



VIEW Assessment of Problem Solving Style Now Available

Edwin C. Selby, Donald J. Treffinger, Scott G. Isaksen, and Kenneth Lauer

Our new instrument, *VIEW: An assessment of problem solving style*, is now available for use with individuals or groups, from ages 12 through adult. Beginning in April, 2002, the Center's core team members will be available to conduct programs using VIEW, and the Center will offer qualification programs for individuals or groups who wish to use VIEW in their own work.

VIEW was designed to assist and support people in using their preferences to solve problems and manage change effectively; it is not a generic style or type measure. VIEW's 34 items measure three important dimensions of style that relate directly to creative behavior, problem solving, and change management. As in all discussions of type and style, most people share some preferences associated with each of the styles. No single score or set of scores is more or less socially valued than any other, and no approach is more (or less) creative than others. Individuals emphasize these style preferences through their typical behavior across varying contexts and over sustained periods of time.

The scores yielded by the first scale provide an overall indication of the person's perceived preferences along a continuum we describe as Orientation to Change (OC), with two general styles: the "Explorer" and the "Developer." The items comprising the OC dimension represent important cognitive aspects of problem solving style. This scale addresses the questions: "How do I prefer to deal with boundaries and parameters?" "How do I feel about and react to structure?" and "How do I prefer to respond to novel challenges?" A second dimension of VIEW describes one's preferred manner of Processing (P) information during problem solving, with two styles, "External" and "Internal." This scale addresses the questions: "How do I prefer to manage information and its flow when problem solving?" "When do I share my thinking?" and "Does interacting with others build or spend energy?" The third dimension of VIEW involves preferences for Deciding (D) about options or possibilities. Scores on this scale indicate whether one's primary focus in decision making is on "People" or "Task." This scale

addresses such questions as: "What factors get first priority when I focus or decide?" "Where do I start?" and "How do I make trade-offs?"

The current research edition of VIEW is the outgrowth of three rounds of development and revision based on data collected from more than 3,000 subjects, from 34 states and several foreign

Continued on Page 7

Where To Find It

VIEW Assessment Now Available	1
Personal Creativity Characteristics (Part 1)	2
Alabama Students Discover That They Can Change The World	4
New CCL Research and Development Opportunities	9
Creativity Assessment Practices Survey	9
Student Action Planning for Talent Development	11
VIEW User Qualification Program Information	12

Personal Creativity Characteristics

Part 1 of 4

By Don Treffinger, Grover Young, Ed Selby, and Cindy Shepardson

In the last issue of *Creative Learning Today*, we provided an overview of our recent research on definitions and characteristics of creativity and creative thinking that we did in conjunction with a project on creativity assessment. Based on our thorough review of the literature on creativity and creative thinking we clustered our list of characteristics into four categories: *Generating Ideas*, *Digging Deeper into Ideas*, *Openness and Courage to Explore Ideas*, and *Listening to One's "Inner Voice."* These categories include cognitive characteristics, personality traits, personal preferences, and biographical events that influence one's level of creativity (how creative are you?) as well as one's style of creativity (in what way are you creative?).

In this issue, we begin a four part series about personal creativity characteristics. We will discuss one of our four sets of characteristics in each part of this series. We will also provide our list of indicators for each category and their supporting research citations. In this first installment, we will present the *Generating Ideas* category.

Generating Ideas

The generating ideas category includes the cognitive characteristics commonly referred to as divergent thinking or creative thinking abilities and metaphorical thinking. In their pioneering work, Guilford identified them as divergent production abilities and Torrance described them as creative thinking variables. The characteristics in the category we refer to as *Generating Ideas* in-

clude: Fluency, Flexibility, Originality, Elaboration, and Metaphorical Thinking.

Fluency refers to quantity or the ability to generate a large number of ideas in response to an open-ended question or in reference to one's thinking process. Fluency builds on the premise that quantity of idea generation can stimulate the production of ideas that will be both novel and useful; "quantity provides opportunity for quality."

Flexibility refers to the ability to shift the direction of one's thinking or to change one's point of view. Flexibility involves an openness to examine ideas or experiences in unexpected or varied ways, and thereby to discover surprising and promising possibilities.

Originality refers to the ability to generate new and unusual ideas. Originality deals with generating options that are unusual or statistically infrequent (i.e., ideas that few people in any group might think of).

Elaboration refers to the ability to add details and to expand ideas. Elaboration involves making ideas richer, more interesting, or more complete.

Metaphorical thinking refers to the ability to use comparison or analogy to make new connections. Metaphorical thinking involves thinking about how different things are alike and different (or "making the strange familiar or the familiar strange") and then transporting those connections to produce or dis-

cover new possibilities. Many breakthrough ideas were the result of metaphorical thinking such as the popular invention of a "hook-and-loop" fabric fastener system by George de Mestral. Today, most of us know it by the brand name of VELCRO™. Mestral got his idea in 1948 through metaphorical thinking after returning home from a walk and finding some cockleburs clinging to his cloth jacket.

We often refer to people who are able to generate many, varied, and unusual possibilities as "creative thinkers," or "creative people." People exhibit the characteristics associated with generating ideas by thinking of many possibilities, looking at things from many different angles, or producing novel ideas. You might observe them engaging in:

- Asking "what if" or "just suppose" questions and then playing with those ideas to see where they might lead.
- Predicting, speculating, and forecasting ("what will happen if...") and then testing out their ideas.
- Combining or changing parts to make new possibilities.
- Thinking about metaphors or analogies to help themselves to look at something differently.
- Deferring judgment and refraining from criticizing ideas when they are generating them.

Even though some people excel in these mental operations naturally, through instruction and practice all people can develop and im-

prove their fluency, flexibility, originality, elaboration, and metaphorical thinking abilities. The table accompanying this article presents a summary of the key characteristics related to generating ideas along with supporting citations from the research literature.

In the next issue of CLT, we will discuss the Digging Deeper into Ideas category. Meanwhile, it is important to remember that creative thinking involves generating many, varied, and unusual possibilities. We hope you will reflect on these questions:

- What opportunities do you provide for students to learn, practice, and apply the skills

and processes involved in generating ideas?

- In what ways do you encourage and reinforce the characteristics included in the generating ideas category?
- What specific behaviors might you observe and document among your students that would help you to begin to recognize and nurture those with high potential?

References

Amabile, T. M. (1983). *The social psychology of creativity*. NY: Springer-Verlag.

Carroll, H. (1940). *Genius in the making*. New York: McGraw-Hill.

Davis, G. A. (1998). *Creativity is forever (Fourth Edition)*. Dubuque, IA: Kendall-Hunt.

Gordon, W. J. J. (1961). *Synectics*. NY: Harper and Row.

Gordon, W. J. J., Poze, T., & Reid, M. (1966). *The metaphorical way of learning and knowing*. Cambridge, MA: Porpoise Books.

Guilford, J. P. (1959). Traits of creativity. In H. H. Anderson (Ed.), *Creativity and its cultivation* (pp. 142-161). New York: Harper and Row.

Guilford, J. P. (1987). Creativity research: Past, present and future. In S. G. Isaksen (Ed.), *Frontiers of creativity research: Beyond the basics* (pp. 33-65). Buffalo, NY: Bearly Limited.

Hollingworth, L. S. (1942). *Children above 180 IQ*. Yonkers, NY: World Book.

Kneller, G.F. (1965). *The art and science of creativity*. New York: Holt, Rinehart and Winston.

MacKinnon, D. W. (1978). *In search of human effectiveness: Identifying and developing creativity*. Buffalo, NY: Creative Education Foundation, Inc.

Perkins, D. N. (1981). *The mind's best work*. Cambridge, MA: Harvard University Press.

Renzulli, J. S., Smith, L., White, A., Callahan, C., & Hartman, R. (1976). *Scales for rating the behavioral characteristics of superior students*. Mansfield Center, CT: Creative Learning Press.

Smith, J. A. (1967). *Creative teaching of the social studies in the elementary school*. Boston, MA: Allyn and Bacon.

Starko, A. J. (1995). *Developing creativity in the classroom: Schools of curious delight*. , White Plains, NY: Longman Publishers USA.

Torrance, E. P. (1962). *Guiding creative talent*. Englewood Cliffs, NJ: Prentice-Hall.

**Key Characteristics and Indicators of Creativity:
I. Generating Ideas**

<i>Characteristics and Indicators</i>	<i>Citations</i>
Fluency	Carroll, 1940; Guilford, 1959, 1987; Hollingworth, 1942; Kneller, 1965; Renzulli, et al., 1976; Smith, 1967; Starko, 1995; Torrance, 1962
Flexibility	Amabile, 1983; Davis, 1998; Guilford, 1987; Kneller, 1965; MacKinnon, 1978; Smith, 1967; Starko, 1995; Torrance, 1962
Originality	Carroll, 1940; Davis, 1998; Guilford, 1959, 1987; Hollingworth, 1942; Kneller, 1965; MacKinnon, 1978; Perkins, 1981; Renzulli, et al., 1976; Smith, 1967; Starko, 1995; Torrance, 1962
Elaboration	Guilford, 1959; Kneller, 1965; Renzulli, et al., 1976; Starko, 1995
Metaphorical thinking	Gordon, 1961; Gordon, et al., 1966; Starko, 1995

Alabama Students Discover That They *Can* Change the World

By Gwendolyn Day, Tiffanye Threadcraft, and Barbara Romey

Imagine seeing eleven of your students asking to learn statistical analysis, making appointments with school system administrators to discuss their ideas to increase interest in reading among younger students, writing grant proposals to fund their project and presenting their findings at a national conference. Students at Central High School in Phenix City, Alabama had just such an experience because of their involvement in the Community Problem Solving component of Future Problem Solving Program (FPSP).

Future Problem Solving Program (FPSP) evolved out of efforts by Dr. E. Paul Torrance in 1974 to give students a sense of empowerment about issues that may be of concern to them in the future. This program seeks to stimulate creative and critical thinking skills by encouraging students to focus on future events. FPSP is student centered and action oriented. It provides opportunities for students to apply the FPS model to real life problems. Some goals of the FPSP are to increase creative thinking abilities, to improve analytical thinking skills, and to stimulate an interactive interest in the future. The program also seeks to promote research and to refine communication skills-verbal and written.

In the team competition component of FPSP, students research background information on a general topic and then follow six problem solving steps. In Step One, students read and analyze a Future Scene. Then, based on

their analysis they generate up to 16 possible challenges (problems, issues, concerns) found in the Future Scene. In Step Two, students develop a single underlying problem based on the challenges identified in Step One. Teams generate many varied and unusual ideas that respond to their underlying problem in Step Three. Step Four directs students to develop criteria to evaluate their 10 best solutions. Then in Step Five they use a grid to identify their most promising solution based on the criteria. Finally, students write an action plan that could be used to implement their best solution in Step Six. Because the problem is set in the future, participants do not have an opportunity to actually implement their action plan. Students complete the six steps in a two-hour period using only dictionaries and thesauruses as resources. The FPS approach requires students to use both creative and critical thinking tools to complete their booklets.

The Community Problem Solving (CmPS) component of FPSP comes into play where the team component stops. CmPS increases awareness of community problems and helps students to apply creative and critical thinking in the real world. The beauty of CmPS is that students not only have a real world problem solving experience but they actually implement their action plan in their own community. CmPS sets up a structured methodology for developing a project that includes researching their community and identifying areas of concern,

selecting one problem to work on and then following the FPS approach, through the implementation of an action plan. In this manner, CmPS provides an outline to follow that breaks problem solving into smaller more “do-able” steps. Step One includes researching the community and identifying areas of concern. By using the brainstorming tool, we generated a list of some major challenges facing our community. Then we used newspapers and interviews with local school and government officials to collect specific information about those issues. Some of the challenges the team considered were:

- Issues surrounding a conflict between the local animal shelter and the humane society
- Concerns of the retirement community
- Challenges related to the environment from littering to community clean up
- Results of our “school report card” indicating that reading was a weakness among many of our students

As part of our further research on our identified challenges we invited Louella Hudson, Director of the Russell County/Phenix City Literacy Council, to talk with us. She indicated that literacy was a serious community wide problem because one out of every three citizens in our community was functionally illiterate. Her presentation helped us to decide to focus our efforts on literacy within our community.



The Community Problem Solvers

We chose DREAM as the name for our project to address the many aspects of illiteracy and began implementing the specific steps of CmPS. In Step One we researched the wide variety of challenges and concerns that illiteracy presents in a community. We completed Step Two by narrowing our focus to one underlying problem. In Step Three we developed possible solutions to improve the literacy rate in our community. We decided to narrow our focus by considering solutions that would help a single group within our community improve their literacy levels. Some of the more promising suggestions included:

- teaching reading skills to the elderly in nursing homes
- reading to small children
- teaching convicted mothers to read, then tape-recording them reading bedtime stories and sending the tapes to their children
- conducting adult reading classes

Next we developed criteria to evaluate four of the solutions. The criteria included: which solution will have the greatest long-term benefits, which solution will our

class most readily get permission to implement, and which group will most readily respond to us. Teaching reading skills to the elderly was promising, but we decided that the long-term benefits would not be as great. Recording convicted mothers reading bedtime stories for their children was heartwarming, but there was no way our class would get permission to go to jails. After some discussion, we decided that we would not draw many adults to reading classes, and the ones who might attend might not be keen on learning to read from teenagers. We then concluded that working with children would be the best way to fight illiteracy because the long-term benefits were promising; our class would easily get permission for access to elementary schools; and young children would readily respond to us.

Now that we decided to focus on elementary age students, what were we going to do with them? We returned to the research phase and considered a variety of methods that have been tried to improve the reading levels of elementary students. We concluded that we needed to get kids excited about reading in

order to make them want to learn to read. If we could do that, then these kids would try hard to acquire the fundamental reading skills taught to them by their teachers. They could then grow into literate adults, and thereby raise our community's literacy rate.

At this point we began to develop our formal action plan, Step Six of the CmPS model. We decided to test what method of introducing information children responded to best and consequently from which they retained the greatest amount of information. It was at this point that our efforts turned into a formal research project. After researching methods of teaching as well as the importance of understanding students' learning styles, we decided to identify the preferred learning style of the students with whom we would be working. To do this we found nine fourth grade classes and nine fifth grade classes to work with over a period of three days. We administered the *Barsch Learning Styles Inventory* to each student in those 18 classrooms.

Then we divided the fourth grade classrooms into three groups. Each classroom worked with three different stories using three different methods. Stories were told, read aloud, or silently read. We divided the nine classrooms into three groups so that we could measure the results of the different methods using the same story. In other words, in three classrooms children silently read a story, in three other classrooms the same story was read aloud to them, and the final three classrooms had a storytelling experience. Each cluster of three classrooms experienced each method, but with different stories. The students who did the

Continued on Page 6

Alabama Students Solve Community Problems

(From Page 5)

storytelling dressed in full costume to add to the theatrical effect. After the presentation of the stories, the children took a quiz to measure short-term comprehension. To ensure that the children would be unfamiliar with the stories, we chose old multi-cultural folktales. We used the same process with the fifth grade classrooms.

A week later, we tested their long-term comprehension. We found that story telling appeared to be the best form of teaching for comprehension. We also compared the results with the learning style identified by the *Barsch Learning Styles Inventory*. We found that most students were tactile but that regardless of learning style preference, students had greater short term and long-term comprehension from the storytelling method. Looking at our charts it was obvious that storytelling was the best way of communicating information to children. However, we wanted some statistical data to back up this information.

We visited Dr. Carolyn Cartledge at Columbus State University to learn the skills necessary to determine if our results were statistically significant. She taught us how to perform a simple ANOVA to help us with our project. Using these formulas, we established that there is a .001 level (99.9 %confidence) that the storytelling methodology results in better general understanding of a story than either silent reading or hearing the story read to them. We then were able to include the data in a report about our

research. Also, included in the report was a list of activities that would best promote each child's preferred style of learning. We provided a copy of our report to each school, so that teachers could use it for future reference. A copy was also sent home to the parents of any child who participated in the project.

In order to fund our project, we wrote two grant proposals. To do this, we had to first learn how to create a budget. This included getting price comparisons on items we would include in our wish list. We also had to learn how to write our plans and goals in a grant proposal format. We received \$200 from Phenix Foundation and \$1000 from Alabama Power. This part of our project taught us to think big, for we never thought we would get the amount of money we were asking for. Because we wanted to share our results with a larger audience than our own community we wrote a proposal to present our project at the National Association for Gifted Children in Cincinnati, Ohio in November 2001. The skills we learned for grant writing helped us to write the NAGC Conference presentation proposal.

Project DREAM continues into the current 2001-02 school year. We are making plans for a multi-cultural storytelling fair this spring. In addition, we are presenting our results to all of the faculties in our district. We are developing a series of original stories based on specific subsections of the curriculum so teachers may further incorporate storytelling as part of the daily routine.

This project has meant a great deal to us. Not only did we do something for our community,

but we also gained knowledge in new areas like statistics, public speaking, grant writing, and organizational skills. However, the greatest benefit that we gained through participation in the CmPS was a sense that we had the personal motivation to take on huge projects and complete them. By developing the project through the CmPS approach, we were taken seriously and earned the respect of the adult leaders in our community.

Before we began this project, we never thought we could accomplish some of the tasks that were necessary. But through CmPS, we had no choice but to accomplish those tasks because we felt so strongly about our mission of increasing children's interest in reading specifically and learning in general for the next generation of adults.

Community-linked problem solving was very beneficial to students like us. It gave us the answer to our ever-present question, "Why?" Our project gave us the reason to learn otherwise abstract skills and to have confidence in our ability to use the problem solving process in a tangible way. For that, it will always be invaluable to our academic and personal maturation. Perhaps best of all the project empowered us to continue to serve as agents of change within our community.

VIEW: Now Available

(From Page 1)

countries, and ranging in age from 11 to 84. The initial studies included more than 200 subjects, and an extensive second round of study (with a revised and improved item set) involved more than 2,000 subjects, including middle school, senior high school, community college, and university students, classroom teachers, educational administrators, church leaders, and business managers from within the United States as well as internationally. Although we did not code data specifically to categorize socioeconomic or ethnic distribution, those who participated represented a broad spectrum of demographic groups.

Reliability of VIEW

The data from our developmental studies indicated that VIEW meets the customary expectations regarding reliability to support use in research and training contexts. A reliability study involving stability, as reflected in test-retest results over a one month interval, was carried out with 48 middle school students and nine adults. The correlations were .90, .60, and .65 for the OC, D, and P dimensions respectively. In another study of stability involving 23 adults over a one month period, the correlations were .85, .80, and .77 respectively. Nineteen subjects from the VIEW-MBTI study completed the VIEW again after two months. The two-month stability correlations were .93 for the OC dimension, .93 for P, and .84 for the D dimension. We also conducted reliability analyses of internal consistency in each round of development's data collection, using Cronbach's coefficient Alpha. Studies with more than 700 responses from

business managers, educators, and students (public school, undergraduate, and graduate), yielded Alpha coefficients of .81 (OC), .80 (P), and .70 (D), all of which meet the generally accepted standards for instrument development.

Evidence Supporting the Validity of VIEW

Demonstrating that an instrument is valid, or measures what it purports to measure, is an on-going process, not an "event" that can be established definitively in a single study or a specific set of results. Therefore, validation of VIEW, like any other new instrument, will require an on-going program of research by the developers and the active contributions of many other researchers over a period of years. We are committed to establishing and maintaining that research in our own work, and to encouraging research with VIEW by other investigators. Our initial work included several preliminary validation efforts that we consider promising, including both quantitative and qualitative procedures.

We have conducted factor analytic studies of the instrument during the most recent two rounds of development (with 2,000 subjects in one round, and more than 700 in the second round). Although the results and interpretation of factor analysis are more complex than warranted for the purposes of this article, we did find that the hypothesized factor structure was confirmed in accord with customary statistical procedures and criteria. The analyses supported the predicted factor structure of the item set. (A separate technical paper summarizing these data is currently in preparation.) Throughout our three rounds of development,

reviewing all of the data we have collected there have been no significant correlations of the scores on the three VIEW dimensions with age or gender, with the exception of a greater preference for the Person style on the D dimension among female respondents. Based on psychological type theory and research (Myers et al. 1998) this was not a surprising finding.

Criterion-Related Validity: Correlations with Other Measures. We have studied correlations between scores on the VIEW instrument and several other measures that represent the theories and models that influenced us in designing and developing our instrument.

Dunn and Dunn Learning Style. We conducted a correlational study in our first round of development, with 191 subjects who completed our instrument and the Productivity Environmental Preference Survey (PEPS; Dunn, Dunn and Price, 1991). The results indicated, as expected, that subjects with an Explorer preference tended to prefer Informal Design, while subjects with a Developer preference scored higher on Motivation and Persistence. A second study involving 28 adults who were administered our instrument and PEPS also yielded several significant correlations in the expected direction. While studying new and difficult material, Developers preferred Quiet, Formal Design, and Structure, while Explorers preferred Sound, an Informal Design, and little or no imposed Structure. Those with an External processing style also preferred Mobility, working with Peers, and working in the presence of Authority figures. Subjects with an Internal processing style preferred to work

Continued on Page 8

Alone and had no preference for Mobility.

The most recent study involved the responses of 118 North Carolina Senior High School Students, whose VIEW results were correlated with scores on the Dunn and Dunn Learning Style Inventory (Dunn, Dunn and Price 1993). These data yielded significant correlations ($p \leq .05$ or beyond) in the expected directions. Developers preferred Quiet, were high in Motivation and Persistence, preferred Structure and were motivated by Authority figures. Explorers had a study preference for Sound, preferred low external Structure, and were not motivated by Authority figures. Students who preferred Internal processing also preferred Quiet, Learning Alone, learning in a set manner, and learning Visually. Those with an External style of processing preferred learning with Peers, in the presence of an Authority figure, and learning in Several Ways, often with Sound in the background.

Kirton's KAI. Twenty-three educators were administered our instrument and the Adaption Innovation Inventory (KAI; Kirton, 1987a.). The correlation between the OC scores and the KAI total score was .89 ($p < .05$). Since, in the early stages of our work, the OC scale was reversed (so that low scores represented the Developer style), this result was in the expected direction. These results were obtained before we developed the Processing and Deciding scales. In another study with 48 subjects who responded to our instrument and the KAI, the correlation with the total KAI score and the OC dimension was .73 ($p < .01$). The D and P dimensions correlated -.14 and .24 respectively.

Among adults in international business organizations ($N=101$), using version 1.1 of VIEW (in which the scoring of the OC scale was reversed, so high scores represent the Developer style), the correlation between VIEW OC and KAI total score was -.75 ($p < .01$). There were also significant ($p < .01$) correlations between OC and the three KAI subscales (OCxSO, $r = -.70$; OCxE, $r = -.70$; and OCxR, $r = -.66$). Thus, Developers had lower, or more adaptive scores on each of the KAI subscales. In relation to Processing, there were significant, but moderate, negative correlations with KAI total score and all KAI subscales [SO, E, and R; $r = -.40$, $-.32$, $-.33$, and $-.34$, respectively, all $p < .01$). In all cases, subjects with an Internal processing preference tended to have more adaptive KAI scores. There were no significant correlations of VIEW Deciding preferences with KAI scores.

Myers-Briggs Type Indicator®. A study involving 20 graduate and undergraduate students at an urban university in New York City examined the correlations of VIEW scores with scores on the Myers-Briggs Type Indicator® (Myers et. al., 1998). The results were significant and in the expected direction. The OC dimension correlated .67 with Sensing/Intuition and .61 with Judging/Perception. (The Developer style was more strongly indicative of a Sensing and Judging MBTI® preference.) The correlations of the Processing (P) dimension correlated .59 with the MBTI Extraversion/Introversion scale, in the expected direction, and the Deciding (D) dimension of VIEW correlated .49 with the Thinking/Feeling scale of the MBTI, also in the expected direction.

Qualitative Validity Evidence. In two stages of the development process, we also gathered qualita-

tive data that lend support to the validation of the instrument. In one study, we asked a group of 23 adults in a CPS training program to complete a questionnaire at the conclusion of the program, in which we posed the question, "Did your overall score [on VIEW] agree with your own personnel assessment of your style preference?" In this group, 18 responded "yes," three answered "only partly," no one answered "no," and two participants did not respond. As part of a middle school study, 10 parents voluntarily returned a survey asking how well the measure described their perception of their child's typical behavior when solving problems. Four responded "very much so," six responded "mostly," while none responded "somewhat" or "not at all."

Summary. Based on the data we have collected in our initial studies of VIEW, involving more than 3,000 subjects, we conclude that VIEW is a promising measure for use with individuals or groups with a sixth grade or better level of English proficiency when seeking to identify and describe individual problem solving style preferences. VIEW has demonstrated acceptable levels of reliability, and the initial validation studies have been supportive. Through the publication of a Research Edition of VIEW and the development of a well-qualified user base that includes researchers as well as practitioners, we intend to continue studying the instrument's reliability, validity, and usefulness.

Contact the Center if you are interested in learning more about how you might benefit from using VIEW, or to obtain information about becoming a Qualified VIEW User.

New CCL Research and Development Opportunities

By Don Treffinger

In addition to new research and development on creativity assessment and our new VIEW instrument (both reported in other articles in this issue), we are working on several other projects that may offer CLIC Members and *Creative Learning Today* readers new opportunities to participate in pilot projects during the coming year. These include:

Self-Directed Learning: Teaching and Parenting for Independent Learning. We have been revising and updating many of our resources on self-directed learning. This project includes: new instructional resources; a revised, expanded version of our SDL Teaching Style inventory for educators; and a new parenting style inventory with supporting materials on fostering independence at home.

Creative Problem Solving Kit for Students. We are completing our initial development work on a new set of resources for direct use by students (in grades five and older), working on their own or in small groups, to apply CPS in a natural, flexible approach.

Trainer's Resource Handbooks. We are continuing our work on the development of a series of handbooks of resources for trainers in the areas of assessment, creative and critical thinking, CPS, and talent development. These resources include training activities and exercises for in-service or professional development, overhead transparencies, and Power Point presentations.

Linking Standards and Productive Thinking. We have already developed more than 50 sample activities illustrating ways to

incorporate productive thinking, generating tools, and focusing tools with specific content area or curriculum standards. We are interested in working with schools, districts, regional groups, or states to field test these materials and to expand our resources across many grade levels and content areas.

Applying Productive Thinking in Inventing With Students. There are many ways to link creative thinking, critical thinking, and CPS with the "three I's" of inventors, inventions, and inventing. We are developing a variety of new activities, exercises, and resources in this area.

Contact the Center if you would like to learn more about any of these projects and ways you might be involved in one or more of them.

Creativity Assessment Practices and Needs: A Survey

By Don Treffinger

We are now planning several new initiatives in the area of creativity assessment, for general education and specifically in relation to gifted/talented identification. Every year we receive many questions from educators interested in thinking skills, or from gifted/talented program coordinators or administrators, seeking guidance on policies, procedures, and instruments for creativity assessment for identification and programming. Their questions are important, and need good answers—but there have seldom been easy answers for those complex challenges.

We have learned, through several recent projects, that new development work may be important and necessary: gathering data on student performance on various measures; building case studies of effective practices; developing training support materials; building norms for several existing and new assessment resources at the state and national levels to guide decision making in gifted/talented education; and, quite possibly, developing new assessment tools and resources for use in K-12 settings.

We have prepared a brief survey to help us evaluate our priorities

for new directions in this area; a copy of the survey appears on page 10 of this issue. Your responses to these questions will help us to insure that the next stages of our work will recognize and respond to the real needs of our colleagues in the field. We would appreciate it if you would take a few minutes to complete this form and return it to us by mail or by fax (941-342-0064). In addition, if your district might be interested in participating in pilot studies involving data collection with both existing and new instruments, please let us know by phone, mail, email, or fax.

Creativity Assessment Survey

1. State _____ 2. Name of person responding (optional): _____

3. Current practice.

a. Creativity assessment is an important component of G/T identification in our district. Strongly Agree — Agree – Disagree – Strongly Disagree

b. We are generally doing a good job with creativity assessment in our district. Strongly Agree — Agree – Disagree – Strongly Disagree

Comment:

4. How would you anticipate (or desire) that the current status of creativity assessment in your g/t identification might change in the next 1-3 years? In your district: Increased emphasis Stay the same as present practice Decreased emphasis

In your state: Increased emphasis Stay the same as present practice Decreased emphasis

Why? Other Comment?

5. Which of the following information or resources would be most helpful for you to have in relation to creativity and g/t in your district. Please check all that apply, and double check any items you consider especially important.

- access to information about and evaluations of current creativity instruments
- access to new tools (e.g., an integrated set of several assessment resources to yield data about student creative strengths)
- training and technical support to improve identification of creative strengths
- training and technical support to link creativity assessment with programming and instruction
- state or national norms for various creativity instruments for student assessment
- Procedures and resources for student profiles
- Performance-based assessment resources
- Case studies of creativity in students (with sample profiles)
- Case studies of creativity assessment practices in exemplary school settings
- Resources to guide use of creativity assessment data in differentiating instruction and links with NAGC's "parallel curriculum" model
- Test/profile development support resources (on-line; CD software)
- External scoring or profile development services

6. At what grade levels would new work on creativity assessment be particularly helpful?

K-3 4-5 6-8 9-12

7. If specific creativity assessment resources are now being recommended or used in your district, please tell us what instruments are most commonly used, and how effective you believe their present use to be:

Instrument	Present Level of Effectiveness in Use
_____	Very <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/>
_____	Very <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/>
_____	Very <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/>

Comments:

8. Who would be the key "target audience" for information, resources, or training of creativity assessment and its role in g/t identification?

- | | | |
|--|--|---|
| <input type="checkbox"/> District level administrators | <input type="checkbox"/> Building Administrators | <input type="checkbox"/> State Leaders (e.g., state steering committee) |
| <input type="checkbox"/> Counselors | <input type="checkbox"/> G/T Coordinators | <input type="checkbox"/> School Psychologists |
| <input type="checkbox"/> G/T Teachers | <input type="checkbox"/> Special Ed Directors | <input type="checkbox"/> Classroom Teachers |
| <input type="checkbox"/> Parents | | |

9. Add any other comments or suggestions about creativity assessment in gifted education:

Student Action Planning for Talent Development: Toward a New Paradigm for “Identification”

By Don Treffinger, Grover Young, Carole Nassab, and Carol Wittig

New approaches to recognizing and developing students’ strengths and talents lead us to reexamine many traditional views of programming and identification. We believe it is particularly important to explore new directions for linking our knowledge of students’ characteristics and strengths closely with the opportunities and services the students need; identification and programming must be interrelated in order to assure appropriate and challenging educational opportunities and experiences. One major goal in our approach has been to work toward a shift from “identifying students” (with an emphasis on labels and categories) to “identifying needs” (with a focus on planning and preparing for effective instruction). When we first began to question the traditional view that “identification is the engine that drives gifted programming” (e.g., Treffinger, 1998), we assumed that, even if we shifted our initial emphasis from identification to programming, most of the instruments and many of our traditional identification practices and procedures would still be important. We discovered, however, that the transition from an identification-driven to a programming-driven approach challenged many longstanding assumptions and practices.

First, we found that many practices commonly used to “identify” or select students were primarily what we called “file cabinet data.” That is, after the data were collected and used to select or exclude students, they were put away in a file and no longer used for any purpose. Those data served to categorize students

(“gifted or non-gifted,” “in or out”), but not to guide instructional planning or delivery. When the question changed from selecting students to serving them, those data were much less important or useful. Our guiding principle became: “If the data don’t help you teach the student better, don’t bother gathering that information.” Second, we found that the essence of the task itself—the very questions we were trying to answer—led to changes that made the practices, and even the language associated with them, take on a different form and shape. We found that we were looking at questions about the “fit” between a student’s characteristics and the educational

programming offered, and at ways of documenting students’ needs and our responses, rather than simply determining eligibility for a program.

We struggled for some time to find terminology that would describe the new goals and approach more accurately and effectively. As a working decision that serves our purpose now (but may not be a final choice), we have been using the phrase, “Student Action Planning” for talent development. We can present a number of the attributes of Student Action Planning that we consider important principles guiding our approach; these are summarized below.

Student Action Planning for Talent Development is:

- Deliberate and explicit; reflective; focuses data toward practical use; points toward valued outcomes.
- Data-rich; multiple sources; blends formal and informal in a natural way; quantitative (tests, grades) and qualitative (ratings, check lists, observation, self-report)
- Constructive and affirmative, not exclusion-oriented; building up the person; responds to, and builds on, strengths, talents, and sustained interests.
- Focus on the person’s unique style and creative strengths, not just at knowledge acquisition or content coverage
- Challenging and forward-looking; leads to higher-level activities and outcomes
- Inspiring and motivational; stirs the person’s dreams and passions for learning and growth; holds up lofty aims and ideals; visionary
- Authentic; performance- and productivity-oriented; concerned with what people can/will do, not what “kind or category” they “are”
- Dynamic and flexible; Open, on-going; long-term, life-long; process-oriented; means, not end; continuous through year
- Diagnostic; points toward programming; guides instructional planning and decision-making
- Empowering, enabling; shared input and collaborative design (teacher, student, parent, community); ownership for the learner; moves towards self-direction or self-management

Continued on Page 12

Student Action Planning

(From Page 11)

We are now working on ways to translate these guiding attributes and principles into practical procedures and resources for implementation in programming for talent development. There will be many hurdles along the way, such as policy requirements in various states or districts that are still locked tightly into the "identification as labeling, selection, and placement" model. We believe that further work in this area has considerable potential for new and more powerful ways to serve students and nurture their strengths and talents. We would be interested in hearing from schools, districts, or states in which there might be willingness and opportunity to collaborate in experimentation with innovative directions.

Reference

Treffinger, D. J. (1998). From gifted education to programming for talent development. *Phi Delta Kappan*, (79) 10, 752-755.

VIEW User Qualification Program Schedule

If you are interested in using our new VIEW problem solving style assessment, you will need to become a Qualified VIEW User. To become a qualified user, you must successfully complete our qualification program, which requires one and one-half days of intensive training with one or more of our VIEW developers and trainers. Qualified VIEW users are entitled to purchase the VIEW instrument for use in their own work or programs. They also receive a variety of other research, training, and presentation resources to support effective and appropriate use and interpretation of the instrument.

VIEW User Qualification programs are being hosted by the Creative Problem Solving Group, Inc., in Williamsville, New York, and by the Center for Creative Learning in Sarasota, Florida. The first program, to be held in Buffalo on April 11-12, 2002 is already fully enrolled. The second program, to be held in Sarasota on April 20-21, 2002 (immediately following the Center's Annual Networking Conference) still has a few seats available as this newsletter issue goes to press. The cost for VIEW User Qualification is the same at either the Buffalo or Sarasota sites; contact either organization for specifics.

After the initial April programs, the next scheduled program in Buffalo will be August 7-8, 2002, and the next scheduled program in Sarasota will be September 26-27, 2002. The Center for Creative Learning will also offer custom VIEW User Qualification Programs in Sarasota for individuals or groups, by appointment, on any mutually convenient dates, or for groups of four or more at other locations upon request. For more information about programs in Buffalo, contact the Creative Problem Solving Group, Inc. (716-689-2176 or cpsb@cpsb.com). For information about Sarasota or custom-planned programs, contact the Center for Creative Learning (941-342-9928 or cclofc@gte.net).

Purpose and Subscriptions

Editor: Dr. Don Treffinger

Purpose: To share new ideas and practical strategies for productive thinking, and talent development, and learning style; information about and reviews of new resources; and opportunities for networking among our readers.

CLT is published quarterly. The annual subscription rate is \$24 (US funds), order #8002. Please enclose payment by check (US funds), Visa or MasterCard with your subscription order. Subscriptions are for the calendar year; new subscriptions receive the current issue and any back issues for the calendar year.

Direct all subscription inquiries, payments, and changes of address to Center for Creative Learning, Inc., Subscription Department, P.O. Box 14100-NE Plaza, Sarasota, Florida, USA, 34278-4100; Fax: 941.342.0064, Phone: 941.342.9928

Contact the Center by e-mail at: cclofc@gte.net

Creative Learning Today, ISSN #0895-9234. Copyright ©2002 by Center for Creative Learning. Quotation permitted provided credit is given to *Creative Learning Today* as the source. All clip-art ©2001 Microsoft Corporation

Visit us on the web at:
www.creativelearning.com

JOIN US AT THE 2002 NETWORKING CONFERENCE— APRIL 18-20, 2002

Reservations are still being accepted from CLIC Members and *Creative Learning Today* Subscribers!