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ABSTRACT

In 1987, a study was conducted to develop a profile of high school students who were currently enrolled in advanced placement, accelerated, or honors coursework in Utah, based on data reported by students who registered to take the American College Testing (ACT) Program exam. ACT responses obtained from 13,605 of the 20,930 students who graduated from Utah high schools in 1987 indicated that 59.7% of the responding students were enrolled in an advanced program. The ACT scores of these students were considerably above those of students who were not enrolled in advanced coursework (20.9 versus 15.6). The advanced students also had higher grade point averages, expressed more satisfaction with their educational experience, and were more apt to choose an out-of-state college than other college-bound students taking the ACT. For several years, Snow College has responded to the need for high school cooperation by providing concurrent enrollment opportunities for academically able high school students. In response to the difficulties experienced by its small, rural feeder high schools in developing advanced programs, the college offers appropriate courses on the high school campus as part of the daytime curriculum. Course registration results in the establishment of a college transcript, and course completion earns college credit applicable toward degree programs. Snow College's newly revised guidelines for its College Level Program are included in the report, explaining the nature and rationale for the program, general regulations, and criteria for the selection of students. (AYC)

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CONCURRENT ENROLLMENT IN COLLEGE AND HIGH SCHOOL

by

Roger G. Baker

Research Report Prepared for Third International Conference

"Achieving Access and Excellence - A Global Imperative"

The First Year Experience

Snow College

Ephraim, Utah 1988

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CONCURRENT ENROLLMENT  
IN COLLEGE AND HIGH SCHOOL

Roger G. Baker

**Abstract:** A conservative estimate in Utah is that 24.5% of the high school graduates in 1987 took advanced course work other than courses leading to the Advanced Placement examination while in high school. This is at a time when the Utah Legislature has encouraged high schools and colleges to provide a system of concurrent enrollment whereby students in high school may enroll in college level courses. Institutions of higher education have been cautious about pursuing this idea partly because of a lack of research evaluating the concept.

Even though cautious, a joint committee from public and higher education has submitted a report generally favorable to the concept but calling for a thorough evaluation.

This report is not a summary of research on concurrent enrollment; no research question was proposed. It is a description of the students who are currently enrolled in advanced courses in high school in Utah with some comparisons to available national data. The courses may or may not provide college credit. The report is also a description of a program developed at Snow College which allows enrollment of capable high school students in college level courses at their high school.

These Utah students are very capable compared to students not in advanced courses and many are planning higher education out of Utah. The review found that 72% of these students enrolled in advanced courses expressed approval of their high school program. This compares with an approval rating of 58% from the students in standard programs.

Research Report  
Prepared for Third International Conference  
(Achieving Access and Excellence - A Global Imperative)  
THE FIRST YEAR EXPERIENCE

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A report of the Utah State Board of Education - State Board of Regents Enrollment Committee was submitted to the Liaison Committee of the two boards on December 9, 1987. Among the thirteen recommendations of the report is the suggestion that the two governing boards appoint "a standing committee composed of an equal number of faculty and administrators from both the public schools and institutions of high education to coordinate concurrent enrollment activities." Included in this committee's assignment would be "research and evaluation of concurrent enrollment practices in Utah." The report states that "research studies should be designed to assess student selection procedures, student success and rate of progress, quality of instruction and academic preparation of instructors, and relative costs and benefits of concurrent enrollment programs."

Snow College has had an interest in concurrent enrollment for the past 8 years and this report is a beginning response to the research suggestion of the Concurrent Enrollment Committee. Even though a Statewide Coordinating Committee has not yet been appointed, Snow College hopes that the data in this report will be a

springboard for further investigation by the new committee when it is formed.

#### DATA BASE

The data for this report is student reported from 1987 Utah High school graduates who registered to take the American College Test (ACT). The data are compared to a 10% national sample of students taking the same assessment. Caution is necessary in using these data for two reasons. First, it is self reported data and even though research suggests that it is very reliable, the perspective should be maintained that this is what students say not what administrators or faculty report. The second caution is that not all students who take college level courses while in high school also take the ACT Assessment. A telephone survey of 10 school counselors at large Utah high schools indicated, however, that the student enrolled in a college level course and not taking the ACT Assessment is rare since concurrently enrolled students are almost all, by definition, college bound.

In 1987 there were 20,930 high school graduates in Utah. Of these 13,605 completed the ACT Assessment. This means that 65% of the Utah high School graduates in 1987 had the opportunity of indicating whether or not they were enrolled in college level courses while in high school.

Utah ACT data show that 8124 students of the 13,605 tested (59.7%) answered yes to the following question:

While in high school, I was enrolled in advanced placement, accelerated, or honors courses in the following areas.

94. English
95. Mathematics
96. Social Studies
97. Natural Sciences
98. Foreign Language

It cannot be assumed that all 8124 students who answered yes to one of the above questions received college credit for their experience. However, the data do indicate that 59.7% of the students taking the ACT Assessment regarded themselves as being enrolled in an advanced program while in high school. It also means that at least 38.8% of the 1987 graduating class indicated that they were enrolled in advanced placement, accelerated, or honors courses. Some of these courses would undoubtedly carry college credit and all would at a minimum help students be better prepared for a college curriculum.

Data from the ACT national sample show that 47.9% of those taking the assessment indicated that they were enrolled in advanced placement, accelerated, or honors courses. The fact that Utah is 11.8 % higher than the national norm could indicate that the encouragement by the

legislature to provide college opportunities at the high school level is having an effect.

Further context for these data can be found in an analysis of the number of 1987 Utah high school graduates who were enrolled in an Advanced Placement Program and took the Advanced Placement Examination offered by The College Board. Advanced Placement Data for this period indicate that 7970 examinations were given to 5390 candidates for Advanced Placement credit. Of these 5390 candidates who took examinations, 2995 were seniors. That is 55.6% seniors. The pass rate for examinations, not students, is 67.4%. This means that 5372 examinations given in Utah received college credit. This represents 5372 enrollments in Advanced Placement Courses and not 5372 individual students.

If the assumption is made (even though obviously not correct) that all seniors taking the Advanced Placement Examination also took the ACT Assessment during this period and indicated yes to the question asking about advanced placement, accelerated, or honors courses, then 5129 graduates remain that took advanced work in high school other than Advanced Placement. This would be 24.5% of the graduating class.

If nearly one fourth of the 1987 high school graduation class was enrolled in advanced courses, it may be that the Utah Legislature, which seems to be encouraging concurrent

enrollment as a method of saving money, is only encouraging something that is already happening. It may also be the case that the \$168,560 additional funding requested in the report of the Concurrent Enrollment Committee could be a gross underestimate since it projects 2100 students earning three hours of college credit per year and increases the total funding for concurrent enrollment to \$368,560. Another view could be that 8124 Utah high school graduates are getting advanced work at the current funding level and that additional is not needed.

#### ACT SCORES

The preparation of high school students taking advanced courses is striking in contrast to those students taking the ACT Assessment and not taking advanced courses. It should be noted that this fact can lead to at least two conclusions. One is that advanced courses attract capable students and the other is that advanced courses make advanced students.

The average ACT Composite for 1987 Utah high school graduates was 18.9. Table 1 shows the average score for students enrolled in advanced courses at 20.9 which would be at the 62nd percentile of Utah's high school graduates. This is considerably above the 15.6 (30th percentile) for students not taking advanced work. It should be noted that both groups consider themselves college bound. The ACT Assessment is for college bound students.

The national data show a similar difference between the scores of students taking advanced courses and those in the standard curriculum. Table 2 is a summary of the national test score data.

Table 1  
Comparison of Utah ACT Scores

	Utah HS Graduates n=13605		Enrolled in Advanced Courses n=8124		Not Enrolled in Advanced Courses n=5031	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
English	18.6	5.5	20.4	4.9	15.7	4.9
Math	16.8	7.7	19.3	7.2	12.8	6.6
Social Studies	17.8	7.1	20.1	6.8	14.3	6.2
Natural Science	21.9	6.1	23.6	5.8	19.1	5.6
COMPOSITE	18.9	5.7	20.9	5.3	15.6	4.8

Table 2  
Comparison of National ACT Scores

	Enrolled in Advanced Courses		Not Enrolled in Advanced Courses	
	Mean	S.D.	Mean	S.D.
English	20.1	5.0	16.9	5.1
Math	19.9	7.5	14.7	7.3
Social Studies	19.7	7.0	15.5	6.8
Natural Science	23.2	6.2	19.6	6.0
COMPOSITE	20.9	5.6	16.8	5.4

#### HIGH SCHOOL GRADES

Students taking the ACT Assessment are asked to report high school grades in each of the four test areas. Research has indicated that there is no significant difference between the self reported grades and actual grades.

The average self reported Utah high school grade calculated by averaging the four grades is 3.12. The average for students enrolled in advanced courses was 3.32 and the average for students not enrolled in the advanced courses was 2.79.

The high school grade difference at the national was similar to the Utah difference. The national average for students enrolled in advanced courses was 3.10 and the

average for students not enrolled in the advanced courses was 2.68. This is a difference of 0.53 in Utah and 0.42 nationally. In each case the difference between students in advanced courses and those not was about a half grade.

### STUDENT SATISFACTION WITH EDUCATION

Perhaps some of the most telling data comparing students taking an advanced curriculum with those not, is the level of satisfaction each group expressed with their high school program.

Table 3  
Expressed Adequacy of Education  
Utah Students

	Advanced Studies n=7979			Standard Curriculum n=4945		
	freq	pc	ACT Comp	freq	pc	ACT Comp
Excellent	1996	25%	22.6	570	12%	16.8
Good	3734	47%	20.9	2306	47%	16.1
Average	1257	16%	18.9	1470	30%	14.8
Below Average	249	3%	19.7	272	6%	14.4
Very Inadequate	743	9%	20.9	327	7%	15.0

Table 4  
Expressed Adequacy of Education  
National Sample

	Advanced Studies		Standard Curriculum	
	pc	ACT Comp	pc	ACT Comp
Excellent	23%	23.1	12%	18.7
Good	47%	20.9	45%	17.4
Average	19%	18.5	31%	15.3
Below Average	3%	18.9	5%	15.1
Very Inadequate	8%	20.7	7%	16.3

Although it is encouraging to see the level of satisfaction of those Utah students choosing the advanced curriculum, it should be discouraging to educators that about the same percentage of each group (12% advanced and 13% standard) rated the adequacy of their high school education as below average or very inadequate. The discouragement is compounded when it is recognized that the dissatisfied students who choose an advanced curriculum scored quite well on the ACT Assessment.

The following data is more specific with respect to satisfaction with various aspects of the local high school. The data is reported as a percent of each group with advanced being those students who chose advanced placement, accelerated, or honors courses and standard being those students not selecting advanced courses.

Table 5  
Student Satisfaction With Various  
Aspects of Utah High Schools

		satisfied	neutral	dissatisfied	no experience
Classroom Instruction	Advanced	62%	25%	11%	0%
	Standard	55%	33%	11%	1%
No. & Variety of Course Offerings	Advanced	61%	19%	19%	1%
	Standard	55%	24%	20%	1%
Grading Practices & Policies	Advanced	51%	31%	18%	1%
	Standard	42%	35%	21%	1%
No. & Kinds of Tests Given	Advanced	55%	36%	8%	0%
	Standard	45%	43%	10%	1%
Guidance Serv Provided by School	Advanced	52%	25%	20%	3%
	Standard	50%	30%	17%	2%
School Rules Regulations & Policies	Advanced	45%	27%	26%	1%
	Standard	40%	30%	28%	1%
Library or Learning Center	Advanced	50%	26%	21%	2%
	Standard	54%	29%	14%	2%
Laboratory Facilities	Advanced	42%	30%	21%	7%
	Standard	40%	34%	17%	9%
Provisions for Help in Reading, Math	Advanced	33%	23%	9%	35%
	Standard	37%	28%	12%	21%
Provisions for Acad. Outstanding Students	Advanced	72%	16%	8%	3%
	Standard	49%	27%	6%	16%
Adequacy of Prog in Career Ed & Planning	Advanced	44%	29%	20%	5%
	Standard	44%	32%	19%	5%

It may be that the above data has the potential of developing more heat than light. The differences between the groups offer much for conjecture as well as the percentages themselves.

The largest difference between the two groups was on the question of provisions for academically outstanding students. There were 72% of the students who were in such classes that indicated satisfaction. This is 23% more than the 49% of the other students who indicated satisfaction with provisions for academically outstanding students.

Although 72% of the students in advanced classes indicated satisfaction with provisions for academically outstanding students, 8% or 649 students, indicated dissatisfaction.

#### COLLEGE CHOICES

Although beyond the scope of this report, the choices of institutions of higher education of students in advanced and standard high school programs raises interesting and compelling research questions for Utah educators. Data is available by state institution indicating the number of students from each group choosing each state college or university. There were 19.5% of the students enrolled in advanced courses that indicated an out of Utah college or university as their first choice institution. This is contrasted to 14.3% of the student in the standard program

who were looking out of state as a first choice. With 1533 of the advanced students looking out of state as a first choice for higher education Utah may have to face the fact that some of the brightest are choosing to leave the state after high school. Perhaps earning Utah college credit while in high school would help persuade these bright students to remain in Utah to continue their education.

#### COMMUNITY COLLEGE RESPONSE

Community colleges historically have been willing to reach out into the larger community to try and meet educational needs. A survey of off campus credit programs by Jones and Greenland published in 1985 showed that most state legislatures endorsed off campus credit programs. In addition they reported that nearly 700,000 students were served in one year.

Earlier work (Stover, 1984) described a specific response by a community college to advanced high school students. The report describes a high technology high school program designed to provide advanced courses in preparation for college degrees in engineering and the sciences. High school juniors and seniors took math, science, and computer courses at a local community college and the rest of their courses at their regular schools.

Syracuse University has seemed to lead the way in providing college level courses away from the college

campus. The University's Project Adventure (SUPA) is a cooperative arrangement between the university and 80 school districts in New York, New Jersey, Massachusetts, Maine, and Michigan, which is designed to give talented highschool seniors the opportunity to enroll in university freshman courses in several subject areas, including computer engineering. (Lambert, 1986, 1987)

The issue of college credit for the Syracuse courses is discussed by Mercurio and others in College and University (1983). The work at Syracuse was used as Snow College developed college level courses in high schools.

#### SNOW COLLEGE RESPONSE

The development of college level courses in high schools was motivated by the rural and isolated setting of Snow College in central Utah. The feeder high schools are small and it has been difficult for these schools to develop advanced courses because of economies of scale problems. The current guidelines were revised in 1986 and are compatible with state guidelines adopted December 9, 1987. The courses include College Composition, US History, Biology, and Literature.

The following are the guidelines developed at Snow College:

# SNOW

## COLLEGE

August 22, 1986

### GUIDELINES FOR COLLEGE LEVEL PROGRAM (Daytime College Courses at High School Locations)

#### A. THE NATURE AND RATIONALE OF THE COLLEGE LEVEL PROGRAM

The concepts upon which the College Level Program is based may be summarized by the following:

1. Gifted and subject-superior high school students can and should be allowed to profit from enriched or advanced level courses while completing high school attendance and/or curricular requirements.
2. Distance and other factors often prevent such students from attending college or other enriched or advanced courses.
3. One solution to this problem is to form an association between the high school and the cooperating college to organize appropriate college courses on the high school campus to be taught as part of the daytime curricular offerings to high school students legally enrolled at the high school.
4. Where practicable, such courses may replace advanced level courses currently offered by the high school or they may constitute additions to the established high school curriculum.
5. Registration in the college course will result in the establishment of a college transcript and the recording of college credit upon completion of the course. Such credit is applicable toward college degree programs, but such registration does not constitute "matriculation" as a full-time, degree-seeking student. Further, it does not imply any abrogation of the school district's legal control of the ungraduated high school student's educational program and uncompleted compulsory school attendance responsibilities.

#### B. GENERAL REGULATIONS

1. The contact representative of Snow College in all matters pertaining to CL courses is the Office of Community Services and Continuing Education.
2. Courses are to be considered Snow College courses, subject to all academic regulations current for campus-based courses.
3. Grading standards (overall scale) are subject to supervision by appropriate college representatives. (Dual grading may be exercised at the initiative of the high school, in which high school as well as college grades and credits are issued.)

4. In order to mutually insure the academic integrity of CL courses, formal linkage between the high schools and the colleges will be maintained as follows:
  - a. A pre-school, one-day conference involving the high school adjunct instructors and appropriate Snow College department heads, under whose direction the teaching takes place, will be scheduled each year in August. The director of Continuing Education will encourage appropriate Snow College personnel such as division chairman, the vice president for instruction, and faculty to attend. In addition, school district supervisory personnel will be invited to be there.
  - b. The high school adjunct instructors must be authorized through their school district headquarters to attend at least one college departmental faculty meeting per high school semester.
  - c. College course outlines will be made available to the adjunct instructors as a guideline to cover the intended course content.
  - d. Snow College department chairmen will be required to visit the participating high schools twice during each school year.
5. Free access of college representatives to the high school/adjunct college instructor, to students, and to students, and to student records must be guaranteed at all times. As a matter of policy, college representatives will not interfere with class routine or high school functioning.
6. All adjunct instructors must be approved in advance by the Snow College Office of Community Services and Continuing Education and by the appropriate college academic department.
7. No compensation of salary will be made to contract employees of the school district. In instances where unusual travel expenses are required of a high school/adjunct instructor, pre-arranged expenses will be paid by the college.
8. The district or the student is required to purchase the current college approved text materials for all courses. Books and other materials will be made available by the college bookstore at standard prices, and the Office of Community Services and Continuing Education will deliver such material to the high schools at their request. Because the Snow College bookstore needs advance notice of any extra demands for textbooks above anticipated needs for regular daytime students, high schools need to place an order three weeks prior to course commencement dates.
9. Student tuition and registration fees will be established prior to the beginning of the course. In no case will they exceed the single student charges required of student in off-campus evening school courses of the same type. Established fees must include a \$10.00 minimum registration fee as required by state of Utah regulations. In addition, a \$15.00 administration fee will be required.

10. The college reserves the right to withhold approval of the class if there is insufficient enrollment. Enough money needs to be generated to pay for the trips outlines in 4-d above.

C. CRITERIA FOR SELECTION OF STUDENTS FOR COLLEGE LEVEL PROGRAMS

1. Student Admission to the CL Program:

All admissions will be administered by a school district College Level Program Committee consisting of the building principal, the appropriate department head, a guidance counselor, and one teacher who has previously had the students in a subject-related class. All students admitted to the program must be recommended by the College Level Program Committee.

2. Age:

This program is limited to senior and strongly-recommended junior students.

3. Grade Point Average:

- a. Overall GPA:

A student's GPA must be 3.5 or higher in all high school course work from grade nine to the date of application.

- b. GPA in Subject Area:

High School grades in courses related to the CL subject for which the student is applying must be a 3.0 or better.

4. Standard Test Scores:

Composite score in the upper quartile of an approved standardized achievement test is required.

5. Teacher Recommendation:

One or more teacher recommendations based on past and present performance in the subject area are required.

6. Exceptions to Above Criteria:

Students who do not meet all of the above-listed criteria but who show exceptional promise based upon objective data may be placed in the program upon the unanimous recommendation of the College Level Program Committee.

## CONCLUSIONS

These data certainly provide more points of departure for further investigation that answers to the problems associated with the legislative encouragement towards concurrent enrollment.

The report confirms what may be intuitive. Bright and capable high school students in Utah are choosing a high school curriculum that includes advanced placement, accelerated, or honors courses. These students are generally satisfied with their high school program but at least one fifth of them expressed dissatisfaction with school rules, laboratory facilities, libraries, guidance services, and career education. Further, 19.5% of them are indicating a college or university that is out of Utah as their first choice.

The most important question yet to be addressed concerns the benefit to the students of concurrent enrollment in programs like the one developed at Snow College. Concomitant questions concern the cost vs. benefit. These include costs in time, money, and institutional priorities in both public and higher education.

A follow up study involves a difficult research problem since a comparison of a concurrent enrollment group with a non concurrent enrollment group would involve comparisons of

self selected samples. Perhaps students should be studied who select concurrent enrollment classes in high school compared to students who qualify for concurrent enrollment but because of class scheduling or the lack of a program in their school are unable to participate.

The Snow College response to the request for college level courses in the high school could provide a starting point for other institutions of higher education that notice similar needs. Various attempts to meet these needs could together generate a data base that would assist in program evaluation.

## REFERENCES CITED

- Jones, Steven W., Greenland, Annette E. Off-Campus Credit Programs in Two-Year Colleges: A Broad View Across All 50 States. Community / Junior College Quarterly of Research and Practice, 1985, 9, 65-70.
- Lambert, Leo M., Mercurio, Joseph A. Making Decisions: College Credits Earned in High School. Journal of College Admissions. Spr 1986, 28-32.
- Mercurio, Joseph A. (and others) College Credit Earned in High School: Comparing Student Performance in Project Advance and Advanced Placement. College and University. Fall 1983, 59, 74-86.
- Stover, Barbara. College Opens High Tech Door to Teens. Electronics Education. Jan. 1984, 3.4, 33-34.