and GPA of these groups was compared with those of a matched control group that was offered neither the services nor the financial incentives. Results showed that those offered tutoring alone were no more likely to persist than the control group, but those offered scholarship incentives were statistically more likely to return for their sophomore year, and those offered both tutoring and aid did better still. A significant increase in GPA was also noted for those offered both tutoring and scholarship incentives. Moreover, these students used the proffered academic support services much more than the control group or the group that was not offered financial assistance. The authors of the study also noted that the positive outcomes were concentrated almost exclusively among female students.

While more investigation is necessary to determine the long-term effects, these studies indicate a strong correlation between financial aid and student performance. In addition to providing more direct aid in the form of scholarships or grants to students, colleges can also contribute to student success by enhancing student opportunities to acquire available aid. Effective practices would include creating strong mechanisms for communication with developmental students, increasing student awareness of financial aid opportunities, and providing accessible assistance with aid application processes.

A significant increase in GPA was also noted for those offered both tutoring and scholarship incentives.

C. Staff Development

According to the literature, the importance of comprehensive training and development opportunities for faculty and staff who work with developmental students cannot be overestimated. Programs with a strong professional development component have been shown to yield better student retention rates and better student performance in developmental courses than those without such an emphasis (Boylan, Bonham, Claxton, and Bliss, 1992). Furthermore, analysis has demonstrated that specific training is one of the leading variables contributing to the success of a variety of components of developmental education, including tutoring, advising, and instruction. Boylan goes so far as to state that, “no matter what component of developmental education was being studied, an emphasis on training and professional development improved its outcomes” (Boylan, 2002, 46).

Effective practices include:

C.1 Administrators support and encourage faculty development in basic skills, and the improvement of teaching and learning is connected to the institutional mission.

C.2 The faculty play a primary role in needs assessment, planning, and implementation of staff development programs and activities in support of basic skills programs.

C.3 Staff development programs are structured and appropriately supported to sustain them as ongoing efforts related to institutional goals for the improvement of teaching and learning.

C.4 Staff development opportunities are flexible, varied, and responsive to developmental needs of individual faculty, diverse student populations, and coordinated programs/services.

C.5 Faculty development is clearly connected to intrinsic and extrinsic faculty reward structures.
C.1 EFFECTIVE PRACTICE  Administrators support and encourage faculty development in basic skills, and the improvement of teaching and learning is connected to the institutional mission.

RESEARCH FINDINGS  The research and analytical literature consistently points to the relationship of high-level administrative support to the success of faculty development programs and services (Brawer, 1990; Eble, 1985; Murray, 2002; Sydow, 2000). Administrative leadership must establish institutional goals related to the improvement of teaching, create a climate that fosters and encourages faculty development, and, most importantly, communicate to faculty the “belief that good teaching is valued by administrators” (Murray, 1999, 48). Faculty development is most effective when it is directly tied to the institutional mission, and the executive administration usually provides the leadership for the development and implementation of institutional mission processes (Murray, 2002; Richardson and Wolverton, 1994; Tierney, Ahern, and Kidwell, 1996). While the literature also strongly advocates for the primacy of faculty involvement in the development and implementation of staff development initiatives, several national surveys (Murray, 2002; Grant and Keim, 2002) report of successful programs, and numerous analytical commentaries (Eble, 1985; Nwagwu, 1998; Vineyard, 1994) clearly substantiate the important role that chief academic and chief executive officers play in successful developmental programs.

Ironically, while the support and leadership of chief academic officers is vitally important, the literature also points to the limitations of that leadership. Murray (1999) and others report that in the absence of a designated staff development coordinator, the chief academic officer is identified as having responsibility for leading staff development in the vast majority of community colleges, a task that clearly requires more time and focus than can be expected of a chief officer. Given the importance of faculty ownership of staff development, a careful balance needs to be established in which the administrative leadership sets the context for faculty development and then “remove[s] the stones from the path of faculty” (Travis, 1995, 85).

C.2 EFFECTIVE PRACTICE  The faculty play a primary role in needs assessment, planning, and implementation of staff development programs and activities in support of basic skills programs.

RESEARCH FINDINGS  In a paper on faculty development, the Academic Senate for California Community Colleges states that “faculty development activities should be designed by faculty who know their needs, who can develop forums geared toward teaching excellence, and who can design sustained and collective efforts” (Academic Senate, 2000, 10). There is ample support for this assertion found over the 40-year history of contemporary literature on staff development theory and practice. Starting with the seminal works of Gaff (1975) and Berquist and Philips (1975), continuing in the faculty-based theories related to the scholarship of teaching and learning, classroom research, and reflective teaching practices (Hutchings and Shulman, 1999; Cross and Angelo, 1993; Brookfield, 2002), and culminating with recent research (Murray, 1999 and 2002; Grubb, 1999; Grant and Keim, 2002), it is absolutely clear that the key to successful faculty development programs is the direct involvement of faculty in every aspect of the planning, implementation, and evaluation of developmental activities.
Beyond the obvious truism that professional staff members are more likely to benefit from developmental activities that they feel they have created to meet their own needs, there are also several issues related to the professional identity of community college faculty that emerge from the literature as significant factors. First, there is an inherent conflict between the role of the faculty member as a professor in higher education and the needs of the highly diverse, heterogeneous student populations found in community colleges, particularly in basic skills courses and programs. The literature on community college faculty consistently points to the adjustment that community college faculty must make when they move from graduate programs in research-oriented universities into teaching institutions that serve students with weak academic skills and preparation (Grubb, 1999; Murray, 2002; Brawer, 1990; Boylan, 2002). While community college hiring practices attempt to emphasize teaching theory and practice, Grubb (1999) and others note that the amount of time and procedural limitations imposed on the hiring practices mean that hiring committees “do not gather valid information about teaching” even from teaching demonstrations which are usually “so short and artificial as to be laughable” (289). Murray (2002) summarizes a common theme found throughout the literature: “If instructional improvement efforts are to succeed, faculty must first accept the unique mission of the community college” (90).

Even faculty who seek preparation for teaching in graduate programs directly related to basic skills instruction (such as university-level reading programs) find that their training programs are frequently not specific to adult learners and, once hired by a community college, find that their status in the institution is sometimes viewed by some colleagues as lower than traditional discipline-based faculty (Kozeracki, 2005; Grubb, 1999).

A second significant factor might be described as the gap between the faculty’s own educational experiences and their students’ educational experiences and needs. There is overwhelming evidence that graduate programs in most colleges and universities provide little or no training in the art of teaching to graduate students (Grubb, 1999; Brawer, 1990; Eble, 1985; Gaff, 1975; Svinicki, 1990). This produces two common results. First, many faculty, without the benefit of specific staff development, teach as they were taught: placing an emphasis on lecture, large group discussion, and what might be described as relatively passive student learning styles. “A second defining aspect of instructor’s lives,” notes Grubb (283), “is isolation.” The literature on instructor isolation is rich with explanations related to the independence assured by academic freedom (Grubb, 1999), the teacher as expert/scholar, and even suggestions that faculty fear that their pedagogical weaknesses, either real or imagined, will be “found out” (Collay, Dunlap, Enloe, and Gagon, 1998). However, Grubb concludes that “the isolation of instructors is created by the lack of any activities that draw them together around teaching” (285).

Finally, the works of Boyer (1990) and Hutchings, Shulman, and Huber (Hutchings, 2000; Hutchings and Shulman, 1999; Huber and Sherwyn, 2002) address the real and perceived links between the organization of knowledge within a discipline and the methodologies commonly used to teach that discipline. This literature suggests that certain disciplinary structures are inherently connected to certain pedagogical frameworks. However, the literature also points to ways faculty can re-conceptualize these frameworks to promote better learning among students who lack the academic background or bring other perspectives to the college learning environment (i.e., diverse learning styles and multicultural life experiences of community college students).

Effective faculty development not only imparts specific skills that can improve the faculty member’s effectiveness in promoting student learning, it also seeks to change the basic identity of the community college instructor, striking a balance between the higher education scholar and the adult education practitioner. There is much discussion in the literature regarding which faculty
participate in staff development. A common theme is summarized by Angelo (1994): “those faculty who do participate [in staff development programs] are often the ones who seem to need them least” (3). However, there is virtually no reliable research to support this assertion except surveys that ask faculty and administrators to share their perceptions of who benefits (Blackburn, Boberg, O’Connel and Pellino, 1980; Maxwell and Kazlauskas, 1992). In fact, some recent research suggests that faculty participation in relevant staff development activities is significantly increasing among all types of faculty (Grant and Keim, 2002).

**C.3 EFFECTIVE PRACTICE**

Staff development programs are structured and appropriately supported to sustain them as ongoing efforts related to institutional goals for the improvement of teaching and learning.

**RESEARCH FINDINGS**

The most common criticism of staff development activities found in the literature is that these programs “appear to be a plethora of activities: it is difficult to detect the desired outcomes or identify how activities are linked to institutional goals” (Beno, 2003, 4). Richardson and Wolverton (1994) found that “professional development opportunities in higher performing institutions were linked in systematic ways to institutional priorities” and that in lower-performing institutions, “faculty had no sense of priorities” (46). Clearly articulated goals linked to systematic sets of programs and activities are a key factor in successful staff development (Travis, 1995; Murray, 1999; Beno, 2003; Grubb, 1999).

Workshops are the most common form of staff development offered by community colleges, yet they are also the most consistently rejected as ineffective by research, expert analysis, and even the faculty and administrators who participate in these activities (Murray, 1999 and 2002; Maxwell and Kazlauskas, 1992; Brawer, 1990; Grubb, 1999). There is little evidence that “one-shot” workshops produce any change in pedagogical practice; and, even when workshops do affect faculty performance, the improvements are short-lived unless they are reinforced and developed with ongoing staff development activities (Clark, Corcoran, and Lewis, 1986; Lenze, 1996; Grubb, 1999). “A well formed faculty development plan recognizes that many diverse activities are needed over a long period of time,” concludes Murray (1999). “It also recognizes that these activities must be united around a common institutional mission—the systematic, demonstrable, and highly regarded improvement of teaching” (48).

Leadership is another central feature of a formalized staff development structure. As noted above, strong support from the chief academic and executive officers is important. However, the key to effective program development and implementation is the designation of specific staff with direct responsibility for staff development and adequate professional time to work on development activities. In national studies, Murray (1999) found that the chief instructional officer was identified as the leader of staff development in 68 percent of community colleges and Grant and Keim (2002) found similar designations in 48 percent of two-year colleges. The amount of time that the designated leaders of staff development reported spending on development activities was generally very limited. In Murray’s study, 83.3 percent of the institutions had staff development leaders who spent less than 50 percent of their time on development activities. Only 2.3 percent of the institutions had a faculty leader assigned full-time. While Grant and Keim argue that commitment to staff development is improving, Murray and others “found a glaring lack of commitment on the part of leadership for faculty development” (58).
One of the most reliable and accessible methods for achieving well-planned and well-executed staff development is the establishment of a teaching and learning center, responsible for overseeing a broad range of staff development activities, providing individual faculty training and consultations, and promoting staff development at the institutional, program, and department levels (Cross, 2001; Singer, 2002; Travis, 1995). Cross notes that these centers are effective in “(1) maintaining high visibility, high credibility, campus-wide conversations focused on forward-looking learning and teaching and (2) providing quality support for all teachers, from beginning instructors to experienced, highly regarded faculty members” (59).

While teaching and learning centers have become a central feature of instructional development activities at many four-year institutions, their growth at two-year colleges has been significantly more limited. As indicated above, the lack of a clearly articulated organizational structure for staff development within the institution is one reason these centers have not flourished at community colleges. However, the limitations and instability of funding is another major factor inhibiting the implementation of these centers and almost all other forms of staff development. The source of funding for staff development appears to have changed very little over the last 30 years. Centra (1975) and Grant and Keim (2002) report that over 70 percent of the funding for staff development came from general funds through state apportionments, with the balance from foundations and governmental grants. But the Academic Senate for California Community Colleges notes that the “lack of funding has constantly plagued professional development programs” and there has been no increase in state staff development funding “since early in the 1990s” (Academic Senate, 2000, 4). In addition, the Academic Senate finds that local senates frequently are not consulted on the allocation or expenditure of those funds. The lack of faculty control and limited institutional resources are significant in light of the findings of Eble and McKeachie’s highly respected study of faculty development in which they concluded, “a firm conclusion from this study is that faculty development programs need to be shaped by the individual college or university and be invested with a sense of faculty ownership” (1985, 210, emphasis added).

RESEARCH FINDINGS

The literature and research on faculty development contains a broad spectrum of theoretical frameworks and specific programmatic activities that can support the improvement of teaching and learning. These range from individualized peer mentoring to structured reflective teaching practices to broad-based efforts to promote the scholarship of teaching and learning across large groups of faculty. While there is extensive literature on the specific processes and benefits for each type of development activity, the literature generally does not specify or provide adequate research for assessing the applicability of each framework to basic skills staff development. However, when viewed in the context of the other effective practices articulated in this review, each framework has the potential for effective development related to basic skills. This concise literature review can only briefly cite a few of the more prominent methodologies.

Peer mentoring is one of the oldest and most varied forms of faculty development. In its simplest form, it involves two faculty working together to improve their teaching. Some peer mentoring involves a “master teacher” format in which an experienced faculty member is teamed with a less experienced instructor. In the “master teacher” format, the development focus is primarily on the
less experienced instructor and is usually related to evaluation or tenure review procedures. Other forms of peer mentoring involve more of an equal exchange between faculty, sometimes combined with a particular developmental methodology such as "microteaching" in which faculty incorporate a specific teaching strategy into their classroom work and use video and peer feedback to assess the strategy's success (Levinson-Rose and Menges, 1981).

**Instructional consultation** involves the use of an outside expert to work with individual instructors or groups of faculty on specific pedagogies. While the literature suggests that use of outside consultants for single-session workshops has a limited impact, if any (Brawer, 1990; Levinson-Rose and Menges, 1981), the use of experts within a specific discipline or across disciplines with clearly defined shared interests can be an effective resource (Maxwell and Kazlauskas, 1992; Murray, 2002). This type of discipline-based consultation supports the faculty's identity as a teacher/scholar and promotes pedagogical solutions that address the structure of the discipline adapted to the learning styles and personal experiences of diverse community college student populations.

**Reflective teaching** is a practice-oriented approach in which faculty engage in self-reflection on specific instructional issues, articulate their personal theories on the issue, and engage with peers in developing alternate approaches to those issues. Reflective teaching can be a highly structured process using facilitators and rigorous protocols or it can be informally implemented at the department or program level (Chung, 2005; Weimer, 1990; Hirshfield, 1984). Faculty inquiry groups or “teaching communities” are another form of reflective teaching that provide faculty in basic skills with a focused process for investigation (see [www.carnegiefoundation.org](http://www.carnegiefoundation.org) for information on SPECC project). Brookfield (2002) describes the reflective process as a “set of lenses” the instructor uses to understand his or her teaching. These include the *autobiographical lens* of the faculty member’s experiences as a student, the *learner’s eyes* using students’ perceptions of the faculty member’s teaching, the *colleagues’ experience* in which faculty reframe and broaden their *theory and practice through consultation with peers*, and the *theoretical framework* in which individual faculty members compare their personal theories and practices with literature on research and theory.

**The Scholarship of Teaching and Learning** and **Classroom Assessment Techniques** are two distinct but strongly related movements in higher education faculty development. The Scholarship of Teaching and Learning (SoTL) began with the work of Ernest Boyer (1990) as an effort to reframe the organizational culture of four-year institutions to recognize faculty accomplishments in teaching and learning theory and practice as having the same status and professional validity as accomplishments in the more traditional discipline-based research and theory. As refined by Shulman, Huber, and Hutchings (Hutchings, 2000; Hutchings and Shulman, 1999; Huber and Sherwyn, 2002), SoTL has become an effective model for promoting individual faculty members’ efforts in using their classroom as a laboratory for self-improvement as well as receiving recognition for their accomplishments by contributing to the literature on effective teaching and learning practices (Paulson and Feldman, 2006).

The work of Patricia Cross and Thomas Angelo (Angelo, 1991 and 1994; Cross, 1993 and 1998) provides faculty with specific techniques for conducting, evaluating, and responding to research in the classroom. The Classroom Assessment Techniques (CAT) developed by Cross and Angelo have been widely used in both two- and four-year institutions (Cross and Steadman, 1996; Belcher and Glyer-Culver, 1998). Teaching portfolios are another technique used in conjunction with classroom-based research in which faculty develop documentation of their work which can be used for evaluation, promotion, or other professional development (Travis, 1995). While SoTL and CAT can be used by all community college faculty, these methodologies provide a particularly useful context for addressing basic skills issues within non-basic skills, discipline-based classrooms, since individual faculty can use these techniques with limited support from staff development specialists.
In addition to training in effective instructional pedagogy, staff development programs can assist faculty in developing enhanced skills in other areas that impact the quality of instruction. Boylan (2002) advises that “quality of instruction” refers not only to effective delivery methods but also to classroom organization, management, and environment. Faculty who may have excellent presentation skills or be very effective in engendering student engagement might still benefit from opportunities to learn effective classroom management techniques or ways to improve their organizational abilities to ensure that students receive the highest quality of overall instruction.

Other forms of staff development include Great Teachers Seminars (GTS) and Academic Alliances. GTS involve an extended set of highly structured, process-oriented workshops held over several days. The agenda for the workshops is developed as part of the process to address the specific needs of the participants (Travis, 1995; Gottshall, 1993). Academic Alliances are usually structured like GTS but involve participants from different levels of education (K-12, community colleges, and four-year institutions) in a specific discipline (or closely related disciplines) within a geographic region. Grants for instructional improvement also play a major role in faculty development, although the results of these activities are not well documented in the literature except for individual journal articles on specific grant activities. Frequently, grant sponsored curriculum development has had a significant impact on the pedagogy used to implement that curriculum (Schmidt, Houang, and Cohen, 2002; Cohen and Hill, 2002). Funding for travel to professional conferences is another very common form of staff development that occurs at some level in most community colleges (Grant & Keim, 2002).

Changes in faculty pedagogy that come as a result of projects to revise and refocus curriculum and support services are a form of staff development that receive little attention in the higher education research literature. However, several studies of K-12 initiatives demonstrate that the collegial interchanges and clear focus on student outcomes related to curriculum reform efforts promote faculty understanding of how students learn content and result in positive changes in pedagogy (Schmidt, Houang, and Cogan, 2002). This type of staff development may be more pervasive in community colleges than the literature suggests. Recent efforts on the part of major external funding organizations (e.g., basic skills initiatives funded and supported by the Carnegie, Hewlett, and MDRC Foundations) and locally funded initiatives (e.g., Chaffey College’s Basic Skills Transformation Project) actively involve faculty in the curricular reforms that focus on more effective teaching and support services.

**C.5 EFFECTIVE PRACTICE** Faculty development is clearly connected to intrinsic and extrinsic faculty reward structures.

**RESEARCH FINDINGS** As noted above, the most effective staff development evolves from faculty members’ direct participation in setting the goals, developing the activities, and using the results of those activities to improve instruction. Bland and Schmitz note that “whether faculty activities are considered productive or not depends on whether they relate to the faculty member’s personal and professional goals and to the institution’s mission” (1990, 45). Therefore, it is not surprising that the research suggests that the most important rewards faculty experience from staff development are intrinsic as opposed to extrinsic rewards.

As early as the 1970s, Gaff, Centra, and Berquist and Philips were contending that “faculty development activities…enable faculty members to find intrinsic satisfaction in their
teaching” (Centra, 1978, 15). The Grant and Keim 2002 study found that “intrinsic incentives of professionalism and commitment are incentives for most faculty,” although they did point to certain extrinsic factors such as salary advancement and release time as important for broad-based participation. Murray and others (Nwagwu, 1998; Harnish and Creamer, 1986; Ferren, 1996) assert that “recognition needs to include praise and support for experimentation even when it fails…faculty need to know…that taking risks is not damaging to their careers” (Murray, 1999, 95, emphasis added).

Support from colleagues is another intrinsic reward that is an important aspect of professional development. Many of the development activities described above involve colleague-to-colleague interchanges. The perception among faculty that pedagogy is inherently connected to disciplinary structures and values (Hutchings, 2000; Hutchings and Shulman, 1999; Huber and Sherwyn, 2002) means that pedagogical advice and praise for instructional innovation from colleagues in the same discipline carries particular value (Maxwell and Kazlauskas, 1992). Braxton (2006) and Brothern and Wambach (2004) describe the characteristics of a “culture of teaching” in which colleagues across disciplines broaden their sense of scholarship to include teaching and learning and thus develop an alternate “community of scholars” (Kozeracki 2005, 45).

A Note on Evaluating Faculty Development Initiatives

Evaluating faculty development programs and activities is a vexing problem for researchers, administrators, and faculty involved in development activities. “There is abundant information concerning the structure and organization of professional development,” concludes Sydow in his analysis of the long-term fiscal and human resources investment necessary for effective staff development, “but no data to measure program effectiveness” (383). Actually, there are significant data on the perceptions that participants have about various types of staff development activities. It is common practice to conduct surveys that assess the number of participants, their satisfaction with the activity, and their perceptions of the relevance of the development activity (Murray, 2002; Grant and Keim, 2002). However, the connection between faculty development and student learning is much more elusive.

Using research terms, the problem is the “dependent variable,” or what is used as the measure of success. Maxwell and Kazlauskas (1992) define three measures:

1. The assessment of the activity itself (re: participation and satisfaction)
2. Changes in teaching behavior
3. Improvements in student learning

Beno (2002) adds organizational development and the return on investment as additional factors. However, measuring changes in teaching behavior poses significant challenges in the culture of community colleges. Classroom observations are generally restricted to faculty evaluation procedures and generally must adhere to contractual and other policy restrictions, unless the observations are part of the staff development activity itself (Grubb, 1999). The connection of a specific staff development activity to a data-based assessment of improvements in student learning is even more difficult to accomplish. In a report on faculty development in higher education, the California Postsecondary Education Commission (1998) concluded that “even if it is impossible to prove certain faculty activities result in particular student learning, the development of clear purposes or objectives…can help ensure that individual and institutional resources are directed toward the highest priority needs and are effective in meeting those needs” (22).