This paper examines how creative thinking techniques can be used to help rural educators provide effective transition programs and services to secondary students. Factors affecting transition in rural areas include a small, homogenous economic base; travel time and distance between job sites; lack of services and trained staff; the community role of schools in rural areas; less formal politics; and a rural-oriented work ethic. The literature suggests that self-determination, secondary school reform, and public policy alignment also affect rural services. The challenge before rural educators is to take advantage of existing positive elements in their community to create new solutions to problems in transitioning disabled students from school to work. The five stages of a creative problem-solving model include fact finding, problem finding, idea finding, solution finding, and acceptance finding. One method for generating information is forced creativity, which involves techniques to clarify a problem and generate solutions. One technique of forced creativity is attribute listing--listing principle characteristics or attributes of a problem and generating ideas for improving or changing each attribute. Another technique is morphological synthesis--identifying one set of problem attributes on an axis in matrix form and identifying a second set on another axis, allowing for all possible interactions between the diverse sets. There are also checklists available to help generate considerations or questions to discover aspects of a problem or process. This paper suggests that by selecting a creative thinking technique and applying it to the identified problem of transition in rural communities, unique solutions to an individual's transition problem can be generated. (LP)
CREATIVITY IN RURAL SPECIAL EDUCATION SETTINGS:

AN EXAMPLE WITH TRANSITION

"We can't find appropriate placements for our students in the job market."
"There are no jobs for our normal kids, let alone those with handicaps."
"The support for students and parents, whether it may be legal, medical, or community, is not available!"

Although these may be oft repeated phrases or stereotypical ideas about rural education, there are other ways to see the hand dealt to the rural special education administrator. It is reported that rural schools by their nature have unique characteristic and concerns differentiating them from larger schools or those schools located in urban areas. Some identifying characteristics affecting special education are potential difficulties in recruiting and retaining trained personnel (Helge, 1989; Lemke, 1994; Sarkes, 1990), access to current research or innovative program models (Helge, 1989; Howley, 1991), extreme variance in low incidence occurrences (Helge, 1989; Cates, 1991), availability of related services legal or medical support (Helge, 1989), and appropriate or abundant community support and resources for transition (Elrod, Devlin & Obringer, 1994; Walls & Price, 1993).

Creativity is an answer! We can take each of these perspectives and turn it around, twist it and make it a support for good, positive, creative education of rural children we can creatively view most other problems in alternative ways as well. Let's see how this change might work.

The purpose of this discussion is to encourage a view of rural characteristics as strengths or opportunities to express creativity and innovation. Although often perceived as deficits or limitations, rural characteristics may be used to spawn the solutions for a better education for all students. Various creativity techniques can be formally (forced) or informally (intuited) applied to identified issues. As an example of this premise, the issue of providing transition services in rural areas will be examined using the creative problem solving process (Osborn, 1963; Parnes, 1981) and other various creativity training techniques.

One of the principle goals for schools is to prepare students for entry into the world of work and self-sufficiency. However, of the 2.5 million identified people who have exited the special education classroom (Morris et. al, 1993), only 23% have become gainfully employed or attended college. Forty percent are considered underemployed, earning wages at the poverty level. Approximately 26% are unemployed or are receiving welfare subsidies. The drop-out rate for regular education students (National Center for Education Statistics, 1991) in
1989 was 4.5%. During the same period, the corresponding rate for students with disabilities was 26.7%. Despite the emphasis seen on mandated issues, many students leaving special education classrooms are entering a segregated, dependent, non-productive environment. These statistics reinforce the crucial need for effective programs and services to facilitate transition from school environment to the work place.

This identification of needs points in the direction of clarifying the issues. This is called "the Mess" stage in creative problem solving. Many factors impact transition in the rural setting. Identified characteristics of rural settings that impact transition to supported employment include (Elrod, 1994):

1. **A small, homogeneous economic base.** This economic limit may result in a restricted number and type of available job opportunities to match to the unique needs of individuals with disabilities

2. **Travel time and distance between job sites.** Distances provide difficulties for the student, given a lack of public transportation, and often limits professional follow-up.

3. **Lack of services and trained staff.** Many rural communities lack vocational rehabilitation services which hinders transition planning.

4. **Synergistic advantage of rural areas.** It is easier to identify the school community in a rural setting. Defined as the families of children in school and their immediate neighbors, the school community becomes the local community in a rural setting. All children participate in one system, so a feeling of "ownership" can develop. Additionally, the population sparsity requires people to be "generalists," each individual able to participate in many activities.

5. **Less formal politics.** System modification and change is simplified because of the accessibility of both school and non-school personnel.

6. **Rural oriented work ethic.** Physical labor is the foundation of the work ethic in rural settings. Primary importance is placed on the ability to be self-sufficient.

Three additional issues have been identified as having a crucial impact on transitions in the 1990's (Thompson, 1993): self-determination; secondary school reform; and public policy alignment. Issues of independence, such as self-sufficiency and informed decision-making capacity, are being addressed in rehabilitation and educational literature as essential for integration into the community. Increased responsibility for self-management aimed at self-determination would distribute responsibility for learning among teachers, parents, and students with the primary control remaining with the students. Secondary school reform and public policy alignment speak to the issue of providing students with disabilities opportunities for gainful employment while still...
in the school environment with time to monitor the transition into the community. Students may exit school with both a diploma and a resume/portfolio.

The challenge before rural educators is to meld the positive elements which exist in their particular setting in order to create new solutions for problems encountered in transitioning students. By using creative problem-solving strategies, uniquely different solutions to problems may be generated. For instance, combining a solid skills training with a supportive academic training responds to the either/or argument. In rural schools, it makes more political sense to intensify job skill support, and employers will get involved on this basis.

The five stages of the creative problem solving model (Parnes, 1981) include fact finding, problem finding, idea finding, solution finding, and acceptance finding. In the first stage, fact finding, all information in the form of questions, facts or feelings is assembled concerning the "mess," the question or problem being studied. Answers to who, what, when, where, why and how aid the fact finding process. During the second stage, problem finding, alternative definitions are explored in order to produce an exact definition of the true problem. Each child with capabilities and limits is a new, true problem. Knowing both the wants and needs is important here! In idea finding, the third stage, divergent thinking produces brainstorming for solutions to each of the problem definitions produced in the second stage. Ideas are freely accepted and judgment is deferred. In solution finding, ideas are evaluated by a set of generated criteria and one or more of the best ideas are selected. Finally, in acceptance-finding, an action plan is produced for implementation of the solution. The audience in transition is potentially large and diverse (students, parents, school personnel, employers, human services, personnel). Each stage of the model incorporates both divergent and convergent thinking. Think about the ways the transition issues can be addressed.

Intuitive creativity involves unpredictable inspirations which occur spontaneously. Forced creativity occurs when a person or group uses one or more techniques to clarify a problem and generate solutions. Various techniques may be used in order to complete each step of the model which supplement intuitive creativity.

Creativity Techniques

An example of a forced creativity technique is attribute listing. With this technique, the thinker (or group) lists principle characteristics of the problem and then generates ideas for improving or changing each attribute. Each community has rich resources among its members which can be listed.

Morphological synthesis is a second creative technique similar to attribute modifying. One set of attributes or dimension of a problem is placed on an axis in
A matrix form. A second set of attributes is listed on the other axis allowing for all possible interactions between the diverse sets. A two or three dimensional matrix may be used to explore the relationships between the variables. By forcing one set of characteristics and words against the second set, many new ideas may be created. For example, transition curricula solutions may emerge in a matrix modeled with job categories by local employers by skill area development.

A third type of creative thinking technique is called a checklist. A checklist is a series of considerations or questions used to discover all possible aspects of a problem or process. Various checklists are in the literature, such as Osborn's verbal checklist which incorporates the verbs adapt, modify, magnify, minify, substitute, rearrange, reverse and combine to generate new ideas which lead to product or process improvement.

By selecting one of these creative thinking techniques and applying it to the identified problem of transition in rural communities, unique solutions, to an individual's transition problem can be proposed. The questions become, How can educators in the rural setting assist each student in transitioning to an independent, integrated and productive lifestyle in a community environment? or What program components can be provided to accomplish this objective given the unique attributes of a rural community? As individual problems are solved a knowledge base and a placement potential list is developed. One soon discovers that new students may not be too different from old students and the process becomes easier as one goes along.

Let's attempt to apply the creative strategy, of morphological synthesis, to generate unique solutions. Attributes to be listed on one axis may be the old "problems": small economic base, distance between locations, lack of trained staff, synergistic community, less formal politics, and rural work ethic. On the second axis, let's list program strength characteristics, such as self-determination, communication skills, community training sites, acquisition of job skills, etc. By combining these characteristics, new and unique solutions may be generated.

1. Small economic base/community training sites
   Establish 6 sites (two from the school setting) which can be used on a rotational basis.

2. Lack of trained staff/acquisition of job skills
   Use people who may lack formal vocational training but are versed in appropriate job skills as job coaches, such as retirees, volunteers, graduating seniors, etc.

3. Synergistic community/self-determination
   Allow each student with disability to choose three of the rotational job sites to serve as an internship during his sophomore year........... and so on.
Summary

These and many other solutions could be emerge by using creative strategy techniques to solve educational issues. As Davis (1992) states, "Civilization is a history of creative ideas that have been modified, combined, transformed and transferred, building upon each other, into ever new creations. Without creative ideas and creative thinkers, we still would be living in caves and trees, picking berries and clubbing bunny rabbits for breakfast. Civilization will continue to have problems, and creative people will continue to provide solutions" (p. 11).

Transition problems will not be eliminated by the application of creativity models and techniques, but if applied in a conscious way, there is never a need to say to a parent, "I just don't know what your child can do when he/she leaves high school." By using creativity there is always an abundance of choices. Often, that is all that most need and the most that all can expect!
References


