provides a rationale for it. The second section analyzes critical issues in assessment. The assessment model and its stages follow. The three stages in the model serve as decision points to determine an individual's readiness for placement into an educational program or a job. Assessment methods are suggested for each stage that range from general career interest interviews and inventories in Stage I to employability and aptitude assessment in Stage II, to job-specific and work-sample assessment procedures in Stage III. The manual provides a list of important questions that should be asked for targeted groups of individuals and suggests methods for each stage of assessment as well as planning documents to record information. Appendixes include sample assessment forms such as an appraisal checklist, individual career plans, individualized transition plans, and employability development plans. A summary report of the California Education Summit of December 12-13, 1989, and a 24-item glossary are also included. (KC)

AN: ED301597
AU: Kapes,-Jerome-T., Ed.;
Mastie,-Majorie-Moran, Ed.
TI: A Counselor's Guide to Career Assessment Instruments. Second Edition.
CS: American Association for Counseling and Development, Alexandria, VA.
PY: 1988
NT: 363 p.
AB: A collection of 50 articles comprising guidelines for use of career assessment instruments by school counselors is provided. Topics addressed include: the nature of the guide, the counselor's role in career assessment, selection of career assessment instruments, interpretation of psychometric instruments in career counseling, and testing competencies and responsibilities for counselors. In addition, the guide provides descriptions and reviews of 43 major career assessment instruments. Types of instruments described and reviewed include multiple aptitude batteries, interest inventories, measures of work values, career development/maturity instruments, combined assessment programs, personality measures, and instruments for special populations. Sources of information about tests and testing, addresses of selected publishers, and a user's matrix are appended. (TJH)

AN: ED291049
AU: Krieshok,-Thomas-S.
TI: Assessment of Adolescent Career Interests and Values.
PY: 1987
NT: 15 p.; Paper presented at the Annual Convention of the American Psychological Association (95th, New York, NY, August 28-September 1, 1987).
AB: A broader perspective of vocational assessment based largely on Super's formulations of the career development process, calling for greater attention to role salience and career maturity is described. The most promising development in career planning in recent years, the application of information processing theory to career decision making, is discussed. The following changes in emphasis are predicted about what should be included in vocational assessment and in the methods used to accomplish assessment: (1) process variables and assessment methods will become more crucial; (2) assessment tools placing a greater emphasis on articulating one's personal constructs will be used; and (3) counselors will move away from interest assessments to more detailed and ideographic examinations of skills used in performing specific functions and values which delineate the work environment. (ABL)

Social Context of Assessment

AN: EJ479981
AU: Dillon,-Dennis
TI: Understanding and Assessment of Intragroup Dynamics in Family Foster Care: African American Families.
PY: 1994
JN: Child-Welfare; v73 n2 p129-39 Mar-Apr 1994
AB: Discusses the requirements of culturally competent practice with African-American social service clients. Notes that ethnic identity, differential levels of cultural assimilation, social class, and cultural values affect the provision of clinical services in family foster care. Examines possible points of stress between African-American case workers and African-American clients, and Caucasian case workers and African-American clients. (MDM)

AN: EJ478917
AU: Bersoff,-Donald-N.; And-Others
TI: Legal Issues in the Assessment and Treatment of Individuals with Dual Diagnosis.
PY: 1994
JN: Journal-of-Consulting-and-Clinical Psychology; v62 n1 p55-62 Feb 1994
AB: Discusses difficult legal, ethical, and professional issues confronting psychologists who work with people with dual diagnoses. Outlines applicable constitutional principles in context of discussing right to institutional services and to refuse treatment, describes statutes that go beyond constitutional protections, and highlights issues that people with dual diagnoses face in criminal and civil justice systems. (Author/NB)

AN: EJ468272
AU: Gushue,-George-V.
TI: Cultural-Identity Development and Family Assessment: An Interaction Model.
PY: 1993
JN: Counseling-Psychologist; v21 n3 p487-513 Jul 1993
AB: Proposes extension of Janet Helms' African-American and white interaction model to be used as starting point for organizing and understanding cultural-identity data in making initial family assessment. Reviews Helms model and other pertinent constructs from literature, extends theory to multicultural family counseling, and concludes with some illustrative cases suggesting how interaction model might be applied. (Author/NB)

AN: EJ437257
AU: Hoffman,-Mary-Ann
TI: Counseling the HIV-Infected Client: A Psychosocial Model for Assessment and Intervention.
PY: 1991
JN: Counseling-Psychologist; v19 n4 p467-542 Oct 1991
AB: Presents model providing conceptual framework to help counselors assess client's resources for addressing psychosocial issues resulting from human immunodeficiency virus (HIV) infection. Hypothesizes that four client resources (special characteristics, social supports, situation, and client characteristics) predict or moderate client's response to HIV infection. Discusses responses to HIV infection, presents counseling strategies and interventions, and considers case management issues. (Author/NB)

AN: EJ413513
AU: Denton,-Roy-T.
TI: The Religiously Fundamentalist Family: Training for Assessment and Treatment.
PY: 1990
JN: Journal-of-Social-Work-Education; v26 n1 p6-14 Win 1990
AB: This article suggests that fundamentalist families are significantly different from nonfundamentalist families, that fundamentalist beliefs have an impact upon the family's operations to the extent that they are a distinct subculture, and that treatment requires sensitivity to their beliefs and a set of unique assessment and intervention skills. (MLW)

AN: EJ412876
AU: Goldman,-Leo
TI: Qualitative Assessment.
PY: 1990
JN: Counseling-Psychologist; v18 n2 p205-13 Apr 1990
AB: Qualitative assessment methods typically are holistic and integrated. Compared with standardized tests, they offer a more active role for clients, a more intimate connection between assessment and the counseling process, and greater adaptability to ethnic, cultural, age, gender, and other individual differences. (Author/TE)

AN: EJ411435
AU: Kaufman,-Allan-V.
TI: Social Network Assessment: A Critical Component in Case Management for Functionally Impaired Older Persons.
PY: 1990
JN: International-Journal-of-Aging-and Human-Development; v30 n1 p63-75 1990
AB: Presents a framework that identifies variables associated with relationship dynamics that exist between older persons and their social network members. Suggests framework can be used by case managers to help them assess the characteristics and functioning of their clients' social network relations and develop service strategies that maximize the helping efforts of those networks. (Author/TE)

AN: EJ400106
AU: Floyd,-Frank-J.; And-Others
TI: Clinical Family Assessment: Applying Structured Measurement Procedures in Treatment Settings.
PY: 1989
JN: Journal-of-Marital-and-Family-Therapy; v15 n3 p271-88 Jul 1989
AB: Describes use of battery of structured family measurement procedures to conduct systematic, comprehensive assessments of families who enter treatment. Describes the assessment as multimodal, examining the entire family unit, the marital subsystem, the individual family members, and the larger social context affecting a family. (Author/ABL)

AN: EJ371585
AU: Snipe,-Rosetta-M.
TI: Ethical Issues in the Assessment and Treatment of a Rational Suicidal Client.
PY: 1988
JN: Counseling-Psychologist; v16 n1 p128-38 Jan 1988
AB: Notes that rational client's decision to commit suicide may present complex ethical issues for therapist. Presents and discusses three-month account of therapy with client, from perspective of ethical values and principles upon which assessment and treatment decisions were made, and complex ethical dilemmas encountered as therapist juxtaposed client's autonomy with irreversibility of potential death by suicide. (Author)

AN: EJ360509
AU: Sue,-David; Sue,-Stanley
TI: Cultural Factors in the Clinical Assessment of Asian Americans.
PY: 1987
JN: Journal-of-Consulting-and-Clinical Psychology; v55 n4 p479-87 Aug 1987
AB: Critically evaluates assessment issues with Asian American populations, including issues in the extent and symptoms of psychopathology, personality assessment, and face-to-face clinical assessment. Makes suggestions for improving assessment strategies and for testing the limitations and generality of constructs. (Author/NB)

AN: EJ360508
AU: Westermeyer,-Joseph
TI: Cultural Factors in Clinical Assessment.
PY: 1987
JN: Journal-of-Consulting-and-Clinical Psychology; v55 n4 p471-78 Aug 1987
AB: Examines special issues in cross-cultural psychopathology, including culture-bound syndromes, variable distribution of psychopathology across cultures, and cultural distinctions between belief and delusion and between trance and hallucination. Offers suggestions for educating clinicians about cross-cultural conceptual issues and teaching the clinical skills necessary for cross-cultural work. (Author/NB)

AN: EJ292369
AU: Panek,-Paul-E.
TI: Influence of Client Age on Counselor Trainees' Assessment of Case Material.
PY: 1983
JN: Teaching-of-Psychology; v10 n4 p227-28 Dec 1983
AB: Recently, a number of investigators have reported negative views or attitudes by professionals from various mental health fields toward aged clients. However, the graduate students who participated in this study were not significantly affected by their client's age. Perhaps professionals develop biases toward various client groups on the job. (RM)

AN: ED283882
AU: Yager,-Geoffrey-G.; And-Others
TI: Evaluations of Videotaped Counselors on a Variety of Counselor Assessment Scales.
PY: 1987
NT: 30 p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
AB: Concurrent and construct validity of six instruments designed to assess counselor effectiveness was studied. Participants included 139, male and female, undergraduate general studies and education majors. Consistent with social influence theory, four videotaped counselor role conditions (non-expert, not-attractive, non-trustworthy, and not-deficient) were created. Participants were randomly assigned to view one of the four counseling roles and to rate the counselor on each of six commonly-used counselor effectiveness instruments, three drawn from social influence theory and three from other theoretical viewpoints. High concurrent validity was found for social influence instruments, however high discriminant validity coefficients between the expertness, attractiveness, and trustworthiness subscales indicates that these subscales may not measure distinct constructs. Also, considerable construct overlap was found between social influence and comparison instruments. Social influence instruments discriminated between the counselor role conditions as might be expected based on social influence theory. Implications for measurement of counselor effectiveness were discussed. (Author)

Modifications for Special Assessment Circumstances

AN: ED355376
AU: Kapes,-Jerome-T.; And-Others
TI: Career Assessment Instruments for Vocational Students with Special Needs.
PY: 1992
NT: 30 p.; Paper presented at the American Vocational Association Convention (St. Louis, MO, December 7, 1992). For related documents, see ED 341 823, ED 344 068, and ED 345 035.
AB: This paper reviews the 12 career assessment instruments that have been found to be most used in Texas with students with special needs. Two tables list the instruments along with the opinions of users concerning their qualities. The reviews follow a standard outline. Each review is one to two pages in length and provides this information: title, publisher, population, purpose and description, administration and scoring, scales/scores, norms, reliability and validity, comments, and cost. These instruments are reviewed: Apticom; Career Ability Placement Survey (CAPS); Career Occupational Preference System (COPS); Differential Aptitude Test (DAT); McCarron-Dial System (MDS); Occupational Aptitude Survey and Interest Schedule--Second Edition (OASIS-2); Prevocational Assessment Screen (PAS); The Pictorial Inventory of Careers (PIC); Reading Free Vocational Interest Inventory (R-FVII); Social and Prevocational Information Battery--Revised (SPIB-R); Talent Assessment Program (TAP); and Wide Range Interest Opinion Test (WRIOT). (YLB)

AN: EJ452552
AU: Omizo,-Sharon-A.; Omizo,-Michael-M.
TI: Career and Vocational Assessment Information for Program Planning and Counseling for Students with Disabilities.
PY: 1992
JN: School-Counselor; v40 n1 p32-39 Sep 1992
AB: Discusses career/vocational assessment information as it is used to improve career-vocational preparation of youth with disabilities. Shows how counselors can help these students make transition from school to work or higher education by participating in multidisciplinary team. Discusses application of career-vocational assessment to educational and training program placement and planning decisions. (NB)

AN: EJ435424
AU: Janikowski,-Timothy-P.; And-Others
TI: Validity of the Microcomputer Evaluation Screening and Assessment Aptitude Scores.
PY: 1991
JN: Rehabilitation-Counseling-Bulletin; v35 n1 p38-51 Sep 1991
AB: Examined validity of Microcomputer Evaluation Screening and Assessment (MESA) aptitude scores relative to General Aptitude Test Battery (GATB) using multitrait-multimethod correlational analyses. Findings from 54 rehabilitation clients and 29 displaced workers revealed no evidence to support the construct validity of the MESA. (Author/NB)

AN: EJ432240
AU: Fohs,-Mark-W.
TI: Family Systems Assessment: Intervention with Individuals Having a Chronic Disability.
PY: 1991
JN: Career-Development-Quarterly; v39 n4 p304-11 Jun 1991
AB: Responds to case study, presented in previous article, of young adult male with chronic back pain who has been unable to work. Sees counselor's role as determining how to establish rapport with client, create situation conducive to his adjustment to circumstances, and mobilize energy for change. Identifies areas where additional information is needed before such work can begin. (NB)

AN: EJ422540
AU: McKee,-Lynne-M.; Levinson,-Edward-M.
TI: A Review of the Computerized Version of the Self-Directed Search.
PY: 1990
JN: Career-Development-Quarterly; v38 n4 p325-33 Jun 1990
AB: Discusses general issues and concerns relative to the adaptation of paper-pencil

assessment instruments to computerized formats. Describes and evaluates Self-Directed Search computerized version (SDS-CV). Presents strengths and weaknesses of the SDS-CV and makes recommendations for its use. (Author/ABL)

AN: EJ422341
AU: Hohenshil,-Thomas-H.; Brown,-Michael-B.,-Eds.
TI: Special Issue: Current Practices in Career Assessment.
PY: 1991
JN: Career-Planning-and-Adult-Development Journal; v6 n4 p2-44 Win 1990-91
AB: Includes "Introduction" (Hohenshil, Brown); "Overview of Career Assessment Methods and Models" (Hohenshil, Solly); "Career Interest Assessment Techniques" (Levinson, Folino); "Aptitude Testing in Career Assessment" (Capps, Heinlein, Sautter); "Personality Assessment in Career Counseling" (Brown); (Computerized Techniques in Career Assessment" (Brown); "Considerations Regarding Career Assessment for Special Groups" (Maddy-Bernstein); and "Career Assessment: Projections for the Future" (Ryan, Cole). (SK)

AN: EJ385041
AU: Snyder,-Douglas-K.; And-Others
TI: Computer-Based Intepretation of the Marital Satisfaction Inventory: Use in Treatment Planning.
PY: 1988
JN: Journal-of-Marital-and-Family-Therapy; v14 n4 p397-409 Oct 1988
AB: Describes computer-based interpretive system for Marital Satisfaction Inventory (MSI) and application in initial phases of clinical assessment and treatment planning. Provides case study. Compares clinical findings at intake with MSI profiles for one couple obtained at termination and follow-up. Considers strengths and limitations of self-report measures and computer-based interpretive reports. (Author/ABL)

AN: EJ363157
AU: Levinson,-Edward-M.
TI: Vocational Assessment and Programming of Students with Handicaps: A Need for School Counselor Involvement.
PY: 1987
JN: School-Counselor; v35 n1 p6-8 Sep 1987
AB: Contends that vocational assessments should be conducted along with other assessments that are completed as part of a handicapped student's triennial evaluation and that the school counselor should be a member of the multidisciplinary team responsible for the vocational assessment and programming of handicapped students. (NB)

AN: EJ296217
AU: Harris-Bowlsbey,-Jo-Ann
TI: The Impact of Computers on Career Guidance and Assessment.
PY: 1983
JN: New-Directions-for-Testing-and Measurement; n20 p63-76 Dec 1983
NT: Theme issue with title "Measurement Trends in Career and Vocational Education," edited by Ronald C. Rodgers.
AB: Summarizing the impact of computers and technology on vocational assessment and counseling practices, this discussion focuses on software created for computers of all sizes specifically to help students and adults enhance their career decision making. (PN)

AN: ED340697
AU: Carter,-Marcia-Jean; And-Others
TI: Designing Therapeutic Recreation Programs in the Community.
CS: American Alliance for Health, Physical Education, Recreation and Dance, Reston, VA. American Association for Leisure and Recreation.
PY: 1991
NT: 391 p.
AB: This publication is designed to assist in the development of therapeutic recreation services in the community and may also be used in the preparation of procedural manuals or risk management plans. Therapeutic recreation is defined as the process of assessment, planning, implementation, and evaluation, applied through a helping relationship to improve functional

behaviors and enhance leisure function commensurate with each participant's ability level. The sequence of the text reflects the order to follow when either initiating or redesigning services and is organized into six parts: (1) assessment; (2) demographic information, functioning characteristics, and needs of persons with disabilities; (3) program planning; (4) program operation; (5) implementation; and (6) evaluation. Each part includes an introduction, a summary, a list of key terms, training experiences and study questions, and references. The document concludes with four appendixes: "Assessment and Evaluation Instruments and Resources"; "Accessibility Survey List"; "Integration Planning and Evaluation Documents"; and "Sample Volunteer Manual Contents." (LL)

School Psychologists' Roles in Assessment

AN: EJ401735
AU: Sommers,-Ronald-K.
TI: Language Assessment: Issues in the Use and Interpretation of Tests and Measures.
PY: 1989
JN: School-Psychology-Review; v18 n4 p452-62 1989
AB: The strengths and weaknesses that characterize language tests and measures used with young school-aged children are reviewed. Suggestions are given to assist school psychologists in testing children formally and informally and in working in conjunction with speech-language pathologists. (SLD)

AN: EJ347248
AU: McCrone,-William-P.; Brice,-Patrick-J.
TI: A Teacher's Guide to Psychological Assessemnts with Hearing Impaired Students.
PY: 1986
JN: Perspectives-for-Teachers-of-the-Hearing Impaired; v5 n2 p22-24 Nov-Dec 1986
AB: Information is presented for teachers in referring hearing-impaired students for psychological assessment, working with school psychologists, reviewing a psychological report, and choosing a psychology professional. Selected readings and an address for more information are noted. (CB)

AN: EJ341244
AU: Cummins,-Jim
TI: Psychological Assessment of Minority Students: Out of Context, Out of Focus, Out of Control?
PY: 1986
JN: Journal-of-Reading,-Writing,-and-Learning Disabilities-International; v2 n1 p9-19 1986
AB: Discriminatory assessment of minority students for possible handicap is virtually inevitable when the process ignores the societal context within which the students develop and schools educate. The psychologist or special educator should be an advocate for the student, not a legitimizer of existing role relationships. (DB)

AN: EJ326360
AU: Copeland,-Ellis-P.; Miller,-Larry-F.
TI: Training Needs of Prospective School Psychologists: The Practitioners' Viewpoint.
PY: 1985
JN: Journal-of-School-Psychology; v23 n3 p247-54 Fall 1985
AB: Surveyed practicing school psychologists (N=516) about present and future training needs focusing on preferred course work, current course trends, rankings of course categories, practica, and internships. Results showed assessment as the dominant training need and an expanded role for school psychologists. Discusses training, certification and accreditation. (MCF)

AN: ED332457
AU: Foster,-Kathleen
TI: Broadening School Psychological Services through Program Evaluation and Modification That Emphasized Curriculum Based Assessment.
PY: 1990
NT: 78 p.; Ed.D. Practicum Report, Nova University.
AB: The practicum examined a means of conducting psychoeducational evaluations of children suspected of educational handicaps while expanding the delivery services of school psychology to include consultation, program planning, research, evaluation, supervision, and interventions. Practicum activities included: (1) psychoeducational evaluations focusing on answering referral questions and linking assessments to interventions; (2) demonstration of the usefulness of curriculum-based assessment (CBA) through innovative practice and inservice presentation; (3) a consultation project involving collaborative efforts between teachers of educable mentally impaired students and the school psychologist; and (4) a formative evaluation of current multidisciplinary evaluation team reporting. Reports and logs indicated that assessments had been appropriately modified and that a sufficient number had been done. Structured interviews supported the value of consultation and the school psychologists

gained in understanding of CBA. Positive responses to the intervention project and planned continuance of the model suggested success. The formative evaluation was accepted and used in program development. It was concluded that school psychological service delivery can be expanded while sustaining assessments. Appended are a workload analysis, a CBA checklist, the evaluation team questionnaire, and a summary of the formative evaluation. Includes 71 references. (DB)

AN: ED304822
AU: Hestick,-Henrietta
TI: Roles and Functions of the Psychologist in Special Education.
PY: 1987
NT: 21 p.; Paper prepared For the U.S. Criminal Justice Exchange to the People's Republic of China (November 1987).
AB: The paper, intended for a Chinese audience, examines roles and functions of the school psychologist in special education in the United States in the context of federal and state (Maryland) legislation and in correctional institutions. Some of the minimum roles of the school psychologist are to serve on the preplacement team, conduct student assessments, provide assessment information, and participate in student evaluation and program planning on the evaluation team. Additional roles may involve crisis intervention and consultation. Obstacles to the expansion of the school psychologist function include lack of training in specific skill areas and the large amount of time required by the assessment function. The role of the school psychologist in correctional institutions is additionally hampered by the need for security; the high numbers of disabled youth, particularly learning disabled youth, in corrections; the lack of adequate staff; and the lack of continuity in staff. (DB)

AN: ED269654
AU: Paget,-Kathleen-D.; Barnett,-David-W.
TI: Training School Psychologists in Preschool Service Delivery: An Analysis by Roles.
PY: [1985]
NT: 36 p.; Paper presented at the Annual Convention of the American Psychological Association (93rd, Los Angeles, CA, August 23-27, 1985).
AB: This paper offers a model for role-based preschool psychological services and addresses training issues within the context of the model. A challenge exists to train for a wide range of roles and to train in the judgmental components necessary for appropriate implementation of these roles. To accomplish these ends, an ecological framework lays the groundwork for implications related to training and practice. School psychologists serving preschool children must play a number of assessment roles, shifting emphasis from child variables based on traditional assessments to environmental variables within the proposed interactive model. Intervention strategies should include responsivity to cues from children, use of language appropriate for the young child, encouragement of active involvement with the environment, and a match between a child's level of functioning and task demands. A need exists for specialists who possess the necessary clinical and liaison skills for effective preschool service delivery. Training in preschool service delivery should address the analysis of roles and the development of judgment relative to young children, their teachers, their families, and the community. (ABL)

AN: ED253001
AU: Scholl,-Geraldine-T., Ed.
TI: The School Psychologist and the Exceptional Child.
CS: ERIC Clearinghouse on Handicapped and Gifted Children, Reston, Va.
PY: 1985
NT: 265 p.
AB: Intended for use with students preparing for careers in school psychology, the text assumes little familiarity with special education and focuses on those aspects of special education of greatest relevance for the assessment process. The book is divided into two major parts: Part I, "General Considerations," includes a brief description of the changing role of the school psychologist, an overview of assessment, and the use of informal procedures as assessment tools. Part II, "Areas of Exceptionality," reviews the specialized characteristics and needs of each category of exceptional pupils. The document contains the following studies: "The Role and Function of the School Psychologist"

(G. Scholl); "The Process of Assessment" (P. Elitov); "Non-Test-Based Approaches to Assessment" (E. Oka and G. Scholl); "The Gifted and Talented" (A. Swan); "Mental Retardation" (J. Ardizzone and G. Scholl); "Learning Disabilities" (E. Mollen); "The Emotionally Disturbed" (R. Brown); "Physical and Multiple Handicaps" (S. Tindall and G. Scholl); "Hearing Impairments" (J. Harrison); "Visual Impairments" (G. Scholl); and "Communication Disorders" (G. Scholl and Y. Loucks). (DB)

Assessment Professionalism

AN: EJ477118
AU: Boughner,-Shelly-R.; And-Others
TI: Use of Standardized Assessment Instruments by Marital and Family Therapists: A Survey.
PY: 1994
JN: Journal-of-Marital-and-Family-Therapy; v20 n1 p69-75 Jan 1994
AB: Surveyed 598 marriage/family practitioners to examine use of standardized assessment instruments in practice. Responses from 188 clinicians who reported use of tests revealed that 147 different standardized tests were used in marriage and family therapy practice. Test use was most frequent for treatment planning purposes, except in premarital area where tests were used for educative or consultative purposes. (NB)

AN: ED358139
AU: Schafer,-William-D.; Mufson,-Dolores
TI: Assessment Literacy for School Counselors.
PY: 1993
NT: 22 p.; Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993).
AB: Education for school counselors in the area of assessment was studied in an effort to develop recommendations to improve the quantitative literacy portions of counselor education programs. To identify skills needed by school counselors, information was obtained from the Educational Research Service (an independent non-profit corporation) from studies done in the following districts: (1) Harlendale Independent School District (Texas); (2) Patchoque-Medford Public Schools (New York); (3) Petersburg Public Schools (Virginia); and (4) Solanco School District (Pennsylvania). A study done by the Montgomery County Public Schools (Maryland) was added. In the areas of pupil assessment and research and evaluation as described by these five school districts, a spectrum of responsibilities is evident that expands from basic standardized test interpreter to test developer, evaluator of programs, consultant, and researcher. The current status of counselor preparation for the basic roles of student assessment, program evaluation, and basic research was considered through a review of the standards used by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Comparing the CACREP defined skills with counselor roles, a list of principles is presented to serve as a guide for counselor education in the assessment area. (SLD)

AN: EJ422540
AU: McKee,-Lynne-M.; Levinson,-Edward-M.
TI: A Review of the Computerized Version of the Self-Directed Search.
PY: 1990
JN: Career-Development-Quarterly; v38 n4 p325-33 Jun 1990
AB: Discusses general issues and concerns relative to the adaptation of paper-pencil assessment instruments to computerized formats. Describes and evaluates Self-Directed Search computerized version (SDS-CV). Presents strengths and weaknesses of the SDS-CV and makes recommendations for its use. (Author/ABL)

AN: EJ401955
AU: Sampson,-James-P., Jr.; And-Others
TI: Counselor Intervention Strategies for Computer-Assisted Career Guidance: An Information-Processing Approach.
PY: 1990
JN: Journal-of-Career-Development; v16 n2 p139-54 Win 1990
AB: Describes information processing skills used in career decision making (communication, analysis, synthesis, valuing, and execution). Relates these skills to elements of computer-assisted career guidance systems (orientation and needs assessment, self-assessment, alternative generation, information dissemination, decision-making instruction, and choice) and discusses appropriate counselor interventions. (SK)

AN: EJ379658
AU: Boen,-Dan-L.
TI: A Practitioner Looks at Assessment in Marital Counseling.
PY: 1988
JN: Journal-of-Counseling-and-Development; v66 n10 p484-86 Jun 1988
AB: Asserts that marital assessment instruments can be used to enhance effects of marital counseling. Examines some of more popular marital instruments available, including Stuart's Couples Precounseling Inventory, Russell and Madsen's Marriage Counseling Report, Taylor-Johnson Temperament Analysis, Snyder's Marital Satisfaction Inventory, and Spanier's Dyadic Adjustment Scale. (Author/NB)

AN: EJ370628
AU: Srebnik,-Debra-S.
TI: Academic Advising Evaluation: A Review of Assessment Instruments.
PY: 1988
JN: NACADA-Journal; v8 n1 p52-62 Spr 1988
AB: Student, advisor, and administrator surveys from 12 colleges are reviewed in terms of their length, content, format, and use. The importance of choosing evaluation instruments appropriate for specific assessment purposes is discussed. More consistent evaluation could help delineate factors critical in producing positive results attributed to good advising. (Author/MLW)

AN: EJ370016
AU: Westbrook,-Bert-W.
TI: Suggestions for Selecting Appropiate Career Assessment Instruments.
PY: 1988
JN: Measurement-and-Evaluation-in-Counseling and-Development; v20 n4 p181-86 Jan 1988
AB: Makes six suggestions for selecting appropriate career assessment instruments in the areas of pro er training, use of the right kind of standards, deciding what information is needed, getting written documentation about tests under consideration, careful evaluation of instruments, and becoming familiar with issues in career assessment. (ABL)

AN: EJ367130
AU: Helwig,-Andrew-A.
TI: Information Required for Job Hunting: 1,121 Counselors Respond.
PY: 1987
JN: Journal-of-Employment-Counseling; v24 n4 p184-90 Dec 1987
AB: Developed the Needs Assessment for Job Hunters' Guide, and conducted a statewide needs assessment with 1,121 counselors employed in various settings to determine information needed by job hunters. Offers recommendations for counselors in regard to increasing individuals' self-awareness, facilitating access to job information, teaching job-seeking behavior, and educating individuals about the employer's perspective. (Author/KS)

AN: EJ337188
AU: Celotta,-Beverly; And-Others
TI: Program Development, Management, and Evaluation: A Computer-Assisted Approach.
PY: 1986
JN: Measurement-and-Evaluation-in-Counseling and-Development; v19 n1 p38-47 Apr 1986
AB: Three specific ways in which counseling and human development professionals can use the computer as a tool in program development, management, and evaluation are presented. Software developed to assist with needs assessment, databased management, and program evaluation is described. (Author/ABB)

AN: EJ336284
AU: Hiscox,-Michael-D.; Hiscox,-Suzanne-B.
TI: A Level-Headed Look: The Potential of OD-ROM in Education.
PY: 1986
JN: TechTrends; v31 n3 p14-19 Apr 1986
AB: Reviews 15 potential uses of optical disc read-only memory (OD-ROM) in education, including instructional, curriculum, assessment, administrative, and counseling applications. Need for the product, cost of development, size of audience, critical competitor, and potential profitability to suppliers are noted for each application. (MBR)

AN: EJ296217
AU: Harris-Bowlsbey,-Jo-Ann
TI: The Impact of Computers on Career Guidance and Assessment.
PY: 1983
JN: New-Directions-for-Testing-and Measurement; n20 p63-76 Dec 1983
NT: Theme issue with title "Measurement Trends in Career and Vocational Education," edited by Ronald C. Rodgers.
AB: Summarizing the impact of computers and technology on vocational assessment and counseling practices, this discussion focuses on software created for computers of all sizes specifically to help students and adults enhance their career decision making. (PN)

AN: ED301597
AU: Kapes,-Jerome-T., Ed.; Mastie,-Majorie-Moran, Ed.
TI: A Counselor's Guide to Career Assessment Instruments. Second Edition.
CS: American Association for Counseling and Development, Alexandria, VA.
PY: 1988
NT: 363 p.
AB: A collection of 50 articles comprising guidelines for use of career assessment instruments by school counselors is provided. Topics addressed include: the nature of the guide, the counselor's role in career assessment, selection of career assessment instruments, interpretation of psychometric instruments in career counseling, and testing competencies and responsibilities for counselors. In addition, the guide provides descriptions and reviews of 43 major career assessment instruments. Types of instruments described and reviewed include multiple aptitude batteries, interest inventories, measures of work values, career development/maturity instruments, combined assessment programs, personality measures, and instruments for special populations. Sources of information about tests and testing, addresses of selected publishers, and a user's matrix are appended. (TJH)

AN: ED239190
AU: Wysong,-H.-Eugene
TI: Needs Assessment in Counseling, Guidance, and Personnel Services. Searchlight Plus: Relevant Resources in High Interest Areas. No. 21+.
CS: ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich.
PY: 1983
NT: 109 p.
AB: This paper, for practitioners and researchers, is based on a computer search of the ERIC database and other references, and organizes and summarizes the literature on needs assessment in counseling, guidance, and personnel services. Following the brief introduction, a definition of terms used in the paper and a discussion of the purposes and general content of needs assessment are presented. Models, methods, and instruments for needs assessment are described, e.g., the CIPP (Context, Input, Process, Product) model and the Goal Attainment Scaling (GAS) model. Issues and procedures for identifying staff needs are also discussed. Uses for needs assessments, and issues, problems, and trends in their use are explored in a final section. The annotated bibliography on which the review is based and a list of additional references are appended. (MCF)

AN: ED218435
AU: Patsula,-Philip-J.
TI: The Assessment Component of Employment Counselling.
CS: Canada Employment and Immigration Commission, Ottawa (Ontario). Occupational and Career Analysis and Development Branch.
PY: 1981
NT: 450 p.
AB: Designed for use by employment counselors who are involved in employment counseling at the operational level, this learning module consists of printed self-sutdy materials dealing with the assessment component of employment counseling (ACEC). The module emphasizes a combined theory and practice instructional approach. Presented in the text of each of the five chapters are the following specified knowledge or skill components of the ACEC:

initiating an ongoing collaborative relationship of mutual respect; relating the purpose of ACEC; eliciting from clients a statement of employment issue or concern; assisting clients in forming and clarifying constraint statements in identifying their strengths and barriers in relation to expressed employment/employability constraints, in clarifying underlying values and assumptions, in judging such values as constructive or self-defeating, and in formulating and committing themselves to more productive values or assumptions; helping clients to formulate, test, and validate contingency statements; and enabling clients to form an acceptable employment counseling goal. (MN)

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Sample Document Resume

(for *Resources in Education*)

ERIC Accession Number—identification number sequentially assigned to documents as they are processed.

Clearinghouse Accession Number

ED 654 321 CE 123 456

Author(s) — *Butler, Kathleen* *Smith, B. James*

Title — **Career Planning for Women.**

Institution. (Organization where document originated.) — Central Univ., Chicago, IL.

Sponsoring Agency—agency responsible for initiating, funding, and managing the research project.

Spons Agency — Office of Educational Research and Improvement (ED), Washington, DC.

Report No. — ISBN-0-3333-5568-1; OERI-91-34 — **Report Number**—assigned by originator.

Date Published — Pub Date — May 92

Contract or Grant Number — Contract — RI900000

Note — 30p.; An abridged version of this report was presented at the National Conference on Educational Opportunities for Women (9th, Chicago, IL, May 14-16, 1992). — **Descriptive Note** (pagination first).

Available from — Campus Bookstore, 123 College Avenue, Chicago, IL 60690 ($5.95). — **Alternate source for obtaining document**

Language of Document—documents written entirely in English are not designated, although "English" is carried in their computerized records.

Language —English, Spanish

Journal Cit—Women Today; v13 n3 p1-14 Jan 1992 — **Journal Citation**

Publication Type—broad categories indicating the form or organization of the document, as contrasted to its subject matter. The category name is followed by the category code.

PubType— Reports—Descriptive (141)—Tests/Questionnaires (160)

EDRS Price—MF01/PC02 Plus Postage.

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Descriptors — Career Guidance, *Career Planning, *Demand Occupations, *Employed Women, *Employment Opportunities, Females, Labor Force, Labor Market, Postsecondary Education — **Descriptors**—subject terms found in the *Thesaurus of ERIC Descriptors* that characterize substantive content. Only the major terms (preceded by an asterisk) are printed in the Subject Index.

Identifiers — Consortium of States, *National Occupational Competency Testing Institute — **Identifiers**—additional identifying terms not found in the *Thesaurus*. Only the major terms (preceded by an asterisk) are printed in the Subject Index.

Women's opportunities for employment will be directly related to their level of skill and experience and also to the labor market demands through the remainder of the decade. The number of workers needed for all major occupational categories is expected to increase by about one-fifth between 1990 and 1999, but the growth rate will vary by occupational group. Professional and technical workers are expected to have the highest predicted rate (39 percent), followed by service workers (35 percent), clerical workers (26 percent), sales workers (24 percent), craft workers and supervisors (20 percent), managers and administrators (15 percent), and operatives (11 percent). This publication contains a brief discussion and employment information (in English and in Spanish) concerning occupations for professional and technical workers, managers and administrators, skilled trades, sales workers, clerical workers, and service workers. In order for women to take advantage of increased labor market demands, employer attitudes toward working women need to change and women must: (1) receive better career planning and counseling, (2) change their career aspirations, and (3) fully utilize the sources of legal protection and assistance that are available to them. (Contains 45 references.) — **Informative Abstract**

Abstractor's Initials — (SB)

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Sample Journal Article Resume

(for *Current Index to Journals in Education*) (CIJE)

ERIC Accession Number → EJ 378 676 CS 736 728 ← Clearinghouse Accession Number

Title → **Conversational Memory: The Effects of Time, Recall, Mode and Memory Expectancies on Remembrances of Natural Conversations.**

Author(s) → Stafford, Laura; And Others *Human Communication Research*; v14 n2 p203-29 Win 1987 (Reprint: UMI)

← Journal Citation

← Publication Date (at end of Citation)

← Reprint Availability

Descriptors (major descriptors are starred) → *Descriptors:* *Recall (Psychology); Communication Research; *Long Term Memory; Short Term Memory; Interpersonal Communication; Higher Education

Identifiers (major identifiers are starred) → *Identifiers:* *Conversation; *Memory Span; Memory Behavior

Note: Theme issue topic: "Memory and Human Communication."

← Note

Examines changes in participants' memories for natural conversations over a one month period. Reports that after one month, participants recalled less content and reported more descriptive statements, made more inferences, and were less accurate than when they had recalled the conversations immediately. (MM)

← Annotation (50 Words or Less)

← Annotator's Initials

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Traditionally, online access to ERIC and other national databases has been available through several commercial vendors wh offer sophisticated search capabilities. Because it requires training in the vendor's search language, this type of searching is usually performed by librarians and other information professionals. Online vendors include: BRS Information Technologies; Data-Star/DIALOG Information Services; GTE Educational Network Services; and OCLC (Online Computer Library Center).

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In the mid-1980s, the vendors of the databases began to provide users with more direct access by putting the databases on CD ROM. However, because of the expense of the hardware needed and the price of an annual subscription (>$1,000), individual users still needed to gain access via universities and libraries. An encouraging development: In 1994 Oryx Press (1-800-279-ORYX) announced the availability of CIJE on Disc for $199.00 per year; and NISC (410-243-0797) is expected to make the entire ERIC database available for approximately $100 per year early in 1995. Other CD-ROM vendors include: DIALOG (1-800-334-2564); EBSCO Publishers (1-800-653-2726); and SilverPlatter Information, Inc. (1-800-343-0064).

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For individuals who do not have access to database search service or the Internet through their place of employment, one of the commercial services may be a viable alternative. Among the better known are America Online, Compuserve, and GTE Educational Network Services, all of which feature "AskERIC" information on current topics in education. Many also offer th capability of searching the ERIC database.

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A component of the ERIC system that offers a central contact point for the entire system, Access ERIC disseminates general information about ERIC and responds to specific inquiries on its toll-free number (1-800-LET-ERIC).

AskERIC
ERIC's first question-answering service offered through the Internet. Established by the ERIC Clearinghouse on Information an Technology, AskERIC now responds to thousands of online requests per week. To access AskERIC, simply send an e-mail message to AskERIC@ericir.syr.edu.
AskERIC also maintains a large gopher site for educational resources.

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ERIC/CASS Toll-Free Number
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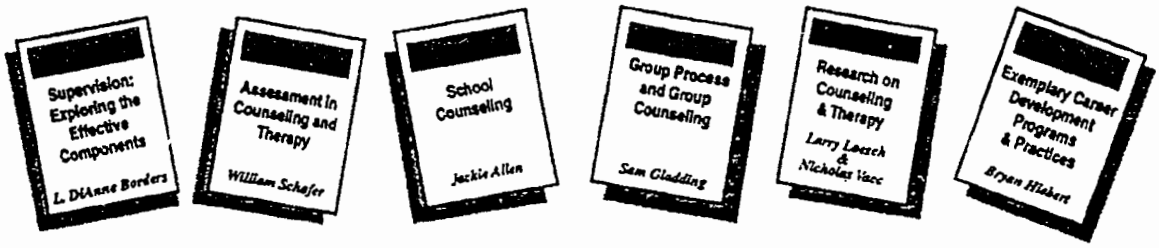
For direct access to the ERIC Clearinghouse on Assessment and Evaluation, call 1-800-464-3742.

Internet: ERIC/CASS
To contact ERIC/CASS via e-mail, send a message to ericcass@iris.uncg.edu.

ERIC/CASS ListServs
A unique type of ListServ featuring a "topic of the month" moderated discussion forum with a subject-specialist guest host, ListServs for counselor educators, school psychologist trainers, and school counselors are under development and scheduled tc be fully implemented in Spring, 1995. ListServs for other groups will follow. The CATS^2 system, Counselor and Therapist Support System involving a moderated listserv, World Wide Web and special resources, will be available in the Spring as well. See the special CATS^2 flyer for details.

ERIC/CASS World Wide Web
Currently under development, this site will contain a vast array of resources such as the full-text of all ERIC/CASS Digests and information on upcoming conferences, recent resources added to the ERIC database, professional association activities, new ERIC/CASS publications, etc.

The ERIC/CASS Counseling Digest Series



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