

DOCUMENT RESUME

ED 366 637

TM 021 037

TITLE Student, Educator, and Parental Views on Proficiency-Based Credit Assessment.

INSTITUTION Institute for Behavioral Research in Creativity, Salt Lake City, Utah.

SPONS AGENCY Utah State Office of Education, Salt Lake City.

PUB DATE Oct 92

NOTE 74p.

PUB TYPE Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS *Academic Achievement; Acceleration (Education); Advanced Courses; Advanced Placement; *Equivalency Tests; Experiential Learning; High School Equivalency Programs; High Schools; High School Students; Parents; Prior Learning; Program Evaluation; Public Schools; Questionnaires; Rural Schools; *Student Attitudes; Suburban Schools; Surveys; Teacher Attitudes; *Teachers

IDENTIFIERS *Proficiency Based Credit Assessment; *Utah

ABSTRACT

This report presents results from Phase 2 of an ongoing Utah State Office of Education project titled "Preliminary Study of Proficiency Based Credit Testing in Utah Public Schools." Proficiency-based credit assessment (PBCA) means awarding secondary school academic credit to students considered proficient in the area without having taken the designated academic course. Phase 1 of the study examined the literature on PBCA, PBCA use in other states, and PCBA use in Utah. Recommendations from phase 1 supported development of PBCA on a state-wide basis. In phase 2, a catalog of PBCA resources and learning opportunities was compiled to help students become aware of possibilities. A major component of phase 2 was the surveying of 1,296 students, approximately 400 parents, and 114 educators in a small rural district and a large suburban district. Findings demonstrate that students, parents, and educators are aware of and support learning outside the classroom. They are also in favor of granting credit for such learning. From 46 to 64 percent of students expressed an interest in PBCA. Recommendations are made for the Phase 3 development of PBCA assessment. Four exhibits present study findings. Five appendices include the catalog of resources; the three surveys given to students, parents, and educators; and student comments. (Contains 4 references.) (SLD)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

TM

Student, Educator, and Parental Views on

PROFICIENCY-BASED CREDIT ASSESSMENT

ED 366 637

Utah State Office
of Education
250 East Fifth South
Salt Lake City, Utah
84111

Scott W. Bean
State Superintendent
of Public Instruction

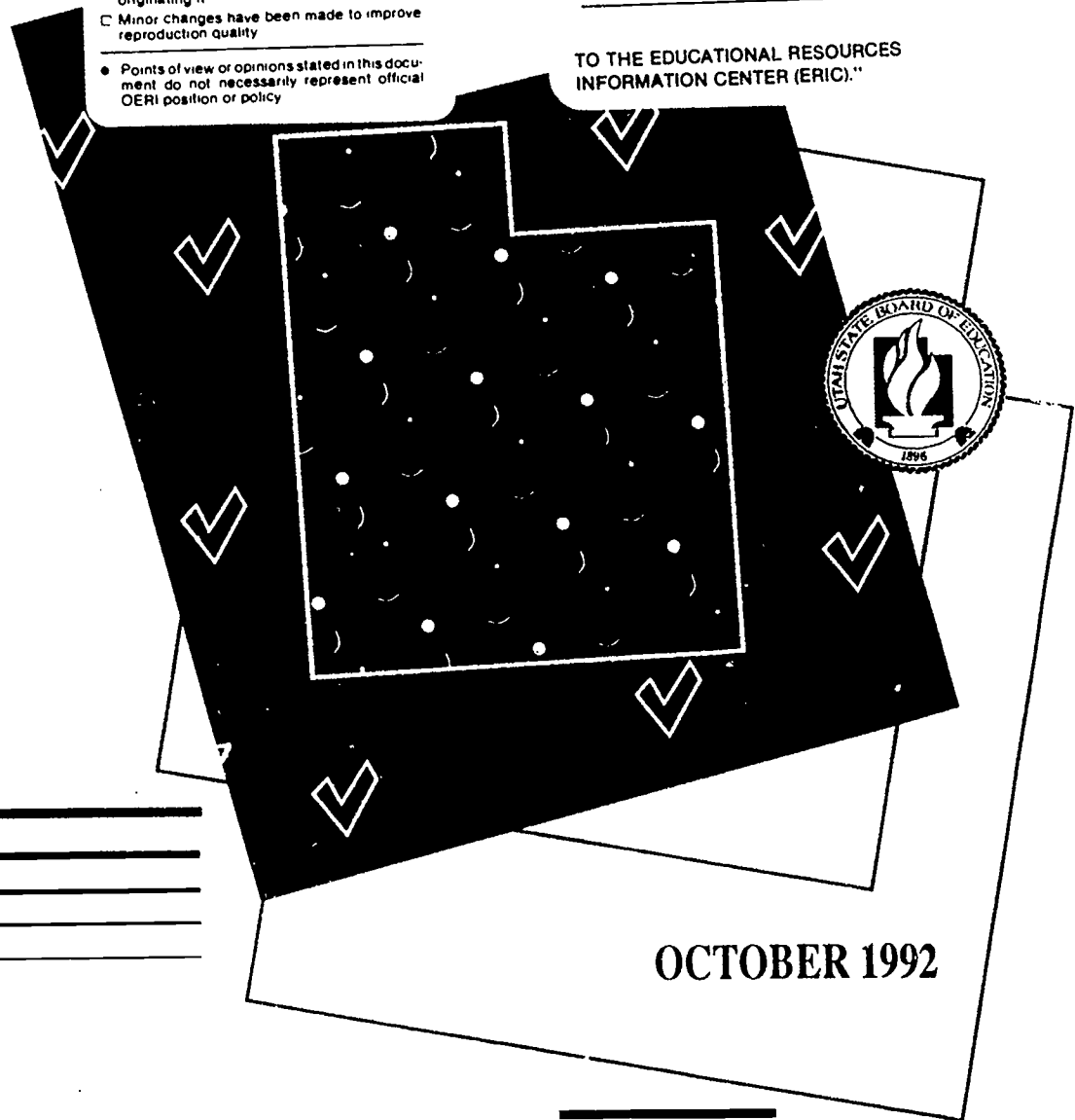
"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. CAPRAEL

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."



OCTOBER 1992

1st 021037

**STUDENT, EDUCATOR, AND PARENTAL VIEWS ON
PROFICIENCY-BASED CREDIT ASSESSMENT**

UTAH STATE OFFICE OF EDUCATION

**Scott W. Bean
State Superintendent of Public Instruction**

**Steven R. Mecham
Associate Superintendent, Instructional Services**

**David E. Nelson
Coordinator, Evaluation and Assessment**

Prepared By:

The Institute for Behavioral Research in Creativity (IBRIC)

October, 1992

UTAH STATE BOARD OF EDUCATION
UTAH STATE BOARD FOR VOCATIONAL EDUCATION

BOARD MEMBERS

Keith T. Checketts, Chair
District 2
Logan, Utah 84321

Ruth Hardy Funk, Member
District 4
Salt Lake City, Utah 84109

C. Grant Hurst, Vice Chair
District 6
Sandy, Utah 84093

Katherine Garff, Member
District 3
Bountiful, Utah 84010

Neola Brown, Member
District 1
Beaver, Utah 84713

Harold S. Jensen, Member
District 9
Gunnison, Utah 84634

Donald G. Christensen, Member
District 7
Salt Lake City, Utah 84120

V. Jay Liechty, Member
District 8
Provo, Utah 84604

Frances H. Merrill, Member
District 5
Salt Lake City, Utah 84107

Scott W. Bean, Executive Officer

Twila B. Affleck, Secretary

TABLE OF CONTENTS

	Page
INTRODUCTION	1
PHASE II	3
Catalog of Resources	3
Survey Methodology	4
Student Survey	7
Independent Learning	7
Classes Outside of School	8
College Classes	9
Learning from Work and Travel Experiences	10
Additional Knowledge of Computers	10
Interest in Receiving PBCA Credit	11
Comments	11
Staff Survey	11
Use of PBCA for Different Courses	13
Student Learning	13
Early Graduation	15
Support for PBCA	15
Comments	16
Parent Survey	16
Student Learning	17
Early Graduation	17
Impact of PBCA Information on Parents' Views	17
Interest in PBCA for Specific Courses	18
Comments	18
DISCUSSION AND RECOMMENDATIONS	20
REFERENCES	23
APPENDICES	25
A: Proficiency Based Credit Assessment Catalog of Resources	
B: Proficiency Based Credit Assessment Survey for Students (with Percent Choosing Each Alternative)	
C: Proficiency Based Credit Assessment Survey for Staff (with Percent Choosing Each Alternative)	
D: Proficiency Based Credit Assessment Survey for Parents (with Percent Choosing Each Alternative)	
E: Student Comments Regarding Subject Area Uses for PBCA	

LIST OF TABLES

Exhibit		Page
1	Sample of Brochure that Accompanied PBCA Surveys	5
2	Student Interest in PBCA for Specific Curriculum Areas	12
3	Staff Interest in PBCA for Specific Curriculum Areas	14
4	Parent Interest in PBCA for Specific Curriculum Areas	19

*STUDENT, EDUCATOR, AND PARENTAL VIEWS ON
PROFICIENCY BASED CREDIT ASSESSMENT* _____

INTRODUCTION

This report will provide the results from Phase II of an ongoing Utah State Office of Education project entitled "Preliminary Study of Proficiency Based Credit Testing in Utah Public Schools". For the purposes of this study, the general definition of proficiency-based credit assessment (PBCA) is "Any policy or system which awards secondary school academic credit to students who are considered to be proficient in that area without having taken the designated academic course". Proficiency-based credit is emerging as one response to pressures on the educational system from low budgets, crowded classrooms, increased learning opportunities outside of school, and a constantly increasing rate of knowledge growth.

Phase I of the study examined the status of proficiency based credit assessment in the professional literature, its use in other states, and its use in Utah school districts. To accomplish this, an extensive review of the literature was conducted, and surveys were sent to all state education offices in the country and to all Utah district education offices. The results of the first phase of the project were presented in a report to the Utah State Office of Education (Fairfield, Ellison, & Fox, 1991) and are summarized in the following paragraphs.

Only a few references to PBCA were found in the professional literature. The most directly analogous approach described was the nationally administered College Level Examination Program (CLEP) used by higher education to allow students to "test out" of lower level classes prior to admission into more advanced courses.

Since only limited relevant information was found in the literature, our nation-wide survey of state school offices was especially helpful. Of the forty states that responded, sixteen had a policy which provided statewide direction for the use of PBCA options for high school credit. Only five of these had state-

specified assessment methods in use by every district. And of the five state programs, four were seen as successful.

The statewide survey of the 40 Utah school districts found seven specific PBCA systems currently in use. Some of these systems take advantage of end-of-course tests available from the State Office of Education; others have developed their own methods of assessment.

The literature review and surveys of PBCA practices from Phase I of the study revealed a number of issues surrounding decisions to implement PBCA policies and procedures. The most relevant issues are listed below, along with some of their implications.

- *Acceleration of Students.* Would the opportunity for students to accelerate encourage them to take more advanced courses? Would it encourage early graduation?
- *Perceived Value of PBCA Versus Course Work.* The ways in which PBCA is used will reflect the perceived value (negative or positive) assigned to PBCA credit versus traditional course credit.
- *Locus of Control.* PBCA's vary greatly in their reliance on state resources versus district resources. How should state and district resources be combined to increase the potential for success of a PBCA program?
- *Out of School Learning Resources.* To what extent do we recognize the contribution of learning resources outside of school, resources such as parents and the community in which students live?
- *Support.* Are educators willing and able to establish a system to recognize learning that goes on outside of school classrooms by awarding course credit?

Based on the results of Phase I of the study, the following recommendations for future development of PBCA options within Utah were made:

- Centralize PBCA procedures at the state level.
- Form a PBCA development committee with representatives from districts with existing PBCA procedures.
- Use end-of-course tests and item pools in the assessment process.

- Emphasize subject methodology over subject-matter content (how you do something in a field rather than what specific facts you know).
- Build a needs assessment/marketing component into the PBCA exploration process.
- Make PBCA attractive to district educators.
- Make PBCA attractive to students.
- Recognize and promote external-resource educational opportunities (e.g., parents, university, community).

PHASE II

The purpose of Phase II of the project was to follow up on the above recommendations by determining the level of interest and ability which exists among the students in Utah to successfully elect PBCA options, as well as the level of support and interest on the part of school staff and parents. The process by which this was done included a needs assessment and marketing component which served to educate students, parents, and school staff about possible PBCA applications, while also assessing the need for such options in specific course areas. The following sections document the results obtained under Phase II.

Catalog of Resources

As part of the Phase II effort to help define the need for PBCA options, a variety of materials was assembled into a catalog of resources and learning opportunities available to Utah students outside of the regular secondary school system. The list of resources was compiled through interviews with college and university staff, adult and continuing education personnel, and current high school students.

Many opportunities were found to exist via summer courses and concurrent enrollment offerings by local colleges and universities (University of Utah, Utah State University, Weber State University, and Southern Utah University). Most of them have summer enrichment programs which allow high school students to take courses with the option of accumulating college credit. Such programs give students the opportunity to continue taking courses of interest or courses which are not available in their high school. Colleges and universities also offer special

one to two week academies to students selected for their leadership and scholastic abilities. These programs provide a general introduction to most of the opportunities available at the schools. Various departments within the universities have special one week summer camps which give high school students chances to further their knowledge or abilities in specific areas. These camps are most popular in science, art, and athletics.

Other opportunities are available outside of educational institutions. Many local museums, athletic facilities, computer stores, and specialized art studios offer a variety of classes that high school students may attend.

The catalog of resources is included as Appendix A to this report as a resource for future PBCA projects.

Survey Methodology

A major component of Phase II of the project was the surveying of students, parents, and educators to determine their interests, concerns, and suggestions regarding PBCA. Separate questionnaires were distributed to each of the three groups in two Utah school districts: Emery which is small and rural, and Jordan which is large and suburban. These two districts were chosen to participate based on the results from Phase I of the study. Jordan's responses to the earlier statewide PBCA survey indicated that PBCA devices were available for some courses in the district, but that they were not frequently used. Emery indicated a strong interest in making PBCA options available.

The three questionnaires that were developed under Phase II, one for each of students, educational staff, and parents, are provided as Appendices B, C, and D of this report. The percentage of the respondents choosing each alternative to each question has been included by the alternative in these appendices.

A brochure accompanied each survey when it was distributed and served as an introduction. The brochure informed respondents about the purpose of the survey, defined proficiency-based credit assessment, described what a PBCA program might look like, and told the respondents how to return the form once it was completed. The brochure was adapted somewhat to address specifically each of the samples (students, teachers, and parents). Since the brochure was instrumental in explaining PBCA, a representative version is presented here as Exhibit 1.

Exhibit 1
Sample of Brochure that Accompanied PBCA Surveys

PROFICIENCY-BASED CREDIT ASSESSMENT

Our school district is participating in a study by the Utah State Office of Education (USOE). The state office is conducting this study to determine the extent to which students and parents support the use of a proficiency-based credit assessment (PBCA) option to obtain high school credit. This brochure is designed to answer your questions about proficiency-based credit assessment.

What is Proficiency-based Credit Assessment (PBCA)?

- o A system which assesses and awards credit for students out-of-school knowledge in various subject areas.
- o Credit is granted based on students' performance on some kind of assessment (test, oral presentation, skill demonstration) of the knowledge covered by a course.
- o Use of such a program could potentially lower school costs and accelerate student learning.
- o There is currently a statewide policy which allows for the use of proficiency-based credit assessment (PBCA) options. However, few school districts have utilized these options through formal district procedures.

What are some examples of the uses of PBCA?

- o Students who learned computer programming on their own time would have the option of taking a test or doing a project to get credit for a required course in Information Technology.
- o Suppose your child already knows a lot about biology from independent study or from taking summer classes. Do you believe your child should be able to study and take a test to get credit for Biology I without having to take the course?

What might a PBCA program look like?

A program for Proficiency-based Credit Assessment (PBCA) would look something like this:

- 1) At the end of the school year, students would take a survey describing their out of school learning activities. From this information, the school and students could determine which PBCA options were appropriate.

Exhibit 1, Continued
Sample of Brochure that Accompanied PBCA Surveys

- 2) The students would receive the standards and objectives of each course for which they wished to elect the PBCA option. They would also receive information describing books or other resources for that course to use over the summer to prepare for taking the PBCA.
- 3) At a mutually agreed-upon time, the students would come to the school to perform the PBCA option for that course. In most cases the PBCA would be a multiple choice test; in others, it would be an oral examination or some other kind of performance evaluation.
- 4) The students would soon be notified whether or not they received credit based on the PBCA. If credit were received, they could: 1) take a different class than the one required; 2) elect a study-hall or free period; 3) explore out-of-school learning or employment opportunities.

What is the purpose of this survey?

To gather information from parents concerning their interest in having these options more available to their children. Some of the issues involved are interest in early graduation, and whether parents feel there is a need for proficiency-based credit assessment options.

How can I get the results of this survey?

- o Your school district will have information about the results of the survey this spring. Interested parents can also call the district office to learn more about possible and available PBCA options in the district.
- o The results will also be available in the form of a final report from the State Office of Education in the summer of 1992. You can write or call the State Office of Education for more information.

Please complete the attached survey and return it to your child's school by December 12. Thank you for your participation.

Student Survey

The student survey booklet (shown in Appendix B) presented the respondents a variety of multiple-choice questions related to PBCA options for each of the following curriculum areas:

- Math
- English
- Vocations
- History
- Science
- Art
- Foreign Languages
- Computers
- Athletics

There was also a place for the students to comment on any accomplishments or specialized knowledge they had mastered on their own in each course area.

Due to the district's small size, the total student population at grades 9, 10, and 11 in Emery School District was asked to respond to the questionnaire. The Jordan student sample was drawn from all AP and Honors classes and a representative sample of regular classes. Of the 1500 student surveys sent out (750 to each of the two districts), 611 (81%) were returned from Emery School District and 685 (91%) were returned from Jordan.

The survey results presented below are organized by topics generally covered by the survey questions, rather than by course areas. This will facilitate making comparisons between interests and abilities in different curriculum areas. Information about out-of-school learning specific to each curriculum area is also discussed.

Independent Learning

The students were asked a number of questions about the extent to which they studied subjects independently and on their own (outside of school) time. Taken together, the results from these independent learning questions, summarized below, revealed not only which subjects students are most likely to study on their own time, but, also, by what methods students are most likely to gain their out-of-school knowledge. Note that not all curriculum areas were addressed by every question in this area, given that some questions were more appropriate for some subjects than others.

- While 55% of the respondents said that they often or frequently read books on their own time, another 20% said that they rarely or never read books on their own.

- Fifty percent had read books on history in their free time. Science was also a popular subject area; 26% had read books in that area on their own time.
- Students responded that they often or regularly studied history (24%) and computers (23%) beyond what was required in class.
- Twenty-three percent made an aspect of computers their hobby to some extent or extensively and 19% made an aspect of science a hobby.

Finally, for most curriculum areas, the students were asked whether or not they had learned about the subject from someone outside of their regular classroom teacher (family or friends).

- Seventy-eight percent of the students said they learned math from someone outside of school; and,
- for both history and art, 63% said they learned from family or friends.
- Related to this, 11% of students said that a language other than English was spoken regularly in their home.

These results indicate that students participate in a variety of learning activities, although the extent of the learning cannot be determined.

Classes Outside of School

A number of questions focused on students' participation in various types of classes and lectures outside of their regular school. This included formats from summer classes and camps to television courses. Below is a summary of the key results from this set of survey questions.

- Twenty-three percent of the students had taken at least one out-of-school class on computers, more than any other course of study.
- Participation for other curriculum areas ranged from 10% for history to 16% for science.
- Twenty-five percent to 35% of the students had attended one or more lectures to learn more about a subject; the highest participation was for lectures about literature or writing.

- Thirty percent of the students responded that they write short stories or poetry on their own time about once a month to once a week.
- Twelve percent said they had watched one or more complete televised courses on a foreign language and 9% said they had watched one or more math courses.
- Students were most likely to have attended a science class or camp during the summer at least once (17%) and next most likely to have attended a summer computer class or camp (14%).

From these questions, it was not possible to determine whether students were educating themselves in one specific area of a subject or obtaining a broader base of proficiency (e.g., learning to use a software program versus learning a complete programming language). The range of proficiencies in foreign languages and computers is explored in greater depth in later sections of this report.

College Classes

For each course of study, students were asked two questions related to concurrent enrollment in classes at a college or university. First, they were asked if they had taken any college classes in the curriculum area at this point in time; second, they were asked if they planned to take college classes in the area while still in high school. The results of these questions revealed that:

- only 3% to 6% of the students had taken one or more college courses in any of the subjects;
- the areas in which students had taken the most college classes were computers (6%) and foreign languages (5%); and
- English was chosen most (39%) among subjects they definitely planned to take as college classes while in high school in the future; computers was the subject chosen least (19%).

One factor that may affect interest in future concurrent enrollment in college computer courses is that this was consistently the course of study students had the most out-of-school experience in already, according to other survey questions. While these questions did not attempt to determine the skill level

students obtained, it is reasonable to assume that a certain percentage of the highly motivated students are already computer proficient.

Learning from Work and Travel Experiences

Students' work experience was considered to be an important aspect of out-of-school learning, so survey items addressed the contribution of work experience to knowledge of the different curriculum areas. Overall, 35% of students surveyed worked at a part-time job while in school. Fifteen percent said they had quite a bit to a lot of work experience which contributed to their math knowledge; 14% said they had learned about some type of art from work; 9% said their work experiences contributed to their knowledge of computers; 9% also said work contributed to learning to write better.

When asked about how their travel experiences (trips or tours) contributed to their knowledge of history, foreign languages, and science, 69% of the students had taken at least two trips or tours of a historical nature, 43% had taken at least two trips to learn about science, and 16% had learned a foreign language through two or more trips or tours.

On a related note, the students were asked if they had gone to the Hansen Planetarium, a museum, or any science exhibit in the last two years. Thirty percent said they had gone to such an exhibit at least three times.

Additional Knowledge of Computers

A number of questions specific to computer and information technology explored in more detail the extent to which students developed proficiencies in computers on their own. With regard to extracurricular computer use:

- 39% of the students said they used a computer in their home quite a bit to a lot;
- 46% said they used a computer outside of school at least weekly to daily;
- 25% said they used a school computer for purposes unrelated to assigned class work at least weekly to daily;

- 30% said they occasionally or often use a modem, database, or computer network;
- 18% said they used computer programs outside of school at least once a month to learn more about computers, 7% learned more about math through computer programs, and 6% learned more about English.

These survey results suggest that a large minority of students use computers frequently and may have varying levels of proficiency. Examples of student proficiency can be found in Appendix E, which includes students' comments regarding their special knowledge and accomplishments in each of the major subject areas.

Interest in Receiving PBCA Credit

Overall, a large percentage of the students surveyed were interested in obtaining PBCA credit for the various high school courses targeted by the survey. Exhibit 2 shows the differing levels of interest in PBCA options for each course. The percentage of students who were possibly or definitely interested in trying to get PBCA credit was highest for English and lowest for foreign languages. Overall, Emery students were consistently more interested in trying to get PBCA credit than were Jordan students. Across all curriculum areas, 57% of the students were interested in attempting some form of PBCA credit.

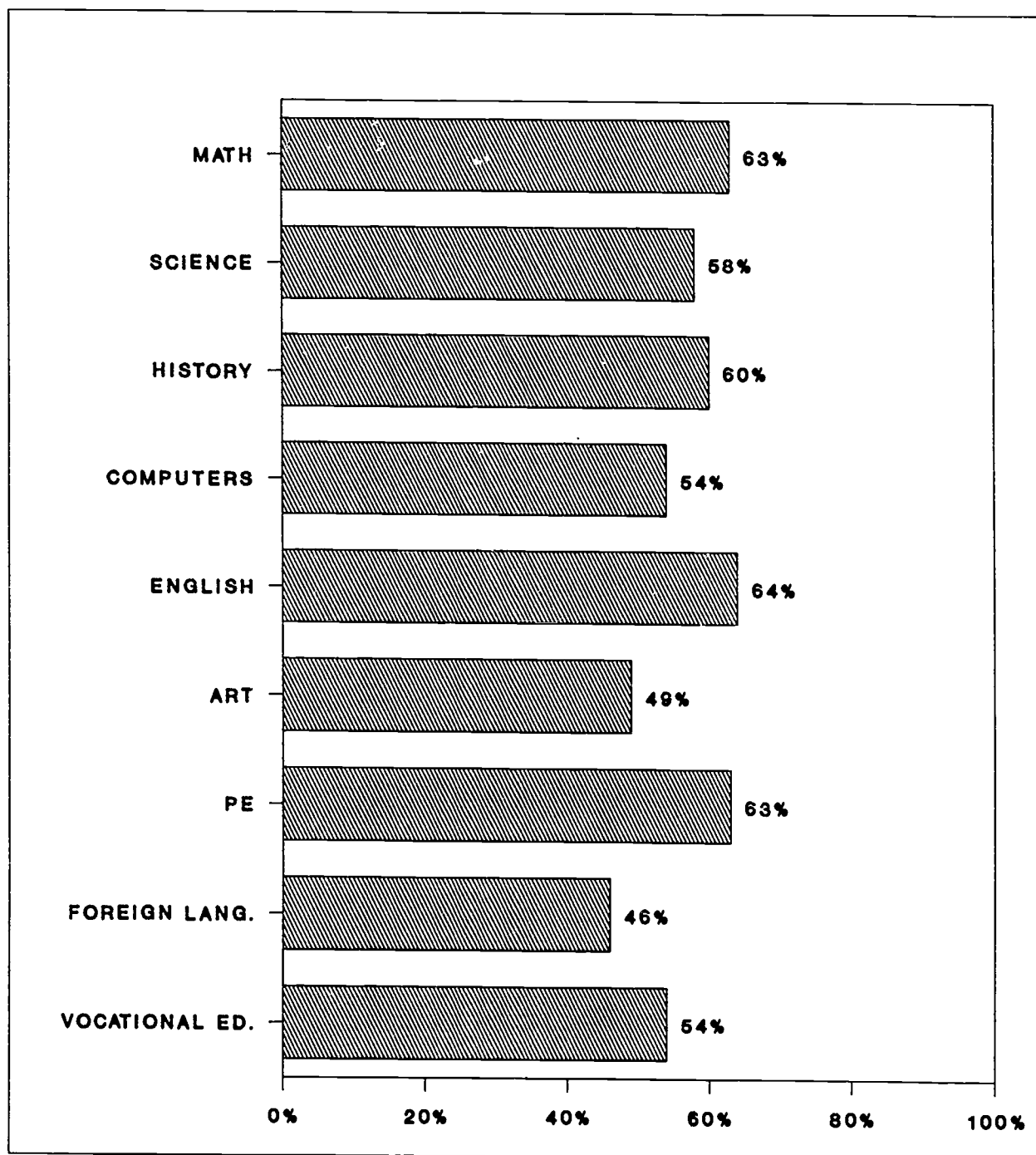
Comments

The student comments primarily described out-of-school accomplishments and special knowledge in each curriculum area. There were numerous examples of students whose special knowledge would make them likely candidates for PBCA. These examples are listed by subject area in Appendix E.

Staff Survey

Teachers, counselors, and principals who work with 9th, 10th, and 11th grade students in Emery School District or in Union Middle School or Bingham High School in Jordan School District were asked to respond to the brief Staff Survey on PBCA shown in Appendix C. Of the 114 staff members who responded to

Exhibit 2
Student Interest in PBCA for
Specific Curriculum Areas



the survey, 50 were from Emery School District and 64 were from Jordan. Ninety percent were teachers.

The staff from the two school districts responded somewhat differently to a number of the survey questions; however, overall the staff in both districts who responded were generally positive toward PBCA options. As an example of the disparity in response, 36% from Emery School District said that they encourage somewhat or strongly encourage students to graduate early from high school, while only 23% of the Jordan District staff were so encouraging of early graduation. Throughout the summary of the results from the staff survey, other differences between the two districts will be noted only when they were substantial.

Use of PBCA for Different Courses

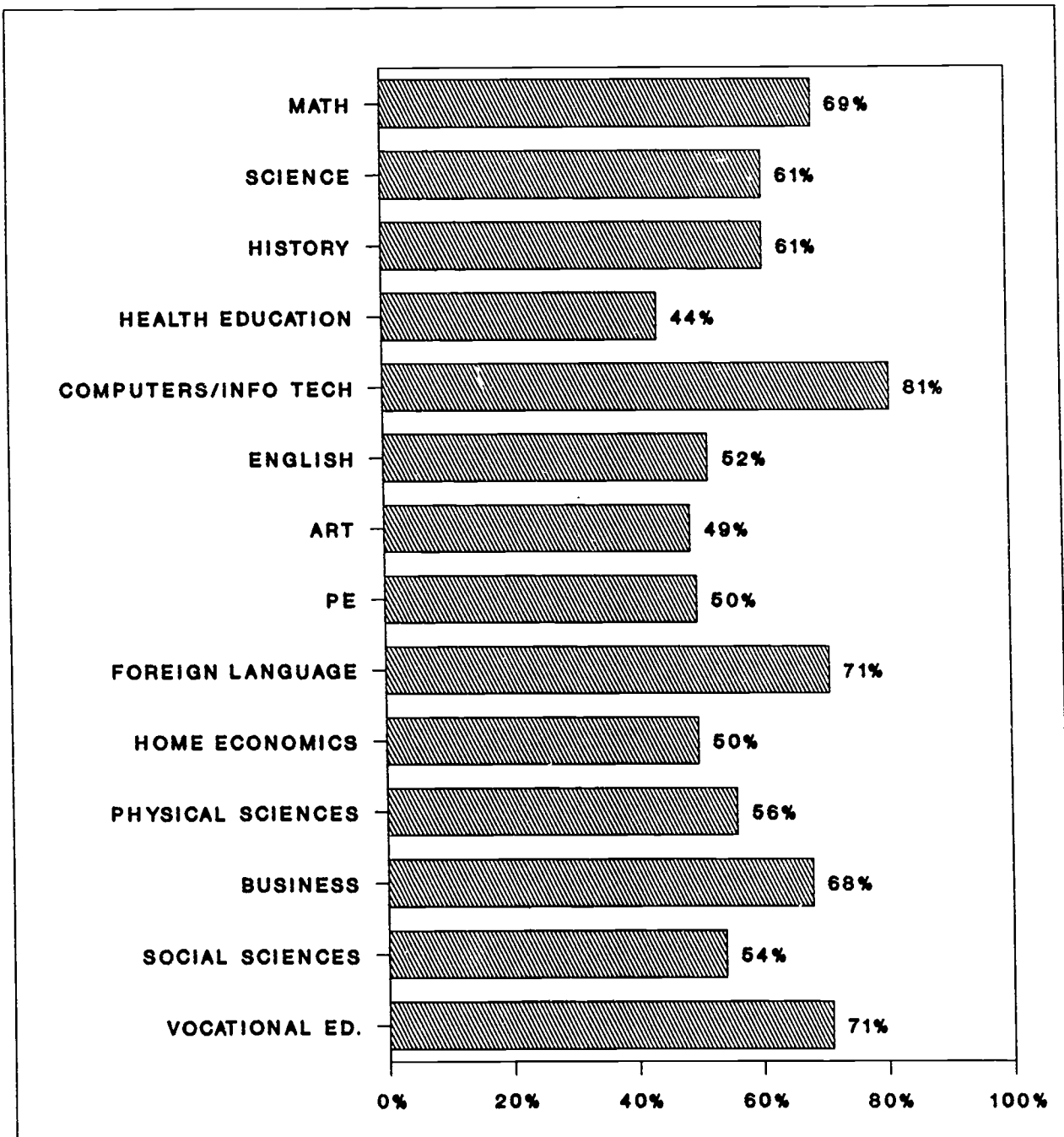
When asked to indicate for which courses they felt PBCA could be effectively used, 81% of the staff selected computer and information technology, while 71% each felt foreign language courses and vocational education courses were appropriate. Surprisingly, health education — a area for which PBCA devices already exist in some Utah school districts — was least frequently nominated; 44% of the respondents said PBCA could be effectively used there. The level of staff interest in PBCA for each course is illustrated in Exhibit 3.

Student Learning

The staff were asked two questions regarding their observations on student learning outside of school: 1) do many students learn material on their own beyond what is required by the schools; and 2) how often do students know required material before you teach it.

- Twenty-two percent of the respondents reported that many students often or frequently learn material on their own beyond what is required.
- Twenty-seven percent said rarely do students learn material on their own.

Exhibit 3 Staff Interest in PBCA for Specific Curriculum Areas



None of the staff surveyed said that students frequently know required material before they teach it, 8% said they often know it, 59% said sometimes, 32% said rarely, and 1% said never.

Early Graduation

Use of proficiency based credit assessment can provide two different kinds of opportunities for students. It can help them toward early graduation, or it can open up possibilities for taking greater numbers of advanced classes and electives while in high school. Overall, 29% of the staff respondents said they encourage or strongly encourage early graduation; 59% were neutral toward the issue, and 12% discourage or strongly discourage it.

As mentioned elsewhere in this report, Jordan staff members were less favorable toward early graduation than Emery. Based on a correlational analysis of the survey items, it appears that staff's position on early graduation was related to the extent to which they were supportive of PBCA in general. The more staff encouraged early graduation, the more likely they were also to be interested in learning more about future developments of PBCA options, to want more students to take advantage of PBCA options, to be in favor of using a PBCA system in their school, and to believe use of PBCA would enhance educational opportunities for students.

Support for PBCA

Overall, 67% of the staff surveyed stated that they were in favor or strongly in favor of using a PBCA system in their school. Emery staff were more in favor (72%) of a PBCA system than were Jordan staff (63%). Further demonstrating strong support for PBCA among the staff, 64% said they were interested or very interested in learning more about future developments of PBCA options and 65% felt that more PBCA options were somewhat or greatly needed in their school. In addition, 76% said they felt that the use of PBCA would enhance the educational opportunities available to students.

The majority of staff (62%) said they'd like to see more students take advantage of PBCA; however, only 37% responded that they think many students would take advantage of PBCA options. When questioned about how active a role they would take in getting students to attempt a PBCA option, 43% said they

would encourage 5% or more of their students to attempt it. Only 9% would not encourage any of their students to try PBCA.

Comments

The written comments from the staff of the Jordan district tended to be negative regarding the potential effectiveness of PBCA. Example comments include; "students using PBCA would only learn the highlights of the courses", "the use of PBCA would eliminate interactive learning", and "many classes need to gain students not lose them". Emery district staff was somewhat more supportive, citing the opportunities for student growth. Their primary negative concern dealt with students' need for continued social development in high school, rather than graduating early.

Parent Survey

The parent survey, shown in Appendix D, contained eleven multiple-choice questions about student learning outside of school, parental knowledge about PBCA, and how they thought PBCA might be applied best. Space was given to encourage the parents to make written comments about the issues.

The parents targeted to receive the survey were those with children in grades 9, 10, or 11 of the two participating districts. Surveys were mailed to 1500 parents, 750 in Emery and 750 in Jordan. The parents were requested to mail the survey back to the district in a pre-stamped envelope which was provided.

The response rate for Emery School District was 19% and for Jordan was 34%. One factor that contributed to the difference in rates was that the middle and high school samples overlapped in Emery but were from two locales in Jordan. Therefore Emery, parents with students in both middle and high school received more than one survey but likely returned only one, decreasing the response rate. Jordan parents with a student at the high school would not likely have a student at the distant middle school, and vice versa. Fifty percent of the survey respondents had 9th grade children, 40% had 10th grade children, and 46% had 11th grade children.

Student Learning

In contrast to the 22% of staff, 37% of the parents felt that students often or frequently learn material beyond that required by the school. While the responding sample of parents viewed their children as having more out-of-school learning than did teachers, note that the parents and teachers came from different schools and were not referring to the same body of students. Related to the issue of student learning, 89% of the parents surveyed said that they would probably or definitely help their child learn more outside of school if it would enhanced his/her ability to earn credit.

Early Graduation

Parents were generally less favorable toward early graduation than were staff; only 20% encouraged somewhat or strongly encouraged their students to try to graduate early from high school. Consistent with the results of the staff survey, Emery parents were much more favorable toward early graduation (29%) than were Jordan parents (15%).

Impact of PBCA Information on Parents' Views

In addition to gathering information, the surveys and accompanying brochures were designed to educate the participants about PBCA and the issues involved. This was especially so with parents. Eighty-two percent of the parents indicated that, prior to the information received with the survey, they knew very little to nothing about PBCA. In Jordan school district, 85% of the parents were not aware of the HELP tests which exist in that district — PBCA devices which are available for a limited number of courses.

The majority of the parent sample intended to move forward, based the information they received about PBCA through their participation in the survey.

- Seventy-three percent said they probably or definitely intend to inquire further into PBCA options for their children.
- Seventy-eight percent said they are interested in learning more about available PBCA options.
- Seventy percent felt there is a need for more PBCA options in their child's school.

- Seventy-two said they probably or definitely would like their child to take advantage of any PBCA options available.

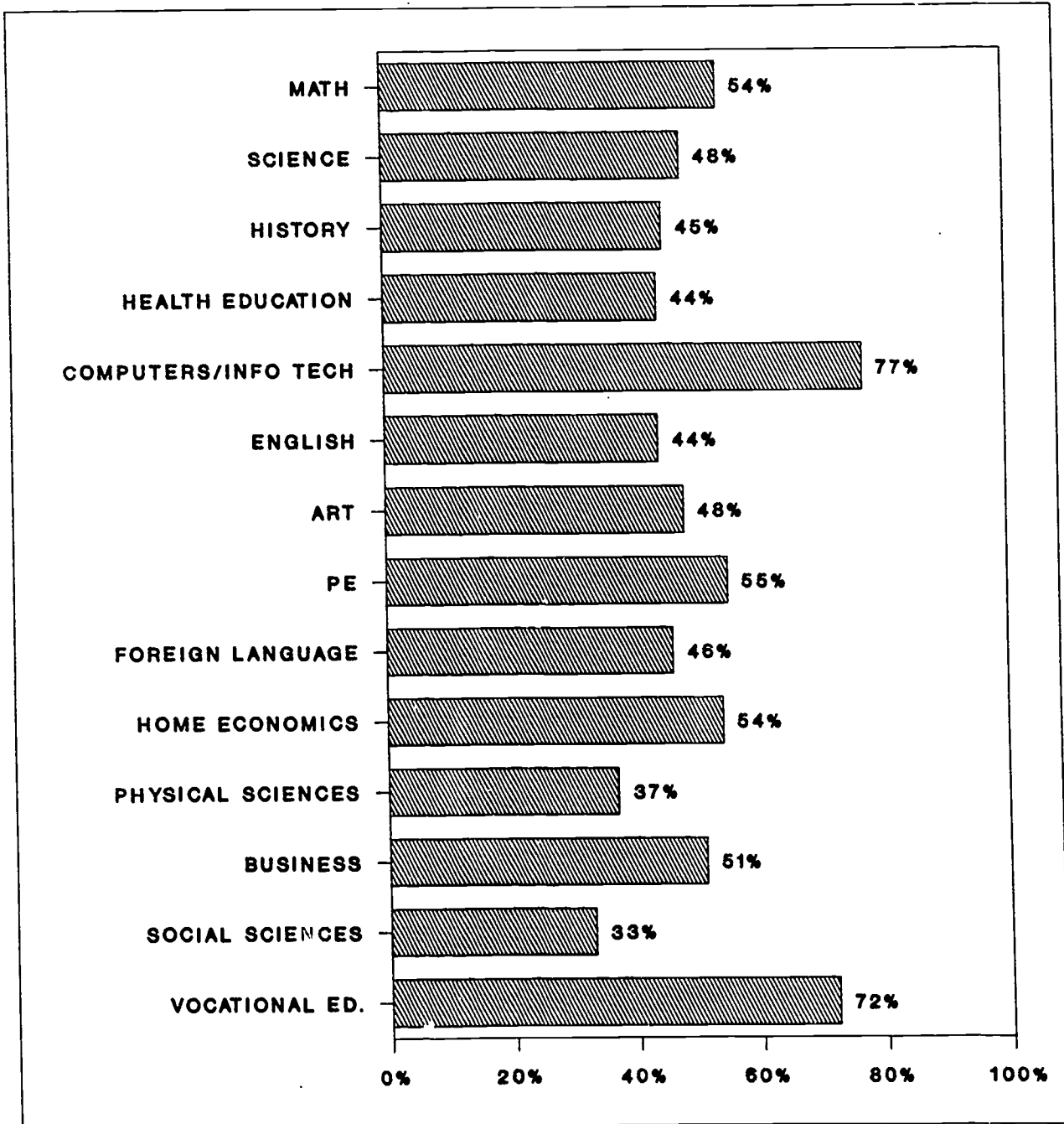
Interest in PBCA for Specific Courses

Consistent with the results from the student and staff samples, parents were overwhelmingly in favor of having a PBCA option available for computer and information technology (77%). Jordan District parents were somewhat more favorable toward this option (82%) than were Emery District parents (69%). Also consistent with the staff results, parents in both districts' next most favored course of study for a PBCA option was vocational education (72%). The level of parental interest in PBCA for all of the curriculum areas covered in the survey is displayed in Exhibit 4; parents agreed with students and staff about the potential for PBCA.

Comments

Parents in both school districts were generally positive in their comments concerning future applications of PBCA; 73% of the comments made were of a positive nature. Typically, the parents saw PBCA options as tools to enrich the teenage learning experience, both in and out of school. Of the parents who made comments, 6% indicated that the more choices available to students, the better the educational system; PBCA would allow faster students to go ahead, thus promoting independent learning, while teachers would have more time to help slower students. However, as was the case with the staff survey, views concerning the use of PBCA were often confounded with views on the possible outcomes of PBCA — early graduation versus continued course work. Parents were often in favor of PBCA, but not in favor of early graduation. Five percent of the Jordan parents stated that PBCA would only encourage early graduation and would not further learning. Another 5% of Jordan parents and 14% of Emery parents mentioned the need for students to attend high school for social learning and for their enjoyment. In Jordan school district, there were a number of comments (20%) concerning the need for more information to get to students and parents regarding the PBCA devices that were already available.

Exhibit 4
Parent Intest in PBCA for
Specific Curriculum Areas



DISCUSSION AND RECOMMENDATIONS

The findings of this study argue persuasively that students, parents, and educators are aware and supportive of learning outside the classroom. Furthermore, they are in favor of granting credit for such learning. From 46% to 64% of the students, depending on the subject matter area, expressed an interest in trying to get proficiency based credit. Educators as a group were more positive, while parents were slightly less so.

The extent to which students are actually taking advantage of outside learning opportunities has yet to be determined. Certainly an important percentage of Utah's students appears willing to explore PBCA options. With computer and video assisted learning still in the early stages of development, our exploding knowledge base, and the wide range of individual differences in student interests, knowledge, and abilities, PBCA seems clearly to have a place in future educational plans. The soundness of providing choices and opportunities for qualified students to develop their potential more effectively and efficiently appears irrefutable. However, questions about the scope, timing, operation, and cost-effectiveness of such programs are crucial and still remain. A key question that must be investigated is what percentage of students can actually benefit from PBCA programs. This can be answered best through experimental programs as described in our recommendations.

Results from both the district staff and parents showed that PBCA was most endorsed for use with foreign languages, vocational education, and computer and information technology courses. Similarly, results from the student questionnaire suggested that students had greater out-of-school knowledge (from outside classes, independent study, etc.) in computer and information technology than in other areas. Students, however, were most interested in having PBCA options for English and math classes.

Proficiency in computer technology is clearly a viable skill for the future, and the area appears to be important for a PBCA option. But, currently, while information technology is part of the Utah State Core Curriculum, it is not a requirement for graduation and there are no appropriate assessment procedures (such as end-of-course tests) available by which to determine the proficiency level of students who have taken such courses in school or have acquired

proficiency from out-of-school learning. Similarly, vocational education and foreign languages are areas for which there are no end-of-course assessments. However, all of these are subject areas for which there is great potential for out-of-school learning, and they lend themselves more to performance-based assessment than to traditional paper-and-pencil tests.

Building on earlier efforts which called for educational reform, a number of national education agencies and federal concerns have investigated the preparation of today's students for tomorrow's work force (Secretary's Commission on Achieving Necessary Skills, 1991; National Center on Education and the Economy, 1990; and Reich, 1988). Specifically, the focus of these endeavors has been on the changing nature of skills needed for adequate performance as a member of the work force. The results from Phase II of this project suggest that such an emphasis is timely, given student willingness to acquire out-of-school knowledge and skills which will contribute to their viability in the work force.

Recent efforts by the Secretary's Commission on Achieving Necessary Skills (SCANS) in the Department of Labor to determine the needs of education have emphasized that we must provide students with the knowledge and skills needed to address the demands of the work force, especially if our nation is going to be competitive in the future. The report calls for further definition of the skills needed to perform in the work place (to determine whether the right skills are being taught) and for the means to assess mastery of the skills.

Presented below and based on the results of Phase II are the recommendations for Phase III of the project or for other consideration by the Utah State Office of Education. The recommendations are supported and enhanced by much of the current literature around potential educational policy reform.

- Develop additional assessment devices to measure proficiency in the core curriculum courses. Continued development of end-of-level tests is encouraged, as these devices can be potentially used for PBCA.
- Pilot a PBCA option. For a selected area where there is interest and an existing appropriate assessment device (e.g. math with its end-of-course tests), design a PBCA procedure and have a sample of students follow it.

- Examine the implications of national agendas for educational reform (such as the SCANS report) for education in Utah.
- Explore the current status of Utah education on world-of-work skills. Look at the curriculum taught and at the means by which credit for proficiency is awarded.
- Interview Utah educators to understand existing curriculum coverage of world-of-work proficiencies and to explore how appropriate skills and characteristics could be infused into education.
- Survey individuals in selected research organizations, testing companies, private industry, and government to obtain a direct report of educational resources and needs, and to gather reports, tools, and other relevant resources.
- Examine the literature on the development of work-relevant curricula and assessment techniques.
- Examine the feasibility of obtaining or constructing a system of measures to monitor the success of the educational system in developing appropriate abilities, talents, and skills.
- Specific, non-core curriculum areas (e.g., computer and information technology) may well be subjects in which students have developed proficiency on their own. More attention needs to be paid to how these subjects fit into future needs and curricula.
- An effort is needed to determine how best to assess the skills which may be represented by areas of study with a more applied focus.

The implications for educational policy from the literature and from the results already obtained in the first two phases of this research need to be explored more thoroughly. To realize the full potential of a new educational perspective, one based on real-world performance rather than classroom recitation, requires exploration of the current status of Utah education and world-of-work proficiencies. The effort will involve not only the curriculum taught, but also the means by which we assess and award credit.

REFERENCES

- Fairfield, M. L., Ellison, R. L., & Fox, D. G. (1991). *Proficiency based credit assessment: A national and statewide survey of use*. Salt Lake City: Utah State Office of Education.
- National Center on Education and the Economy. (1990). *America's choice: High skills or low wages*. Rochester, N.Y.: Author.
- Reich, R. B. (1988). *Education and the next economy*. Washington, DC: National Education Association.
- Secretary's Commission on Achieving Necessary Skills. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: U.S. Department of Labor.

APPENDICES

- A: PROFICIENCY BASED CREDIT ASSESSMENT CATALOG OF RESOURCES
- B: PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR STUDENTS (WITH PERCENT CHOOSING EACH ALTERNATIVE)
- C: PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR STAFF (WITH PERCENT CHOOSING EACH ALTERNATIVE)
- D: PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR PARENTS (WITH PERCENT CHOOSING EACH ALTERNATIVE)
- E: STUDENT COMMENTS REGARDING SUBJECT AREA USES FOR PBCA

APPENDIX A
PROFICIENCY BASED CREDIT ASSESSMENT
CATALOG OF RESOURCES

**Proficiency Based Credit Assessment:
Catalog of Resources**

UNIVERSITY OF UTAH

1. University Challenge Program

This program involves concurrent enrollment in both high school and University courses. College credit is earned through this program but admission to the University after high school graduation is not guaranteed. High schools with students concurrently attending the University have the option of waiving certain graduation requirements based on the course work completed.

Students must have parental permission as well as their high school's consent to enroll in the University Challenge Program. Students must have a cumulative high school GPA of at least 3.0 and may not enroll in more than two classes or eight credit hours per quarter. The Challenge program is available during the Autumn, Winter and Spring quarters. During the 1990-1991 school year, there were 126 applications for the program and 50 students attended the University each quarter.

2. Summer Enrichment Program

The Summer Enrichment Program is also a concurrent enrollment program, although it is only available during the Summer quarter for students who have completed their junior year of high school. Students who have not completed their junior year may be admitted, but they must meet more stringent eligibility requirements. Like the Challenge program, students must have a 3.0 cumulative GPA, and college credit is available. During the summer of 1990 there were 100 applicants for the program, 71 of which attended the University.

3. Take a Trip to Mars

Take a Trip to Mars is a one month, non-credit workshop for exceptional high school students offered by the University of Utah's Computer Science Department. To be eligible for this program, students must be chosen by their guidance counselor and teachers as one of the top three computer science students in the high school. Students must have prior computer knowledge, including the mastery of at least one computer language. Only

thirty students are accepted into the program. The goal of the workshop is to further the student's knowledge of computer graphics and expert systems.

4. Upward Bound

Upward Bound is a one year program for 9th to 12th grade students from low income families in targeted high schools (East, West, Kearns, and Highland). It is an intensive on-campus program with classes in science, reading, English and math (pre-algebra through Introduction to Calculus). Each class lasts six weeks, and continuous counseling and tutoring are provided. The goal of this program is to develop academic skills and prepare students for college. Although this program is not a substitute for high school, it may be a deciding factor in determining the graduation eligibility of borderline students. The Upward Bound program is funded by the United States Department of Education and is offered through University of Utah Educational Opportunities. Sixty-five students enroll each year and remaining applicants are wait-listed.

5. Hughes Initiative

The Hughes Initiative program is offered through the College of Science and emphasizes Medical Biology. It is an outreach access program designed to give laboratory experience to college and high school students. A nine week, non-credit course is offered for sophomores and juniors in high school. Students spend three weeks in a classroom learning laboratory techniques and experimental procedures. Classroom instruction is followed by six weeks of paid laboratory research work on a full time basis. A six week program is offered to junior high students, although this abbreviated curriculum involves neither classroom training sessions nor paid work experience. The 1991 summer program matriculated twenty advanced high school students with a mean grade point average of 3.8.

6. Youth Academy for Excellence

The Youth Academy for Excellence is a pre-college, on-campus program for bright and motivated 8th, 9th, and 10th grade students. This two week, non-credit workshop, offered by the Division of Continuing Education, includes field trips, special projects, sporting activities, and motivational speakers as part of its course work. Students may choose from areas of interest such as humanities, science, mathematics, and writing. Fifty students attended the summer workshop during the 1991.

7. Youth Education

Youth Education, also sponsored by the Division of Continuing Education, offers a variety of non-credit classes for high school students. Sports courses include: the U. of U. football camp, volleyball camp, horseback riding, and martial arts. Other areas of study available through Youth Education are: art, creative dance, and theater.

THE UTAH MUSEUM OF NATURAL HISTORY

Summer adventures are offered through the Utah Museum of Natural History located on the campus of the University of Utah.

1. A Day With a Naturalist and The Weekend Naturalist

These workshops include: Flintknapping, Geology of Arches, Botany, Mining, and Bird and Insects Watching.

2. Field Trips

Museum instructors guide students to remote and unique sites throughout Utah and the Western States and explore areas of prehistoric interest. These 12-student, natural history excursions are not limited to high school age scholars.

3. Adult Classes

These courses are available to high school students and adults of all ages through the University's Division of Continuing Education. Some of the courses available include: The Natural History of Moab; Bioethics in the Colorado Plateau; Environmental Ethics in Utah; and Space, Time and Life — A Canyonlands Perspective.

4. High School Field Science Program

This is a five day program for all high school students who are interested in learning more about southern Utah. These field science classes explore the geographical, geological, and environmental features of the southern Utah mountains and desert in addition to the Colorado River.

5. Youth Art Academy

The museum offers a two week camp taught by local artists. The students use the museum exhibits as a creative stimulus for their projects and learn artistic skills and methods.

UTAH STATE UNIVERSITY

1. Engineering State

This is a one week summer program for high school students who have completed their junior year. Offered through the Engineering Department, Engineering State is an opportunity to participate in workshops and compete for scholarships. Some students are able to receive college credit for the workshop. During the summer of 1991, 350 high school students attended and nearly 400 are expected for 1992.

2. High School Art Seminar

The Utah State University Art Department offers a one week, non-credit seminar on graphic design to high school students. The program is designed to enhance computer graphic skills.

3. Business Education

The Salt Lake Chamber of Commerce sponsors a seminar for high school students on Entrepreneurship. Thirty students from the Salt Lake area are invited to attend the seminar each year.

4. Miscellaneous Workshops at Utah State University

Drill and Cheer Camps, Sports Camps, 4H Conferences on leadership and social skills, Computer Workshops, a Yearbook Festival and a Poetry Festival are several other programs available to high school students. 6,000 high school students from Utah, Idaho and Wyoming typically attend Utah State University in a given year. Next year the University will be offering academic workshops as well.

SALT LAKE COMMUNITY COLLEGE

Salt Lake Community College offers concurrent enrollment to high school students who are at least 16 years of age. Students are required to follow standard admission procedures and submit letters of permission and recommendation from their parents and their principal. Once admitted, students may enroll in any course offered by the college and are eligible to receive college credit. The awarding of high school credit is determined by the individual high school. Of the 13,000 students enrolled at the College, fewer than 100 are also attending high school.

WEBER STATE COLLEGE

1. Concurrent Enrollment

High school students may concurrently enroll at Weber State while they attend high school. Students earn college credit and may earn high school credit if their school approves.

2. Summer Enrichment Program

Students who have completed their junior year in high school may attend the college during the summer term and earn up to six hours of college credit. High school credit is not awarded for this program.

SOUTHERN UTAH UNIVERSITY

1. Concurrent Enrollment

High school students may concurrently enroll at S.U.U. while attending high school. Students earn college credit and may earn high school credit based on school approval.

2. Governor's Honorary Academy

The Governor's Honorary Academy is a one week, summer workshop for outstanding high school students who have completed their junior year. Student selection is based on leadership and scholastic abilities. The

program, limited to 50 students, offers a general introduction to most of the opportunities available at the S.U.U. Students earn college credit for attending this workshop.

3. Acting Workshop

A one week Shakespearian workshop is offered to graduating high school seniors. Students earn college credit for attending this summer workshop.

4. Vocational and Educational Workshops

These workshops are held on campus and are designed for students who have completed their junior year. These workshops last for one week and college credit is awarded. Some of these workshops include: Welding, Secretarial and Nursing.

WESTMINSTER COLLEGE

Westminster College offers concurrent enrollment to high school students. Westminster offers day and evening classes and is well known as a strong liberal arts institution.

BRIGHAM YOUNG UNIVERSITY

1. Independent Study

Independent Study through B.Y.U. allows high school students and individuals of all ages to complete college course work at home in a variety of subjects. It is possible to fulfill most of the requirements for a bachelor's degree in several different disciplines through this program. Additionally, non-credit courses are offered through the Office of Independent Study. High school credit for course completion is determined by individual high schools.

2. Concurrent Enrollment

High school students may attend the University and receive college credit for successfully completed course work. High school students wishing to enroll at B.Y.U. must adhere to the standard matriculation process in addition

to providing parental and high school consent. The University's night school program is limited to those individuals 23 and older.

3. Education Week

Education week takes place each year in the middle of August. It involves a registration fee which permits attendance to a variety of motivational and educational seminars. Education Week seminars are non-credit classes and are open to participants of all ages.

4. Especially for Youth (E.F.Y.)

The E.F.Y. program is for high school aged students. Motivational speakers address issues facing teen-aged students through a series of workshops, games, and self-development activities. The Especially For Youth program is repeated weekly throughout the summer and accommodations are available in the B.Y.U. dormitories. A registration and accommodation fee is required for this not-for-credit program.

COMPUTERS

1. Computer classes through stores, community ed., colleges, etc.

Many courses are offered through a variety of sources to teach computer literacy. High schools, colleges, and local businesses often offer non-credit courses to people of all ages. Typically, a small registration is assessed to cover the sponsors expenses.

2. Computer self-guided tutorials

Most software programs offer a class taught by the computer. These tutorials provide another means of becoming computer literate. Tutorial manuals can also be purchased at bookstores or through software manufacturers.

3. Computer Programs

Computer software offers students the opportunity to learn academic subjects on their own. Spreadsheets, typing, word processing and graphics are a few of the computer skills required to succeed in the business world

today. Computer instruction in areas such as accounting, mathematics, English, astronomy, biology, chemistry, etc. are available on computer disk.

HANSEN PLANETARIUM

1. Adult Classes

The Planetarium offers classes for students 16 and older. This year, two classes are offered: 1) How to Make a Telescope and 2) Cosmic Catastrophes. These non-credit classes are deigned to develop skills and knowledge in the field of astronomy.

2. Star Shows

Hansen Planetarium offers a presentation about the solar system each evening at 7:00 p.m. These are non-credit presentations for individuals of all ages.

APPENDIX B
PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR STUDENTS
(WITH PERCENT CHOOSING EACH ALTERNATIVE)

PROFICIENCY-BASED CREDIT ASSESSMENT SURVEY FOR STUDENTS
WITH PERCENT CHOOSING EACH ALTERNATIVE (N=1296)

The following survey is about your views on Proficiency-Based Credit Assessment (PBCA). Please respond to this survey on the separate answer sheet. Darken one and only one response to each question completely and neatly. Please include any additional comments on the back of this survey.

MATH

1. Have you taken any **math** classes outside of school?

- 89% A. No, none
- 8% B. One class
- 2% C. Two classes
- 0% D. Three classes
- 1% E. Four or more classes

2. Have you taken any **math** courses at a college or university?

- 98% A. No, none
- 2% B. One
- 1% C. Two
- 0% D. Three or more

3. In the last year, have you used computer programs outside of school to learn or study **math**?

- 72% A. No, not at all
- 22% B. At least once or twice
- 4% C. At least once a month
- 3% D. At least once a week

4. How often have you attended any classes or educational camps during the summer to learn **math**?

- 89% A. Never
- 8% B. Once
- 2% C. Twice
- 1% D. Three or more times

5. Do you plan to enroll in college **math** classes while you are still in high school?

- 25% A. Yes
- 51% B. Possibly
- 23% C. No

6. Do you ever study **math** beyond what is required for your class?

- 8% A. Yes, I do regularly
- 9% B. Often
- 32% C. Sometimes
- 31% D. Rarely
- 20% E. Never

7. Have you ever watched courses on television to learn more about **math**?

- 47% A. No, never
- 34% B. At least one program
- 10% C. Part of a course
- 3% D. One whole course
- 6% E. I've watched more than one course

8. Have you had any work experience which contributed to your knowledge of **math**?

- 35% A. None
- 23% B. Very little
- 28% C. A little
- 11% D. Quite a bit
- 4% E. A lot

9. On your own time, have you ever read any books to learn more about **math**?

- 78% A. None
- 14% B. One
- 6% C. Two to three
- 0% D. Four or five
- 2% E. Several

10. Have you learned **math** from someone outside of your regular classroom teacher (i.e, family or friends)?

- 78% A. Yes
- 21% B. No

11. Are you interested in trying to get proficiency-based credit for a high school **math** course?

- 32% A. Yes, definitely
- 31% B. Possibly
- 25% C. Not sure
- 9% D. Probably not
- 3% E. Definitely not

12. Have you made a special area of **math** your hobby?

- 61% A. No, not at all
- 23% B. Yes, a little
- 14% C. To some extent
- 1% D. Quite extensively
- 1% E. Very extensively

Describe any accomplishment or specialized knowledge related to **math** that you have mastered on your own:

HISTORY

13. Have you taken any **history** classes outside of school?

- 90% A. No, none
- 7% B. One class
- 2% C. Two classes
- 0% D. Three classes
- 1% E. Four or more classes

14. Have you taken any **history** courses at a college or university?

- 97% A. No, none
- 2% B. One
- 1% C. Two
- 0% D. Three or more

15. In the last year, have you used computer programs outside of school to learn or study **history**?

- 81% A. No, not at all
- 15% B. At least once or twice
- 3% C. At least once a month
- 1% D. At least once a week

16. How often have you attended summer classes or educational camps to learn **history**?

- 90% A. Never
- 7% B. Once
- 2% C. Twice
- 1% D. Three or more times

17. Do you plan to take college **history** classes while you are still in High School?

- 27% A. Yes
- 47% B. Possibly
- 25% C. No

18. Do you ever study **history** beyond what is required for your class?

- 12% A. Yes, I do regularly
- 12% B. Often
- 29% C. Sometimes
- 25% D. Rarely
- 22% E. Never

19. Have you ever attended any lectures outside of your regular school classes to learn more about **history**?

- 68% A. Never
- 18% B. Once
- 6% C. Twice
- 3% D. Three or four times
- 5% E. Several times

20. Have you had any work experience which contributed to your knowledge of **history**?

- 70% A. None
- 17% B. Very little
- 10% C. Some
- 2% D. Quite a bit
- 1% E. A lot

21. On your own time, have you ever read any books to learn more **history**?

- 32% A. None
- 19% B. One
- 29% C. Two to three
- 6% D. Four or five
- 15% E. Several

22. Have you learned **history** from someone outside of your regular classroom teacher (i.e., family or friends)?

- 63% A. Yes
- 35% B. No

23. Have you ever taken any historical trips or tours?

- 29% A. Several
- 10% B. Four to five
- 30% C. Two to three
- 13% D. One
- 18% E. None

24. Have you made a special area of **history** your hobby?

- 61% A. No, not at all
- 25% B. Yes, a little
- 10% C. To some extent
- 2% D. Quite extensively
- 2% E. Very extensively

25. Are you interested in trying to get proficiency-based credit for a high school **history** course?

- 29% A. Yes, definitely
- 31% B. Possibly
- 22% C. Not sure
- 12% D. Probably not
- 5% E. Definitely not

Describe any accomplishments or specialized knowledge related to **history** that you have mastered on your own:

FOREIGN LANGUAGE

26. Have you ever taken any **foreign language** classes outside of school?

- 86% A. No, none
- 10% B. One class
- 3% C. Two classes
- 1% D. Three classes
- 1% E. Four or more classes

27. Have you taken **foreign language** courses at a college or university?

- 96% A. No, none
- 3% B. One
- 1% C. Two
- 1% D. Three or more courses

28. In the last year, have you used computer programs outside of school to learn or study **foreign languages**?

- 89% A. No, not at all
- 7% B. At least once or twice
- 1% C. At least once a month
- 2% D. At least once a week

29. How often have you attended summer classes or educational camps to learn a **foreign language**?

- 92% A. Never
- 6% B. Once
- 2% C. Twice
- 1% D. Three or more times

30. Do you plan to take **foreign language** college classes while you are still in High School?

- 28% A. Yes
- 37% B. Possibly
- 35% C. No

31. Do you ever study a **foreign language** beyond what is required for your class?

- 10% A. Frequently
- 7% B. Often
- 19% C. Sometimes
- 17% D. Rarely
- 48% E. Never

32. Do you know how to speak and understand another language?

- 16% A. Yes, I can speak and understand it well
- 42% B. I understand it but do not speak it well
- 41% C. No, I do not know another language

33. Is a language other than English spoken regularly in your home?

- 88% A. No
- 11% B. Yes

34. Have you had any work experience where you learned another language?

- 80% A. None
- 12% B. Very little
- 6% C. Some
- 2% D. Quite a bit
- 1% E. A lot

35. Have you ever watched courses on television to learn a **foreign language**?

- 56% A. No, never
- 25% B. At least one program
- 8% C. Part of a course
- 3% D. One whole course
- 9% E. I've watched more than one course

36. On your own time, have you ever read any books to learn another language?

- 71% A. None
- 16% B. One
- 8% C. Two to three
- 1% D. Four or five
- 3% E. Several

37. Have you taken any trips or tours where you learned another language?

- 9% A. Several
- 2% B. Four or five
- 5% C. Two or three
- 9% D. One
- 76% E. None

38. Are you interested in trying to get PBCA credit for a high school foreign language course?

- 20% A. Yes, definitely
- 26% B. Possibly
- 23% C. Not sure
- 18% D. Probably not
- 13% E. Definitely not

Describe any accomplishment or specialized knowledge about a foreign language that you have mastered on your own:

ENGLISH

39. Have you taken any English classes outside of school?

- 87% A. No, none
- 8% B. One class
- 3% C. Two classes
- 1% D. Three classes
- 1% E. Four or more classes

40. Have you ever taken any English courses at a college or university?

- 96% A. No, none
- 2% B. One
- 1% C. Two
- 1% D. Three or more

41. In the last year, have you used computer programs outside of school to learn or study English?

- 79% A. No, not at all
- 15% B. At least once or twice
- 4% C. At least once a month
- 2% D. At least once a week

42. How often have you attended summer classes or educational camps to learn English?

- 91% A. Never
- 5% B. Once
- 2% C. Twice
- 1% D. Three or more times

43. Do you plan to take college English classes while you are still in High School?

- 39% A. Yes
- 40% B. Possibly
- 20% C. No

44. Do you ever study English beyond what is required for your class?

- 10% A. Frequently
- 9% B. Often
- 25% C. Sometimes
- 27% D. Rarely
- 30% E. Never

45. Have you attended lectures outside of your regular school classes to learn more about literature or writing?

- 9% A. Yes, several times
- 6% B. Three or four
- 7% C. Twice
- 14% D. Once
- 65% E. Never

46. To what extent do you read on your own time?

- 35% A. Frequently
- 20% b. Often
- 25% C. Sometimes
- 14% D. Rarely
- 6% E. Never

47. How often have you written short stories or poetry on your own time?

- 14% A. About once a week
- 16% B. About once a month
- 28% C. A few times a year
- 24% D. Rarely
- 19% E. Never

48. Have you had any work experience where you learned to write better?

- 53% A. None
- 21% B. Very little
- 18% C. Some
- 6% D. Quite a bit
- 3% E. A lot

49. On your own time, have you ever read any books to learn more about grammar, writing, literature etc.?

- 69% A. None
- 16% B. One
- 9% C. Two to three
- 1% D. Four or five
- 4% E. Several

50. Have you learned about writing or literature from someone outside of your regular classroom teacher (i.e., family, friends)?

- 52% A. Yes
- 46% B. No

51. Are you interested in trying to get proficiency-based credit for a high school English course?

- 33% A. Yes, definitely
- 31% B. Possibly
- 19% C. Not sure
- 11% D. Probably not
- 7% E. Definitely not

Describe any accomplishment or specialized knowledge related to English that you have mastered on your own:

SCIENCE

52. Have you taken any science classes outside of school?

- 84% A. No, none
- 10% B. One class
- 3% C. Two classes
- 1% D. Three classes
- 1% E. Four or more classes

53. Have you ever taken any science courses at a college or university?

- 95% A. Never
- 3% B. One
- 1% C. Two
- 1% D. Three or more

54. In the last year, have you used computer programs outside of school to learn or study science?

- 83% A. No, not at all
- 13% B. At least once or twice
- 2% C. At least once a month
- 3% D. At least once a week

55. How often have you attended summer classes or educational camps to learn **science**?

- 83% A. Never
- 10% B. Once
- 4% C. Twice
- 3% D. Three or more times

56. Do you plan to take college **science** classes while you are still in High School?

- 29% A. Yes
- 42% B. Possibly
- 27% C. No

57. Do you ever study **science** beyond what is required for your class?

- 12% A. Frequently
- 9% B. Often
- 22% C. Sometimes
- 23% D. Rarely
- 33% E. Never

58. Have you ever attended lectures outside of your regular school classes to learn more about **science**?

- 9% A. Yes, several times
- 6% B. Three or four times
- 8% C. Twice
- 11% D. Once
- 67% E. Never

59. Have you gone to the Hansen Planetarium, a museum or any other **science** exhibit in the last two years?

- 19% A. Yes, many times
- 11% b. Three or four times
- 30% C. A few times
- 21% D. Once
- 19% E. No, not at all

60. Have you had any work experience where you learned about **science**?

- 63% A. None
- 17% B. Very little
- 14% C. Some
- 4% D. Quite a bit
- 2% E. A lot

61. On your own time, have you ever read any books to learn more about **science**?

- 59% A. None
- 16% B. One
- 16% C. Two to three
- 2% D. Four or five
- 8% E. Several

62. Have you ever learned **science** from someone outside of your regular classroom teacher (i.e., family or friends)?

- 50% A. Yes
- 49% B. No

63. Have you taken any trips or tours to learn more about **science**?

- 15% A. Several
- 12% B. Three or more
- 16% C. Two
- 18% D. One
- 40% E. None

64. Have you made a special area of **science** your hobby?

- 58% A. No, not at all
- 24% B. Yes, a little
- 11% C. To some extent
- 4% D. Quite extensively
- 4% E. Very extensively

65. Are you interested in trying to get proficiency-based credit for a high school **science** course?

- 27% A. Yes, definitely
- 31% B. Possibly
- 20% C. Not sure
- 13% D. Probably not
- 10% E. Definitely not

Describe any accomplishment or specialized knowledge related to **science** that you have mastered on your own:

COMPUTERS

66. Have you taken any **computer** classes outside of school?

- 77% A. No, none
- 15% B. One class
- 4% C. Two classes
- 2% D. Three classes
- 3% E. Four or more classes

67. Have you ever taken any college **computer** courses?

- 93% A. No, none
- 4% B. One
- 1% C. Two
- 1% D. Three or more

68. How much time do you spend using a **computer** in your home?

- 23% A. A lot
- 16% B. Quite a bit
- 22% c. Some
- 12% D. Very little
- 27% E. None, don't have one

69. Have you used **computer** programs to learn more about computers?

- 39% A. No, not at all
- 42% B. At least once or twice
- 9% C. At least once a month
- 9% D. At least once a week

70. How often have you attended summer classes or educational camps to learn **computers**?

- 86% A. Never
- 9% B. Once
- 3% C. Twice
- 2% D. Three or more times

71. Do you plan to take college **computer science** classes while you are still in high school?

- 19% A. Yes
- 47% B. Possibly
- 33% C. No

72. Do you ever study **computers** beyond what is required for your class?

- 12% A. Frequently
- 11% B. Often
- 19% C. Sometimes
- 19% D. Rarely
- 39% E. Never

73. Have you ever attended lectures outside of your regular school classes to learn more about **computers**?

- 6% A. Yes, several times
- 4% B. Three to four times
- 4% C. Twice
- 11% D. Once
- 75% E. Never

74. How often do you use a computer outside of school?

- 18% A. Daily
- 28% B. Weekly
- 24% C. Monthly
- 10% D. Yearly
- 21% E. Not at all

75. How often do you use a school computer for purposes unrelated to assigned classwork?

- 12% A. Daily
- 13% B. Weekly
- 16% C. Monthly
- 10% D. Yearly
- 48% E. Not at all

76. Have you had any work experience which contributed to your knowledge of computers?

- 56% A. None
- 20% B. Very little
- 15% C. Some
- 5% D. Quite a bit
- 4% E. A lot

77. On your own time, have you ever read any books to learn about computers?

- 69% A. None
- 16% B. One
- 8% C. Two to three
- 2% D. Four or five
- 4% E. Several

78. Do you ever use a modem, database or computer network?

- 32% A. No, don't have a computer
- 19% B. Never
- 19% C. Seldom
- 18% D. Occasionally
- 12% E. Often

79. Are you interested in trying to get proficiency-based credit for a high school computer course?

- 24% A. Yes, definitely
- 30% B. Possibly
- 21% C. Not sure
- 15% D. Probably not
- 11% E. Definitely not

80. Have you made a special area of computers your hobby?

- 52% A. No, not at all
- 26% B. Yes, a little
- 13% C. To some extent
- 5% D. Quite extensively
- 5% E. Very extensively

Describe any accomplishment or specialized knowledge related to computers that you have mastered on your own:

VOCATIONAL

81. Are you interested in trying to get proficiency-based credit for a high school vocational course?

- 26% A. Yes, definitely
- 28% B. Possibly
- 23% C. Not sure
- 12% D. Probably not
- 11% E. Definitely not

82. Are you currently working at a part-time job while in school?

- 35% A. Yes
- 63% B. No

Describe any specialized knowledge or skills you have acquired as a result of your work experience (full or part time):

ART

Describe any specialized knowledge or skills you have acquired in an artistic area such as painting, ceramics, photography, etc?

83. Have you had any work experience where you learned more about some type of art?

- 52% A. None
- 19% B. Very little
- 15% C. Some
- 7% D. Quite a bit
- 7% E. A lot

84. On your own time, do you ever read any books to learn more about art or how to do something artistic?

- 52% A. None
- 15% B. One
- 17% C. Two to three
- 5% D. Four or five
- 12% E. Several

85. Have you learned about art or how to do a certain kind of art from someone other than your regular art teacher (i.e., family or friends, etc.)?

- 63% A. Yes
- 35% B. No

86. Are you interested in trying to get PBCA credit for a high school art course?

- 23% A. Yes, definitely
- 26% B. Possibly
- 18% C. Not sure
- 19% D. Probably not
- 14% E. Definitely not

ATHLETICS

87. Do you compete in any athletic event outside of school?

- 22% A. No
- 15% B. I used to compete
- 21% C. I compete sometimes
- 41% D. Yes, regularly

88. How many hours a week do you spend on in-school athletics?

- 39% A. None
- 32% B. One to five hours
- 13% C. Six to ten hours
- 16% D. Ten or more hours

89. How many hours a week do you spend on out-of-school athletics?

- 22% A. None
- 46% B. One to five hours
- 17% C. Six to ten hours
- 15% D. Ten or more hours

90. If you play on a school athletic team, how many hours a week do you spend practicing during the off season?

- 57% A. I am not on a school team
- 9% B. None, I only practice during the sport season
- 17% C. One to five hours
- 9% D. Six to ten hours
- 8% E. Eleven or more hours

91. Are you interested in trying to get proficiency-based credit for a high school physical education course?

- 38% A. Yes, definitely
- 25% B. Possibly
- 14% C. Not sure
- 12% D. Probably not
- 12% E. Definitely not

What physical activities do you participate in?

How much out of school time do you spend doing athletic activities?

OTHER

92. Do you feel that you are able to take all of the classes that you want while you are in High School?

- 32% A. Yes
- 49% B. Most of them, but not quite all.
- 12% C. Only a few of them.
- 6% D. No, I rarely get the classes that I want.

Please list the courses for which you would like proficiency-based credit options to be available in the space provided below.

Thank you for your participation.

APPENDIX C
PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR STAFF
(WITH PERCENT CHOOSING EACH ALTERNATIVE)

**PROFICIENCY-BASED CREDIT ASSESSMENT SURVEY FOR STAFF
WITH PERCENT CHOOSING EACH ALTERNATIVE (N=114)**

The following survey is about your views on Proficiency-Based Credit Assessment (PBCA). Please complete this survey by circling one and only one response to each question. Please include any comments about these questions in the space provided.

- | | |
|---|--|
| <p>1. How much do you encourage students to graduate early from high school?</p> <p>5% A. Strongly encourage
24% B. Encourage somewhat
59% C. Neither encourage nor discourage
11% D. Discourage somewhat
1% E. Strongly discourage</p> | <p>5. What percentage of your students, if any, would you encourage to try a PBCA option if it were available?</p> <p>9% A. None
33% B. 1-2%
17% C. 3-4%
18% D. 5-9%
25% E. 10% or more</p> |
| <p>2. Do many students learn material on their own beyond what is required by the schools?</p> <p>7% A. Frequently
15% B. Often
51% C. Sometimes
27% D. Rarely
0% E. Never</p> | <p>6. Would you like to see more students taking advantage of the PBCA options?</p> <p>27% A. Definitely yes
35% B. Probably yes
29% C. Possibly
7% D. Probably not
2% E. Definitely not</p> |
| <p>3. Do you feel there is a need for more PBCA options in your school?</p> <p>25% A. Yes, greatly
40% B. Somewhat
24% C. Don't know what need exists
10% D. Not really
2% E. Not at all</p> | <p>7. Do you think many students would take advantage of the PBCA option?</p> <p>13% A. Definitely yes
24% B. Probably yes
40% C. Possibly
23% D. Probably not
1% E. Definitely not</p> |
| <p>4. Are you interested in learning more about future developments of PBCA options?</p> <p>24% A. Very interested
40% B. Interested
29% C. Somewhat interested
4% D. Not very interested
3% E. Not at all interested</p> | <p>8. Are you in favor of using a PBCA system in your school?</p> <p>14% A. Strongly in favor
53% B. In favor
25% C. Neutral
8% D. Against
1% E. Strongly against</p> |

9. Do you believe the use of PBCA will enhance the educational opportunities available to your students?

- 11% A. Greatly enhance
- 65% B. Enhance
- 18% C. No effect
- 5% D. Harm
- 2% E. Greatly harm

10. How often do students know required material before you teach it?

- 0% A. Frequently
- 8% B. Often
- 59% C. Sometimes
- 32% D. Rarely
- 1% E. Never

11. What is your position in the school district?

- 90% A. Teacher
- 4% B. Principal
- 4% C. Counselor
- 1% D. Administrator
- 1% E. Other (explain below)

12. For which of the subject areas below could PBCA be effectively used? Circle any that apply.

- 69% A. Math classes
- 61% B. Science classes
- 61% C. History
- 44% D. Health Education
- 81% E. Computer & Information Technology
- 52% F. English or Literature
- 49% G. Art
- 50% H. Physical Education
- 71% I. Foreign Languages
- 50% J. Family Living/Home Economics
- 56% K. Physical Sciences
- 68% L. Business or Consumer Math
- 54% M. Social sciences
- 71% N. Vocational courses

Comments

Please feel free to comment in the space provided below. If you would like, please include more information about your views on the current and potential uses of PBCA and how more PBCA options may or may not affect students' school careers.

Thank you for your participation!

APPENDIX D
PROFICIENCY BASED CREDIT ASSESSMENT SURVEY FOR PARENTS
(WITH PERCENT CHOOSING EACH ALTERNATIVE)

PROFICIENCY-BASED CREDIT ASSESSMENT SURVEY FOR PARENTS WITH PERCENT CHOOSING EACH ALTERNATIVE (N=398)

The following survey is about your views on Proficiency-Based Credit Assessment (PBCA). Please complete this survey by circling one and only one response to each question. Please include any comments in the space provided.

1. How often do your high school students learn material beyond what is required by the schools?

- 15% a. Frequently
- 22% b. Often
- 45% c. Sometimes
- 17% d. Rarely
- 1% e. Never

2. How often do you encourage your child to try to graduate early from high school?

- 7% A. Strongly encourage
- 13% B. Encourage somewhat
- 62% C. Neither encourage nor discourage
- 9% D. Discourage somewhat
- 10% E. Strongly discourage

3. If it enhanced your child's ability to earn credit, would you help your child learn more outside of school?

- 50% A. Definitely
- 39% B. Probably
- 7% C. Not sure
- 3% D. Probably not
- 1% E. Definitely not

4. Do you feel there is a need for more PBCA options in your child's school?

- 43% A. Yes, greatly
- 27% B. Somewhat
- 24% C. Don't know what need exists
- 4% D. Not really
- 1% E. Not at all

5. Are you interested in learning more about available PBCA options?

- 37% A. Very interested
- 41% B. Interested
- 16% C. Somewhat interested
- 4% D. Not very interested
- 2% E. Not at all interested

6. Based on the information you received with this survey, do you intend to inquire further into PBCA options for your child?

- 29% A. Yes, definitely
- 44% B. Probably
- 16% C. Not sure
- 9% D. Probably not
- 2% E. Definitely not

7. Would you like your child to take advantage of any PBCA options?

- 40% A. Definitely yes
- 32% B. Probably yes
- 25% C. Possibly
- 3% D. Probably not
- 1% E. Definitely not

8. Prior to the information received with this survey, how much did you know about PBCA?

- 1% A. Know a lot about it
- 2% B. Have inquired into it
- 15% C. Heard about it, but did not look into it
- 33% D. Very little
- 49% E. Nothing

9. To what extent are you aware of the PBCA options called HELP tests which are available in Jordan school district?

- 89% A. I was not aware of them
- 9% B. I had heard about them
- 0% C. I have inquired into them a little
- 2% D. I know about them and I want my student to try them
- 1% E. My student has tried a HELP test

10. How many children do you have in grades 9-11 and what grades are they in?

11. For which of the subject areas below could PBCA be effectively used? Circle any that apply.

- 54% A. Math classes
- 48% B. Science classes
- 45% C. History
- 44% D. Health Education
- 77% E. Computer & Information Technology
- 44% F. English or Literature
- 48% G. Art
- 50% H. Physical Education
- 46% I. Foreign Languages
- 55% J. Family Living/Home Economics
- 37% K. Physical Sciences
- 51% L. Business or Consumer Math
- 33% M. Social sciences
- 72% N. Vocational courses

Comments

Please feel free to comment in the space provided below. If you would like, please include more information on the out-of-school learning activities you encourage your child to participate in, your views on the current and potential uses of PBCA, and how more PBCA options may or may not affect your child's school career.

Thank you for your participation!

APPENDIX E
STUDENT COMMENTS REGARDING SUBJECT AREA USES FOR PBCA

STUDENT COMMENTS REGARDING SUBJECT AREA USES FOR PBCA

Math Accomplishments:

1. First in my school in the State Math Contest. I was awarded the United States Academic Achievement for Math.
2. I went to the State Math Contest in 7th & 8th grade.
3. I placed 3rd in the State Math Contest in 8th and 9th grade. Achieved 84 on AGSNE.
4. I went to the State Math Contest.
5. I received a math book from a teacher and studied it during the summer to help me for next year.
6. I competed in Math Blasters
7. In Math, I got the highest score on the Iowa tests in my school. I got 100%!
8. I participated in Math Olympiads.
9. I won 4th place in the 8th grade State Math Counts contest.
10. I've finished Calculus AB and BC. I know a lot about fractals
11. I scored in the 99 percentile on the P-ACT math section.
12. I've gone to the State Math Counts contest.
13. In the 5th grade, I was in Math Olympiads.
14. I placed in the Regional Math Counts contest.

History Accomplishments:

1. I quite frequently write history reports, just to learn more.
2. In the Utah State Citizen Bee I took 4th place.
3. I've been on many trips to Washington D.C., etc.
4. I've read many books on the history of wars in the world.
5. I have learned and gone to the spot of a lot of battles in the Civil War.
6. I am involved in an extra-curricular program (Civil Air Patrol) that discusses the history of America, the world and flight.
7. I went on a history tour back east for about a month.
8. I have read a lot about the archeological wonders of the world-- Stonehenge, Great Pyramid, Nacca Lines, etc.

Foreign Language Accomplishments:

1. I've learned to read and speak Ancient Greek and I can speak some German.
2. I've learned quite a bit about the Mexican culture by teaching ESL to Spanish/Mexican people.
3. At my house the only language that we speak is French and English

4. I passed a Spanish class 2 years ago. My grandpa has been teaching me Spanish since I was just a little kid and I've read Spanish dictionaries. I've managed to go to Mexico and speak with some people.
5. I lived in Samoa for 2 years and learned to speak a little Samoan.
6. French
7. I attended BYU's Language Fair/Competition.
8. I went to Espanolandia at BYU last year.
9. I can speak and understand French mostly on my own.
10. I've been in two German competitions.
11. I speak Spanish.
12. I have been offered magazine shoots in foreign countries which required some knowledge of the language. I have also traveled all over Europe.
13. I take German and am half German. My mother is full German and speaks German fluently. So I have an extra advantage.
14. I went to Tahiti (French speaking). The family I stayed with helped me to learn and understand the language.
15. I use a Spanish disk on my computer.
16. We adopted a Spanish girl and I learned Spanish to be able to speak to her.
17. My grandmother is a native Puerto Rican and English is her second language. My grandfather and aunt speak fluent Spanish. I've gotten A's in my Spanish class. I took extra-curricular Spanish classes in the 2nd and 4th grades.

English Accomplishments:

1. I won several contests for writing stories, essays, etc. In 4th grade, I won 2nd place in a National contest for writing.
2. I learned to write poetry on my own and I love it. I write a poem a week, if not more.
3. I've written stories and have won prizes for the stories.
4. I've written several poems and stories and one book.
5. I write a lot of poetry, songs, stories, etc.
6. I won an award for a short story in a Reflections Contest.
7. A poem I wrote is in a National competition and will be published in a poetry book.
8. Writing poems and short stories
9. I write many stories and poems. My sister's poem was just published in a book. She helps and guides me to be a good writer.
10. I've had two of my poems published.
11. I have won several awards for poems and stories I have written.
12. I have won some awards for stories I have written. I am on the newspaper staff.
13. I won 1st place for literature in two contests.
14. I've had a few poems published in our school paper and in the Deseret News. I write short stories & poems often.

Science Accomplishments:

1. I was awarded the United States Academic Achievement for Science.
2. I am taking an advance (College credit) science class now, as a sophomore.
3. I am completing a home-study AP chemistry program on my own time.
4. I was in an electric contest and did very well.
5. I have studied a lot about nuclear energy. I've done a lot of research and tried to find out different opinions.
6. I know a lot about superconductors, atomic structure, physics, and the Quantum theory.
7. I have studied astronomy a lot.
8. I have been in two Science Fairs.
9. I am in an advanced placement course for Science. I enjoy my chemistry class.
10. I've taken a ground school class to learn more about airplanes, aerodynamics, etc.
11. I'm taking honors Biology. My father works in the Biology Department at Caltech. My stepmother did her thesis work there and is now a Prof. of Environmental Engineering at Stanford. I've gotten A's in my science classes.
12. I've made a lot of electrical things like radios and lamps.
13. Learned more about weather and light from working with science kits.

Computer Accomplishments:

1. I developed and implemented a menu program for the Biology Department of ECHS and adapted it to run on Tandy 1000's, IBM PS/2's and IBM clones.
2. I learned to use many programs by myself.
3. I know how to run most computer systems.
4. I know how to do some computer programming.
5. I have almost mastered Word Perfect Version 5.1 learning it on my own. Although there are still a few areas I need to work on.
6. I've written many complex programs for fractals & other graphics.
7. I know a lot about WordPerfect because I use it to write stories, etc.
8. I know Pascal, ASM basic and am learning C.
9. I have learned to use my computer without a teacher.
10. I have learned about WordPerfect and am working on some graphics
11. I learned everything (almost) about computers on my own.
12. I've worked on some computer programs and designed my own.
13. I've taught myself how to do all programs.
14. I learned how to program in BASIC without any help from people or manuals. I know almost everything there is to know about computers. I programmed one of ours at home.
15. My dad is always trying to get me to read his MSDOS books on how to write programs. I rewired and fixed his computer last summer. We use computers in

my homes for everything. We have 2 at my mom's house and 3 or 4 at my dad's house.

16. Word Processing is my strength. I know a lot about how to work with WordPerfect.
17. My dad sells computers so I understand the Macintosh very well.
18. I learned to use WordPerfect on an IBM by myself.
19. I know the Basic language and DOS language.
20. I have made computer programs.

Work Experience skills or knowledge:

1. I am proficient with Ventura Publisher, PageMaker, Paradox, Windows 30, MS/DOS on computers. I am an able printer, and have completed print jobs with no assistance.
2. I teach piano lessons and also take them. I spend about 4 hours a day with music.
3. I have my own business during the summer and I can make about \$200 a month. I have learned to budget and spend wisely.
4. Farming
5. Cosmetology
6. Construction and a lot about farm work and tractors
7. Dental Hygienist, catering, and nursing
8. Building codes & regulations
9. Architectural
10. I have knowledge in heating and air conditioning from my part time job.
11. Knowledge in medicine and health care. (to a certain extent)
12. I have learned how to build and put up fences.
13. I've become much better with computers and I know a lot more about medicine.
14. I work part-time at a hospital and have worked on computers and have taught kids art and dance.
15. I am learning to do farm work.
16. I've learned to be a water safety instructor.
17. I can work with cash registers, food, metal, and staffing electrical boards.

Artistic skills or knowledge:

1. Ceramics and leather
2. In my printing experience, I have touched up art work, developed photographs, and printed photographs.
3. I won 2nd in a State Photography Contest in 4th grade.
4. I won an Art contest once and won a trip to the Hansen Planetarium but was unable to attend.
5. Sewing and music
6. Ceramics

7. I can sew extremely well. I don't know if this is considered an art.
8. I have done a lot of art work including ceramics and basic drawing
9. Drawing
10. Pottery
11. I work for my mom who is a photographer
12. I've played piano for 8 years, flute for 4years, and I'm starting to write music.
13. I won a Reflections award for photography.
14. Commercial art, ceramics airbrush, silkscreening, photography, drawing, drafting and construction art.
15. Ceramics and wood
16. Ceramics and drawing
17. I draw and paint a lot. I want to have a job in this area!
18. Ceramics, photography, drawing, design, music, and painting
19. I can do both photography and ceramics.
20. Painting, ceramics, and drawing
21. Dancing and photography
22. Dance is an art to me. I am very good in dance. I hope to get a scholarship for dance.
23. I took 3 years of painting, and 1 full year of drawing.
24. Drawing and ceramics
25. Paint, drawing, ceramics, arts & crafts
26. I am take a lot of ballet, 6 times a week.
27. I do ceramics and paintings
28. I work with ceramics and have painted
29. I can identify wall paintings - petrograffs
30. I took art classes in summer school.
31. I have taken violin lessons for about seven years. I spend a lot of time playing various musical instruments.
32. I play drums.
33. I've taken ceramics and a lot of art classes.
34. I have taken classes in ceramics.
35. I've worked for my Mom's business painting and making new designs on ceramics and crafts.
136. I have skills with art, painting and ceramics - I got 1st place on one of my pieces of pottery.
37. I have won many prizes for paintings, drawings and cross-stitch.
38. Painting, drama, photography

Participation in Physical Activities:

1. Track and dance
2. Rodeo
3. Horseback riding

4. Basketball, track and field, and bowling
5. Lifting weights, playing football, baseball, track
6. Baseball
7. Basketball, volleyball, track, softball
8. Cross country running
9. Church sports
10. Basketball
11. Track, Cross country running
12. Bicycling
13. Baseball, basketball, soccer
14. Basketball, football, baseball
15. Softball, volleyball, basketball
16. Basketball, football, baseball, wrestling, weight lifting
17. Basketball, football
18. Running
19. Most sports (i.e. basketball, volleyball, softball, soccer, weight lifting) and I am good at them.
20. I was a Cheerleader and on the drill team. I often walk and do aerobics.
21. I am a Cheerleader at the high school
22. Basketball, football, volleyball, softball, track
23. Basketball, swimming, softball, volleyball, track
24. Basketball, football, track, biking
25. Cheerleading, track
26. Rodeo. I think that Rodeo should be counted for a P.E. credit just like all other school sports.
27. None, I am unable to participate
28. Softball
29. Weight lifting, basketball
30. Wrestling, track
31. I play high school basketball and run track
32. Football, wrestling and track
33. Basketball, football
34. Football, track, P.E.
35. Karate
36. Church basketball, volleyball, softball, city leagues
37. Wrestling, football, track
38. Football, basketball, wrestling, baseball, golf
39. Football, wrestling, track
40. Football, basketball, wrestling, track
41. Basketball, cheerleading, volleyball, track
42. Softball, soccer
43. Walking, volleyball, cheerleading

44. I am a Cheerleader.
45. I am a Cheerleader.
46. Volleyball, basketball, track, softball, cheerleading
47. Football, Wrestling, Basketball, Track, Baseball
48. Baseball, Wrestling, Basketball, Track, Football
49. Basketball, volleyball, football, soccer
50. Kickball, basketball, football, track
51. Basketball, kickball, wiffle ball, soccer, volleyball
52. football, wrestling, track
53. Basketball and football
54. Soph. basketball & football
55. Soccer, basketball, and running
56. Basketball and baseball
57. Golf, basketball, and baseball
58. Basketball, volleyball, and softball
59. Aerobics, and basketball
60. Football, baseball, and basketball
61. Basketball
62. Basketball, baseball, and football
63. Volleyball, swimming and track (in school), basketball and softball (in church)
64. Track
65. Basketball, softball, volleyball, and archery
66. Football
67. Swimming, tennis, and Dance Company
68. Basketball
69. Baseball team and church basketball
70. Football and basketball
71. Basketball, soccer, indoor track, and softball
72. Volleyball, softball, and basketball
73. Basketball, softball, volleyball, and track
74. I used to be in diving and am considering track.
75. Softball, rodeo, gymnastics and dance.
76. Kempo Karate
77. Drill team, Rocky Mountain Ballet, Academy One Ballet, Corps Esprit dance team, performing arts.
78. I participate in track.
79. I play baseball, basketball, run, track, and lift weights.
80. Basketball, softball, etc.
81. Football
82. Softball, basketball, and volleyball
83. Aerobics, running, bike riding & other daily activities
84. Softball, football, and basketball

85. Volleyball, aerobics, and running
86. Basketball, swimming, running, and tennis
87. Dance and track
88. Baseball, football, soccer, and basketball
89. Gymnastics, Dance Company, basketball, and volleyball
90. Basketball
91. Baseball and football
92. Baseball & basketball
93. Dancing, track, and volleyball
94. I play baseball, volleyball, dance and some basketball.
95. I sometimes play basketball and I dance.
96. I participate in gymnastics, weight lifting, Karate and dance.
97. Basketball, volleyball, and softball.
98. I box for Golden Gloves.
99. Basketball, softball, sometimes football, volleyball, soccer, weight lifting.
100. Rollerblade races, ice hockey, street hockey, and skiing races.
101. Basketball, tennis, ice hockey, skiing, golf, and baseball
102. Volleyball
103. Dancing
104. Basketball, dance, and skiing
105. Tennis and Golf -on high school teams.
106. Tennis, bowling, and basketball
107. Dance, track, and gymnastics
108. Soccer. I play on the high school team, and girls State Select Soccer team.
109. Basketball
110. Ice skating, basketball, football, rollerblading, golf, and tennis
111. Gymnastics, swimming, diving, basketball, dancing, and skiing.
112. Junior Jazz, church basketball, Hillcrest Junior football A-team
113. Basketball, baseball, and football
114. Skateboarding, hiking, and snowboarding
115. Dance, softball, volleyball, and basketball
116. Baseball, football, soccer, basketball, skiing, and skating
117. Baseball, basketball, and football
118. I play basketball and soccer
119. I just mainly dance!
120. I'm in the dance company. I'm on the basketball team and I run track
121. Football and basketball
122. Dance, volleyball, and swimming
123. Softball, tennis, basketball, racquetball, etc.
124. Dance
125. Basketball
126. I'm on the girls basketball team and high school track team.

127. Baseball, competition soccer, and basketball
128. Basketball, dance, softball, and volleyball
129. I am a dancer. I play church activities - basketball, softball and volleyball.
130. Football & basketball
131. Running and high school soccer
132. I used to be in gymnastics. I play volleyball, softball, and basketball.
133. I was on the Hillcrest volleyball team. I did volleyball, softball & basketball camps this summer with San Jose Recreation & California All-star softball. I dive. My step mom was on the Caltech diving team and my step dad was on the U's diving team. I swim.
134. Basketball, baseball, football, and track
135. Dance
136. I am on the Varsity Wrestling team at Hillcrest.
137. Basketball, track, and baseball
138. Dance, gymnastics, and basketball
139. Football and basketball
140. Baseball, basketball, football, golf, and tennis
141. Basketball, softball, and volleyball
142. Football, basketball, and baseball
143. Football, wrestling, run, and street hockey
144. Soccer
145. Football, basketball, and weight lifting
146. Basketball, football, baseball, and soccer
147. I am a dancer.
148. Basketball once a week for 2 hours
149. Track, baseball, and basketball
150. Basketball and biking
151. I play soccer on a team.
152. Aerobics, volleyball, basketball, and running.
153. I play soccer, football, tennis, volleyball, and basketball.
154. Wrestling and basketball
155. Dance
156. I take ballet lessons outside of school.
157. Dance
158. Baseball, basketball, and swimming
159. Basketball, soccer, baseball, and football
160. Dance
161. Volleyball, basketball, softball, and soccer
162. Basketball, baseball, and volleyball
163. Soccer, football, baseball, basketball, refereeing, and coaching
164. Swimming, cheerleading, and dance
165. Hockey, two teams. (Travel out of state)

166. Baseball, basketball, track, and volleyball
167. Basketball, football, and tennis
168. Football, wrestling, track, and cross country
169. Ballet
170. Basketball, volleyball, baseball
171. Baseball, basketball, karate, boxing, and cycling
172. Soccer, skiing, rollerblading, and running
173. Dance and gymnastics
174. Dance and running
175. Basketball, volleyball, swimming, racquetball, tennis, etc.
176. Basketball
177. Swimming, skiing, hiking, football, hockey, soccer, biking, and running.
178. I'm on the Hillcrest Sophomore basketball team and Junior Jazz
179. Soccer- high school and indoor, Volleyball- outdoor team summer, basketball- indoor winter.
180. Basketball and volleybal
181. Basketball and football
182. I play for my church basketball team. I'm in the dance company at our school and I sometimes attend aerobics.
183. Basketball, volleyball, and softball
184. Cross training (Weight lifting, running, etc.), football, and baseball.
185. Football, hockey, baseball, polo, and soccer
186. Gymnastics, dance, and running
187. Softball, soccer, basketball and football
188. Dance
189. I play basketball and volleyball. Dance regularly.
190. Dance, gymnastics, and aerobics.

Time spent doing out-of-school athletic activities:

1. 1 - 5 hours
2. Quiet a lot to keep in shape.
3. I'm not sure. About as much as possible
4. All the time except when I am doing homework.
5. I go practice about 2 times a week for a few hours.
6. None. I workout after school
7. A little
8. Not much
9. 24 hours a week
10. At least 5 - 7 hours a week
11. 1 - 3 hours
12. At least 10 hours a week
13. About 10 hours a week. (Come early and cheering at games)

14. A lot
15. I play softball during the whole summer and basketball and swimming and track.
16. Not much
17. I try to do something each day
18. One hour a night
19. All summer, year around working out for wrestling
20. We usually practice for about 2 hours a night and 2 hours on Saturday. Games take up about 6 hours a night.
21. I play basketball at church weekly.
22. Twice a week, 3 hours at a time
23. About 1-5 hours a week
24. When I get out for games day or to practice
25. I play basketball about one hour a day.
26. 10 hours a week
27. Not very much
28. I love to do athletic activities so I am usually always busy.
29. A couple of hours a week
30. 10 hours a week
31. Most of the summer
32. One or more hours
33. 5 hours weekly
34. 1 - 2 hours a day
35. Couple hours a week
36. 2 - 3 hours on weekdays
37. One to five hours a day
38. At least ten hours a week
39. I usually run or play sports everyday for an hour or two.
40. 2 hours a day
41. 5 - 10 hours
42. 1/2 hour a day
43. 8 - 10 hours a week
44. Three or four times a week for basketball. During the summer I spend 5 or 6 times a week playing baseball
45. 5 hours a week
46. 10 days in about 3 months
47. 5 - 10 hours/week
48. maybe 5 - 10 hours a week
49. 10 minutes per day
50. 2 hours a night
51. Every night from 4:00 p.m. to 9:00 p.m. and every morning from 6:00 a.m. to 8:00 a.m. - Saturday 8:00 a.m. to 10:00 a.m.
52. I spend about one hour practicing a day

53. Probably 10 or more hours a week
54. 1 hour a day
55. 1 - 5 hours a week
56. 7 - 8 hours a week
57. 5 to 6 hours a week
58. 3 hours a day
59. 3 to 3 1/2 hours a day. Dance hrs. and gymnastics
60. About 7 hours a week
61. About 30 minutes a day
62. I spend maybe about one to two hours a week.
63. About 8 hours per week
64. 20 min. daily
65. At least 1 hour every other day
66. About 30 minutes daily
67. About 7 - 8 hours a week
68. During the summer, 4 hours a day, every day
69. At least 2 hours a day
70. Six to seven hours a week
71. 2 hours a day
72. 4 hours a week
73. 14 hours a week
74. I spend about 4 hours a week playing basketball or soccer
75. I go to rehearsals about 4 days a week!
76. I spend on the average of 7 or 8 hours a week
77. 2 hours a day
78. 3 - 5 hrs/wk
79. 1 hour per week
80. A lot. I run with my dad - training for marathon
81. 30 min a day
82. 1 1/2 hours a day, 3 times a week
83. 1 hr. a day
84. I practice basketball a lot and play volleyball, and softball twice a week in season.
85. A few hours a day about two or three days a week
86. 7 - 10 hours a week
87. 5+ hours a week
88. About 7 hours.
89. I spend about 2 - 4 hours working out and learning more about the sport a day.
90. 2 - 6 hours a week
91. Probably about 7 - 8 hours a week.
92. About 5 hours a week.
93. About 8 to 10 hours a week playing soccer.

94. 5 hours nightly
95. Between 1 - 2 hours a day
96. Probably 2 - 6 hours a week
97. I spend 10 hours or more each week outside of school dancing.
98. 35 mins., 4 times a week.
99. 3 hours a week
100. A few hours a week
101. 6 - 10 hours or more a week- it depends.
102. 11 to 12 hours a week.
103. 6 hours a week
104. About 2 - 4 hours a week.
105. 6 hours a week
106. 4 to 5 hours a week
107. 1 - 7 hours a week
108. About 2 hours a week
109. 2 hours a week.
110. About six hours a week.
111. About 1 hour per day.
112. 1 hour a day
113. About 4 - 6 hours a week
114. 4 hours a day.
115. 5 hours a week at the least.
116. 6 hrs a week.
117. I try to exercise at least 20 minutes a day.
118. 10 or more hours a week
119. 6-7 hours a day.
120. I spend a few hours a week.
121. 2 hours a week
122. 5 - 10 hours a week.
123. About 3 times a week
124. Probably about 4 hours a week.
125. At least 1 hour every day; usually 2 - 3 hours
126. Probably 2 - 3 hours a week

Courses desired with proficiency-based credit:

1. P.E., history, and computers
2. Ag. mechanics, auto mechanics, and welding
3. math, science, computers, and English
4. Athletics, math, type & English
5. Computer programming and data processing
6. P.E. and Computers

7. AP chemistry and computer sScience (Basic programming, Word Processing, DOS, Desktop Publishing)
8. English, Art, and Computers
9. Home economics, music, athletics, and vocational classes
10. Home Ec., music, and athletics
11. Computers, foreign language, and athletics
12. Science and math
13. Rodeo
14. English, foreign language, and art
15. Psychology course, Sociology course, and more college credit courses, more health and medical knowledge courses for people other than sophomores.
16. Psychology
17. P.E., art, and English
18. Shop and woodwork
19. Math, science, English, and art
20. Math, science, history, and computers
21. English, art, P.E., computers, and math
22. All of them
23. English, science, history, and art
24. Science, math, history, and English
25. Science, math, computers, vocational, and athletics
26. P.E., art, and English
27. Math, history, and science
28. Music, literature, and weight lifting
29. Science, English, P. E., and computers
30. Science and vocational classes
31. Math, English, history, science, art, and athletics
32. English, science, and history
33. P.E., art, history, and math
34. Music - such as violin, trumpet and other such instruments.
35. Health and computers
36. Child care, computer, social studies, and crafts
37. Health, P.E., and English
38. Math, English, P.E., science, athletics, and vocational
39. Computer, computer repair, advanced calculus II
40. Architecture, computer graphics and futuristic art.
41. Science and P.E.
42. Art, journalism, maybe history, and health fitness
43. English and computers
44. Arts, music, and weights
45. Zoology and aerobics
46. Art, athletics, English, etc.

47. Type, biology, P.E., and geometry
48. Math, foreign language, art, English, sports
49. Math, science, history, English, and vocational
50. Athletics
51. History, English, science, math, vocational, art, and P.E.
52. Health, English, sciences, art, drama, Other arts, math, foreign language, history
(All of them)
53. Beginning art, beginning ceramics, and beginning French
54. Gymnastics
55. Science, sports, math, and languages
56. All if possible
57. Art and possibly computers
58. Art, ceramics, sewing, and other courses concerning art.
59. English, computers, and math
60. Computers, math, business tech., P.E., and science
61. Auto mechanics, foreign language, and P.E.
62. Science, computers, English and history
63. All of them, P.E. especially!
64. Dance
65. Dance/P.E., English, history, math, and languages (foreign), science
66. History, English, maybe vocational, and athletics
67. Physical education and art
68. Art and Sports medicine
69. Art
70. English, math, social studies, art, and P.E.
71. Math, art, and science
72. Math, science, English, art, and athletics
73. Math, athletics, history, psychology, computers, and English
74. Photography
75. Dance, drill team, and child development
76. Art, math, science, and vocational
77. Math, maybe arts, but mostly school activities
78. In ballet - or English - or any kind of physical activity
79. English, athletics, and foreign language
80. All of them
81. Music, dance, math, English, and history
82. Literature, athletics, and history
83. History, science, P.E. maybe, and maybe English
84. Computers, math, science, English, foreign language
85. Math, English, and P.E., Science, Foreign Language, etc.
86. History, math, and English
87. Science, English & math.

88. Math, English, science, and language
89. English, math, history, foreign language, and computers
90. Math, English, history
91. Math and English
92. Math, English, science, history and computer science.
93. Foreign language, math, English, and science.
94. History, science, English, and math.
95. Debate and drama
96. English, foreign language, math, science, Phys. Ed., and vocational.
97. Science, English, and math
98. Math, history, music, sports, science, and English.
99. Math, English, history, foreign language, and science.
100. Math, English, P.E., computers, and science.
101. Math and English
102. Art
103. Music, English, Dance, and French
104. English, math, history, sports, vocational, and science
105. P.E., English, and language
106. Computers, science, and math
107. Choir, English, math, and science.
108. Interior design classes.
109. English
110. English, computers, foreign language, and history
111. Science, math, history, and English.
112. Science, English, computers, athletics, foreign language, and math.
113. English, history, geography, and foreign language.
114. History, English, and Art
115. Science and math.
116. Science, art, athletic, English, and vocational.
117. Dance, English, history, and math
118. Math, science, art, and athletics
119. Math, English, science, and history
120. Dance, Drama II, drill team, cheerleading, and history