Articles Read
1. “Program Components and Their Relationship to Student Performance”
   By H. Boylan, L. Bliss, & B. Bonham
2. “Research in Developmental Education: What Should We Do and How Can We Do It?”
   Summarized by H. Boylan, S. Eaton
   By D. Caverly & L. Russell
4. “Exploring Alternatives to Remediation”
   By H. Boylan
5. “What Works in Remediation: Lessons from 30 years of research”
   By H. Boylan & D. Patrick Saxon

The most successful components of developmental programs
The following components were identified from 30 years of research, including a study from 1988-94 funded by the Exxon Education Foundation and involving 3,000 colleges and universities and a random sample of over 6,000 students. Boylan repeatedly stressed that much of the research in Basic Skills has already provided us with successful methods but that many of these methods are not consistently being applied. Boylan also stated that many existing programs can be utilized to benefit developmental education. The following components were linked to varying degrees with increased retention, higher GPAs, and/or higher pass rates.

Needed at CCSF (either in terms of implementation or expansion)

1. Coordination and communication among developmental services and programs. The articles repeatedly stressed that regular meetings, shared goals, etc. among developmental services and programs are the most important element in the success of centralized Basic Skills programs. Coordination and communication are critical whether the program is centralized or decentralized. This sort of coordination is key to the effectiveness of all of the following suggestions.

2. Special training for instructors who teach the developmental courses.
   - The articles stated that developmental classes contain a higher percentage of visual and hands-on learners and that instructors need to be trained to effectively address these learning styles.
   - Developmental courses also contain a higher percentage of multicultural students; instructors should be trained to build upon these students’ existing literacies, and multiculturalism should be looked at more in relation to developmental education. (CCSF currently offers the
Multicultural Infusion Project, which addresses diversity and multicultural teaching methods across the curriculum.

- Critical thinking was found to be a common deficiency for developmental students, and addressing this early in their studies has been linked to success in later courses.
- The articles recommended that instructors receive graduate credit or other incentives for ongoing professional development.

3. **A counseling component with remedial courses.** (At CCSF present in some special programs. Koret, Puente, EOPS, AASP, Math Bridge, WSP, Latino Network. Several of these programs also have a mentoring component.) This could definitely be expanded for all Basic Skills students, with additional emphasis on assessing noncognitive characteristics (such as motivation and attitude), which have been linked to as much as 25% of student success.

4. **Learning Communities and paired classes.** Paired courses can be used to replace remediation in some cases by pairing a remedial course with a non-remedial course, offering students support in the area that they most need. (CCSF currently has some Learning Communities and could expand these and add paired classes.)

5. **Supplemental instruction.** Students who have previously taken the course act as small-group leaders. This approach targets courses, not students, as high-risk when determining which courses need supplemental instruction. Supplemental instruction may be used in some cases in place of entire developmental courses.

6. **Offering various types of credit for developmental courses (including giving students partial credit for what they have accomplished).**

Currently in Place at CCSF

1. Presence of mandatory assessment and placement of students
2. Trained tutors
3. Freshman seminars: year-long courses that introduce incoming students to the college environment and skills necessary for college success.

Areas that Need Further Research (research should be done by practitioners in the field and should be used to modify and design programs)
Consistency of academic standards between developmental and college-level courses. The articles mentioned that the majority of institutions do not assess the relationship between skills taught in developmental and college-level courses.

Suggestion for Further Reading

What is the goal?
To meet students where they are, when they come to us.
Provide tools needed for academic success
Keep in mind that for many the Community college will be their first meaningful academic experience.

It was noted that:
Students participating in centralized developmental programs were more likely to be more successful than students participating in decentralized programs. Students at 2-year institutions, participating in centralized developmental had higher rates of retention than those participating in decentralized programs. There was no difference in either first term GPA or cumulative GPA for those students participating in centralized or decentralized programs at 2-year institutions. (CCSF) for the most part centralized
Boylan, Bonham, & Bliss (1992)

In support of both mandatory assessment and placement testing. Passing developmental courses has been correlated with academic success higher GPA and increased retention.

It was found that a tutor training component is very important for successful tutorial programs, and students participating in tutorial programs that have a training component are more successful and have higher GPA’s