

Snapshot #23

**Improving Student Performance
Through Mastery Learning**

**College Place Middle School
Lynnwood, Washington**

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RESEARCH FINDINGS

Staff of College Place Middle School are enthusiastic about their mastery learning program. From the beginning, their planning for mastery learning has been guided by research on effective schooling. Using the Northwest Regional Educational Laboratory publication, **EFFECTIVE SCHOOLING PRACTICES: A RESEARCH SYNTHESIS**, College Place staff have focused on the following research findings:

At the CLASSROOM level:

1.2.2 CLASSROOM LEARNING TIME IS USED EFFICIENTLY

1.3.4 STUDENTS ROUTINELY RECEIVE FEEDBACK AND REINFORCEMENT REGARDING THEIR LEARNING PROGRESS

1.5.1 LEARNING PROGRESS IS MONITORED CLOSELY

1.6.1 STUDENTS AT RISK OF SCHOOL FAILURE ARE GIVEN THE EXTRA TIME AND HELP THEY NEED TO SUCCEED

At the SCHOOL level:

2.1.1 EVERYONE EMPHASIZES THE IMPORTANCE OF LEARNING

2.1.2 THE CURRICULUM IS BASED ON CLEAR GOALS AND OBJECTIVES

2.2.2 SCHOOL TIME IS USED FOR LEARNING

2.3.2 ADMINISTRATORS AND TEACHERS CONTINUALLY STRIVE

TO IMPROVE THE INSTRUCTIONAL PROGRAM

2.3.3 STAFF ENGAGE IN ONGOING PROFESSIONAL DEVELOPMENT AND COLLEGIAL LEARNING ACTIVITIES

2.6.1 STUDENTS AT RISK OF SCHOOL FAILURE ARE PROVIDED PROGRAMS TO HELP THEM SUCCEED

SITUATION

Directly west of beautiful Puget Sound and 15 miles north of Seattle is the Edmonds School District. Its 36 square miles of suburban area are home to a population of about 125,000 people. One of four junior high/middle schools in the district is College Place Middle School in Lynnwood, Washington, with an enrollment of 688 seventh and eighth grade students.

About 85 percent of the students are middle class, white/non-Hispanic, although there is a growing ethnic minority population that reflects current nationwide changes in demographics. Parents of College Place's students are among the thousands who commute daily to jobs in Seattle and work with such employers as Boeing and GTE, and the school district itself employs a staff of about 2,500.

The school sends 14 students to a central class for English as a Second Language, and 17 percent of the students receive free or reduced-priced lunches.

CONTEXT

Since 1984, College Place Middle School staff members have engaged in and benefitted from a great deal of professional development activity. In 1986 they began long-term participation in NWREL's ONWARD TO EXCELLENCE (OTE) school improvement process. Beginning with an assessment of their school's current situation and needs, as called for by the OTE process, College Place staff developed a plan of action based on effective schooling research.

Another key event occurred in 1987, when College Place principal, Dr. Ann Foley, attended an Outcomes-Driven Developmental Model program designed by the Johnson City Central School District in New York. Dr. Foley became convinced that educators can "overcome the factors they believe are controlling them." Accordingly, College Place improvement activities have come to be driven by a philosophy grounded in three pivotal concepts from the effective schooling research base:

1. Almost all students can learn at a high level.
2. Success in learning promotes further success.
3. Educators control the conditions for success in learning.

In 1989, College Place staff applied for and were awarded a 21st Century

School grant through a program operated by the office of the Washington Superintendent of Public Instruction. With this grant, they were able to set aside \$50,000 for staff training to work toward their goals, including implementation of creative timeuse plans.

These plans, together with the provision of some additional training, have provided the basis for changes within the school.

PRACTICE: IMPLEMENTING

MASTERY LEARNING

IN A MIDDLE SCHOOL SETTING

Mastery learning provides the theoretical base for College Place's instructional approach. The cornerstone of this effort is the staff's focus on productive ways of using time. "We took our ONWARD TO EXCELLENCE training greatly to heart," says Dr. Foley. "It has driven our planning since 1986, when we first became involved with the program." In their initial work with NWREL trainers, College Place staff developed an action plan in which their goals included a high degree of mastery of subject matter and reteaching when necessary for mastery. To attain their goals, they began the process of restructuring their use of time.

In the school's mastery learning program, initial classroom instruction is conducted with the whole class and is teacher paced. Then, depending on learning needs, students engage in different activities during the daily 40-minute "M-E" (Mastery and Enrichment) period. During the M-E period, students may work toward mastery of a topic or, if they have achieved mastery of the current unit's learning objectives, they pursue enrichment activities within the topical area of the unit.

Students working toward mastery engage in a high degree of interactive, one-to-one learning with teachers and teaching assistants. In keeping with the findings from research on mastery learning, the instructional approach provided during the M-E period differs from the initial classroom instruction (e.g., different illustrative examples, different study questions), and learning is assessed using a different form of the test than was originally administered.

Students engaging in enrichment activities typically work at the "application" level of Bloom's taxonomy. They may study sign language, participate in a Great Books program, do special projects in technology, conduct research in the library, or carry out community-based projects. Each day of the week has a special academic focus, so staff members take turns helping students in their particular areas of expertise and providing enrichment work.

Each College Place teacher has one day per week when he/she does not have a class during the M-E period. On these days, teachers call in those students about whom they are particularly concerned and work with them to meet their learning needs. Since more than one teacher might wish to work with the same

student at the same time, College Place faculty members must negotiate schedules with one another. As time permits, teachers also spend these "open" M-E periods working with students who have sought them out for help.

In addition, College Place provides a Study Club which meets after school three days a week for 50 minutes, offering students help from specific teachers and then providing bus transportation home. "Peer-teacher tutoring," that is, students helping other students, is another means by which students needing additional help can receive it.

There are also provisions for extended quarters and/or an extended year at College Place. At the end of the 1989-90 school year, for example, four teachers provided blocks of time during two weeks following the normal school closure date for 70 students to complete work--an opportunity which resulted in 170 grade changes.

In 1990-91, this structure was altered, with teachers meeting with students who had not completed their assigned coursework during four Saturdays in the spring. And during the 1991-92 year, two Saturdays at the end of each school quarter are set aside so that students can get the help they need to catch up on their work. Though initially required, participation in these extended learning activities is now voluntary; even so, the rate of student participation is high, and parents generally support and encourage their children's involvement.

In addition to the positive grade changes resulting from these extensions of learning time, incompletes have decreased considerably. For example, the 17 percent incidence of incompletes noted at the end of the first term of the 1990-91 school year had decreased to 10 percent by the end of the year.

Dr. Foley contends that the beneficial effects of M-E and other periods of extended learning time are largely due to the increase in one-to-one attention received by students. In addition to increased exposure to learning content, students also get a strong message that teachers care about them, believe they have the ability to do the work, and will hold them accountable for completing it. "Since we communicate to our students that they aren't finished until they have earned a B," says Dr. Foley, "they know that we hold high expectations for them--and that slacking off doesn't pay."

Nearly all College Place students are expected to do the same work--even the mainstreamed special education students, although some of these pursue an adapted version of the mastery curriculum. While some students complain that it has become more difficult to earn an A, they understand what is needed to do so: completing work that applies or extends the learning gained in the mastery units.

As Dr. Foley puts it, "We are not confusing higher expectations with making the work harder; rather, we are implementing practices, such as our use of time, in ways that are carefully designed to make those expectations attainable."

Looking at the changes in students' grades over time-- and keeping in mind

that standards for earning an A were raised during this time period--dramatic improvements are obvious:

	1984-88 Averages (%)	1991-92 Averages (%)
A & B	57-60	79-80
C	22-25	2-5
D & E	18	2
Incomplete		approx. 15
Special education students using adapted program		1

Mastery learning implemented in 1989

According to Nanna Brantigan, one of the teachers and leaders of the staff efforts in mastery learning, "We are breaking out of the box of traditional time use: we are changing school schedules, doing Mastery and Enrichment (M-E) and Study Club.

"Time use in the classroom has changed," she says. "We leave a day at the end of a unit as a flex-day for students to catch up or go ahead. It's difficult for us to move from the driven curriculum and covering units to the luxury of mastering materials. Teachers need to be willing to put time and effort into helping all students master the materials.

"We are working at blending our IEP students into the mainstream. The new view of time use eliminates the need to be coercive, erases the stigma of not being able to finish within a certain time frame, and dispenses with the penalties for slow learning.

"Another significant change that mastery learning has brought me is the way I now look at the curriculum. I feel the need to analyze what is being taught and why, to ask myself such questions as: 'What meaning does this curriculum have in terms of our desired outcomes?'

"Mastery Learning is a process, not a journey to a certain end," says Ms. Brantigan in conclusion. "You never arrive, you just keep on with the journey--it's positive, it's growth, and it's the norm. Through this process both the students and teachers are successful."

Special education teacher, Sheila Davis, augments this view, adding, "All kids can learn, given the right circumstances and enough time. Mastery learning seems to be ideal for integrating IEP students into the mainstream. Although I admit the reality of certain problems, we are working them out. Mastery learning forces teachers to pare down lessons and look at what is vital, and special education students are more likely to be successful when lessons are pared down and the students are given more time and second chances."

"Mastery Learning gives kids hope--especially those who struggle to learn," according to Judy Gaddy, a counselor at College Place. "The kids don't just give up, so what they have learned is not lost, but can be built upon. All of the students see themselves as more powerful and responsible for their own

learning.

"More kids successfully complete summer school; we've learned that retention doesn't work. A high percentage complete their work if given additional time and freedom from coercion. The teacher gives a description of what the end product should be, and the outcome depends on the student's work; they do the work and they get the grade. Under this system, the kids can evaluate and set priorities. The kids no longer automatically write off a class as hopeless. Instead, they are able to evaluate how 'incomplete' their 'incomplete' is and can make judgments. A second opportunity often provides the help needed to succeed."

For more information about College Place Middle School's program, contact Dr. Ann Foley, Principal, College Place Middle School, 7501 208th SW, Lynnwood, Washington 98036, (206) 670-7451.

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