Collaborative Conversations for Change: A SolutionFocused Approach to Family Centered Practice

Donald F. Fausel

Follow this and additional works at: http://digitalcommons.library.tmc.edu/jfs

Recommended Citation
Available at: http://digitalcommons.library.tmc.edu/jfs/vol3/iss1/7
Collaborative Conversations for Change: A Solution-Focused Approach to Family Centered Practice

Donald F. Fausel

The renewed interest in Family Centered Practice, prompted by the funding of Family Preservation and Support Programs, has created a need for training practitioners at a number of different levels and for a variety of roles. This paper will describe a training program for Family Centered Practice. Building on an empowerment model, the author presents an approach for working with families and children that views the tragedies of the past as resources, rather than the major cause of present problems. Collaborative Conversations for Change adapts the solution-focused therapy model to nontherapy roles that are required for a program to be family centered. Although these roles are not therapy, they are nevertheless therapeutic and reinforce clients' strengths. These collaborative conversations, however brief they may be, recognize that the client is the expert on his/her pain and struggles and the practitioner is the expert on assisting her/him plan change. Additionally, illustrations from a cross-cultural perspective demonstrate the utility of collaborative conversation in enhancing cultural competence.

Key Words: collaboration; empowerment; family-centered; resilience; strengths

It is well documented that many families do not receive the help they need to maintain minimum safe home environments for their children, let alone provide optimal conditions for growth and development (Brown, & Weil, 1992; Downs, Costin, & McFadden, 1996; Helton, & Jackson, 1997). Recently, the federal government took steps to address the needs of families who face stressful circumstances and needed support and other services to prevent abuse and neglect from occurring. In 1993, Congress passed the Family Preservation and Support Act, an amendment to Title IV-B of the Social Security Act. This Act authorized funding to states of nearly one billion dollars over a five-year period and prescribed two types of services: family support services, available to all families in the community on a voluntary basis and family preservation services, designed to maintain the family unit and avoid placement in substitute care and to promote family reunification after children have been placed outside the home (Highlights, 1994; Downs, Costin, & McFadden, 1996).
This paper will focus primarily on family support services. Specifically, it will adapt a solution focused approach, Collaborative Conversations for Change (CCC), to a Family-Centered Practice (FCP) model. It will utilize the author’s experience in developing and delivering training modules for personnel of community coalitions, receiving family support funding, that adapt a solution-focus to family-centered practice. After briefly tracing the history of the strengths and empowerment tradition in social work practice, the paper will demonstrate the utility of these concepts in a family-centered model that uses a solution-focused approach. Finally, we will describe how concepts of strengths, empowerment and solutions, that have been defined and discussed, and are used in several training modules, designed to teach family-centered practitioners in programs funded by a State’s Title IV-B money.

Everything Old Is New Again!

Just as we as a nation, have periodically rediscovered poverty, so, from time to time, the profession has rediscovered the empowerment and strengths perspective in micro and macro practice (Mauccio, 1981; Pinderhughes, 1993; Weick, Rapp, Sullivan & Kishardt, 1989; Saleebey, 1992; DuBois & Miley, 1992: Davis, 1994; Gutierrez & Nurius, 1994; Lee, 1994; Simon, 1994). In 1983 Howard Goldstein wrote an article, Starting Where the Client Is, in which he reminded us that client-centeredness, basically a strengths perspective, had been a hallmark of social work practice from the days of Mary Richmond. He traced the dictum of starting where the client is, through the work of Richmond, Gordon Hamilton, who pointed out the significance of the “client’s own story,” through the functional school of social work, Helen Harris Perlman, Max Siporin down to Carel Germain and Alex Gitterman.

What seems apparent from even a cursory review of the history of the social work profession, is that although the profession has often given lip-service to the empowerment and strengths perspective, more often than not, we have not put our money where our mouth is, as it were, and have allied ourselves with other professions and models that base practice on clients’ deficiencies, pathology, and failures (O’Melia, DuBoise & Miley, 1994; Berg & DeJong 1996). The allegiance to the medical model, with its linear, cause and effect view of problems and problem solving, evolved over time for reasons that are historically understandable, but beyond the scope of this article.

Perhaps the social work profession has not only been an “unfaithful angel” in our abandoning the poor as Harry Specht and Mark Courtney (1994) have suggested, but our unfaithfulness may be equally true of our abandoning our heritage of the strengths...
perspective that is so crucial for empowering families and children, as well as other oppressed populations that we are mandated to serve (Weick & Saleebey, 1995).

Family Centered Practice

Family-centered practice was first conceptualized as family centered casework by Frances Scherz (1953). During the 1970s, it took the form of family preservation programs, which proliferated over the next twenty years. These child welfare programs, were primarily designed to prevent out-of-home placement and used a family-centered or family-based approach to service (Whittaker, Kenney, Tracy, & Booth, 1990; Kaplan, & Girard, 1994; Schuerman, Rzepnicki, & Littell, 1994; Cole, E., 1995; Pecora, Fraser, Nelson, McCoskey & Meezan, 1995). Family-centered practice was the subject of renewed interest with the publication of Hartman & Laird’s book, Family-Centered Social Work Practice in 1983.

In the past five years, publications on family-centered practice and its key concepts, empowerment, resiliency, and strengths, have found a new generation of readers (DuBoise, & Miley, 1992; Saleebey, 1992; Berg, 1994; Berry, 1994; Cowger, 1994; Davis, 1994; Lee, 1994; Gutierrez & Nurius, 1994; Anderson, 1995; Cole, 1995; DeJong, & Miller, 1995; Weick, & Saleebey, 1995; Gilgun, 1996: Powell, 1996; Saleebey, 1996).

Another indicator of the renewed interest in family-centered practice was the publication of two separate special issues of Families in Society, completely devoted to family-practice, with the majority of the articles focusing on family-centered practice (March, 1995; November, 1996). The March 1995 special issue was the 75th Anniversary issue of the journal and included articles on both practice and education for family-centered practice. The November 1996 special issue applies family-centered practice concepts and skills to six different family constellations. It is interesting to note the original title of the journal was The Family, and for fifty of its seventy-five years had Social Casework in its title. The change in journal’s titles from family, to social casework and back to families, parallels the profession’s change in focus from family, to individual, to family.

Definition and Characteristics

Hartman & Laird (1983) define family-centered practice descriptively, as a model of practice that locates the family as the center of the unit of attention or field of action for intervention. Based on a systems/ecological framework, this approach to helping grows out of the basic premise that human beings can best be understood and helped in the context of the intimate and powerful human system of which they are a part. Family-centered practice focuses on the needs of the entire family rather on an individual member. The family-
centered practitioner offers an array of assistance, both concrete and therapeutic. Even when a practitioner is working primarily with an individual, he/she must “think family.” Family-centered work is a way of thinking about individuals in their family and community context, not simply a set of techniques for working with a family.

The domain of family-centered practice is not restricted to the nuclear or extended family. It includes the larger environmental systems, which might impact the family. Family-centered work is more effective, when it addresses the effect of the environmental stressors on families. Ignoring the environment’s effect on families limits the change that can be created (Hartman & Laird, 1983).

Though family-centered practice draws from family therapy theory and techniques, it is not family therapy (Morton, & Grigsby, 1993). It is similar to family therapy, in that it employs the ecological/systems framework. It also draws eclectically from family therapy modalities, yet it differs in that its interventions, not just its assessments, extend beyond the individual family and extended family to the neighborhood and the community in which the family lives. Unlike family therapy, whose theory base tends to focus on nuclear and intergenerational families, family-centered practice draws its knowledge and skills from both micro and macro practice and prescribes a continuum of services at different levels of intervention (Brown, & Weil, 1992).

Collaborative Conversations for Change

Collaborative conversations for change is an effort to operationalize the family-centered practice model by applying the concepts and skills of Solution-Focused Brief Therapy, developed by Steve deShazer and his colleagues at The Brief Family Center in Milwaukee (deShazer, 1991; Berg, 1994; DeJong, & Miller, 1995; Berg, & DeJong, 1996), to the different roles, not just the clinical role, expected of family-centered practitioners.

There are a number different modalities that could be used with a family-centered model, e.g., family-centered practice could be used “... in combination with a structural approach, communication theory, social learning theory, reality therapy or solution-focused brief therapy” (Kaplan, & Girard, 1994, p.58). The fact that this paper has chosen to draw more heavily on the solution-focused approach is not to suggest that other approaches might not be equally appropriate. It reflects the author’s belief that assisting families look for those times when they are able to cope with life’s problems or those times when they are already overcoming what they present as a problem, however small a step that might be, is more compatible with the strengths perspective, than some of the other approaches, which tend to be more prescriptive and more practitioner driven than client driven. Focusing on

*Family Preservation Journal* (Volume 3, Issue 1, 1998)
Family Preservation Institute, New Mexico State University
strengths fosters empowerment and works well in keeping the worker off the side-roads of pathology (DeJong, & Miller, 1995).

Another reason for the choice of a solution-focused model is that it is easily applicable to a number of different roles that practitioners delivering family-centered services apply at a number of different levels. Understandably, the solution-focused brief therapy approach to working with families has mainly focused on the role of therapist or clinician, who is often perceived as being confined to her/his comfortable counseling cubicle giving prescriptions for clients to follow. However, so many roles in family-centered practice are performed by practitioners who do not consider themselves therapists but provide services that are therapeutic and crucial to the family-centered approach. While the solution-focused approach has demonstrated its effectiveness in therapy sessions (DeJong, & Berg, 1996), it has not been tested with nonclinical roles. Nevertheless, there is no reason to believe that its philosophy and many of the techniques can be equally useful to

- a family support specialist, who has a casual supportive conversation with a client, while driving him/her to the health clinic
- a case manager, who in making a referral, has an opportunity to plant a seed of strength that the client can reflect on
- a child protective service worker, while investigating charges of neglect, can subtly acknowledge behaviors that can be or have been empowering for the client
- a classroom teacher, who can ask parents the appropriate questions to point-out how impressed they are with the ability of the family to cope with severe stressful situations
- a community worker attending a family picnic that the client-family is attending to casually wonder, how the family manages as well as it does
- a day care worker acknowledging the coping skills of a single parent as she picks up her child from the center
- a trained volunteer, participating on a committee with a client-family member to plan an activity, taking advantage of the opportunity to express her/his admiration for the client’s community involvement, despite family responsibilities

Doherty (1994) distinguished five levels of involvement with families that practitioners might assume. These levels range from a minimal emphasis on families, providing advice, information about resources as well as meeting concrete needs, through levels that are more associated with therapy, up to level five, which is providing family therapy. One practitioner might deliver the service at all five levels, but more often than not, the services are delivered by different practitioners, with different roles and different knowledge and skills. This article intends to apply collaborative conversations to all five levels of interactions with families, not just the clinical levels.
Laird (1996) points out that "... few family-centered constructionist theorists have moved beyond the therapeutic conversation to the larger social realities that surround the individual narratives" (p. 160). I would agree and also suggest that few theorists have moved in the other direction, that is, to apply therapeutic conversations to nontherapy situations that are concerned with the individual narrative, but do not involve short or longer term therapy.

**Collaborative Partner or Expert Practitioner**

The debate between "strength or pathology" is well documented in the literature (Goldstein, 1990; O'Melia, DuBois & Miley, 1994; Saleebey, 1996; Miley, O'Melia & DuBois, in press). It is difficult for practitioners, who are more inclined by training or disposition to look for problems and deficiencies, (pathology), to take a strengths perspective. Even though most therapy approaches include strengths in their assessment, listing strengths is usually an add-on and not the major thrust of their work with clients (Berg, & DeJong, 1996; Saleebey, 1996).

It is also well documented in constructionist literature on empowerment, the strengths perspective, narrative and solution-focused therapy, that practicing from an expert position, with its emphasis on diagnosis, treatment, including prescriptive interventions, is disempowering (Gergen, & Kaye; 1992; Hillman, & Ventura, 1993; Laird, 1995; Berg, & DeJong, 1996; Saleebey; 1996).

Laird in her 1995 article on *Family-Centered Practice in the Postmodern Era*, explores the long-held assumptions about assessment and intervention and the implications for social work practice. She suggests that the very terms diagnosis and treatment are not compatible with family-centered practice, because they tend to project the professional as the powerful expert. She quotes Gergen and Kay (1992), who suggest that "... the very structure of the process furnishes the client a lesson in inferiority... (and) the therapist is positioned as an all-knowing wise—model to which the client can aspire" (p. 171).

Family-centered practice is based on a strengths perspective that views the tragedies of the past as resources, rather than the major cause of present problems. The client is viewed as the expert on his/her pain and struggles and the practitioner as an expert in assisting the client make the changes they are seeking (Cowger, 1994; Saleebey, 1996). The practitioner assumes what Anderson & Goolishian (1992) refer to as the not-knowing approach, a one-down position, which is a difficult switch for those of us who have been trained to be the expert.
To be genuinely collaborative, not only do we need to take a more **partnership position** in relating to client families but we also need to adopt a new language for the helping process. Powell (1996) suggests that family-centered practitioners are moving away from directive, hierarchica, and expert stances toward more collaborative coaching approaches. He proposes a schema that he describes as “... a journey whereby a troubled family, guided by a family-centered worker, can find a more satisfying life” (p. 446). In order to make the interaction with the family and the practitioner more collaborative and more of a conversation or a chat than an interview, he recommends using the following terms to describe the helping process: **Joining**—**Discovery**—**Change**—**Celebration**—**Separation**—**Reflection** (p. 446). He goes on to discuss the six stages of the process in more detail. Briefly, **Joining**, or engaging the family is the first step in relationship building; **Discovery**, is the process of helping the family explore and nurture their strengths; **Change**, rather than treatment, implies a positive connotation, possibilities, a future orientation; **Celebration**, involves acknowledging and appreciating the family’s strengths and potential; **Separation**, recognizes that clients leave, at least for the time being, with a greater ability to cope, rather than termination, which sounds so final and practitioner-centered; finally, **Reflection**, which reveals what we have learned as practitioners and represents an opportunity for research/evaluation.

In the same vein, Furman (1994) and Hoyt (1994), use the term **solution talk**, to indicate the posture that a practitioner takes to lead the conversation in such a way that the emphasis is on solutions. In addition to moving from an interview to a conversation, talk, or chat, a number of authors question the use of labels or names for **troubles** that individuals are experiencing (Brown & Weil, 1992; Berg, 1994; Furman, 1994). Outside of acting as a short-hand for referring to a complex problems with just a few words, labeling is rarely an innocent description of the problem. More often than not, a label has embedded implications of the problem’s origins, prognosis, or treatment. “For example, the term **borderline personality disorder** and **having trouble** can both be used to refer to an adolescent with multiple problems” (Furman, 1994, p. 42). Both terms create very different impressions about the problem.

A collaborative conversation also avoids causal explanations. Insights and explanations often imply blame, which has the effect of destroying collaboration and creativity, causing defensiveness and anger (Furman, 1994). Rather than hypothesizing about the cause of the problems, a collaborative conversation focuses on other themes, such as the family’s vision of the future, the progress they have made, or a solution that might have been helpful.
The Strengths Perspective

Rather than looking at families as “multi-problem” families, who are often defined by their deficits, the family-centered practitioner looks at “multi-needs” or “high risk” families, that have strengths that are important to recognize and a capability for resiliency (Gilgun, 1996; Kaplan, & Gerard, 1994). Rather than looking for failures, the family-centered practitioner looks for exceptions and solutions. They look for those times when the family is doing well—those times when the clients are already coping with the problems they are presenting (Weick, & Saleebey, 1995; Berg, & DeJong, 1996).

The family-centered practitioner believes that families are (1) resilient; (2) not perfect, but that all people and environments possess strengths that can be marshaled, despite horrible things that might have happened to them in the past and despite life’s on-going problems; (3) resourceful; (4) want to improve their circumstances; (5) despite many obstacles, somehow, they do keep going and make it through each day; (6) are the experts on what they need; (7) most multi-need families have a healthy distrust of the social service system, and that distrust must be respected; (8) motivation is fostered by a consistent emphasis on strengths as the client defines these; (9) able to discover strengths, but it requires a process of collaboration between the client and the practitioner (Dunst, Trivette, & Deal, 1994; Kaplan, & Girard, 1994; DeJong, & Miller, 1995; Gilgun, 1996).

Empowerment

Kaplan & Girard (1994) suggest that empowerment is the cornerstone of family-centered practice. Empowerment means helping families gain access to their power, not giving them power. “The empowerment process resides in the person, not the helper” (Lee, 1994, p.13).

The process of empowering families requires first and foremost that the worker believes in the family’s ability to change, that he/she provide families with a new perspective on their lives, by recognizing with them the strengths that they might not know they have and helping them build on those strengths and resources, and finally supporting and strengthening the family’s cultural and ethnic background (Kaplan, & Girard, 1994).

There are some who believe that empowerment is the latest fad and a cliche that social work has latched on to, or suggests that empowerment is too weak a word, while others “… have suggested that liberation more accurately describes processes and objectives that challenge oppression” (Lee, 1994). The key word is oppression. Much of the initial thinking and writing about empowerment, was focused on those populations that were the most oppressed, who had the least power—the poor, women, people of color, and gays and
lesbians—the same populations that are part of the profession’s mission to serve (Gutierrez, 1994).

Cultural Competence

Since empowerment is so connected with assisting the disenfranchised access their power, it is obvious that a workers practicing an empowering approach would need to have a high degree of cultural competence and an understanding and ability to work with diverse populations. Cross’ (1988) definition of cultural competence could apply equally to other diverse groups, e.g., gays and lesbians or persons with disabilities. He defines cultural competence as:

A set of congruent behaviors, attitudes, policies and structures which come together in a system, agency or among professionals and enables that system, agency or those professionals to work effectively in the context of cultural diversity (p.13).

The models that Devore and Schlesinger (1991) developed for ethnic-sensitive social work practice and/or the diversity model of Helton and Jackson (1997) fit particularly well with the strengths and empowerment perspective. Rather than just focusing on the strains and strife, which are indeed a reality, their focus is that ethnicity is a source of cohesion, identity, and strengths. Too often people remember part of their story, usually the bad things that have gone on in their lives and forget how they managed to survive and cope with adversity and how those same skills can be applied to current situations.

Family-centered professionals need to acquire knowledge of (1) the impact of the family’s cultural history, (2) the role that acculturation and assimilation have played, (3) the family’s structure and how they communicate, (4) cultural norms and values, (5) how they can best show respect to a particular family from a particular culture, (6) what are the acceptable help seeking and problem solving behaviors, (7) the informal sources of help in their environment, e.g., Church, spiritual and traditional healers, natural helpers, extended family etc. (Cross, 1995).

Family-Centered Practice Training

The mission, goals, and objectives of family preservation and support services for the State of Arizona’s programs, funded by Title IV-B of the Social Security Act, all have a family-centered focus. In order to be funded, agencies needed to demonstrate that they were part of collaborative effort that included a number of agencies in their community and followed a family-centered practice model. As part of the contract, those collaborators that were...
funded were mandated to require their staff to complete thirty hours of training (Annual Progress and Service Report, 1996). The list of the ten modules to follow, represent thirty hours of training available through Behavioral Health Solutions. This section will focus only on Module 2.

All the modules are intended to be covered in three-hour blocks of time. However, depending on the schedule of the participants, topics may be broken into one-and-a-half hours or may be presented in an all-day, six-hour workshop format. Each module contains its own goals and objectives, handouts and outlines for mini-lectures, activities, vignettes for discussion, and suggested video tapes to accompany the training. The content is contained in a training manual, Family-Centered Practice for Family Support and Preservation Programs: A Solution-Focused Approach (Fausel, 1996).

Before proceeding with the modules, it might be helpful to describe one of the twenty-six programs that was funded. All Sines Point to Success, was a collaboration of sixteen different community agencies including two schools, several social service agencies, the police department, several churches, and the Child Protective Services agency. The title of the program, All Sines Point to Success, refers to one of the major collaborators, Sines School. The program focuses on two schools in a Zip code area, which led the entire state in CPS referrals per thousand the previous year. There are more than 6,200 children living in poverty, and the area has the highest number of low-income, single-parent, and minority households in the city. The area also has eighty-five percent of all the narcotic warrants in the city, seventy-five percent of which involve minors.

In addition to hiring two school-based social workers and two social work assistants, the program provides case management, support and referral services, and works closely with CPS. In addition, the program offers several other major projects that utilize the schools’ facilities, and program staff. The projects are a Twilight Summer Camp and Sine Saturday along with a Phone Friend. All of these programs are community- and family-centered. The objectives of the All Sines program are to increase the safety of children in their family home; parenting competency/ effectiveness; the families’ ability to resolve crisis; the capacity of agencies serving children and families to strengthen families (Directory, 1996).
Training Modules

The following are the ten training modules included in the training:

1. The Family-Centered Practice Model
2. Collaborative Conversations for Change: A Solution Focused Approach to Family-Centered Practice
3. Family-Centered Assessment
4. Collaborative Conversations for Cultural Competency
5. Working with Diverse Family Structures
6. Working with the Parent/Child Relationship
7. Working with The Spousal Relationship
8. Working with the Family with Violent Members
9. Working with the Families with Chemically Dependent Members
10. Empowering Practitioners through Reflective Supervision

The goal of Module 2 is to provide participants with an understanding of the assumptions of Collaborative Conversations for Change and the skills to apply a solution-focused approach to the family-practice model presented in Module 1. Eight objectives are identified, along with a list of key concepts that will be covered. After a brief review of the strengths perspective and empowerment presented in the first module, a mini-lecture and handouts on the guiding principles and basic questions used in a solution approach, along with stem statements, are provided the participants for discussion.

Module 2 focuses on the application of collaborative conversations to the nonclinical roles that a family-centered practitioner performs. It first explains and gives examples of the guiding principles and basic questions of solution-focused interventions; second, participants watch clips of a video illustrating the techniques; third, participants are asked to role-play some of the basic questions or solution-focused statements based on vignettes and stem statements.

There is extensive literature that explains the underlying assumption, philosophy, and techniques of solution-focused brief therapy (de Shazer, 1991; Walter & Peller, 1992; Berg, 1994; Chevalier, 1995; DeJong & Miller, 1995; Berg & DeJong, 1996). For readers not familiar with this approach, a recent article from DeJong and Berg (1996) provides an excellent summary of solution-focused brief therapy. The article describes the philosophy and the basis questions and responses that a solution-focused brief therapist would use. It explains the use of exception questions, scaling questions, the miracle question, coping questions, normalizing questions, and the importance of feedback.

Family Preservation Journal (Volume 3, Issue 1, 1998)
Family Preservation Institute, New Mexico State University
One of the exercises in this module, for practicing nonclinical roles, uses stem statements. Participants are asked to not use the same type of solution-focused response for more than one stem statement. The instructions are

For each of the following statements, answer with a solution-focused response:

1. Family support specialist: You’re driving a single mother to a health clinic meeting. You know she has been having trouble with her teenage daughter; the mother says, “I have no idea how to handle Sara; she’s getting beyond by being able to help her.”

2. Social work assistant: Working in a school setting during recreation, an eight-year-old girl complains, “None of my classmates want to play with me.”

3. Case manager: Meeting with parents who have had a history of being verbally abusive to one another. “I hate it when we put one another down. I know it isn’t good for the kids to hear.”

4. CPS worker: Investigating a call from a day care center that the woman’s two-year-old consistently drops her child off at the center without having had breakfast or being bathed. There also is a concern that the child has been left alone for periods of time. “I don’t know why you social workers keep sticking you nose in my business.”

5. A community worker: Discussing an up-coming meeting with a welfare mother at her kitchen table. “I feel scared of talking in front of all those educated people at those meetings.”

After pairing-off and going around the room with each statement in a round-robin, participants are asked to follow-up with another solution-focused response to how their partner replied to the initial statement. For example, if the response to statement number one were, “Are there times now when you are able to handle her?” Then the partner role playing the mother responds and the person playing the family support specialist answers with another solution-focused response, etc. After everyone has a chance to role play, the facilitator guides a discussion about the strengths they see in each client; how the particular solution-focused question helped elicit strengths and how useful they thought even a brief encounter with a client might be. At the end of the session, participants are given the following suggestion:
Between now and the next time we meet, what I would ask you to consider— is to notice those times when you have an opportunity to try one of the responses you practiced and be prepared to share your experience with the rest of us next week.

Conclusions

Training for practitioners with nonclinical roles in family-centered practice programs is essential to the success of these programs. This paper has been an attempt to examine the major concepts of family-centered practice, i.e., strengths and empowerment and apply some of the skills of solution-focused brief therapy to roles that are not therapy, but nevertheless represent therapeutic conversations with clients. Obviously, there is need for research on the results of this training, which is not feasible at this stage of the funding. However, preliminary feedback from participants is very positive and attests to the usefulness of the material.

References


Donald F. Fausel, DSW, ACSW, BCD, CISW, is Associate Dean at Arizona State University School of Social Work, Tempe, AZ 85287-1802. His office telephone is (602) 965-4450; fax is (602) 965-5984, and e-mail address is ICDFF@ASUVM.INRE.ASU.EDU.
Review of Current Resources