

International Handbook of
**Research and Development of
Giftedness and Talent**

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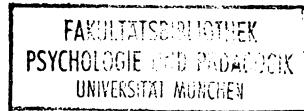
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Structural Tendencies and Issues of Research on Giftedness and Talent

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Introduction

During the last few decades a change has been taking place in the concepts of giftedness and talent as they are featured in research literature. Whereas until ten or fifteen years ago the field was dominated by one-dimensional giftedness concepts and corresponding IQ measurements, a large majority of more recent models are based on multidimensional or multi-factorial psychometric concepts of intelligence—e.g., Gardner's (1985) theory of multiple intelligences—or on approaches from information theory and cognitive psychology—e.g., Sternberg's (1985) triarchic intelligence model. Other models still include elements from socialization theories, e.g., Mönks' (Mönks et al., 1986) extended Renzulli model. Furthermore, I agree with Sternberg's demand that (1990, p. 96): "We need to think in terms not only of multiple components of giftedness, but (also) of multiple kinds of giftedness".

"Giftedness" is thus defined as the individual cognitive and motivational potential for—as well as social and cultural conditions of—achieving excellent performances in one or more area such as in mathematics, languages, or artistic areas with regard to difficult theoretical vs practical tasks (Heller, 1989, 1992). "Talent" can be defined as a domain-specific gift or ability, e.g., "scientific ability" as the competence for scientific expertise in the fields of psychology, medical sciences, or physics. However, the differentiation suggested by Gagné (1985) between "giftedness" and "talent" is infrequently maintained in the literature. In many languages—as in German—both concepts are used more or less synonymously. For this reason, no semantic differentiation was insisted upon in this handbook between "giftedness" and "talent". When this makes sense in individual cases, the differentiation is explicated in that context. This also holds true for related terms, such as intelligence, creativity, or (high) ability, that are not independent of the theoretical basis in which they are found.

In addition, the definition of giftedness etc. is dependent on the intended use, for example, on the type and tasks of school programs, the aims of enrichment vs

acceleration programs, on empirical investigation goals and theory-based hypotheses, etc. Moreover, the term "giftedness" or "talent" is influenced by social norms and considerations (Tannenbaum, 1983, 1991; see also Sternberg in this handbook, Chapter 11). Last but not least, the definition of giftedness will be determined by the choice of measurement instruments, i.e., by the operationalization of the experimental variables examined (cf. Feldhusen & Jarwan in this handbook, chapter 13).

A differentiation between descriptive and explanatory terms is also relevant when looking at research strategies. Whereas the *descriptive* term is linked to the psychometric paradigm, the *explanatory* term needs an experimental design in the cognitive science paradigm. For example, on the one hand the psychometric intelligence structure theories enrich the ability phenomenology substantially, on the other hand the cognitive psychological (experimental) studies make it possible to explain the mechanism of cognitive processes and their individual sources. This also corresponds to the various identification strategies: status vs process diagnosis (see Part III of this handbook). Both descriptive and explanatory terms are necessary for theoretically and practically efficient conceptualizations and measures.

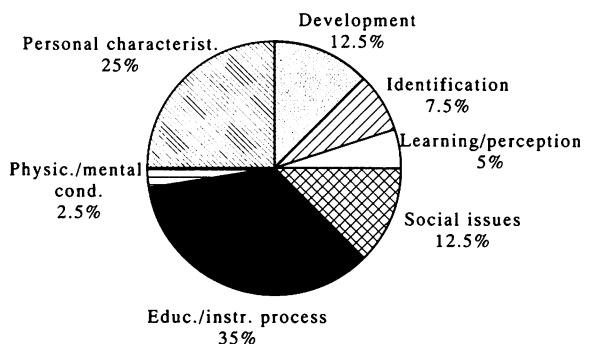


FIGURE 1. Content analysis of the WCGT conference proceedings: Percentages of the main topics 1975–1991.

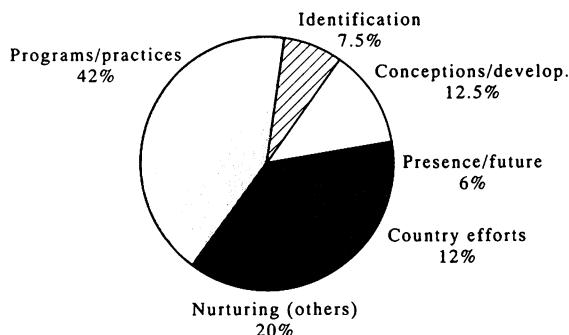


FIGURE 2. Percentages of the main topics of the WCGT conference proceedings (1975-1991) according to the structure of this international handbook.

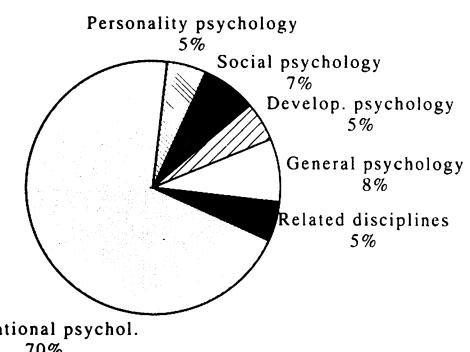


FIGURE 3. Classification of the papers published in the WCGT conference proceedings (1975-1991) according to psychological subdisciplines.

International Trends and Topics of Recent Research on Giftedness and Talent

The state of the art of research on giftedness and talent to be presented here is based on content analyses of (a) the previously published nine volumes of proceedings from the World Council for Gifted and Talented Children (WCGT) and (b) four or six relevant field journals. For more details see Heller and Menacher (1992) and Heller (1993a). Supplementary to this, additional journal analyses and literature searches by Pyryt (1988), Rogers (1989) and Carter and Swanson (1990) are reported.

The conference articles from the WCGT since 1975 are shown in Fig. 1. The first of the biennial WCGT conferences was in 1975. The articles are classified according to seven main topics. It becomes apparent that the categories "Educational/Instructional Processes and Programming" with a median of 35% and "Personal Characteristics of G/T" with a median of 25% have the most entries, relatively speaking. These are followed by the categories "Development" and "Social Issues" with 12.5% each. An additional 7.5% of the published articles are concerned with "Identification" problems, 5% with "Learning and Perception" and only 2.5% with "Physical and Mental Conditions" (median of each calculated from the nine previously published conference proceedings). This picture does not change much if we redefine the categories somewhat. If one prefers to use the structural concept from this handbook, then we find the division as shown in Fig. 2. Once again, we find a clear dominance in the area "Education and Nurturing Problems" (see Fig. 2).

The following analysis results are very informative about the psychological subdisciplines which contributed to the WCGT conference proceedings: Approximately 70% of the contributions stem from Educational Psychology (including Education); 7% of the topics are Social Psychological Problems of giftedness. Develop-

mental Psychological contributions and Individual Differences are each represented in 5% of the contributions and an additional 5% are from related disciplines (e.g., Sociology or Psychiatry); cf. Fig. 3. Thus, there is an emphasis on applied topics in conference proceedings.

This impression is confirmed in the analysis results presented in Fig. 4. The 20% theoretical and only 5% basic research (mainly experimental) contributions can be contrasted with 20% databased (empirical) studies in the sense of applied research as well as 55% more or less related to gifted education in practice (cf. Fig. 4). The WCGT conferences mainly meet practical needs in gifted education. Real research contributions, i.e., those based on hypotheses, make up approximately one quarter of all conference papers. An even smaller percentage of theoretical papers can be added to this. But hardly a third of the contributions would meet the usual scientific standards. This estimation holds true when the category "Theoretical Papers" includes not only "Review and Survey" articles, but also "Opinion Papers".

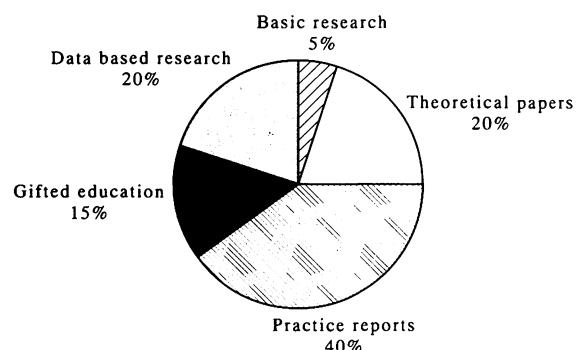


FIGURE 4. Classification of the papers published in the WCGT conference proceedings (1975-1991) according to research vs practice reports.

TABLE 1

Age Groups and Sample Sizes in the Data Based Contributions to the WCGT Conference Proceedings (1975–1991)

Age groups	3%	preschool
	13%	primary education
	45%	elementary/secondary education (grades 4–8)
	23%	later secondary education (grades 9–12)
	3%	higher education
	13%	adulthood
Sample sizes	42%	<i>n</i> = under 100
	42%	<i>n</i> = 101–500
	10%	<i>n</i> = 501–1000
	6%	<i>n</i> = 1001 and more

When we analyze the databased studies which make up about 25% of all contributions in the WCGT conference proceedings according to methodological aspects, then we obtain the following information: The most frequently studied group are students from grades 4 to 8 or 12, with mainly small to mid-sized samples (Table 1). With 71%, the interview is clearly the preferred instrument of analysis. Cross-sectional designs were used in 67% of the studies, whereas longitudinal studies are found—as expected—in only 10%. This is probably due to the high demands on such studies (Table 2).

The type of research represented in the proceedings corresponds somewhat with the results from Pyryt (1988), Rogers (1989) and Carter and Swanson (1990), who undertook content analysis of relevant journals. Here, too, the more practically oriented applied research dominated, generally using more simple statistical analysis methods. There is an enormous need to “catch up” in the area of experimental research on giftedness.

This has already been emphasized by the information presented in Figs 3 and 4 above. One rapidly forms the assumption that the research represented by the WCGT conference proceedings is heavily influenced by educational psychologists, educational scientists, and teachers. These individuals are, of course, more interested in solving practical problems of gifted education, programming, and identifying, counseling and guidance problems than in the development of scientific methods for identification and program evaluation or even theoretical questions and developing models.

With regard to a theoretically based identification and nurturance practice as is repeatedly called for by experts (e.g., Gallagher, 1985; Shore, 1986), a greater representation at conferences by researchers from various disciplines is desirable and useful. Before I make a few recommendations about this, the most important journals in the field should be analyzed with regard to their content. According to most recent literature searches by Hany and Hany (1992, p. 237)—source: Psyclit 1986–1991; descriptor “gifted”—the following

journals have the most frequent contributions on giftedness (the total frequencies are in brackets): *Gifted Child Quarterly* (126), *Roeper Review* (119), *Journal for the Education of the Gifted* (88), *Gifted Education International* (22) as well as *Psychology in the Schools* (22) and *Journal of Counseling and Development* (21). In our content analysis, we therefore considered the first four journals supplemented by two others: *Exceptional Children* and the *Journal of Educational Psychology*. These two journals were selected as a “control group”, since they also publish articles about giftedness but do not specialize in this field and also contain articles on other topics. The most recent 10 or 12 volumes were used in the content analysis; we only had the *Roeper Review* volumes from the year 1987 to present available to us. In order to be able to compare the articles published in the journals with those in the conference volumes from the WCGT proceedings, we also used the categories seen in Figs 1 and 2. The most important results are summarized in Figs 5–8. Here the following questions were asked:

(1) Which topics are most frequently dealt with in the giftedness-related journals?

(2) Are there differences between the four journals that are giftedness related and the two journals in the control group?

(3) What types of articles appear in these journals?

(4) Furthermore, these findings are to be compared with the results from the WCGT conference proceedings analysis. The question which interests us the most, is whether the results to be found in the WCGT proceedings on the situation of research in the field of giftedness can be confirmed by this second content analysis of the most important journals in the field.

Independent of the category system used for analyzing the journals, the following picture is found (cf. Figs 5 and 6): The topics “Gifted Education” and “Programs and Nurturing” are most frequently represented in all four giftedness-related journals (between 30% and 60%). The topics “Characteristics of the G/T” are relatively more frequently dealt with in JEG (30%) and GCQ (28%). The corresponding values in RR are (21.5%) and GEI (19%). “Social Issues” is most frequently found in GCQ (13%); “Identification” makes

TABLE 2
Measurement Techniques and Research Designs of the Data Based Contributions to the WCGT Conference Proceedings (1975–1991)

Measurement techniques	71%	interview
	5%	observation
	19%	(quasi) experiment with intervention
	5%	(quasi) experiment without intervention
Research designs	23%	single-age group
	67%	cross-sectional
	10%	longitudinal

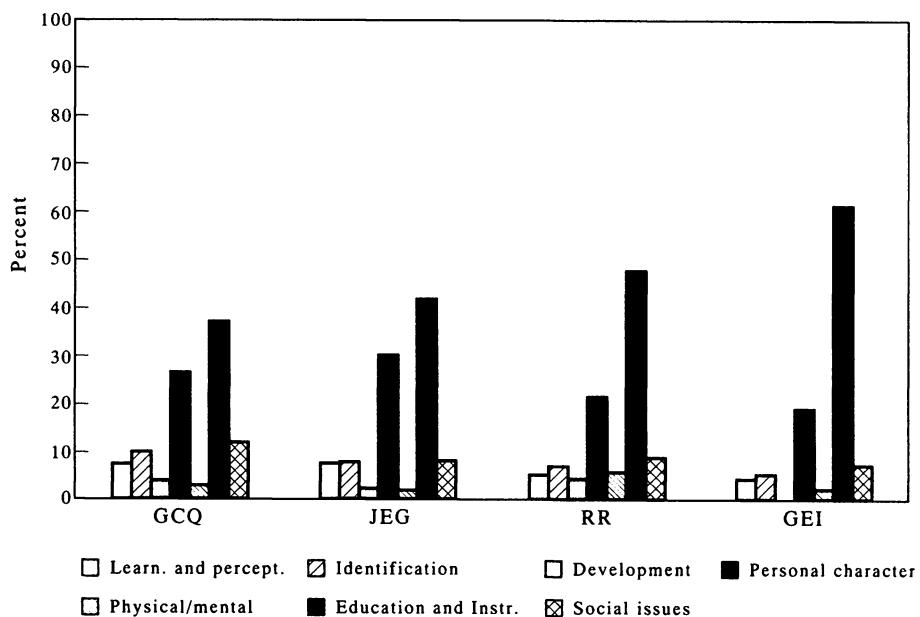


FIGURE 5. Percentages of the main topics in the four analyzed gifted field journals (1980–1991).

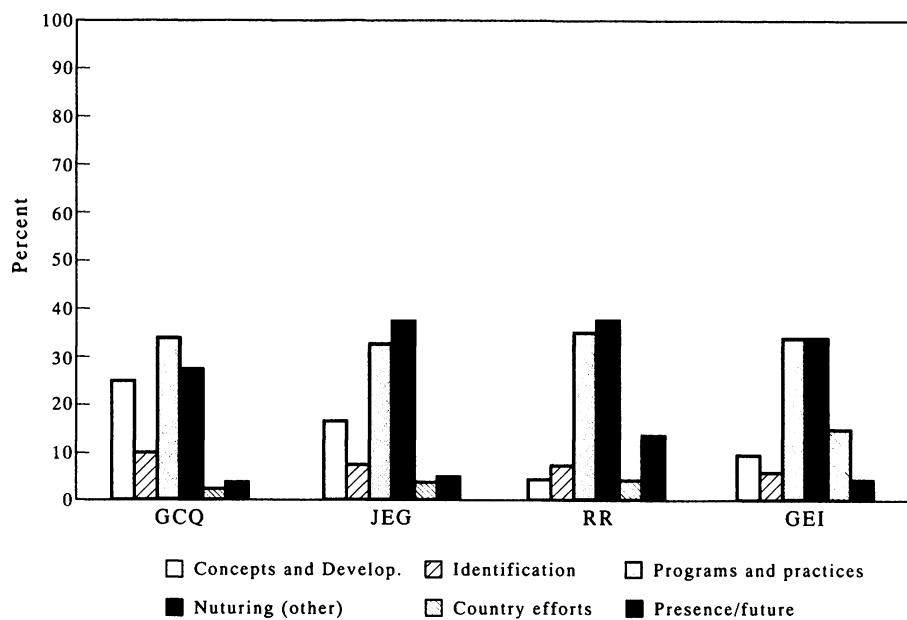


FIGURE 6. Percentages of the main topics in the four analyzed gifted field journals (1980–1991) according to the structure of this international handbook.

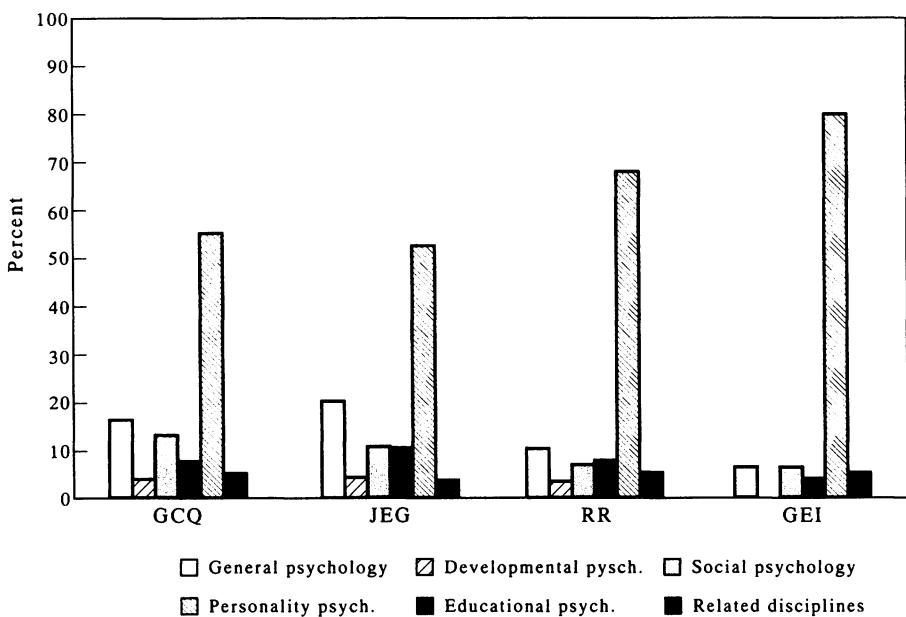


FIGURE 7. Classification of the articles published in the four analyzed gifted field journals (1980–1991) according to psychological subdisciplines.

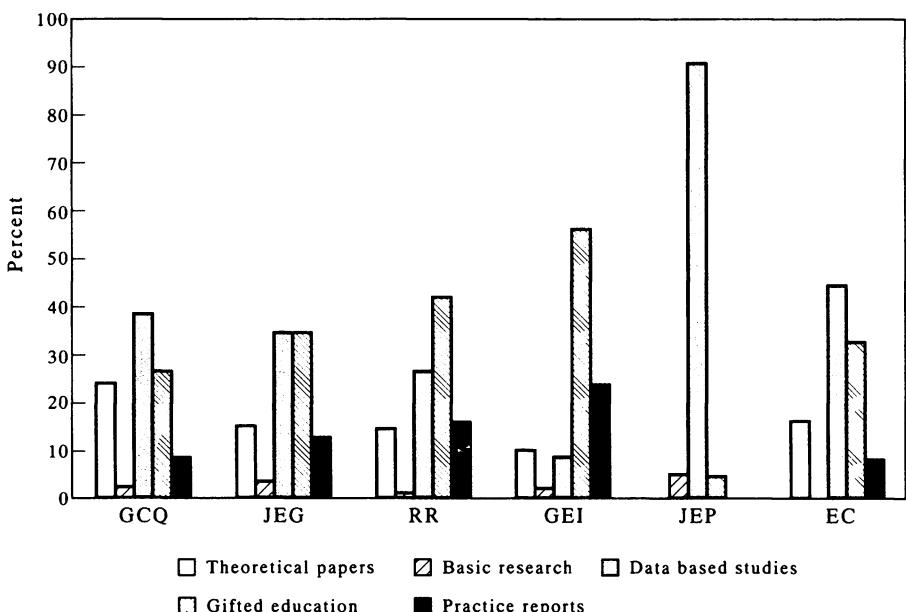


FIGURE 8. Classification of the articles published in all (six) analyzed journals (1980–1991) according to research and practice.

up 7.5% each in GCQ and JEG. The percentages for "Learning and Perception" as well as "Development" are astonishingly low in all journals (Fig. 5). Solely, the broader category "Concepts and Development" obtained higher values in GCQ (27%) and JEG (16%); (Fig. 6). These results generally confirm the findings from Rogers (1989) and Carter and Swanson (1990).

If one compares the individual journal profiles, GCQ and JEG on the one hand, and RR and GEI on the other hand can be joined in more homogeneous subgroups. The obvious emphasis of both RR and GEI is the category "Gifted Education", followed at a clear distance by the topic "Characteristics of the G/T". The profiles of GCQ and JEG show a more balanced content structure. This picture is even clearer when we analyze the contributing psychological subdisciplines (cf. Fig. 7). Indirectly, one can conclude from this that the profile in GCQ and JEG (cf. Pyryt, 1988; Vockell & Conard, 1992) is more strongly research oriented and in GEI and RR more practically oriented.

The journals chosen as control group, EC and JEP in Table 3, have a more balanced content structure as compared with GCQ and JEG even when using the identical categorical system. It should be pointed out, however, that the relationship of giftedness-related articles to the total number of articles is negligibly small in the profiles of the control group journals (percentages in brackets). The number of contributions found by using the descriptor "gifted" in PsycLit 1986–1991 is 14 in JEP, 10 of which are all to be found in the year 1990 (special topics issue). Between 1986 and 1989, and in 1991, absolutely no relevant contributions were published (Hany & Hany, 1992, p. 237).

Thus we again see the need for special journals in the field of giftedness and talent. On the other hand, this specialization of publications makes *interdisciplinary* work more difficult. This is reflected in extremely low quotas of giftedness-related articles in the journal control group (see Table 3, percentages in brackets). In order to recognize the research percentages of the analyzed journals better, the following categorical system was used for evaluation:

- (a) theoretical papers,
- (b) contributions of basic research,
- (c) contributions of applied research,
- (d) papers concerning gifted education,
- (e) practical reports.

The information from Fig. 8 can be summarized as follows:

Reports of databased research are represented by about 40% in GCQ and JEG; the results from RR (27.5%) and GEI (10.5%) show definitely lower median values. This corresponds to a research proportion of approximately one-third of all articles which were published in one of the four journals in the field of giftedness during the last decade. This also corresponds relatively well to the content analysis of the literature on giftedness by Rogers (1989). Rogers considered 2680 citations

during the period from 1975 to 1986 (searches of the ERIC, ECER, PSYC, and Child Development Abstracts; descriptors "gifted" and "creative"). These were evaluated in 15 categories; the results are presented in Table 4.

Our agreement in the analysis of GCQ was even better with the findings of Pyryt (1988), where we found 39.5% of the articles of applied and 3.5% of the articles of basic research whereas Pyryt found 39.7% research articles—abstracted in the ERIC system over an eight-year period—for GCQ. The almost negligible percentage of *basic* research articles in all four analyzed gifted journals also agreed with the values found by Pyryt (1988) with JEG and GCQ (about 3%) achieving the highest values. According to this, multivariate statistical techniques or more complex designs are employed relatively infrequently.

Rogers (1989) as well as Carter and Swanson (1990) came to very similar conclusions; see Tables 5 and 6. We calculated a median of 24% (quasi) experiments in the WCGT conference papers published in the proceedings; see Table 2 above. In contrast, the percentage of the databased research articles in the two journals of the control group are much higher. In the JEP more than 95% of all publications were databased (cf. Fig. 8, above).

Complementary to this, the GEI has the relatively highest percentage of gifted education or practice-related publications, followed by RR. The lowest quota is found in JEP; however, one should not forget the quite low percentage of giftedness related articles in total in this journal.

The content analyses of both the WCGT conference proceedings (1975–1991) and the most important journals in the field of giftedness and talent during the same period showed a number of similar results. The most important can be summarized in three statements.

(1) The main focus of the recent literature in the field of giftedness and talent is on practical problems of *gifted education* and related questions.

Half of the articles published in JEG and GCQ and even two thirds of those published in GEI and RR and those papers published in the WCGT conference proceedings contain information about practical problems of educational and instructional issues, programming, and nurturing the gifted/talented. In contrast, the minimal consideration of basic research questions and those theoretical-innovative considerations related to these is remarkable. There have been repeated warnings in the literature about the disadvantages for both applied research and for improving the practice of gifted education, e.g., from Gallagher (1986), Feldhusen (1989) or Passow (1989). Obviously, not much has changed with regard to this recently. The summary made by Carter and Swanson (1990) at the end of their analysis of the most frequently cited gifted journal articles since the Marland Report holds true without limitation for the results presented above. I quote:

TABLE 3
Percentages of Main Topics in the Journals of the Control Group (JEP, EC)

		<i>Journal of Ed. Psych. (JEP) 1980-1991</i>	<i>Exceptional Children (EC) 1980-1991</i>
I	Learning and Perception	14.5%	(0.5%)
	Identification of G/T	9.5%	(0.2%)
	Development of G/T	5.0%	(0.1%)
	Personal Characteristics	47.5%	(1.0%)
	Physical/Mental Condition	—	8.0% (0.3%)
	Educ./Instructional Processes and Programming	9.5%	(0.2%)
II	Social Context and Influence	14.5%	(0.3%)
	Conceptions and Development	28.5%	(0.5%)
	Identification of G/T	14.5%	(0.3%)
	Programs/Practices of Nurturing G/T	5.0%	(0.1%)
	Other Components of Nurturing the G/T	47.5%	(1.0%)
	National Efforts, Policies, and Programs, etc.	—	20.0% (0.6%)
	Presence and Future of G/T Education	5.0%	(0.1%)

I = Classification according to the categories in Figure 5.

II = Classification according to the categories in Figure 6.

"One of the most perplexing findings from this study is the infrequent use of psychological theory to study the concept of giftedness or to develop programming for the gifted. Certainly theories on intelligence/cognition (e.g., Davidson & Sternberg, 1984; Flavell, 1977; Shore, 1986, 1987; Sternberg, 1981, 1985) and human development (e.g., Bullinger & Chatillon, 1983; Carter & Ormrod, 1982; Horowitz & O'Brian, 1985; Janos & Robinson, 1985) can contribute much to our understanding and can lead to the improvement of practical concerns that have continued since the Marland Report (e.g., identifi-

fication procedures, programming approaches, and curriculum development)" (Carter & Swanson, 1990, p. 122).

New recognitions with regard to the research content are, of course, also dependent on new methodological innovations. We call for not only more multivariate statistical techniques and complex designs, but also longitudinal studies instead of the usual cross-sectional designs. A current overview of longitudinal studies in the field can be found in Subotnik and Arnold (1993); also see chapter 9 in this handbook.

TABLE 4
Category Frequencies and Percentages for Research and Non-Research Based Publications According to Rogers (1989, p. 81)

Category	Research Based Publications		Non-Research Based Publications		Total
	n	%	n	%	
Computers/technology	2	—	37	2	39
Teacher perceptions of students	43	5	115	6	158
Student perceptions of teacher curriculum quality	18	2	327	18	345
Acceleration	8	—	23	1	31
Program spending/planning	32	4	180	10	212
Females/career counseling	25	3	88	5	113
Social/emotional development and family relationships	98	10	253	14	351
Cognitive characteristics	225	29	114	6	339
Identification/testing	157	18	150	8	307
Creativity	33	4	136	8	169
Early childhood	4	—	31	2	35
Program treatment	163	19	217	12	380
Special populations	40	4	40	2	80
Educational strategies	11	1	62	3	73
Teacher/training qualifications	11	1	37	2	48

TABLE 5

Statistical Techniques Used in Gifted Child Quarterly (CGQ) Articles (1980–1987) According to Pyryt (1988, p. 10)

Technique	Frequency
Descriptive Statistics Summary	23
Qualitative	2
Chi-Square	16
Bivariate Correlation	22
Kruskal-Wallis	1
T-Test	21
ANOVA	30
ANCOVA	8
MANOVA	7
MANCOVA	3
Discriminant Analysis	4
Canonical Analysis	6
Multiple Regression Analysis	6
Factor Analysis	6

In addition, the cooperation of researchers and practitioners needs to be increased. Once again, I quote Carter and Swanson (1990, p. 122):

"These efforts should focus on (a) identifying key issues and concepts, (b) synthesizing the literature around those issues and concepts, (c) conducting meaningful, theory based research, and (d) extending and elaborating research findings to both theoretical and practical settings".

The interaction of theory and practice in the area of nurturance of the gifted was reduced by Julian Stanley (cf. George et al., 1979) to the well-known formula of three Ds: Discovery, Description, and Development. In addition see Mönks and Heller (1993).

(2) Basic and applied research in the field of giftedness and talent should be supported by *interdisciplinary approaches*. This should provide information about the developmental conditions surrounding giftedness and talent and also improved solutions to practical problems, such as identification and nurturance of giftedness inside and outside school.

Interdisciplinary cooperation in the area of research on giftedness is primarily necessary between educational specialists and psychologists, but also within these disciplines, e.g., between the various psychological subdisciplines, as they are presented in Fig. 7. Above and beyond this, other related disciplines are called upon to cooperate, such as neuroscience, genetics and brain research, artificial intelligence or expertise research. As experience in other areas has shown, surprising theoretical insights can be obtained due to the change in perspective and sometimes different methodology in interdisciplinary cooperation. In addition creative solutions to practical problems can be expected. Although the existence of specialized journals seems to be quite justified based on the content analyses (and their resulting in greater research vs practical emphases meeting current interests), one should not lose sight of the

danger of isolation from other related disciplines and journals. The interdisciplinary cooperation is more or less blocked rather than increased by such an approach. Perhaps we should consider how the contributions from other disciplines can be more frequently won for gifted journals. A further possibility is to publish interdisciplinary special issues, etc. In addition, the program of the WCGT conferences should include interdisciplinary symposia or workshops so that the research on giftedness does not become too isolated from important related disciplines, especially from the mainstream of psychological and educational research (cf. Jackson, 1993).

Furthermore, a close relationship with regard to information and experiences should be sought between researchers and practitioners. The demands sketched out here can most easily be met in interdisciplinary research groups. These should include especially qualified and research-oriented practitioners. Of course, alimentation problems could interfere with this idea greatly. A national system like that recommended recently by the American National Research Center on the Gifted and Talented—at the University of Connecticut in Storrs—could be used as a model. Presently we do not know how well organizations, such as those primarily concerned with practical problems of identification and gifted education could deal with this kind of system. I am thinking here of the programs from the *Study of Mathematically Precocious Youth* (SMPY) or the *Center for the Advancement of Academically Talented Youth* (CTY) at the Johns Hopkins University in Baltimore (U.S.A.), the *Talent Identification Program* (TIP) at the Duke University in Durham (U.S.A.), the *Center for Gifted Education* at the University of Calgary (Canada), and the *Center for the Study of Giftedness* at the University of Nijmegen (The Netherlands). They can certainly stimulate the international scene in research on giftedness and talent.

(3) *Cross-cultural studies* emphasize not only the worldwide importance of research on giftedness and talent, but are also important for examining theoretical assumptions of universality or specific cultural influences on the development of giftedness and are thus also necessary.

TABLE 6
Research Design Types for All Citations 1975–1985
According to Rogers (1989, p. 83)

Design	n	%
(Quasi) experimental	46	5
Review of research/meta-analysis studies	81	9
Protocol, content, discourse analysis	29	4
Survey	114	13
Case study	144	17
Correlation/regression/disc. analysis	194	22
Causal-comparative	246	28
Factor analysis studies	16	2
Total	870	100

The degree to which development and socialization theory assumptions for explaining individual differences are actually universally valid, can only be determined by cross-cultural studies. There are already individual psychological approaches examining the relationship of culture or subculture and individual development of abilities (e.g., Haensly, Reynolds, & Nash, 1986; Csikszentmihalyi, 1988). Current studies in giftedness also seem to emphasize cultural influences on the development of creativity (Hany, 1993; Hany & Heller, 1993).

The research on creativity is unsatisfactory both in terms of measurement instruments and in its theoretical basis. This is probably due primarily to incorrect universality assumptions. This refers to the neglecting of domain-specific factors of giftedness and also cultural socialization conditions. In view of current research on creativity (cf. Weisberg, 1986; Simonton, 1988; Sternberg, 1988; Glover et al., 1989; Runco & Albert, 1990; Sternberg & Lubart, 1991), most of the previous training methods for increasing creativity can be considered obsolete. Innovations in creativity research and creativity nurturance as in other areas of gifted education are primarily to be expected (according, for example to Gardner, 1989) from cross-cultural studies and are substantiated by impressive examples (see also Winner & Martino in this handbook, chapter 14).

Psychometric Versus Cognitive Psychological Paradigms: Different Tasks and Functions

The current situation in the research on giftedness and talent is characterized by two contrasting paradigms: the psychometric and the cognitive science paradigm. This is especially apparent with respect to basic research. Both paradigms, however, should be viewed less as competing but rather in terms of how they complement each other. Whereas the psychometric structural theories or correlation studies, for example, greatly enrich the giftedness *phenomenology*, cognitive psychological (experimental) studies are expected to provide information about the mechanisms of cognitive *processes* and their individual causes. In the former case, the *descriptive* function dominates, and in the latter the *explanatory*. Thus, this corresponds to the differentiation in personality research to *nomothetic* (psychometric) versus *idiographic* (cognitive psychological) approaches. For new theoretical recognitions about high ability *and* for practical giftedness models we need both paradigms. This is documented by the various contributions in this handbook. For an overview of the various conceptions and models of giftedness, see the following chapter.

Despite this demand, it should not be overlooked that quantitative differences in the *psychometric* approach have thus far been better confirmed than qualitative differences in the *idiographic* or cognitive psychological approaches, i.e., qualitative differences in the learning and thinking of the gifted versus non-gifted individuals

(Jackson & Butterfield, 1986; Rogers, 1986; Waldmann & Weinert, 1990). Therefore, a scientifically elaborated ideal conception of giftedness is not yet available, although there are promising attempts (see chapter 10 of this volume). Whether or not the status quo can be positively rated is not clear. Still, the historical discussion of genius becomes superfluous when we consider the contemporary state of knowledge.

An additional misconception should be cleared up at this point. In the psychometric approach, not only one-dimensional definitions of giftedness are possible, i.e., the g-factor of intelligence (based on IQ), but also multidimensional conceptions of giftedness. An example of this is Gardner's (1985) Theory of Multiple Intelligences, Gagné's (1985, 1991) Differentiated Model of Giftedness and Talents or the Munich Model of Giftedness (Heller & Hany, 1986; Heller, 1991c; Perleth & Heller, 1993; Perleth, Sierwald, & Heller, 1993). In contrast to the usual practice of a single IQ value being used for identification (see the overview by Rost, 1991, or Tannenbaum, 1992, as well as chapter 1 of this volume), the necessity of a multifactorial or multidimensional or rather typological model of giftedness is recognized here in agreement with the majority of more recent concepts of giftedness. This demand holds not only for the theoretical conceptualization of giftedness but also for practical purposes of identification and education of gifted youth.

On the other hand, the influence of general ability on academic achievement, especially in grade school, should not be underestimated—as shown by Cronbach and Snow (1977), Thorndike (1985) or more recently Rost (1991). In recent studies on school, university or professional success predictions for gifted youth, the usefulness of multidimensional or typological concepts of giftedness could be proven (summarized e.g., in chapter 17 of this volume). At the secondary school age and in adulthood, differential approaches to identification with consideration of measurements of domain-specific demands have been proven to be much superior to single dimensional IQ definitions. The fact that identification of the gifted nevertheless often takes place in adolescence using IQ measures, is probably primarily due to less energy necessary for measurements with traditional IQ tests and not justified by any methodological arguments. The proven superiority of IQ tests over creativity tests cannot be used as an argument against considering creativity characteristics in the identification of the gifted as long as the combination of intelligence *and* creativity predictors leads to a better prognosis of outstanding achievement than an IQ test alone (Hany & Heller, 1991; see also chapter 11 in this volume). Above and beyond this, the usefulness of typological identification approaches must be emphasized with a view toward practical needs in gifted education in current literature (for an overview see chapters 12 and 13 as well as 18 of this volume). There is still no substitute for the psychometric approach for reliable and valid talent searches within the framework of enrichment courses

or for individual academic achievement predictions. This also holds true for developmental psychologically oriented longitudinal studies of giftedness (see chapter 9 of this volume).

However, purely psychometric identification procedures do have a number of obvious limitations. Interindividual differences in giftedness can be measured in this way, but this does not explain *how* they came into being. Such explanatory knowledge can only be obtained by means of cognitive psychological or rather experimental diagnostic strategies. In other words: Status diagnosis (psychometric) needs to be supplemented by process diagnostic (cognitive psychological, experimental) paradigms to provide theoretically and practically satisfactory information about gifted children and adolescents.

According to Facaoarau and Bittner (1987, p. 194), the following analytical units are characteristic for the research subject in the *cognitive psychological paradigm*:

Individual and developmental or age-related test achievement differences are not explained by global structural units or common achievement factors as within differential intelligence theories—i.e. by verbal or quantitative abilities—but rather through elementary process units such as information processing components. It is assumed that the so-called basic parameters of intelligence make up the individual thought processes. In Sternberg's component analysis, the speed of information processing, information selection and storage, the accessibility of available knowledge, etc. are taken into consideration. Corresponding taxonomies of cognitive components have been presented, for example, by Carroll (1976, 1981), Sternberg (1977, 1979, 1982, 1986), Rose (1980).

Whereas traditional intelligence theories within the *psychometric* paradigms study mental structures, the approaches to research of the gifted in the *cognitive psychological* paradigm study the mental components upon which the cognitive activities are based. The focus here is on the internal cognitive conditions and mechanisms as well as changes in the internal structure of knowledge, problem solving processes and thinking strategies, metacognitive competencies, etc.

The task division principle is typical of such component analyses. The well-known—and well-structured—intelligence test items are artificially divided into elementary components before they are again presented serially (Sternberg, 1977, 1986; Klix, 1983; van der Meer, 1985). As an alternative, test items can be employed together with successively presented information which is relevant for solving the problems (cf. Davidson & Sternberg, 1984; Davidson, 1986).

"In contrast to the traditional psychometric approaches where solely the number of test items

solved within a certain time period is counted up, within sequential information processing approaches, the speed (time necessary for each individual step in the solution process) and also the exactness (number of errors) and the course that problem solving takes (value of the independently produced intermediate solutions) are recorded. The individual steps are either recorded in writing or automatically using a computer simulation" (Facaoarau & Bittner, 1987, p. 195; free translation from German).

Waldmann and Weinert (1990), whose literature search provides a good overview of the current stand of research on thought processes of the gifted, expect the differential thought psychology to contribute heavily in the cognitive psychological paradigm to the development of theories in this context. A basic problem, however, is the extreme (inter- and intraindividual) variability of behavior in the gifted. A double risk results from this: unjustified generalizations versus inflationary model development, e.g., for explaining the problem solving behavior of gifted individuals. Waldmann and Weinert consider the development of a "theoretically well-founded, even if always provisional taxonomy of tasks and problem classes" to be an important task for future research from the general as well as differential psychological aspect. This cannot, however, be equated with a taxonomy of cognitive processes in problem solving. The enormous number of empirically identified cognitive processes makes it difficult to isolate task-invariant and non-domain-specific achievement predictors as was the long dominant research tradition. Waldmann and Weinert (1990, p. 179) believe that the flexibility of processes in problem solving is very great and that compensatory effects between various cognitive determinants are the rule rather than the exception.

"A basic problem of the psychometric approach was that similar and invariant ability patterns are postulated as independent of the giftedness quality (if one does not consider the theoretical variation of the differentiation hypothesis for the gifted). It is, however, certainly clear in the research tradition of the cognitive paradigm that higher thought processes play a decisive role in the explanation of exceptional abilities. One has to, therefore, cast doubt on the assumption that the research of giftedness is simply a specific variation of population-oriented differential cognitive psychology or whether it is not a search for specific structure and process characteristics of learning and achievement behavior in the gifted" (loc. cit.; free translation from German).

This again approaches the question of *qualitative* differences in the gifted vs non-gifted.

In an analogous fashion, more recent creativity research (e.g., Facaoarau, 1985) has been able to prove that both divergent and convergent thought processes are necessary for solving complex difficult problems—for example, in natural sciences and tech-

nology—in a creative way. This means that only the simultaneous employment of both divergent and convergent processes connected with adequate domain-specific knowledge increases problem-solving productivity (cf. Weisberg, 1986; Heller, 1991b, 1993b; Facaoaru, 1992). In addition to higher intelligence and the ability to use knowledge flexibly, Waldmann and Weinert (1990) claim that impulsive, fluid styles of thinking together with persistence and high intrinsic achievement motivation favor creative problem solving in demanding, challenging situations. In fact, more recent studies, primarily in the area of natural sciences, technological and mathematical giftedness, have been able to isolate a number of problem solving characteristics in the gifted that can be interpreted as *qualitatively* different from those in average individuals. For example, we can refer here to the experiments from Klix (1983) and van der Meer (1985) or Sternberg (1977, 1985, 1991). Linked to such cognitive psychological studies is the expectation that not only theoretically relevant explanatory knowledge will result from them, but also important information for the practice of raising and educating gifted individuals and nurturing the necessary knowledge of change.

Expert–Novice Paradigm, Cross-Cultural and Other Approaches in the Field of Giftedness Research

From a developmental psychological or instructional psychological perspective, it is especially interesting to see how the relatively general abilities and thinking competencies establish themselves. The learning processes necessary for this stretch over many years and are effected by many various internal (cognitive and motivational) and external (socialization and situational or context) variables. Because of these and possible compensatory effects, long-term predictions of outstanding achievement are difficult in early childhood (see chapters 15 and 27 in this volume).

In addition, the relative importance of *general* intellectual potential for explaining achievement variance decreases with age, and elaborated domain-specific knowledge bases for explaining expertise increase in importance. Long-term *individual* achievement predictions in childhood and adolescence with a certain degree of reliability are thus limited, i.e., to comparable situations. Modern knowledge psychology in the *expert–novice paradigm* is especially interested in those learning and knowledge acquisition processes which make it possible to achieve outstandingly in the sense of expertise. Accordingly, nurturance approaches for gifted students are thus directed less at ability constructs or predictors of giftedness in a narrower sense, and more at *learning* competencies. Some representatives of knowledge psychology (e.g., Gruber & Mandl, 1992) even suggest that one should not speak of the gifted but rather of experts, i.e., exchange expertise for the concept of giftedness. This would not

only take frequently neglected criteria problems from traditional intelligence research into consideration better than previously, but also approach more closely a social psychological definition of giftedness (e.g., Tannenbaum, 1983). On the other hand, a number of educational problems in the nurturance of giftedness, especially for so-called underachievers and gifted handicapped persons (cf. chapters 37 to 41 in this volume) would be mostly neglected in this approach. As useful as expertise research would appear to be in many cases, in other instances of fostering giftedness deficits become apparent.

New recognitions can be expected from expertise research, i.e., the comparison of beginners or novices with more experienced or expert individuals. This will primarily be found in the area of knowledge acquisition in *complex* domains which should compensate for a disadvantage of many ability-oriented (psychometric) studies. It is well-known that external or ecological validity is a major problem in measurements in the trait or factor approach. Expertise research could, thus, contribute to the description and analysis of domain-specific competencies in "natural", complex demanding situations. At the same time, an attempt could be made to relate more closely various positions of learning and thought process research positions. Through the focus of learning theory questions about the *acquisition* of expertise and cognitive psychological *application* aspects on problem solving, they complement each other with regard to research on giftedness.

Empirical studies on the relationship of expertise and giftedness have been primarily carried out in the areas of music, sports and chess. For example, Gruber, Renkl, Schneider, and Kuhn (1992) examined the development of expertise in children and adolescents in a three-and-a-half year longitudinal study. In addition to the analysis of developmental courses in adolescent experts and novices in chess, predictors of various degrees of performance development were to be determined. Domain-specific short-term memory was measured. In addition, intelligence test values and results of biographical data were evaluated. The degree of expertise was defined by external criteria.

"The domain-specific memory performance from the first measurement was found to be a good predictor of unfavorable expertise development. It was well-suited to the identification of those who were identified during the first measurement as experts whose development would progress at a slow rate. It is probable that dispositional factors, such as memory capacity or intelligence, are responsible for the unfavorable expertise development. For the 'entrance' into an expert career, no person-specific predictors could be determined. In subjects who were novices at the first measurement and became experts, this was probably due to external experiences (e.g., entrance into a chess club based on corresponding peer relationships). . .

The superiority of practice-related variables versus

dispositional variables can be interpreted in two ways: On the one hand, it is possibly the expression of a *compensation* through practice comprehensible, which lets the expertise development appear to be independent of disposition when a certain degree of expertise has been achieved. On the other hand, one can express some doubt about the *validity* of measuring dispositional factors" (Gruber et al., 1992, p. 67; free translation from German).

The latter interpretation probably holds especially true for complex tasks or areas. For the initial explanation, which can utilize corresponding results of validity studies on school success predictions (Heller, Rosemann, & Steffens, 1978; Heller, 1984, 1991a), one should not overlook the confounding of cognitive learning abilities with learning activities. As a whole, representatives from expertise research seem to tend to underestimate the role of intellectual abilities in knowledge acquisition. The attempt is frequently made to support this with inadequately domain-specific intelligence test results. On the other hand, believers in the psychometric concepts of giftedness may be in danger of underestimating non-intellectual and situational prerequisites for learning. In this way, both paradigms can complement each other. An extensive valuation of the expertise approach as well as a detailed presentation of various methodological problems can be found in chapter 16 of this handbook.

With few exceptions (e.g. Amabile, 1983; Tannenbaum, 1983, 1991), *social psychological* aspects have been greatly neglected in the conceptualization of giftedness. This theoretical deficit is related to the psychometric research tradition where status diagnostically determined test scores (e.g., IQ scores) are considered to be—relative to corresponding (age) groups—invariant measures across the life span. Modern cognitive component approaches are also affected by this individualistic misinterpretation according to Waldmann and Weinert (1990). Cross-cultural cognitive psychological research provides, however, enough proof for the interaction hypothesis. According to this, personality characteristics as well as giftedness continually need to be seen as a product of interaction between individual factors and social-cultural determinants.

Attempts to describe such interaction processes need to include not only cognitive and non-cognitive (motivational) competencies, but also individuals' social abilities. These make it possible for a person to activate a potential gift in concrete social situations—particularly in the family, school and peer group (see chapters 4 and 5 in this volume). On the other hand, these activities are influenced by the quality of the learning environment. The development of corresponding systemic models of giftedness should be a rewarding research task. From a practical standpoint, the newly developed pentagonal model from Sternberg (chapter 11 in this volume) is of particular interest.

Cross-cultural studies cannot only provide important

information about social and cultural influences on the development of giftedness as well as nurturing and restraining socialization factors about gifted children and adolescents. Cross-cultural studies are also indispensable for examining the universality assumptions of many theories.

Cross-cultural research approaches to giftedness research can be expected to provide information about various cultural influences on individual developmental and educational processes (cf. Eckensberger & Krewer, 1990). This goal is to be achieved by specific research strategies making it defined not by its object but by its method (Petzold, 1992). Three comparative forms are relevant (a) cross-national, (b) cross-cultural, and (c) cross-societal. In the present context, cross-cultural studies are of interest. The systematic comparison of psychological variables or results obtained in various cultural conditions should help to identify culturally caused behavioral differences in individual development. This is a main problem in empirical cross-cultural research. Based on such research designs, universality assumptions of relevant developmental, educational and/or learning/instructional theories can be examined. This is something that Wilhelm Wundt emphasized at the turn of the century in his ethnological psychology.

This is also the approach taken by modern so-called *etic* (from *phonetic*) approaches in cross-cultural research on the universality of human behavior characteristics (universalism hypothesis). In contrast to this, the so-called *emic* approach (derived from *phonemic*) tries to determine cultural socialization influences within particular cultures (culture-relativism hypothesis). Corresponding culture-specific and valid measurement instruments which are also culture-fair make it difficult to really compare cultures. Thus, in more recent ecological psychological models (e.g., Berry, 1980), an attempt was made to overcome the dichotomy between "emic" and "etic" in an integrative conception (cf. Petzold, 1992, pp. 311–312).

Comparative cultural studies can provide new recognitions about social-cultural conditions in the development and nurturance of gifted children and adolescents because they force us to change our perspective. This could increase the variety and variance of nurturing ideas. This is not only of practical use, but tolerance and understanding of other cultures can be increased by cross-cultural research cooperation (Gardner, 1989).

To avoid or remove undesirable differences in the development of giftedness, both from the competence and performance points of view, a corresponding knowledge of change is necessary. This grows from the explanatory knowledge as it is obtained in experimental or quasi-experimental studies. For understanding sex-related and other giftedness and achievement differences, it is insufficient to carry out quasi-experiments in the social sciences, so that *interdisciplinary* research approaches can mediate furthering knowledge including neuroscientific and

biological research methods (see chapters 6, 7, and 40 in this volume).

Desiderata in the Research on Giftedness and Talent

The research on giftedness includes not only basic scientific research, but also technological and practice-oriented questions, i.e., tasks of applied giftedness research. In this context, possibilities for improvement related to the identification and practical nurturance of gifted children and adolescents increase in importance, reflected in the content structure of this handbook.

The applied research of the gifted is more or less based on reliable recognitions from basic research, e.g., from the area of experimental psychology. These are, however, still inadequate or provide, in part, non-uniform or contradictory results corresponding to the theoretical explanations. With regard to the "pressure to act" that practical research often feels from practitioners, a dilemma often arises: On the one hand, they should attempt to solve practical problems in a scientific and serious manner; on the other hand, this is impossible without adequate basic research and is hard due to the complexity of many practical fields. This often makes it necessary to compromise in applied research—also in the area of giftedness—while scientific methodological standards dare not be substantially impinged upon.

The model shown in Fig. 9 should clarify important relationships in research on the gifted and practical necessities of gifted education. Inasmuch as one considers formal nurturance of the gifted to be a function of individual personality development, a relationship exists, as shown in the model, between giftedness research and practical tasks in the identification and nurturance of the gifted, including evaluation of identification and nurturance measures.

A few exemplary research desiderata from the perspective of basic vs applied research are provided in the following (Heller, 1993a).

Deficiencies in the Field of Basic Research

- Lack of combined approaches of general and differential psychological perspectives for developing specific structure and process models for experimental designs in order to explain achieving excellence, expertise, etc.

- Few analyses of the development of metacognition, general vs specific knowledge bases etc.

- Little study of developmental courses of the highly gifted during the second half of the life span.

- Few system-theoretical analyses of individual and social components in the socialization process.

- Almost no cross-cultural studies in the field of high ability in order to verify or falsify theories, i.e., for testing hypotheses of universality.

- Lack of (quasi-)experimental studies aimed at causal

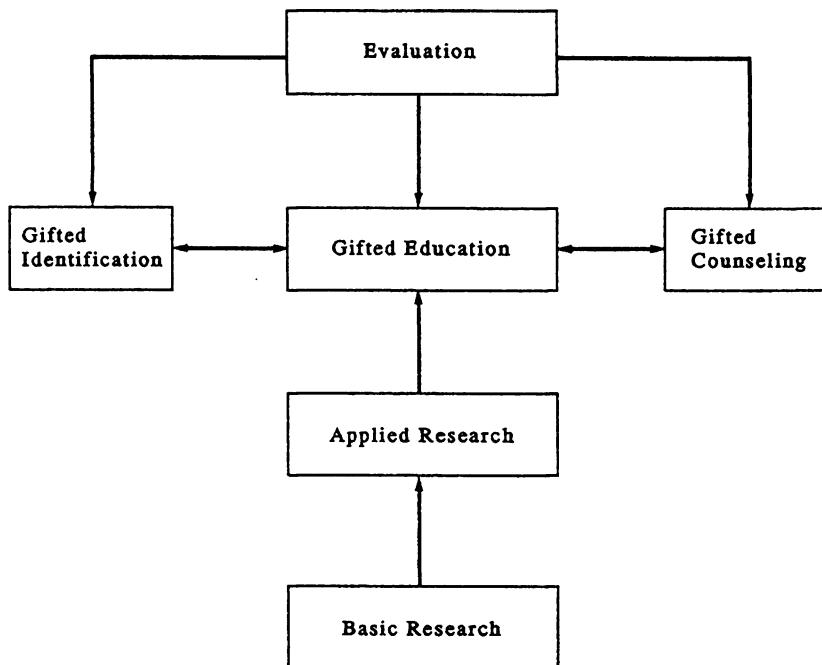


FIGURE 9. Relationship between giftedness research and practical tasks of gifted education.

analyses, e.g., of gender-specific differences, especially in the fields of mathematics, sciences and technology.

Deficiencies in the Field of Applied Research

—Very few multidimensional approaches and sequential strategies in the diagnosis of highly gifted and talented children and adolescents.

—Little process diagnosis (complementary to the so-called "status diagnosis") in the field of high ability.

—Lack of intervention (and prevention) programs for balancing out gender-specific differences in competence and, above all, in performance, especially in the fields of mathematics, "hard" sciences and technology.

—No metacognitive and general problem-solving development programs as well as domain-specific knowledge-based programs for highly gifted students.

—Lack of evaluation of school programs and extracurricular (enrichment vs acceleration) courses for the gifted and talented youth.

—Lack of expert systems for school psychologists, school counselors and study advisers in connection with problems related to high ability.

This list is incomplete and could go on forever, as one sees from the topics in this handbook. Among others the following research topics seem important to me with regard to *gifted education*.

Desiderata in the Research on Gifted Education

—Development of instruction concepts of talent didactics; didactic possibilities of differential, i.e., talent-oriented, instruction regarding cognitive instruction/learning contents.

—Curricular development for special academic courses, special classes or even special high schools for certain acceleration groups and for enrichment courses with extracurricular support of the gifted, including their evaluation (cf. Scriven, 1980, 1983; Wottawa & Thierau, 1990; Brandtstädtter, 1991; Buchanan & Feldhusen, 1991).

—Longitudinal studies of the gifted including analyses of the life environment over a whole life span.

—Study of leisure-time activities of talented adolescents and their influence on personality development.

—Career problems of talented girls and women; especially in the fields of mathematics, natural sciences and technology.

—Analyses of metacognition, causal attribution (achievement motivation) styles, action control, the self-concept of talented adolescents, including sex-specific differences and problems, e.g., regarding situation orientation vs action orientation (Kuhl, 1981, 1987), self evaluation of heuristic abilities (Dörner et al., 1983).

Problems in *gifted identification* and *gifted counseling* have to be considered together. In consideration of

high risk groups, e.g., disabled talented girls or children of minority groups, the difficulties of differentiation in instruction and education require special attention. Despite a number of useful attempts over the past few years to identify and support talented children and adolescents, there is a lack of convincing evidence of the validity of many techniques, especially those which experts judge as innovative. Here, requirement-oriented diagnosis and support concepts (cf. Heller, 1984) could be useful, especially when they are linked to recent results of applied problem-solving research and knowledge psychology. On the other hand, possibilities of psychometric identification, e.g., in the aptitude testing paradigm, have by no means been exhausted (cf. Trost, 1986). There is often a considerable discrepancy between theoretical (multidimensional) identification and stimulation strategies (see Rost, 1991; Hany & Heller, 1991; Mönks, 1991). Independent of such controversies, the following topics for improving identification and support can be regarded as urgent (Heller, 1992).

Desiderata in the Research on Gifted Identification and Counseling

—Advisory aids for talent-orientated education, especially at preschool and primary school age.

—Advisory concepts for talented students, their parents and teachers.

—Early identification and support of the talented disabled.

—Identification and support of gifted girls (especially in the fields of mathematics, natural sciences and technology).

—Identification and support of gifted underachievers.

—Construction of process diagnostic identification instruments and their validation.

—Construction of domain-specific counseling tests for talented adolescents.

—Academic stimulation of creativity, in general and also in specific areas.

—General vs domain-specific thought training programs.

—Work training programs (e.g., for gifted underachievers).

—Quasi-experimental intervention studies for counseling and supporting gifted children and adolescents.

Evaluation

The *evaluation* of gifted education as well as of gifted identification and counseling takes on two functions, which are expressed in summative and formative evaluations in the sense of Scriven (1967). The *summative* evaluation is directed at measurements of effects (e.g., the effects of various gifted education programs or intervention effects), the feasibility of the corresponding measures is evaluated.

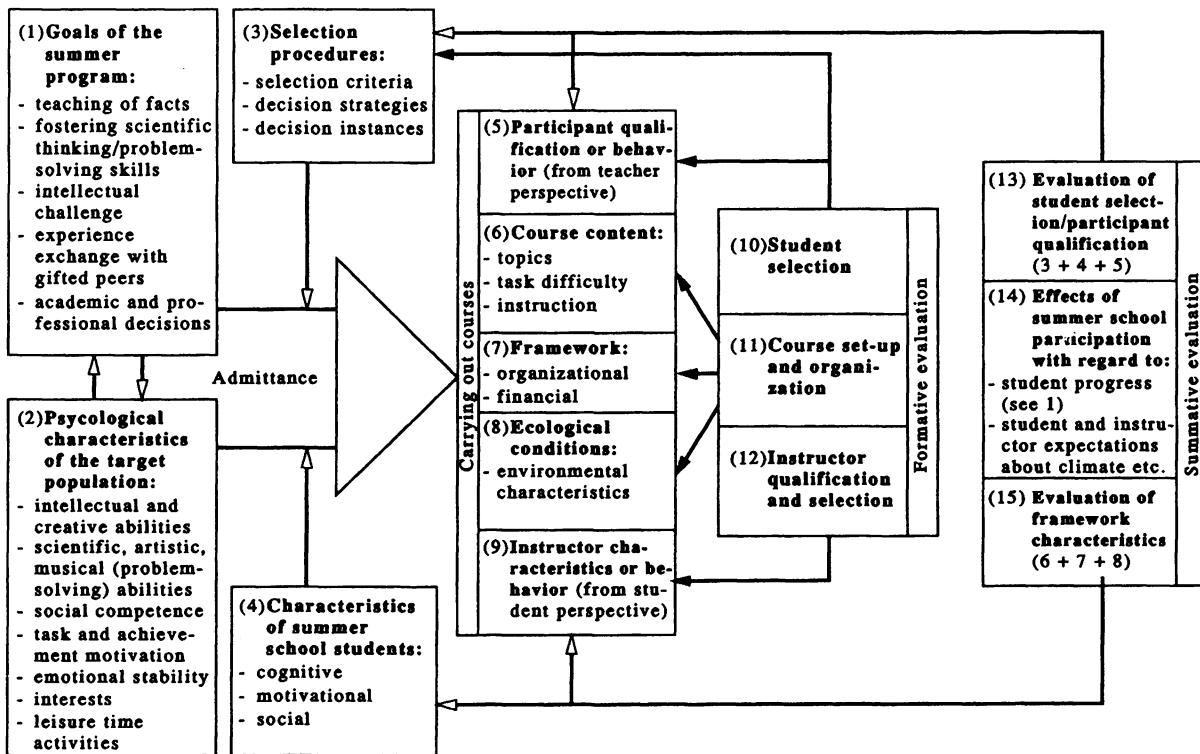


FIGURE 10. Evaluation model for a nationwide summer gifted program.

The *formative evaluation* is more or less directed at the optimization of nurturance and counseling measures, in the sense of action research. Since during the model project, the feedback of relevant evaluation results is given and effects the treatment, dysfunctions that may occur can be recognized, systematic errors eliminated and thus an attempt made to improve the treatment. Corresponding summative evaluation data at the end of the (quasi-) experiments can, however, no longer be interpreted as "independent" judgments. As long as the (formative) evaluation is intended to optimize the treatment, this is no disadvantage. If, however, two or more treatment concepts or models are to be compared with regard to their various advantages or disadvantages, only an independent summative evaluation (without a formative evaluation) can provide objective results. Thus, both forms of evaluation complement each other with regard to their various functions and can frequently be combined. This not only allows a *scientific* evaluation of treatment results but participants can be provided with important support during the trial phase by formative evaluation.

In the area of gifted education and also in the area of gifted identification and counseling, evaluation studies with scientific standards are still relatively rare. Also see Buchanan and Feldhusen (1991) and Callahan in chapter 34 of this handbook. Till now there has been an emphasis on case studies, essay reports or data (collected by those involved in the treatment themselves) which can hardly provide objective judgments. The model shown in Fig. 10 of the evaluation of a nationwide Summer Gifted Program (Summer School in Germany) exemplifies important elements of *scientific* model evaluation.

Research on Giftedness and Responsibility

Finally, the relationship between research on giftedness and the individual vs social responsibility will be discussed from several points of view. The following five aspects are to be especially emphasized here:

(1) Contributions from research on giftedness to improving practical considerations in the identification and nurturing of the development of gifted children and adolescents. Related questions are the prevention of individual behavioral problems, social conflicts, inappropriate upbringing and educational practices, encouraging counseling and intervention for maintaining or developing learning environments appropriate to various types of giftedness. The tasks described here belong to *applied research* on giftedness.

(2) The efficiency of applied research depends on the quality of *basic research* which can be seen in other scientific areas as well. This relationship holds true for research on giftedness and thus also for practical nurturance of giftedness. We can name as examples here innovative approaches from cognitive psychology or research on expertise. These have both provided

important impulses for applied areas such as problem-solving research or practical knowledge acquisition.

(3) The recognition that the development of competence and knowledge acquisition takes place in social-cultural contexts has consequences for the research on giftedness. Theoretically conceived universalities and methodological demands for validity need to be examined in *cross-cultural research*. Above and beyond this, cross-cultural and/or cross-national cooperative research projects serve not only to exchange information and experiences, but also can be expected to provide the flexibility necessary through the change in perspectives. The contribution to peacekeeping efforts is only marginally noted here.

(4) The development of a group of *elites* in the sense of elite achievers is a legitimate democratic desire. This makes for a double responsibility: to the individual and to society. The *society* has a duty to provide every young person with adequate developmental and educational opportunities. This is anchored in most democratic constitutions. This also has a double meaning: Equalizing of chances as a social component and equal opportunity as an individual component. The nation or the society needs to make sure that equal developmental chances are available to every young individual, i.e., also to the gifted. This postulate includes the necessity of equalizing opportunity in single instances and also the co-responsibility of socialization agents (especially parents and teachers). An *individual responsibility* grows out of the social responsibility for individually nurturing educational and upbringing opportunities. This is a responsibility to actually use the academic opportunities or nurturing socialization offers. This individual responsibility is first related to the responsibility of each person with regard to his/her own personality development (developmental psychologists refer to this as "developmental tasks" in the sense of Havighurst, 1952), at the same time, however, the individual's responsibility to society is also meant here. This is the individual's responsibility to make an appropriate contribution to the social well-being. There is an expectation that the gifted will generally be able to contribute more than weaker or handicapped individuals. This includes contributions to securing a social net or "human resources" in highly developed social systems.

(5) Finally a *mutual responsibility of society and the research community* exists. This does not question the freedom of researchers to choose their own topics and methods, but their responsibility to a society which—directly or indirectly—subsidizes their research must be emphasized. This basic demand is no less important in the research of giftedness which is in danger of isolation (and not only from scientific community). On the other hand, researchers in the field of giftedness have the same right as other qualified researchers to demand adequate research conditions, in order to scientifically research those areas considered desirable or necessary both from the point of view of basic research and in the practice of nurturing the gifted.

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References

- Amabile, T. M. (1983). *The social psychology of creativity*. New York: Springer.
- Berry, J. W. (1980). Ecological analyses for cross-cultural psychology. In B. Warren (Ed.), *Studies in cross-cultural psychology, Vol. 2* (pp. 157–189). New York: Academic Press.
- Brandstädter, J. (Ed.) (1991). *Evaluationsforschung* [Research in Evaluation]. Bern: Huber.
- Buchanan, N. K., & Feldhusen, J. F. (Eds.) (1991). *Conducting research and evaluation in gifted education*. New York: Teachers College, Columbia University Press.
- Bullinger, A., & Chatillon, J. (1983). Recent theory and research of the Genevan school. In P. Mussen (Ed.), *Handbook of child psychology, Vol. III* (pp. 231–262). New York: Wiley.
- Carroll, J. B. (1976). Psychometric tests as cognitive tasks: A new structure of intellect. In L. B. Resnick (Ed.), *The nature of intelligence* (pp. 27–56). Hillsdale, NJ: Erlbaum.
- Carroll, J. B. (1981). Ability and task difficulty in cognitive psychology. *Educational Researcher*, **10**, 11–21.
- Carter, K. R., & Ormrod, J. (1982). Acquisition of formal operations by intellectually gifted children. *Gifted Child Quarterly*, **26**, 110–115.
- Carter, K. R., & Swanson, H. L. (1990). An analysis of the most frequently cited journal articles since the Marland report: Implications for researchers. *Gifted Child Quarterly*, **34**, 116–123.
- Cronbach, L. J., & Snow, R. E. (1977). *Aptitudes and instructional methods*. New York: Irvington.
- Csikszentmihalyi, M. (1988). Society, culture and person: a systems view of creativity. In R. J. Sternberg (Ed.), *The nature of creativity* (pp. 325–339). Cambridge: Cambridge University Press.
- Davidson, J. E. (1986). The role of insight in giftedness. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 210–222). Cambridge: Cambridge University Press.
- Davidson, J. E., & Sternberg, R. J. (1984). The role of insight in intellectual giftedness. *Gifted Child Quarterly*, **28**, 58–64.
- Dörner, D., Kreuzig, H. W., Reither, F., & Stäudel, T. (1983). *Lohhausen. Vom Umgang mit Unbestimmtheit und Komplexität* [Uncertainty and Complexity]. Bern: Huber.
- Eckensberger, L. H., & Krewer, B. (1990). Kulturvergleich und Ökopychologie [Cross-Cultural Research and Ecological Psychology]. In L. Kruse, C. F. Graumann, & E.-D. Lantermann (Eds.), *Ökologische Psychologie* (pp. 66–75). München: Psychologie Verlags Union.
- Facaoaru, C. (1992). *Ergebnisse der Evaluationsstudie zum Förderkursprogramm "Technische Kreativität"* [Gifted Programs on Technical Creativity: Results of an Evaluation Study]. Unpubl. Final Report, Part I, to the Federal Minister of Education and Science in Bonn. Munich: LMU.
- Facaoaru, C., & Bittner, R. (1987). Kognitionspsychologische Ansätze der Hochbegabungsdiagnostik [Cognitive-Psy-
- chological Approaches in the Diagnosis of Giftedness]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, **8**, 193–205.
- Feldhusen, J. F. (1989). Synthesis of research on gifted youth. *Educational Leadership*, **46**, 6–11.
- Flavell, J. H. (1977). *Cognitive development*. Englewood Cliffs, NJ: Prentice-Hall.
- Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly*, **29**, 103–112.
- Gagné, F. (1991). Toward a differentiated model of giftedness and talent. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 65–80). Boston: Allyn and Bacon.
- Gallagher, J. J. (1985). *Teaching the gifted child* (3rd ed.). Boston: Allyn and Bacon.
- Gallagher, J. J. (1986). A proposed federal role: Education of gifted children. *Gifted Child Quarterly*, **30**, 43–46.
- Gardner, H. (1985). *Frames of mind. The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (1989). *The open minds. Chinese clues to the dilemma of contemporary education*. New York: Basic Books.
- George, W. C., Cohn, S. J., & Stanley, J. (Eds.) (1979). *Educating the gifted—acceleration and enrichment*. Baltimore: The Johns Hopkins University Press.
- Glover, J. A., Ronning, R. R., & Reynolds, C. R. (Eds.) (1989). *Handbook of creativity*. New York: Plenum Press.
- Gruber, H., & Mandl, H. (1992). Begabung und Expertise [Ability and Expertise]. In E. A. Hany & H. Nickel (Eds.), *Begabung und Hochbegabung* (pp. 59–73). Bern: Huber.
- Gruber, H., Renkl, A., Schneider W., & Kuhn, B. (1992). *Domänen-spezifische Expertiseentwicklung* [Development of Domain-Specific Expertise]. Vortrag auf der 34. Tagung experimentell arbeitender Psychologen in Osnabrück, April 1992.
- Haensly, P., Reynolds, C. R., & Nash, W. R. (1986). Giftedness: coalescence, context, conflict, and commitment. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 128–148). New York: Cambridge University Press.
- Hany, E. A. (1993). The development of basic components of technical creativity: A longitudinal comparison of children and young people with high and average intelligence. In R. Subotnik, & K. Arnold (Eds.), *Beyond Terman: Longitudinal studies in contemporary gifted education*. Norwood, NJ: Ablex.
- Hany, E. A., & Hany, G. W. (1992). Literature on Giftedness—Where to search, what to expect. In F. J. Mönks, M. W. Katzko, & H. W. van Boxtel (Eds.), *Education of the Gifted in Europe: Theoretical and Research Issues* (pp. 236–246). Amsterdam: Swets & Zeitlinger.
- Hany, E. A., & Heller, K. A. (1991). Gegenwärtiger Stand der Hochbegabungsforschung [Current Research on Giftedness]. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, **28**, 241–249.
- Hany, E. A., & Heller, K. A. (1993). Entwicklung kreativen Denkens im kulturellen Kontext [Development of Creative Thinking in the Cultural Context]. In H. Mandl, M. Dreher, & H.-J. Kornadt (Eds.), *Entwicklung und Denken im kulturellen Kontext* (pp. 99–115). Göttingen: Hogrefe.
- Havighurst, R. J. (1952). *Developmental task and education* (2nd ed.). New York: Plenum Press.

- Heller, K. A. (Ed.). (1984). *Leistungsdiagnostik in der Schule* (4th ed.) [Assessment of School Achievement]. Bern: Huber.
- Heller, K. A. (1989). Perspectives on the diagnosis of giftedness. *The German Journal of Psychology*, *13*, 140–159.
- Heller, K. A. (Ed.). (1991a). *Begabungsdiagnostik in der Schul- und Erziehungsberatung* [The diagnosis of giftedness]. Bern: Huber.
- Heller, K. A. (1991b). On the role of creativity in technology and sciences. In Korean Educational Development Institute—KEDI (Ed.), *Lectures of visiting scholars at KEDI, IM 91-1* (pp. 179–199). Seoul: KEDI.
- Heller, K. A. (1991c). The nature and development of giftedness: a longitudinal study. *European Journal for High Ability*, *2*, 174–188.
- Heller, K. A. (Ed.). (1992). *Hochbegabung im Kindes- und Jugendalter* [High ability in children and adolescents]. Göttingen: Hogrefe.
- Heller, K. A. (1993a). International trends and issues of research on giftedness. In W. T. Wu, C. C. Kuo, & J. Steeves (Eds.), *Proceedings of the second Asian conference on giftedness: growing up gifted and talented* (pp. 93–110). Taipei, Taiwan: National Taiwan Normal University.
- Heller, K. A. (1993b). Scientific ability. In Ciba Foundation (Ed.), *The origins and development of high ability. Ciba Foundation Symposium 178*. Chichester: Wiley.
- Heller, K. A., & Hany, E. A. (1986). Identification, development and achievement analysis of talented and gifted children in West Germany. In K. A. Heller, & J. F. Feldhusen (Eds.), *Identifying and nurturing the gifted* (pp. 67–82). Toronto: Huber.
- Heller, K. A., & Menacher, P. (1992). Research on giftedness and talent in the Proceedings at the WCGT Conferences 1975–1991. In F. J. Mönks, & W. A. M. Peters (Eds.), *Talent for the future: social and personality development of gifted children* (pp. 138–148). Assen: Van Gorcum.
- Heller, K. A., Rosemann, B., & Steffens, K. (1978). *Prognose des Schulerfolgs. Eine Längsschnittstudie zur Schullaufbahnberatung* [Prediction of school success. A longitudinal study]. Weinheim: Beltz.
- Horowitz, F. D., & O'Brien, M. (1985). Epilogue. Perspectives on research and development. In F. D. Horowitz, & M. O'Brien (Eds.), *The gifted and talented. Developmental perspectives* (pp. 437–454). Washington, DC: American Psychological Association.
- Jackson, N. E. (1993). Moving into the mainstream? Reflections on the study of giftedness. *Gifted Child Quarterly*, *37*, 46–50.
- Jackson, N. E., & Butterfield, E. C. (1986). A conception of giftedness designed to promote research. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 151–181). Cambridge: Cambridge University Press.
- Janos, P. M., & Robinson, N. M. (1985). Psychological development in intellectually gifted children. In F. D. Horowitz, & M. O'Brien (Eds.), *The gifted and talented: Developmental perspectives* (pp. 149–196). Washington, DC: American Psychological Association.
- Klix, F. (1983). Begabungsforschung—ein neuer Weg in der kognitiven Intelligenzdiagnostik? [Giftedness Research: A New Method in the Cognitive Psychology?] *Zeitschrift für Psychologie*, *191*, 360–386.
- Kuhl, J. (1981). Motivational and functional helplessness: The moderating effect of state versus action orientation. *Journal of Personality and Social Psychology*, *40*, 155–170.
- Kuhl, J. (1987). Action control: The maintenance of motivational states. In F. Halisch, & J. Kuhl (Eds.), *Motivation, intention, and volition* (pp. 279–292). Berlin: Springer.
- Mönks, F. J. (1991). Kann wissenschaftliche Argumentation auf Aktualität verzichten? [Are Scientific Arguments Dispensable in the Discussion on Identification of the Gifted?] *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, *23*, 232–240.
- Mönks, F. J., & Heller, K. A. (1993). Identification and programming. In M. C. Wang (Ed.), *Education of children with special needs* (Section of the second edition of *International Encyclopedia of Education: Research and Studies*, ed. by T. Husen et al.) Oxford: Pergamon Press.
- Mönks, F. J., van Boxtel, H. W., Roelofs, J. J. W., & Sanders, M. P. M. (1986). The identification of gifted children in secondary education and a description of their situation in Holland. In K. A. Heller, & J. F. Feldhusen (Eds.), *Identifying and nurturing the gifted* (pp. 39–65). Toronto: Huber.
- Passow, A. H. (1989). Zur Situation der Hochbegabtenförderung und Hochbegabungsforschung [Research Problems in Developing Giftedness]. *Psychologie in Erziehung und Unterricht*, *36*, 1–7.
- Perleth, Ch., & Heller, K. A. (1993). The Munich Longitudinal Study of Giftedness. In R. Subotnik, & K. Arnold (Eds.), *Beyond Terman: Longitudinal studies in contemporary gifted education*. Norwood, NJ: Ablex.
- Perleth, Ch., Sierwald, W., & Heller, K. A. (1993). Selected results of the Munich longitudinal study of giftedness: The multidimensional/typological giftedness model. *Roeper Review*, *15*, 149–155.
- Petzold, M. (1992). Kulturvergleichende Sozialisationsforschung [Cross-cultural research on socialization]. *Psychologie in Erziehung und Unterricht*, *39*, 301–314.
- Pyryt, M. C. (1988). *The gifted child quarterly as database*. Paper presented at the Annual Meeting of the National Association for Gifted Children in Orlando, FL, Nov. 1988.
- Rogers, K. B. (1986). Do the gifted think and learn differently? A review of recent research and its implications for instruction. *Journal for the Education of the Gifted*, *10*, 17–39.
- Rogers, K. B. (1989). A content analysis of the literature on giftedness. *Journal for the Education of the Gifted*, *13*, 78–88.
- Rose, M. A. (1980). Information-processing abilities. In R. E. Snow, P. A. Federico, & W. E. Montague (Eds.), *Aptitude, learning and instruction: cognitive process analyses of aptitude, Vol. 1* (pp. 65–86). Hillsdale, NJ: Erlbaum.
- Rost, D. H. (1991). Identifizierung von Hochbegabung [Identifying the Gifted]. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, *23*, 197–231.
- Runcio, M., & Albert, B. S. (Eds.) (1990). *Theories of creativity*. Newbury Park, CA: Sage Publications.
- Scriven, M. (1967). *The methodology of evaluation* (AERA Monograph Series on Curriculum Evaluation, No. 1). Chicago: Rand McNally.
- Scriven, M. S. (1980). *The logic of evaluation*. Inverness, CA: Edge-press.
- Scriven, M. S. (1983). Evaluation ideologies. In G. F. Madaus, M. Scriven, & D. L. Stufflebeam (Eds.), *Evaluation models: Viewpoints on educational and human services evaluation* (pp. 229–260). Boston: Kluwer-Nijhoff.
- Shore, B. M. (1986). Cognition and giftedness: New research directions. *Gifted Child Quarterly*, *30*, 24–27.

- Shore, B. M. (1987). Metacognition, intelligence and giftedness. *Gifted Child Quarterly*, **31**, 37-39.
- Simonton, D. K. (1988). *Scientific genius. A psychology of science*. Cambridge: Cambridge University Press.
- Sternberg, R. J. (1977). *Intelligence, information processing and analogical reasoning: The componential analysis of human abilities*. Hillsdale, NJ: Erlbaum.
- Sternberg, R. J. (1979). The nature of mental abilities. *American Psychologist*, **34**, 214-230.
- Sternberg, R. J. (1981). A componential theory of intellectual giftedness. *Gifted Child Quarterly*, **25**, 86-93.
- Sternberg, R. J. (1982). A componential approach to intellectual development. In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence, Vol. 1* (pp. 413-464). Hillsdale, NJ: Erlbaum.
- Sternberg, R. J. (1985a). *Beyond IQ: A triarchic theory of human intelligence*. New York: Cambridge University Press.
- Sternberg, R. J. (1985b). Cognitive approaches to intelligence. In B. B. Wolman (Ed.), *Handbook of Intelligence* (pp. 59-118). New York: Wiley.
- Sternberg, R. J. (1986). A triarchic theory of intellectual giftedness. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 223-243). Cambridge: Cambridge University Press.
- Sternberg, R. J. (Ed.) (1988). *The nature of creativity*. Cambridge: Cambridge University Press.
- Sternberg, R. J. (1990). What constitutes a "good" definition of giftedness? *Journal for the Education of the Gifted*, **14**, 96-100.
- Sternberg, R. J. (1991). Giftedness according to the triarchic theory of human intelligence. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 45-54). Boston: Allyn and Bacon.
- Sternberg, R. J., & Lubart, T. (1991). An investment theory of creativity and its development. *Human Development*, **34**, 1-31.
- Subotnik, R., & Arnold, K. (Eds.) (1993). *Beyond Terman: Longitudinal studies in contemporary gifted education*. Norwood, NJ: Ablex.
- Tannenbaum, A. J. (1983). *Gifted children: psychological and educational perspectives*. New York: MacMillan.
- Tannenbaum, A. J. (1991). The social psychology of giftedness. In N. Colangelo, & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 27-44). Boston: Allyn and Bacon.
- Tannenbaum, A. J. (1992). *The IQ controversy and the gifted* (mimeo). New York: Teachers College, Columbia University.
- Thorndike, R. L. (1985). The central role of general ability in prediction. *Multivariate Behavioral Research*, **20**, 241-254.
- Trost, G. (1986). Identification of highly gifted adolescents—methods and experiences. In K. A. Heller, & J. F. Feldhusen (Eds.), *Identifying and nurturing the gifted* (pp. 83-91). Toronto: Huber.
- Van der Meer, E. (1985). Mathematisch-naturwissenschaftliche Hochbegabung [High Ability in Mathematics and Sciences]. *Zeitschrift für Psychologie*, **193**, 229-258.
- Vockell, E. L., & Conard, F. C. (1992). Sources of information in gifted education literature. *Gifted Child Quarterly*, **36**, 17-18.
- Waldmann, M., & Weinert, F. E. (1990). *Intelligenz und Denken* [Intelligence and Thought Processes]. Göttingen: Hogrefe.
- Weisberg, R. E. (1986). *Creativity: Genius and other myths*. New York: Freeman.
- Wottawa, H., & Thierau, H. (1990). *Evaluation*. Bern: Huber.

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