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AUTHOR McLaughlin, Daniel; Hipps, Jerome
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ABSTRACT

The Career Preparation Assessment (CPA) portfolio is an interdisciplinary, performance-based assessment of skills essential for the post-high school world. The CPA's value as an assessment tool was examined in a pilot test that was conducted in 1996-1997 with six California high schools. The following three data collection activities were conducted to determine the CPA's effectiveness in terms of implementation, student performance/assessment, and whole school change: (1) 8 pilot test teachers and 6 employers of entry-level workers scored the CPA portfolios submitted by 631 students from the 6 high schools; (2) 36 teachers at the 6 schools completed teacher surveys and participated in telephone interviews; and (3) 623 students completed a student survey. Major findings included the following: (1) successful implementation of the CPA and interdisciplinary standards-based assessments requires multiple conditions associated with whole school change; (2) teachers considered the CPA a worthwhile expenditure of time and effort; (3) nearly two-thirds of the students indicated that they would recommend CPA portfolios to other students. (Nineteen tables are included. Appendixes, constituting approximately 40% of this document, contain the following: career preparation standards; data collection instruments; results from the CPA teacher and student surveys; and career preparation assessment rating guide.) (MN)

The Career Preparation Assessment, Results and Analyses from the 1996-1997 Pilot Test

Final Report

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by Daniel McLaughlin, Jerome Hipps

February 6, 1998

WestEd

Improving Education through Research, Development and Service

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EXECUTIVE SUMMARY

I. INTRODUCTION

By definition, systemic reform requires schools and school systems to change a wide variety of practices to improve student performance. This definitional characteristic compels researchers to examine instruments which facilitate change across multiple dimensions of schooling (e.g., curriculum, grading, governance, etc.). This report begins to answer initial, broad questions about such an instrument, the Career Preparation Assessment portfolio (CPA) which was designed to bridge the theoretically interrelated reform vehicles of school-to-work (STW), standards-driven curriculum/assessment, and integrated curriculum.

Overview of the CPA: The CPA is an interdisciplinary, performance-based assessment of the Career Preparation Standards (Thinking and Problem-Solving, Communication, Technology Literacy, Personal and Interpersonal, Employment Literacy, and Occupational Safety) designed to bolster standards-driven reform and whole school change efforts. The CPA defines mastery of the Career Preparation Standards (CPS) by rating portfolios as "Basic," "Proficient," or "Advanced." These ratings also serve as indicators of hirability for an entry-level job. Student performance on four "dimensions" aligned with the CPS (Career Preparation, Analysis, Technology, and Communication) inform a portfolio's rating.

Questions the report addresses: Driven by data from a 1996-97 pilot test of the CPA by six California high schools, the report focuses on three clusters of questions: (1) Implementation, (2) Whole School Change, and (3) Student Performance/Assessment. Implementation is a critical topic because of its relation to scalability and to support for innovative practitioners—to make judgments about the CPA's scalability and to allow practitioners to make informed decisions about the use of interdisciplinary performance-based assessment, we must identify the key conditions for successful implementation. Impact on whole school change should be understood so that the CPA's overall value in the reform context can be described accurately and so that practitioners can make informed judgments about the need for complementary instruments or processes. The quality of the CPA as an assessment should be better understood to know its utility as a data source to guide change at the classroom, school, and district levels.

Pilot test schools: These schools were selected from an initial pool of 300 California high schools most likely to be interested in and capable of successfully using the CPA. Key factors in selecting six pilot test schools from the 300 were: number of teachers and students who were to participate; teacher experience with performance-based assessment, working in teams, and with integrated curriculum; teacher commitment to implementation; and number of shared students. The six schools ranged widely in terms of geography, experience with performance-based assessment, and structure. Thirty-six teachers and

over 600 students participated. The six schools received the following support from WestEd:

- One day of implementation training
- Two half-day trainings focused on reviewing student work against CPA requirements and standards
- Guidelines about how to create a CPA portfolio for all participating students

II. DATA SOURCES

The data sources and methods employed were diverse, and intentionally overlapped to increase validity. In combination they allowed a thorough analysis of the three clusters of questions. The following provided important data for analysis:

Student portfolios. Students from the six pilot test schools submitted CPA portfolios. Eight pilot test teachers and six employers of entry-level workers scored the portfolios as Basic, Proficient, or Advanced over a two-day period in July, 1997. Complete portfolios were also given a score on each of four dimensions (Career Preparation, Analysis, Technology, and Communication). Each complete portfolio was scored by four different scorers. WestEd staff performed statistical analyses of the scoring of the portfolios regarding overall reliability, reliability among types of scorers (teachers and employers), the impact of dimensional scores on overall scores, and student performance by ethnicity and gender.

Scorer Evaluations. After the portfolios were scored, each scorer responded to a one-page questionnaire about scoring issues and the CPA as an indicator of "hirability."

WestEd Observation of Scoring Session. WestEd staff took note of key developments during the scoring session, i.e., which dimensions raised the most questions during training and calibration.

Teacher Survey. At the end of the school year, pilot test teachers completed surveys about their experiences with the CPS/CPA. Survey results were analyzed as a group and a comparison of survey results between higher-performing and lower-performing schools was conducted.

Teacher Interviews. Telephone interviews were conducted with the lead teacher from each pilot school to obtain more detailed information about the issues studied in the teacher survey.

Student Survey. Students who participated in the pilot testing completed a survey that gathered information about their perceptions of the CPS/CPA, including their value to employers and colleges and how the CPS/CPA was implemented. Survey results were

analyzed as a group and a comparison of survey results between higher-performing and lower-performing schools was conducted.

Evaluations of Professional Development. Teachers completed a brief feedback form at the end of each CPA professional development workshop they attended.

III. FINDINGS

Implementation

Key conditions for successful implementation of the CPA: "Successful" implementation of the CPA is defined by the following two characteristics. First, at least 40% of a school's students who attempted a CPA portfolio actually completed the required entries. Second, a majority of the completed portfolios received a score above the Basic rating. Three of the six pilot test schools met the two criteria for success.

Teacher surveys and interviews, student surveys, and students' portfolios informed the identification of the following key conditions:

- teacher experience with the CPA and/or portfolios;
- integrated curriculum;
- regular and effective methods of communication by implementing teachers;
- shared students;
- supporting professional development;
- initiation of implementation of the CPA early in the school year; and, perhaps most importantly,
- teacher commitment to implementation of the CPA and to students attaining the CPS.

It is worth noting that two of the three higher-performing schools had **all** of the essential conditions with the third having all but one (experience with the CPA and/or portfolios). This suggests that *successful implementation of the CPA and of interdisciplinary standards-based assessments requires multiple conditions associated with whole school change.*

Teacher and student views toward the CPA and CPA: Teachers viewed the CPA as a worthwhile expenditure of time and effort. Teachers in the pilot study provided a strong

endorsement of the CPA when 92% of them "agreed" with the statement "I intend to continue using the CPA next year." Other teacher survey results include:

- The CPA portfolio is important for my students (94% agreeing).
- The CPS represent skills valued by employers (89% agreeing).
- The CPS represent skills valued by post-secondary educational institutions (83% agreeing).
- The CPA assesses the CPS well (81% agreeing).
- Doing the CPA is a good way for students to learn or master the CPS (86% agreeing).

Students generally found the CPA to be valuable. *Nearly two-thirds of students indicated that they would recommend CPA portfolios to other students.* Interestingly, their responses indicate that they saw both the CPA and CPS as having some value, with mastery of the CPS perceived as more important than actually doing a CPA portfolio. Students at higher-performing schools were consistently more positive about the CPS/CPA than students at lower-performing schools. Furthermore, survey data suggest that CPA implementation at lower-performing schools needs more teacher time and more focus on the CPS. Less than half of students at lower-performing schools reported that they received the information and help needed to be successful with the CPA, or that their teachers spent enough time explaining the CPS. Given that teachers involved in the pilot test received the same professional development and materials, these data suggest that *teacher impact on student support for the CPA is substantial.*

Whole school change

The CPA and whole school change: Forty-four percent of teachers agreed that "Our school or program has changed its structure, procedures, or curriculum based on CPA-related student work." However, the depth to which the CPA caused implementation of components of whole school change is not known—pilot test schools were implementing components of whole school change prior to the pilot test. Importantly, teachers were positive about the CPA's capacity as a vehicle to affect a key component of whole school change, standards-based curriculum and assessment—83% of pilot test teachers agreed that "The CPA is, or could be, a valuable support for implementing standards-based curriculum and assessment schoolwide." It is important to note that when identifying factors they believe supported successful CPA implementation, teachers often identified conditions commonly associated as components of whole school change. This may lead to teachers working to create those conditions as they attempt to improve CPA implementation.

Changing classroom practice: Responses from the teacher survey suggested the CPS and CPA had impacts on teaching practice. Fifty-nine percent of teachers reported that "Using the CPS made me alter or rethink my teaching methods" and that "Using the CPA portfolio as a means of organizing student work made me alter or rethink my teaching methods." Regarding students' perception of teachers who use the CPA and those who do not, it is interesting to note that 44% of students "agreed" that "Teachers who use the

CPA teach differently or ask me to complete different kinds of assignments than teachers who do not use the CPA."

Student performance/assessment

Background: WestEd received 631 student portfolios from the pilot schools. Of these portfolios, only 20% were "complete," meaning the portfolios contained required entries. The percentage of completed portfolios received from individual schools ranged from 98% to 0%. Three levels of performance (Basic, Proficient, Advanced) were used when giving an overall score. Student performance on the four dimensions aligned with the CPS informed the overall rating of a portfolio. Here are definitions for the performance levels:

> Basic: This rating is given to work that needs improvement and is not ready to show an employer. While the work may be complete, it does not show mastery of the CPS and does not indicate that the student has the skills necessary for satisfactory performance in an entry-level position.
>
> Proficient: This rating means the work is good and is ready to show an employer. The work is complete and meets all requirements; it shows mastery of the CPS and indicates that the student has the skills necessary for satisfactory performance in an entry-level position.
>
> Advanced: This rating means that the work is outstanding. It may exceed the expectations of an employer. The work is complete and meets all requirements; it shows strong mastery of the CPS and indicates that the student may have the skills necessary for exemplary performance in an entry-level position.

Student performance: Sixty-two percent of students submitting complete portfolios received Proficient or Advanced scores. Nearly one-fourth of the portfolios (23%) were scored Basic. The remaining portfolios (15%) fell between Basic and Proficient. These percentages are not representative of the quality of the submitted incomplete portfolios which, while not formally scored, generally were of much lower quality than the complete portfolios.

Substantial differences in student performance existed among the schools and within the three higher-performing schools. Of the three higher-performing schools, Kennedy had the highest percentage of student portfolios scored as Proficient or Advanced (83%)—significantly greater than comparable results at Washington (61%) or Keith (63%). Student performance varied widely by gender, race, and school.

Given that this is the first relatively broad pilot test for the CPA, it is difficult to state whether student performance was "good," "bad," or "mediocre." The performance of the three higher-performing schools' (Washington, an urban school; Kennedy, suburban; and Keith, rural) students suggests strongly that **the CPA is implementable—substantial**

numbers of ethnically diverse students can complete CPA portfolios to a Proficient, or potentially "hirable," level.

Reliability: The reliability of scores given to CPA portfolios was examined in two ways. First, portfolios were analyzed to identify how many of the four scorers agreed on the overall rating. Second, an analysis was conducted to determine the degree to which there was consistency among pairs of scorers (educator-educator, educator-employer and employer-employer).

Given that this is the first attempt at scoring substantial numbers of portfolios from a diverse group of schools, the reliability of the CPA was promising. Seventy-five percent of the time, at least three of the four scorers gave the same overall score to a particular portfolio. With pairs of scorers reliability was lower, 64% overall. Teachers, compared to employers, rated a greater percentage of portfolios as Proficient and fewer as Basic.

IV. CONCLUSION

The pilot test shed light on the CPA's potential as a scalable, reliable assessment that supports systemic reform and improved student performance. We now know that the CPA can be implemented, at least by a range of diverse schools possessing certain preconditions, such that student performance exceeds expectations informed by six years of experience with standards-based portfolios (62% of completed portfolios were Proficient or better). Furthermore, pilot test teachers believe the CPA is a valuable teaching tool that can promote changes in classroom practice and schoolwide reform. Conversely, it is clear that successful implementation is in no way assured even when implementing schools are stronger in terms of capacity for innovation than the general school population—the three lower-performing CPA schools went through a meaningful recruiting and selection process aimed at identifying schools well-positioned to use the CPA. In spite of this, student performance for these three schools suggested that the CPA may not be implemented well even under relatively positive circumstances. We also now know that CPA portfolios can be scored with a reasonable level of reliability by a diverse group of scorers. Moreover, we have data about scoring that will almost certainly lead to improved reliability. Overall, the CPA has a solid base from which to progress.

For the CPA to realize its potential and to gain greater understanding of its scalability, it must meet interrelated challenges regarding: (1) its reliability as an assessment; (2) modification of the portfolio's entries and scoring rubric to better address the needs of employers and college admissions processes; and (3) implementation in a larger number of schools representative of the general population of schools with relatively high stakes. Regarding reliability and validity, while the CPA needs improvement, it is off to a good start technically. Now, the CPA needs to achieve a level of reliability and validity which allows educators, employers, and parents in selected high school communities to use it as a meaningful indicator of student performance. The following steps should increase reliability: revise the scoring rubric with learnings from the 1996-97 pilot test scoring in

order to better define the three performance levels and dimensions, revise scorer training procedures aimed at building a common definition of the three performance levels, and continue to monitor and analyze scoring events and results. After taking these steps, reliability should equal or exceed that of the few other available performance-based assessments measuring work readiness skills.

To increase its value as an assessment and its scalability, the CPA must better meet the needs of employers and college admissions officers. Regarding employers, the Proficient rating must better represent "hirable" in an entry-level position. Regarding college admissions, while the CPS align with skills colleges want in their students, formal review and validation of the CPS by post-secondary institutions is needed. Review of the CPA's format is also necessary to see if post-secondary educators' concerns about use of portfolios in admissions processes can be addressed.

Implementation in schools more representative of the general population than the pilot test schools, and with relatively high stakes (e.g., determining the grade for two or three courses or serving as a high school graduation requirement), is essential to better understand the CPA's scalability and impact on whole school change. Implementing the CPA in such a fashion would allow deeper understanding of the necessary preconditions for successful implementation, particularly with regard to implementation by teachers less interested in the CPA than those in the pilot test. It would also allow for increased study of external and consequential validity. High stakes implementation of the CPA in schools more representative of the general population than the pilot test schools will require an aggressive recruiting effort and may require modification of the CPA and CPS to meet local needs. Willingness to tailor the portfolio components and standards to local needs should increase the following: the pool of schools interested in using the CPA as a high stakes assessment, educator desire to use performance on the CPA as meaningful data informing systemic change, employer desire to use the CPA in hiring decisions, and admissions officers' desire to use it in admissions decisions.

If the CPA meets the challenges listed above, and if preconditions necessary for successful implementation come to exist in a large number of schools, the CPA could become a scalable tool that bolsters standards-driven curriculum, performance-based assessment, and whole school change.

INTRODUCTION

By definition, systemic reform requires schools and school systems to change a wide variety of practices in order to improve student performance. This definitional characteristic compels researchers to examine instruments which facilitate change across multiple dimensions of schooling (e.g., curriculum, grading, governance, etc.). This report begins to answer initial, broad questions about such an instrument, the Career Preparation Assessment portfolio (CPA), an interdisciplinary, performance-based assessment of skills essential for the post-high school world. The CPA was designed to serve as such an instrument by providing a bridge between the theoretically interrelated reform vehicles of school-to-work (STW), standards-driven curriculum/assessment, and integrated curriculum. It derives much of its potential as a support for systemic reform from the large investment in these three vehicles by schools and reformers attempting whole school change -- the CPA may add coherence to many local reform efforts.

The report is organized by broad questions grouped into three clusters:
(1) Implementation, (2) Student Performance/Assessment, and (3) Whole School Change. Implementation is a critical topic because practitioners considering interdisciplinary standards-based curriculum and assessment must know more about what it takes to actually do them. Also, to make judgments about the CPA's scalability, we must identify the key conditions for successful implementation of the CPA as well as teacher and student views about the utility of the CPA. The quality of the CPA as an assessment should be understood in order to know its utility as a data source to inform change at the classroom, school, and district levels. Furthermore, analyzing student performance on the CPA will tell much about its utility and implementability as an assessment and as a curricular tool. Actual impact on whole school change should be understood so that the CPA's overall value in the reform context can be described accurately and so that practitioners can make judgments about the need for complimentary instruments or procedures.

Data from a pilot test of the CPA conducted during the 1996-97 school year with six California high schools provide the basis for preliminary answers to the questions. These answers should inform the design and use of the CPA such that in the 1998-99 school year the CPA could undergo a final test and redesign period leading to the completion of the development of the CPA as a reliable, scalable performance-based assessment of skills essential for the post-high school world that also actively supports whole school change and systemic reform.

Study of, and support for, the CPA aligns closely with WestEd's approach to its national specialty area of Assessment -- improving student performance and bolstering whole school change through focus on four priority areas: whole school implementation, school-to-work transition, teacher assessment and certification, and development and use of scoring rubrics.

OVERVIEW OF THE CAREER PREPARATION ASSESSMENT PORTFOLIO

The CPA is an interdisciplinary, performance-based assessment of the Career Preparation Standards, skills essential for the post-high school world. The Career Preparation Standards (Thinking and Problem-Solving, Communication, Technology Literacy, Personal and Interpersonal, Employment Literacy, and Occupational Safety) align with other important STW skills and standards frameworks such as those in the SCANS report. (The Career Preparation Standards may be found in Appendix A.) Schools and districts can use these standards as part of their systemic reform programs, such as Goals 2000, Carl Perkins, and the School-To-Work Opportunities Act.

The CPA has multiple purposes. The first is to foster and assess student achievement of the Career Preparation Standards (CPS). Second, it is designed to bolster standards-driven reform efforts that focus on preparing students for the post-high school world. Schools, particularly those emphasizing school-to-work transition, can align teaching, learning, and assessment to support student achievement of the CPS. Third, and related to the second purpose, the CPA provides a foundation for teacher collaboration and interdisciplinary curriculum. Because students can demonstrate one or more of the CPS in any class, teachers from all disciplines can support the CPA's use. Fourth, the CPA gives students a useful tool in applying for either entry-level employment or admission to post-secondary education: a completed CPA portfolio.

The CPA portfolio, developed by WestEd in collaboration with teachers and employers, is a set of cumulative entries compiled by students during one or more semesters. The portfolio entries are flexible and can be completed in academic and vocational education classes. The entries are presented in Table 1. When scored against the CPA rubric, complete portfolios receive an overall rating of Basic, Proficient or Advanced. A "**Basic**" rating should serve as an indicator that the student has not mastered the CPS, is not hirable for an entry-level job in a non-technical field, and that the portfolio is not ready to show to an entry-level employer. The "**Proficient**" rating is an indicator that the student has mastered the CPS, is hirable for an entry-level job in a non-technical field, and that the portfolio is ready to show to an entry-level employer. The "**Advanced**" rating is an indicator that the student has strong mastery of the CPS, is hirable for an entry-level job in a non-technical field, and that the portfolio may exceed the expectations of an entry-level employer. It should be noted that the ratings are also designed to describe the quality of the portfolio relative to the expectations of college admissions officers. However, further research is necessary to understand the portfolio's use in the admissions process.

Student performance on four "dimensions", or sub-categories within the rubric, inform the overall rating of a portfolio. Each dimension (Career Preparation, Analysis, Technology, and Communication) contain descriptors of student performance against one or two of the seven CPS at the Basic, Proficient, and Advanced levels. For example, a descriptor of written communication at the Advanced level is "Writing is clear and well organized throughout the portfolio." The analogous descriptor at the Basic level is "Ideas are presented in a disorganized way." Boiling down the seven CPS into four essential

dimensions appeared necessary for efficient scoring -- a rubric with seven dimensions is quite hard to score in a reasonable period of time and was less supportive of holistic scoring than a rubric with four dimensions.

Table 1

CPA portfolio entries

ENTRY	DESCRIPTION
Personal statement	Students outline their career goals and evaluate their skills in relation to the CPS.
Resume	Students prepare a one-page resume describing their experiences and skills in relation to the CPS.
Application	Students obtain and complete an application for employment or continued education/training.
Letter of recommendation	Students obtain a letter of recommendation from someone who knows them well, such as a supervisor, community leader, or teacher.
Work samples	Students select pieces of work demonstrating their mastery of the CPS. Work samples can range from a science experiment to organizing a community event to a statistical analysis of a school-wide survey. (One of the two work samples must address *Technology Literacy*).
Writing sample	Students select any document demonstrating their ability to communicate in writing and to reach a conclusion based on supporting information and evidence. Students are evaluated on their writing ability and analytical reasoning. Writing samples can range from a comparative analysis of short stories to a business proposal.
Interpersonal skills evaluation	An evaluation of students' interpersonal skills (team work, leadership, etc.), the ISE is completed by a supervisor or teacher after a work experience, a team project, or a class.
Optional entries	Students may create an additional section in their portfolios and include any of the following: 1) attendance records, 2) transcript with GPA, 3) extra-curricular activities, certificates, and awards, or 4) cover letter. The CPA rubric does not address optional entries.

In practice, standards-driven curriculum, assessments, and school-to-work co-exist at a small number of high schools, sometimes complementing whole school change, sometimes working independently from or at odds with whole school change. While many educators see the need for whole school change and for supporting standards-driven curriculum and assessments in a STW context, few possess the formidable

combination of will, resources, and expertise to implement. For those who are willing to implement comprehensively, the CPA appears to help blend standards-driven curriculum, assessments, and school-to-work transition, which may lead to whole school change. The CPA is unique as a tool that, in the context of STW, is relatively easy to implement **and** coalesces curriculum, standards, and assessment across multiple disciplines at the high school level.

To date, the CPA's "blending" ability and its value as a teaching tool have been the basis for teachers choosing to implement it. In particular, the CPA has served as a relatively efficient method to organize teaching and student work around the CPS. The word "organize" is chosen carefully. Over three years of use in the field, what appears to have attracted teachers to actually use the CPA is its provision of a framework for eliciting and organizing student performance toward the CPS. In practice it has served not as complete curriculum or assessment, but as a mixture of the two. For example, at Keith High School[1] in rural northern California, teachers of English, Agriculture, and Business have their students complete the CPA portfolio, creating portfolio entries in all three classes. In none of these three classes does the CPA serve as the "core" curriculum. However, each teacher makes sure that his students understand the CPS and identify their best work relative to those standards. Furthermore, while the portfolio comprises a major portion of students' final grades, teachers do not yet use the CPA as an assessment of individual CPS. And according to the teachers, CPA portfolios are the most important single product their students create during high school -- the portfolios are the place where students best demonstrate essential skills and their individual personalities.

HISTORY

1994-95

Development of the CPA began in the winter of 1994 when California's legislature passed AB 198 which mandated schools to report on students' readiness for the world of work. The California Department of Education (CDE) then contracted with WestEd to develop an assessment which: supported high schools' compliance with the new law, aligned with the State's new high school reform vision (*Second to None*), and improved student attainment of California's equivalent of the SCANS skills and competencies, the Career Preparation Standards. The new assessment was to build on and align with WestEd's pioneering work with the CDE in the field of performance-based assessment of occupational cluster standards, the Career-Technical Assessment Program (C-TAP).

During the winter of 1994 WestEd staff, in collaboration with educators and employers, designed the entries that comprise the CPA portfolio and the "Student Guidelines," which assist students and teachers in completing the entries. WestEd then recruited eight

[1] Pilot test schools are described using pseudonyms.

diverse schools to pilot test portfolio **entries** (not the complete portfolio) during the spring of 1995. Nevertheless, students from two of the eight pilot sites submitted complete portfolios. WestEd staff, pilot test teachers, and employers with experience in entry-level hiring evaluated the 2,000+ completed entries, creating exemplar portfolios for the Proficient and Advanced levels for use in teacher training and with students.

In addition to analyzing entries, the following key activities took place:

- WestEd developed and analyzed student and teacher surveys regarding the utility and impact of the CPA. Major findings of the 1994-95 surveys were that students and teachers found the CPA easy to use, the CPA is a powerful teaching and learning tool, and that many students saw a clear tie between success with the CPA and preparedness for the world of work.
- The "Student Guidelines" for implementing the CPA were revised using data from the pilot and feedback from pilot teachers.
- A scoring rubric, aligned tightly with the student work received in the spring pilot, was drafted and refined after review by practitioners and employers.
- Dissemination work began aggressively, with presentations at major assessment and systemic reform conferences and a mailing to some 200 targeted high schools.

From our work in 1994-95, we learned the CPA had strong potential as an implementable comprehensive assessment that organically promotes curriculum integration and teacher collaboration. Also, the work generated initial data about necessary preconditions for successful implementation -- schools with supportive structures (integrated curriculum, team teaching, common planning time) and prior experience with performance-based assessment submitted more and higher quality student work.

1995-96

In the 1995-96 school year, state support for the CPA was withdrawn following a major restructuring of the CDE. However, the two schools that submitted complete portfolios in 1994-95 and one other school from the first year of use continued to pilot test the CPA with support from WestEd. Some 150 completed portfolios were submitted by the three schools. With support from OERI the portfolios were evaluated, exemplars selected, and modifications to the guidelines, scoring rubric and professional development were made based on teacher and student surveys and other feedback. Also, teachers from some of these pilot test schools provided substantive input into the design of the 1996-97 pilot test, adding new information about key conditions for successful completion of CPA portfolio.

1996-97

The 1996 year was pivotal for the CPA. Limited pilot testing in 1994 and 1995 had been successful, and informal data-gathering suggested that high schools across California were at a beginning readiness level to try a performance-based assessment of generic work readiness skills. WestEd decided to launch a significant test of the CPA across

several factors: usability, reliability as an assessment, and impact of use on whole school change.

The 1996-97 pilot testing of the CPA was designed to build on development work completed during the 1994-95 and 1995-96 school years. To start, WestEd identified the 300 California high schools most likely to have interest in, and capacity for, implementing the CPA and invited them to apply for participation in the 1996-97 pilot test. Twenty-eight schools submitted four-page applications. From these 28, WestEd selected seven that appeared able to implement well and represented diversity of geography and ethnicity. Key factors in selection were: number of teachers and students who were to participate; teacher experience with performance-based assessment, working in teams, and with integrated curriculum; teacher commitment to implementation; and number of shared students. The quid pro quo for participation in this larger pilot test was that WestEd would provide materials and professional development, while participating teachers and students would submit their portfolios and observations about implementing the CPA to WestEd for analysis.

As Table 2 details, the selected schools range widely in terms of geography, experience with performance-based assessment, and structure. With the exception of Keith, all schools were ethnically diverse. It must be noted that while academies functioning as comprehensive schools-within-schools participated in the pilot test, only Keith required all students in one grade (seniors) to complete a portfolio. All schools accepted into the pilot were judged to have the capacity to have their students produce substantial numbers of complete portfolios -- no schools were accepted that appeared to lack the fundamentals necessary for completed portfolios. Six schools (one of the original seven schools dropped out prior to the beginning of the 1996-97 school year), 36 teachers, and over 600 students participated. The six schools received professional development about the CPA from WestEd.

Table 2

Descriptive information about schools participating in the 1996-97 CPA pilot test

School	# of Students Projected to Use the CPA	Geographic Location	Prior Experience with Performance-Based Assessment	School Structure
Tunnel	90	(suburban) Bay Area	low	informal academy
Keith	40	(rural) northern CA	high	traditional
Roosevelt	350	(urban) Los Angeles	low	formal academy
Washington	80	(urban) Pasadena	high	formal academy
Lincoln	140	(suburban) Santa Cruz	low	continuation
Kennedy	125	(suburban) Bay Area	low	formal academy

Pilot test schools achieved widely varying results, which will be detailed in the assessment and implementation sections.

METHODOLOGY

DATA SOURCES AND INSTRUMENTS

Throughout the 1996-97 school year, and into the following summer, WestEd gathered data to help understand the CPA in terms of: (1) Implementation, (2) Student Performance/Assessment, and (3) Whole School Change. A list of data sources follows.

Student portfolios. Students from six schools submitted CPA portfolios. Eight pilot test teachers and six employers of entry-level workers scored the portfolios over a two-day period in July, 1997. All complete portfolios (those containing required entries) were given a score on each of four dimensions (Career Preparation, Analysis, Technology, and Communication) and an overall score. Furthermore, each complete portfolio was scored by four different scorers. WestEd's approach to scoring portfolios during this pilot test was more extensive than the scoring procedures generally used with portfolios. In most portfolio systems, only one scorer scores each portfolio. A second scorer then scores a *sample* of the first scorer's portfolios to be sure that the first scorer applied the scoring rubric correctly. If the second scoring shows the first scorer is applying the rubric properly, it is assumed that the first scorer scored all the portfolios correctly. Scoring each portfolio multiple times generated rich data which WestEd used to explore issues related to the reliability with which CPA portfolios could be scored, how dimension scores related to the overall scores given to portfolios, and for biases among different types of scorers (e.g., educators and employers).

Teacher Survey. At the end of the school year, pilot test teachers were surveyed about their experiences with the CPS/CPA. The survey focused on the following areas:

- the extent to which the CPA was implemented in the teacher's classrooms;
- overall impressions of the CPA;
- the degree to which using the CPS/CPA affected teaching methods or curriculum;
- the most important factors contributing to the successful implementation of the CPA;
- resources which would have made CPA implementation more successful;
- professional development for the CPA; and
- education reform efforts occurring at the school, excluding the CPA, such as work with standards, integrated curriculum, block scheduling, team teaching, and career academies.

Teachers responded to most of the items on a Likert-type scale which asked how strongly they agreed or disagreed with a statement. Thirty-six surveys were completed by teachers at the six pilot schools.

Teacher Interviews. Telephone interviews were conducted with the lead teacher from each of the pilot schools to obtain more detailed information about the issues studied in the teacher survey.

Student Survey. Students who participated in the pilot testing completed a survey that gathered information about the following areas:

- their perceptions of the CPS/CPA, including their perception value of the CPA to employers and colleges; and
- how the CPS/CPA were implemented in their classrooms. Issues included whether they understood the CPS and the CPA, the level of assistance they received from their teachers, and how classrooms where the CPA was used differed from other classrooms.

Most of the items were on a Likert scale which asked how strongly they agreed or disagreed with a particular statement. Some items also asked students to explain their responses. A total of 623 students completed the survey.

Scorer Evaluations. After the portfolios had been scored, each scorer responded to a one-page questionnaire asking whether the dimensional scoring helped or hindered them in arriving at a portfolio's overall score, which dimensions most influenced their scoring, whether the rubric should have three or four score points, and whether they felt "Proficient" was a good indicator of "hirability." Six employers and eight educators completed the scorer evaluation. Each of the educators came from a pilot school.

Evaluations of Professional Development. Teachers were asked to complete a brief feedback form at the end of each CPA professional development workshop they attended. The feedback forms contained several Likert scale items about whether training objectives were met and how useful teachers found the information presented during the workshops. Space was provided so teachers could write comments about what was most helpful about the training session.

A copy of each data collection instrument may be found in Appendix B.

FINDINGS

This section of the report is organized according to the clusters of questions listed in the Introduction (Implementation, Whole School Change, and Student Performance/Assessment). Each of the three clusters is organized by key questions or sub-topics, in which results, analyses, and "Summary of Findings" are presented.

I. IMPLEMENTATION

This section of the report seeks to answer the following questions: "Did teachers receive appropriate support to implement the CPA?", "Did teachers view the CPA as a worthwhile expenditure of time and effort?", "Did students value the CPA?", "Did students value the CPS?", and "What are the key conditions for successful implementation of the CPA?"

DID TEACHERS RECEIVE APPROPRIATE SUPPORT TO IMPLEMENT THE CPA?

The answer to this question has deep implications for taking the CPA to scale -- if the relatively limited support WestEd provided for pilot schools was sufficient, going to scale might be relatively inexpensive. While it is early in the development and study of the CPA to draw definitive conclusions about this question, teacher surveys, teacher interviews, and the quality of the portfolios produced provide meaningful data for initial analysis.

With one exception (Keith HS), each school received the following support:

- one day of implementation training;
- two half-day trainings, focused on reviewing draft entries against CPA requirements and standards; and
- student guidelines for all participating students.

Professional development: WestEd structured initial professional development during the pilot test to help teachers understand the CPA and how to implement it in their classrooms. Follow-up professional development provided opportunities for teachers to review their students' work against CPA requirements and the CPS, and to further explore how they could integrate the CPA into their classrooms.

Responses from feedback forms teachers completed at the end of each professional development session (teachers from each school attended one session in the Fall and two in the Spring) showed that teachers gave high marks to the professional development they received from WestEd. Teachers consistently reported that workshops did an "Excellent" or "Good" job providing information about the following: the CPA portfolio, tasks that elicit work demonstrating the CPS, evaluating student work using the

CPA rubric, and ways to support the development of the most challenging portfolio entry, work samples. In their open-ended comments, teachers reported that reviewing sample portfolios and, in later sessions, reviewing samples of work from each other's classrooms were particularly useful activities. No item on the feedback form consistently received a response worse than "Good."

The responses to questions about professional development in the teacher survey[2] completed at the end of the school year, after teachers had used the CPA in their classrooms, were not uniformly positive. Although teachers reported that they understood most aspects of the CPS/CPA, there were specific areas related to implementing the CPS/CPA where teachers indicated more professional development would be useful. These areas were primarily related to integrating the CPA into teachers' curricula and developing student assignments.

There were distinct differences in how much teachers felt they understood various aspects of the CPS/CPA. Furthermore, teachers indicated that their theoretical grasp of the CPA was greater than their understanding of how to implement it in the classroom. Between 80% and 90% of teachers "agreed"[3] that they understood the purposes of the CPA, the components of the CPA, and the CPS. About two-thirds of the teachers believed that they understood how to judge when student work demonstrates the CPS, the nature of the tasks that elicit work demonstrating the CPS, and how to use the CPA rubric. Teachers were much less likely to understand how to integrate the CPA into their curriculum plans (42% of teachers "agreed") and how to design assignments which help students demonstrate the CPS (39% agreeing). These data suggest that additional training in the latter two areas might be needed, particularly since they deal with important implementation issues. Table 3 presents information from the teacher survey about the professional development that teachers received.

Table 3

Percent of teachers who "Strongly Agreed" or "Agreed" that they understood specific aspects of the CPS/CPA after attending CPA professional development workshops

ASPECT OF CPS/CPA	PERCENT AGREEING
The purposes of the CPA portfolio	89%
The Career Preparation Standards	83%
The components of the CPA	83%
How to judge when student work demonstrates the CPS	69%
How to use the CPA rubric	67%
The nature of tasks that elicit work demonstrating the CPS	66%
How to integrate the CPA into my curriculum	42%
How to design assignments which help students demonstrate the CPS	39%

[2] Complete results from the CPA teacher survey and the CPA Student Survey are presented in Appendix C.
[3] A teacher was considered to "agree" with a survey item if he/she marked "Strongly Agree" or "Agree" on a Likert-type item.

In interviews with lead teachers and informal conversations with other CPA teachers aimed at understanding why three of the six pilot test schools did not submit higher numbers of complete or above-Basic portfolios provided additional data about professional development. During these interviews, professional development was never cited as a potentially causal factor in increased overall success.

Student Guidelines: Teachers found the Student Guidelines to be valuable, with 36% identifying the Guidelines as one of the five most important factors in the success of their CPA efforts. Furthermore, during professional development sessions, teachers regularly commented on the high quality of the Guidelines. Only 6% of teachers identified needing different guidelines as being support they wanted but lacked.

Portfolio completion rates and quality: As is detailed in the Student Performance/Assessment section of this report, the quality and completion rates of portfolios varied widely by school. However, three of the schools had completion rates ranging from just under 50% to 98% with large majorities of completed portfolios above the Basic rating. The other three schools had quite low completion rates (0-12%) that suggest that CPA implementation at those schools needs substantial improvement.

Summary of Findings: Given that half of the pilot test schools produced meaningful numbers of complete, above-Basic portfolios it is reasonable to posit that, for these three relatively diverse schools, support was adequate, and that while not necessarily being causal in their success, was valuable. While more and/or better professional development might be an essential ingredient for improved performance, teachers consistently reported that it would not have been causal in increased success. Furthermore, it is unlikely that professional development could significantly compensate for a variety of other structural factors (i.e., shared students, common planning time, commitment to successful implementation, and experience with the CPA and performance-based assessment).

DID TEACHERS VIEW THE CPA AS A WORTHWHILE EXPENDITURE OF TIME AND EFFORT?

Like the prior question, this one relates to scalability -- if pilot test teachers, who, by their very nature have shown strong interest in the CPA, do not answer "Yes" to this question, getting other teachers to successfully implement the CPA faces immense challenges.

Overall, teachers had very positive attitudes toward the CPS/CPA. An analysis of Likert-type items from the teacher survey indicated that over 80% of teachers "agreed" with the following statements:

- The CPA portfolio is important for my students (94% agreeing).
- The CPS represent skills valued by employers (89% agreeing).
- The CPS represent skills valued by post-secondary educational institutions (83% agreeing).
- The CPA assesses the CPS well (81% agreeing).
- Doing the CPA portfolio is a good way for students to learn or master the CPS (86% agreeing).

Additionally, between 70% and 80% of teachers "agreed" that:

- CPA portfolios are of interest to employers (78% agreeing).
- Using the CPA improves students' academic work (75% agreeing).
- The CPA is a valuable assessment tool for me (75% agreeing).
- My students were motivated and interested in participating in the CPA (72% agreeing).

Together, these responses provide strong evidence that teachers believe the CPS and CPA portfolios are valuable, focusing on skills that are important for students' futures and improving the quality of student work. Finally, and perhaps most importantly, teachers in the pilot study provided a strong endorsement of the CPA when **92% of them "agreed" with the statement "I intend to continue using the CPA next year."**

Since there were distinct differences among schools in the percent of completed portfolios students produced, teachers' attitudes were examined to see whether they related to portfolio completion rates. An analysis comparing the attitudes of teachers from high completion rate schools (44% to 98% of portfolios completed) to those from low completion rate schools (0% to 10% completed) showed no consistent differences in attitudes.

Summary of Findings: Given that implementing the CPA or any substantial performance-based assessment is difficult and that many teachers did not produce significant numbers of complete or above-Basic portfolios, it is remarkable that 92% of teachers plan to use the CPA in the 1997-98 school year. Teachers believe that the CPA is a worthwhile expenditure of time and effort.

DID STUDENTS VALUE THE CPA?

This question is the important student analog of the previous question for teachers. While results of any survey of teenagers should be viewed with some skepticism, the results of the CPA survey provide insight into the answer to the question.

Surveys were completed by the students at the pilot high schools who worked with the CPS/CPA during the 1996-97 school year. These surveys focused on two topics, their attitudes toward the CPS/CPA and their experiences implementing the CPA. Like their teachers, students reacted positively to the CPS/CPA. **Nearly two-thirds of students indicated that they would recommend CPA portfolios to other students**. Tables 4 and 5 present the student survey data in full.

Regarding how students' attitudes toward the CPS and CPA portfolios, their responses indicate that they saw both as having some value, with mastery of the CPS perceived as more important than actually doing a CPA portfolio.

- Having the CPS skills will help me in the future (83% agreeing).
- Employers want to hire people who have the CPS skills (71% agreeing).
- Doing the CPA portfolio will help me in the future (71% agreeing).
- Colleges want to admit students who have them (65% agreeing).
- I recommend that other students do the CPA portfolio. (65% agreeing).
- Having a CPA portfolio will help me in getting a job (64% agreeing).
- The CPA is a good teaching and learning tool (64% agreeing).
- The CPA is a good way to learn and master the CPS skills (62% agreeing).

The statement related to attitudes toward the CPS/CPA where fewest students were in agreement was "Having a CPA portfolio will help me in getting into college," (54% agreed). This is not surprising given the need for additional work to promote and understand the CPA as a college admissions tool.

The attitudes of students from high completion rate and low completion rate schools toward the CPS/CPA were compared. The data reported in Table 4 show that students at high completion rate schools were more positive about the CPS/CPA than students at schools with low completion rates. Additionally, fewer than 60% of students at low completion rate schools agreed with 5 of 11 statements about the CPA. There was only one statement on the Student Survey where students from low completion rate schools were more likely to agree with a statement than students from high completion rate schools, "Having a CPA portfolio will help me in getting into college" (55% versus 53%). Given that teachers across the pilot test received the same professional development and materials, these data suggest that **teacher impact on student support for the CPA is substantial.**

Table 4

Percent of students who "Strongly Agreed" or "Agreed" with statements related to their attitudes toward the CPS/CPA

STATEMENT	PERCENT AGREEING (N=623)	HIGH COMPLETION RATE SCHOOLS	LOW COMPLETION RATE SCHOOLS
Having the CPS skills will help me in the future.	83%	88%	80%
My teachers thought the CPA portfolio was important.	76%	85%	72%
Employers want to hire people who have the CPS skills.	71%	80%	66%
Doing the CPA portfolio will help me in the future.	71%	79%	67%
Colleges want to admit students who have the CPS skills.	65%	72%	62%
I recommend that other students do the CPA portfolio.	65%	75%	59%
Having a CPA portfolio will help me in getting a job.	64%	71%	61%
The CPA is a good teaching and learning tool.	64%	74%	58%
The CPA is a good way to learn and master the CPS skills.	62%	74%	55%
The CPS are important to my teachers.	58%	68%	53%
Having a CPA portfolio will help me in getting into college.	54%	53%	55%

Generally positive student attitudes toward the CPA are particularly interesting given that student responses about implementation questions suggested some deficiencies. Regarding implementation, only 62% of students indicated they understood the CPS, the heart of the CPA system, and just 71% reported they understood how to do the entries making up the CPA portfolio. Fifty-five percent of students believed their teachers spent enough time explaining the CPS and that they received the support and information needed to be successful with the CPA. Eight of 11 items presented in Table 5, all of which positively described the CPA or its implementation, scored below 60% agreement.

Students from high and low completion rate schools differed substantially in their attitudes toward CPS/CPA implementation. Students at high completion rate schools were more likely to agree with each positive statement about CPS/CPA implementation. At low completion rate schools, fewer than 60% of students agreed with 9 of 11 positive statements about implementation. These students appear to need much more information and support to work with the CPS/CPA. At high completion rate schools, there were only four positive statements where agreement was below 60% suggesting these students felt more prepared to work with CPA portfolios. Overall, and not surprisingly, these data support the hypothesis that teacher impact on student performance is major.

Table 5

Percent of students who "Strongly Agreed" or "Agreed" with statements related to CPS/CPA implementation

STATEMENT	PERCENT AGREEING (N=623)	HIGH COMPLETION RATE SCHOOLS	LOW COMPLETION RATE SCHOOLS
I understood how to do the entries that make up the CPA portfolio.	71%	84%	64%
After doing the CPA portfolio, I have a better understanding of what skills employers and colleges want.	67%	74%	64%
I understood the CPS.	62%	74%	56%
The CPA "Guidelines for Students" was useful to me.	56%	65%	52%
My teachers spent enough time explaining the CPS.	55%	74%	44%
Overall, I received all the information, help, and support I needed to be successful with the CPA.	55%	73%	45%
Doing the CPA portfolio helped me get the skills I need to have after I finish high school.	52%	61%	48%
Using the CPA helps to improve my academic work.	46%	49%	44%
I can give an accurate assessment of how well I have mastered the CPS.	44%	53%	40%
Teachers who use the CPA teach differently or ask me to do different kinds of assignments than teachers who do not use the CPA.	44%	54%	38%
I learn and master the CPS skills better in classes where I use the CPA than in classes where I do not use the CPA.	38%	52%	30%

Summary of Findings: Students generally found the CPA to be valuable. However, survey data suggest that CPA implementation at low performing schools needs more teacher time and more focus on the CPS. Less than half the students at low performing schools reported that they received the information and help needed to be successful with the CPA or that their teachers spent enough time explaining the CPS.

HOW WOULD STUDENTS IMPROVE THE CPA?

Students were asked how they would change the CPA to make it better and what teachers could do to help students perform well on the CPA. There were three themes to students' responses. First, a large percentage of students said the CPA needs no changes. They like it the way it is. Second, many students indicated that they would like more examples that they can use to guide their work. Lastly, students suggested that their teachers take

more time to explain the CPA to them. This suggestion is consistent with students' attitudes about CPA implementation.

WHAT ARE THE KEY CONDITIONS FOR SUCCESSFUL IMPLEMENTATION OF THE CPA?

Data informing the answer come from the teacher surveys, teacher interviews, student survey, and portfolios.

Teacher Surveys: The teacher surveys explored the question by asking teachers to identify what they saw as the five most important factors or resources that actually **did** contribute to the success of the CPA in their classroom during the 1996-97 school year; teachers could only identify factors or resources they actually had or used on the 1996-97 school year. Teachers were provided an extensive list of factors from which they could choose. Table 6 presents the percentage of teachers identifying each factor or resource they placed in their top five as being most important in their success.

There were two factors that over 50% of teachers selected: (1) significant numbers of students in common with other teachers using the CPA, chosen by 67% of teachers, and (2) integrated curriculum, the choice of 53% of teachers. Forty-four percent of teachers believed structuring schools into career academies, which generally increases teacher collaboration and shared curricular focus, is important to CPA success[4]. Together, these three factors indicate that teachers believe successful CPA implementation is a shared responsibility that requires the coordinated efforts of teachers.

Professional development, selected by 42% of teachers, was seen as the fourth most important factor contributing to successful implementation, followed by the CPA Student Guidelines, chosen by 36% of teachers. These two factors point to the importance of providing information for teachers to support CPA implementation. In this regard, the CPA does not appear to be an assessment which can be implemented "off the shelf" with little orientation about its use, a feature it shares with other performance-based assessments and other vehicles intended to support systemic reform.

Teachers did not widely choose prior experience with portfolios and standards-based or performance-based assessments, either on their part or that of their students, as factors contributing to successful CPA implementation. These factors were chosen by 19% - 28% of teachers. This is probably due, at least in part, to the fact that only two of the six schools had previous experience with the CPA or in-depth experience with performance-based assessment.

[4] Two career academies participated in the pilot test.

Table 6

Percent of teachers selecting factor as important to success of the CPA in their classrooms

FACTOR	% OF TEACHERS SELECTING (N=36)
Significant numbers of students in common with other teachers using the CPA	67%
Integrated curriculum	53%
Career academies	44%
Professional development related to the CPA	42%
CPA guidelines	36%
More experience with portfolios	28%
Students with more experience with portfolios	25%
Team teaching	22%
Previous experience with standards-based assessment	19%
Previous experience with performance-based assessment	19%
More class time for the CPA	18%
Block scheduling	14%
More school-wide support of portfolios	14%
More experience with the CPS and CPA	14%
More school-wide support of Career Preparation Standards	11%
More school-wide support of the CPA	6%
More parent understanding of portfolios	0%

The teacher survey also explored the resources or factors that teachers did **not** have that they felt would have made the CPA more successful in their classrooms. Teachers were again asked to identify the five most important factors in this area. Their responses are provided in Table 7. Number one on teachers' lists was more experience with the CPS and CPA. One of every two teachers believed this would have made CPA implementation more successful. Two of the three schools with the highest rates of completed and above-Basic portfolios had two years of experience with the CPA. Given these results, experience with the CPA might be selected as the most important condition for implementation. However, one of the three higher-performing schools did not have prior experience with the CPA but did have other conditions identified as key to successful implementation including shared student and integrated curriculum. In particular, this school demonstrated an extremely strong commitment to the CPA.

Experience with the CPS/CPA was followed by more professional development related to the CPA, more experience with portfolios, and more class time for the CPA. Overall, these three factors were chosen by 39% to 42% of teachers. More school-wide support of the CPS and the CPA were the next most selected factors with 31% and 25% of teachers selecting them, respectively. No other factor was chosen by over 22% of teachers.

Table 7

Percent of teachers selecting factor as one they did not have which would have made the CPA more successful in the classroom

FACTOR	PERCENT OF TEACHERS SELECTING (N=36)
More experience with the CPS and CPA	50%
More professional development related to the CPA	42%
More experience with portfolios	39%
More class time for the CPA	39%
More school-wide support of Career Preparation Standards	31%
More school-wide support of the CPA	25%
Students with more experience with portfolios	22%
Previous experience with performance-based assessment	22%
Block scheduling	22%
More parent understanding of portfolios	22%
Previous experience with standards-based assessment	19%
More school-wide support of portfolios	19%
Integrated curriculum	17%
Career academies	11%
Team teaching	11%
Different CPA guidelines	6%
Different professional development related to the CPA than we received	4%
Significant numbers of students in common with other teachers using the CPA	3%

Also informing examination of conditions for successful implementation were questions in the teacher survey about **how** and **when** they implemented the CPA. These data for each of the pilot schools and the pilot study overall are presented in Table 8. Time of year when the CPA was introduced and when students began work or entries stand out as the factors which most influenced implementation.

Overall, CPA implementation occurred throughout the school year and teachers introduced it from September to April. Over 50% of teachers indicated they introduced the CPS to their students by the end of December. Also, the students of over 50% of teachers had begun to create their first CPA entries by the end of January. However, there were important differences among the pilot schools as to when teachers began introducing the CPS and when students completed their first CPA entry. The three higher performing schools, now referred to by their pseudonyms, Washington, Keith, and Kennedy, were "early implementers." Teachers at these schools reported having

introduced the CPS by November while lower performing schools often did not begin to focus on the CPS until the second semester. At higher performing schools, the first CPA entries were begun by December, and students had first drafts of half of their portfolio entries written by the end of March. At the low performing schools, this drafting process continued until as late as May.

Table 8

CPS/CPA Implementation Data

	SCHOOL						
CHARACTERISTIC	WASH	TUNNEL	KEITH	ROOS.	LINCOLN	KENNEDY	TOTAL
Number of CPA portfolios received	47	58	40	248	136	99	631
Percent of received CPA portfolios that were complete	49%	0%	98%	2%	10%	44%	20%
Number of teachers surveyed	5	6	3	11	7	4	36
Average number of teacher's classes using CPA	4.0	2.7	2.0	2.5	2.0	3.8	3.0
Average percent of teacher's students attempting CPA	76%	62%	40%	37%	68%	100%	86%
Average percent of teacher's students completing all attempted entries	90%	100%	60%	79%	93%	50%	56%
Timeline for introduction of CPS	Oct.-Nov.	Oct.-March	Sept. - Nov.	Feb. - Apr.	Sept. - March	Nov.	Sept. - Apr.
Timeline for first CPA entry	Oct. - Dec.	Nov. - Feb.	Sept.	Feb. - March	Sept. - March	Nov. - Dec.	Sept. - March
First drafts of half of portfolio entries	Nov. - March	Feb. - Apr.	Jan.	Feb. - May	Sept. - Apr.	Feb.	Sept. - May
Mean percent of class time devoted exclusively to CPA	18%	5%	20%	10%	31%	7%	13%

Not surprisingly, the "early implementers" were the schools with the highest percentages of completed CPA portfolios (Washington = 49%, Keith = 98%, and Kennedy = 44%) and with the highest percentages of portfolios that were Proficient or Advanced. This finding suggests that one key to successfully implementing CPA portfolios is to begin working with them early in the school year.

Early implementation may be interpreted as an indicator of teacher commitment to the CPA; it is not unreasonable to assume that teachers who believed the CPA and CPS were important generally chose to start work on them quite soon in the school year. Certainly, WestEd staff who interacted with teachers from all six schools observed that the staff from higher performing schools generally appeared more committed to CPA success than those at the lower performing schools. Importantly, and supporting the hypothesis that teachers at higher-performing schools were more committed to the CPA/CPS, students survey responses suggested strongly that teachers at higher performing schools presented and taught the CPA and CPS more positively than those at lower performing schools. Students at higher performing schools consistently found that the CPS and CPA were more valuable and that they had better opportunities to be successful with the CPA than those at lower performing schools.

Other survey topics associated with how and when the CPA was implemented (the percent of students attempting the CPA, the percent of students completing all the entries they attempted, the average number of classes where the CPA was used, or the percent of class time devoted exclusively to the CPA) did not appear to have a significant impact on CPA success.

Interviews with lead teachers: These interviews about key implementation conditions elicited four strong themes, teacher commitment, level of program organization and communication, experience with the CPA, and professional development. While most teachers saw the CPA as valuable, teacher commitment to its success and its importance relative to other curricula and assessments varied. Teachers at all three higher-performing schools felt the CPA was central to their curricula with one noting the CPA "was what we have been looking for." Schools where teachers had regular opportunities to work together also fared better than those that did not. Finally, teachers consistently identified experience with the CPA as causal in their success or lack of success. Teachers also consistently stated that more or better professional development would not have been causal in increasing their success.

Summary of Findings: Supportive conditions for successful implementation of the CPA appear to be:

- teacher experience with the CPA and/or portfolios;
- integrated curriculum;
- regular and effective communication by implementing teachers;
- shared students;
- professional development;
- initiation of implementation of the CPA early in the school year; and, perhaps most importantly,
- teacher commitment to implementation of the CPA and to the value of the CPS.

It is worth noting that two of the three higher-performing schools had all of the essential conditions with the third having all but one (experience with the CPA and/or portfolios). This suggests that successful implementation requires multiple conditions associated with whole school change and that schools should be fairly well down the reform path before they try it.

II. WHOLE SCHOOL CHANGE

This section of the report seeks to answer the following questions: "Did implementing the CPA cause teachers to change practice or their thinking about practice?" and "Did implementing the CPA or embracing the CPS promote whole school change?" The data-gathering and analyses are informed by the assumptions that causing change in practices across an entire school takes much more than a year and that one innovation alone (e.g., the CPA) is unlikely to cause such change to occur. The primary data source is the teacher survey.

DID IMPLEMENTING THE CPA CAUSE TEACHERS TO CHANGE PRACTICE OR THEIR THINKING ABOUT PRACTICE?

Responses from the teacher survey suggested the CPS and CPA had modest impacts on teaching practices and whole school change (WSC). Regarding "teaching methods", 58% of teachers "agreed" both that "Using the CPS made me alter or rethink my teaching methods," and "Using the CPA portfolio as a means of organizing student work made me alter or rethink my teaching methods." Moreover, 53% "agreed" that "After seeing CPA related student work I decided to alter or rethink my teaching methods." Forty-two percent "agreed" that "I used the Career Preparation Standards to structure my curriculum." One of these teachers commented, "It brought relevance to the curriculum, always trying to incorporate CPS into lessons, give examples." Comments from teachers who were neutral or disagreed[5] about structuring their curriculum in response to the CPA indicated they responded that way for the following reasons:

- they had already restructured their curriculum ("I have been using many of the ideas of the CPA long before its introduction to our school");
- their curriculum was fixed for the school year so there was little possibility of restructuring it in response to CPS/CPA implementation ("Since we embarked on the portfolio project mid-year, curriculum was already set,"); or
- they believed their relation to CPS/CPA implementation was tangential, such as the mathematics teacher who commented, "Most of the career preparation standards were discussed in the business class." This teacher felt there was little reason to change to curriculum.

Teachers' written comments on open-ended survey items often indicated that the CPS/CPA impacted their teaching. One teacher noted the CPA portfolio provided a common focus which increased the ability of academic and vocational teachers to work together. Other comments:

[5] A teacher was considered to "disagree" with a survey item if he/she marked "Disagree" or "Strongly Disagree."

- "I'm trying to do more with portfolios in my own class."
- "I had to do a lot more on writing skills."
- "I realized students needed much more help in assessing what they're good at and what they've accomplished."
- "The need for summaries was an important new tool."
- "I'm emphasizing more group work in class to emphasize interpersonal skills..."
- "The CPA portfolio supports and is flexible enough to be used in many different classroom settings."
- "It helps make school work seem more relevant to the work world."
- "I want to increase hands-on lab demonstrations with career applications."

Regarding students' perception of teachers who use the CPA and those who do not, it is interesting to note that only 44% of students "agreed" that "Teachers who use the CPA teach differently or ask me to complete different kinds of assignments than teachers who do not use the CPA." This finding is consistent with the results from the teacher survey indicating that the CPA had modest impacts on teaching methods.

DID IMPLEMENTING THE CPA OR EMBRACING THE CPS PROMOTE WHOLE SCHOOL CHANGE?

Implementation of the CPS/CPA at the pilot schools provided an opportunity to examine the impact of standards-based assessment on whole school change, as opposed to changing just individual teachers' methods or curriculum. (Indicators for WSC were: development of standards-based assessments and performance-based assessments not related to the CPA, community involvement in the setting of standards, use of data related to student performance against standards to drive changes in teaching, integrated curriculum, block scheduling, team teaching, and career academies.) As Table 9 shows, this examination occurred within the context of schools already implementing various reforms. Most teachers reported that their schools have been involved with two key reform efforts, integrated curriculum (89% of teachers) and setting standards not related to the CPS (86% of teachers). Where this standard setting has occurred, 72% of teachers indicated that parents, students, employers or community members have been involved in the standard-setting process. Career academies, team teaching, and the development of standards-based assessments and performance-based assessments not related to the CPA were activities occurring at over 55% of the teachers' schools.

There were some notable differences between the high and low portfolio completion rate schools on these WSC indicators. While use of an integrated curriculum was reported as high at both sets of schools, teachers at schools with low completion rates were much more likely to report their schools engaged in standard setting, team teaching, and the development of standards-based and performance-based assessments.

Table 9

Percent of teachers indicating their school's involvement with reform activities

ACTIVITY	PERCENT AGREEING (N=36)	HIGH COMPLETION RATE SCHOOLS (N=12)	LOW COMPLETION RATE SCHOOLS (N=24)
Integrated Curriculum	89%	83%	92%
Setting Standards	86%	67%	96%
Involving parents, students, employers, or community members in setting standards	72%	75%	71%
Career Academies	69%	67%	71%
Team Teaching	61%	25%	79%
Developing performance-based assessments	58%	25%	75%
Developing standards-based assessments	56%	25%	71%
Block Scheduling	30%	33%	29%

Overall, many teachers believed that the CPA had caused some WSC and that it is a good vehicle to do so. Forty-four percent of teachers indicated their "school or program has changed its structure, procedures, or curriculum based on CPA-related student work." Teachers who "agreed" with this statement made the following comments which provide some sense of those changes:

- "We now work as teams to coordinate CPA-related work."
- "We've coordinated the various CPA tasks across several classes which has increased interdisciplinary work and collegial cooperation."
- "Our program is integrating more of our curriculum."

A large majority of teachers (83%) "agreed" that "The CPA is, or could be, a valuable support for implementing standards-based curriculum and assessment school-wide." A few teachers chose to explain their responses to this item. They noted the following:

- "Student analysis of work samples could be a powerful step toward realizing goals/standards."
- "It supports our written, oral, and vocational standards."
- "For most of the second semester, the entire school worked on the CPA."

Summary of Findings: Implementing the CPA caused some teachers to change practice or their thinking about practice. Also, teachers believe the CPA is a good vehicle to affect whole school change. However, the depth to which the CPA caused such change is not known -- the most successful CPA schools already were implementing components of whole school change prior to the pilot test. However, it is important to note that when identifying factors that they believe supported successful implementation, teachers often identified conditions commonly associated as components of systemic reform. This may lead to teachers obtaining those conditions as they attempt to improve CPA implementation.

III. STUDENT PERFORMANCE/ASSESSMENT

This section of the report seeks to answer the questions "How well did students perform on the CPA?", "How reliable is the CPA as an assessment?", and "What is the relationship between dimensional and overall scores?" The primary data sources are the results of the scoring of 100[6] CPA portfolios held in July, 1997 and questionnaires from scorers.

By way of background, WestEd received 631 student portfolios from the pilot schools at the end of the school year. Of these portfolios, only 20% were "complete", meaning the portfolios contained required entries. The percentage of completed portfolios received from individual schools ranged from 98% to 0%.

Prior to presenting scoring data it is appropriate to describe the scoring process that yielded the data. First, a diverse pool of educator and employer scorers were identified and recruited. With one exception, all educator scorers came from schools in the pilot test. (The one educator not from a pilot test school had substantial experience with the CPA and performance-based assessment.) Pilot test teachers were the primary source of educator scorers because, based on extensive experience in Kentucky and with the Career-Technical Assessment Program, it is likely that teachers involved with the CPA will be those who score it. At any given site, it is unlikely that teachers not using the CPA will have major responsibilities in scoring CPA portfolios produced at that site. Employer scorers all played significant roles in hiring entry-level employees at their businesses. Furthermore, they worked at large corporations, small businesses, and temporary agencies specializing in entry-level workers.

Prior to arriving at the two-day scoring session, scorers received detailed information about the CPA and two training portfolios for their review. The scoring session began with three hours of training focused on close review of seven exemplar portfolios, the CPS, and the scoring rubric. Via this training, scorers learned to apply the rubric. Following the training, scorers then scored four "calibration" portfolios. Only scorers who scored three of the four calibration portfolios correctly had their ratings incorporated into the final results. Three of 17 scorers did not calibrate.

Following calibration in the afternoon of Day One, scorers, who were organized in three types of pairings (educator-educator, educator-employer and employer-employer) began scoring sets of approximately eight portfolios . In the morning of Day Two, after all 100 portfolios had been scored twice, additional training was provided to recalibrate the scorers to the rubric. Scoring pairs were then reconfigured and the portfolios scored again by "new" scorers.

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[6] No conscious effort was made to score exactly 100 portfolios. This number of scored portfolios was cause by adjusting the total set of portfolios to be scored to achieve as equal a representation across schools as possible and by the number of available scorers.

Three levels of performance (Basic, Proficient, and Advanced) were used when giving an overall or dimensional (Career Preparation, Analysis, Technology, Communication) score. ("Dimensions", or sub-categories within the rubric that align with the CPS, inform the overall rating of a portfolio.) The overall ratings are defined below and the dimensional ratings are presented in Table 10. Appendix D contains the entire scoring rubric used by the scorers. The overall ratings are:

BASIC: This rating is given to work that needs improvement and is not ready to show an employer. While the work may be complete, it does not show mastery of the CPS and does not indicate that the student has the skills necessary for satisfactory performance in an entry-level position.

PROFICIENT This rating means the work is good and is ready to show an employer. The work is complete and meets all requirements; it shows mastery of the CPS and indicates that the student has the skills necessary for satisfactory performance in an entry-level position.

ADVANCED: This rating means that the work is outstanding. It may exceed the expectations of an employer. The work is complete and meets all requirements; it shows strong mastery of the CPS and indicate that the student may have the skills necessary for exemplary performance in an entry-level position.

Table 10

Dimensions for rating the Career Preparation Assessment portfolios

DIMENSION	FEATURES OF DIMENSION
Career Preparation	• Personal qualities needed for employment • Interpersonal skills needed for employment • Career planning and employment literacy
Analysis	• Analytic thinking • Evaluation
Technology	• Presentation of work using technology • Application of technology other than word processing
Communication	• Attention to audience • Use of own ideas • Organization and clarity • Accuracy and completeness • Language mechanics, sentence structure, and vocabulary

To perform reliability analyses and to compare performance across schools and students, it was necessary to identify a strategy to give each portfolio one rating which reflects the scores of all four scorers (it was unlikely that four scorers would always assign a given portfolio the same rating). This combined rating is called "cumulative." Because the Basic-Proficient-Advanced scoring scale is composed of discrete intervals, using a mean of the four scores was not appropriate. Instead, a mapping strategy was used to derive cumulative scores.

The mapping strategy was based on the assumption that if at least three of the four scorers gave a portfolio the same rating, that rating was appropriate to describe the portfolio. In the cases where the four scorers split evenly between two performance levels (i.e., when two scorers gave a portfolio a Basic and two gave it a Proficient, or two gave it a Proficient and two gave it an Advanced) the authors of this report made selective judgments as to how these situations should be resolved. These judgments are explained in the following definitions of cumulative categories. **Please note the introduction of the "Marginally Proficient" category.**

> BASIC category—Portfolios were assigned to this category when three or four scorers scored the portfolio as "Basic."
>
> MARGINALLY PROFICIENT category—Portfolios in this category had been scored as Basic by two scorers and as Proficient by two scorers. These portfolios appeared to be of a better quality than a Basic portfolio but not as well developed as a Proficient portfolio.
>
> PROFICIENT category—Portfolios were assigned to this category when three or four scorers scored the portfolio as "Proficient."
>
> ADVANCED category—Portfolios were assigned to this category when at least two scorers scored the portfolio as "Advanced." A decision was made to categorize these portfolios in this way since this combination of scores appeared infrequently and clearly showed the portfolio was more developed than a Proficient portfolio.

Currently, it is unclear why a portfolio fell into the Marginally Proficient category. The work in the portfolio might have been, in fact, at the precise borderline between Basic and Proficient. There may be other explanations, however. One explanation is that the inconsistencies between the scorers' scores might reflect variations in how scorers applied the scoring rubric. If so, better training may be needed to ensure that scorers apply the scoring rubric more consistently. Second, the inconsistencies might have been caused by ambiguities in the rubric itself, in which case, the rubric may need clarification. Further research will be directed to understand the characteristics of Marginally Proficient portfolios and the steps which may need to be taken to allow these portfolios to be scored more consistently and to eliminate the category if appropriate.

HOW WELL DID STUDENTS PERFORM ON THE CPA?

Table 11 presents data about the scored CPA portfolios. Sixty-two percent of students submitting complete portfolios received Proficient or Advanced cumulative scores. Nearly one-fourth of the portfolios (23%) were scored Basic. The remaining portfolios (15%) were Marginally Proficient. It should be noted that these percentages are not representative of the quality of the submitted incomplete portfolios which, while not formally scored, were generally of much lower quality than the complete portfolios.

Table 11

Percent of CPA portfolios at each performance level[7]

	BASIC	MARGINALLY PROFICIENT	PROFICIENT	ADVANCED
Overall	23%	15%	50%	12%
Career Preparation	11%	16%	59%	14%
Analysis	23%	16%	55%	6%
Technology	37%	15%	33%	15%
Communication	18%	13%	57%	12%

There was moderate variability in the scoring of portfolios on the CPA **dimensions**. The percent of portfolios judged Proficient or Advanced ranged from a low of 48% in Technology to a high of 73% in Career Preparation. The percentage of Marginally Proficient portfolios was roughly equal for each dimension, between 13% and 16%, similar to the percentage of portfolios judged overall as Marginally Proficient.

The greater percentage of portfolios judged to be of higher quality in Career Preparation is understandable in light of the characteristics of the scoring rubric. The rubric for Career Preparation is relatively specific and tightly defined. It speaks in terms of the content of student work. The rubric contains references to personal qualities, the ability to work with others, and career planning and development. Analysis and Communication are broader dimensions and represent higher-order thinking skills. The scoring rubric for these two dimensions speaks in terms of skills rather than content. Demonstrating Analysis and Communication skills appears to be more difficult than including Career Preparation content in portfolios.

Although the Technology dimension had the highest percentage of portfolios scored as Advanced (15%), it also had the highest percentage of portfolios scored Basic (37%).

The finding that few portfolios contained good or superior quality work in Technology seems understandable for two reasons. First, a student must have easy access to a computer to build entries for a portfolio rated on Technology as Proficient or Advanced, and not all students have easy access. Second, the language of the rubric in the

[7] Percents displayed in Tables 11 through 13 may not total 100% due to rounding.

Technology section was made relatively vague in an attempt to be inclusive in a rapidly evolving arena. Likewise, during the training preceding the scoring session, scorers had the most difficulty in coming to agreement on what constituted a Basic versus Proficient in Technology.

Portfolio scores arranged by school are presented in Table 12. The school level analysis is important because individual schools contained large proportions of given ethnicities and/or grade levels. For example, 22 of 23 Washington portfolios came from 10th grade students. These represented 71% of all 10th grade portfolios. Keith portfolios were all produced by 12th grade students and accounted for 75% of 12th grade portfolios. Similarly, 55% of African American students with scored portfolios attended Washington, 50% of Latino/Hispanic students attended Lincoln, and 77% of White students attended Keith. The uneven distribution of these student characteristics makes it difficult to separate the influences of ethnicity or grade level from the affects associated with attending a particular school.

Substantial differences in student performance existed among all the schools and within the three higher-performing schools. Re all schools, the highest percent of either Proficient or Advanced overall ratings was 83% (Kennedy). The lowest percent of Proficient of Advanced overall ratings was 17% (Lincoln). Of the three higher-performing schools, Kennedy's 83% of Proficient or Advanced was significantly greater than Washington's (61%) or Keith's (63%). No clear reason for the difference in performance is readily apparent and it may warrant further investigation.

Table 12

Percent of CPA portfolios at each performance level by pilot school site

School/Dimension	Basic	Marginally Proficient	Proficient	Advanced
Keith (N=38)				
Career Preparation	13%	13%	55%	18%
Analysis	18%	21%	58%	3%
Technology	8%	24%	61%	8%
Communication	45%	24%	21%	11%
Overall	16%	21%	58%	5%
Kennedy (N=23)				
Career Preparation	4%	4%	70%	22%
Analysis	9%	17%	57%	17%
Technology	9%	4%	44%	44%
Communication	9%	0%	57%	35%
Overall	9%	9%	48%	35%
Lincoln (N=12)				
Career Preparation	25%	25%	50%	0%
Analysis	67%	8%	25%	0%
Technology	75%	17%	8%	0%
Communication	75%	8%	17%	0%
Overall	75%	8%	17%	0%
Roosevelt (N=4)				
Career Preparation	0%	25%	50%	25%
Analysis	0%	25%	75%	0%
Technology	25%	25%	50%	0%
Communication	0%	25%	75%	0%
Overall	0%	25%	50%	25%
Tunnel (N=0)	no complete portfolios submitted			
Washington (N=23)				
Career Preparation	9%	26%	61%	4%
Analysis	26%	9%	61%	4%
Technology	35%	9%	52%	4%
Communication	17%	9%	70%	4%
Overall	26%	13%	57%	4%

The scores of portfolios are presented by grade level in Table 13.[8] Analysis by grade level might be confounded by other factors such as school and race because of the

[8] Ten students who did not indicate their grade level were not included in the analysis of scores by grade level.

homogeneity within schools mentioned previously. Eleventh grade students had the highest quality portfolios followed by students from the 12th grade, and then the 10th grade. Almost all 11th grade portfolios were judged overall and on each CPA dimension as Proficient or Advanced. This relatively high performance might be attributable to the fact that there were only eight 11th grade portfolios. The difference between 10th grade and 12th grade portfolios was not large, suggesting that the CPA may be implemented usefully in the early part of high school. Sixty-two percent of 10th grade and sixty-seven percent of 12th grade portfolios were scored overall as Proficient or Advanced. The dimension scores of 10th grade students ranged from 59% to 72% judged Proficient or Advanced while the range judged Proficient or Advanced for 12th grade students was 42% to 75%.

Table 13

Percent of CPA portfolios at each performance level by grade level

Grade/Dimension	Basic	Marginally Proficient	Proficient	Advanced
Grade 10 (N=31)				
Career Preparation	10%	19%	65%	7%
Analysis	26%	13%	55%	7%
Technology	29%	13%	52%	7%
Communication	19%	10%	65%	7%
Overall	26%	13%	52%	10%
Grade 11 (N=8)				
Career Preparation	0%	0%	75%	25%
Analysis	0%	0%	75%	25%
Technology	13%	0%	50%	38%
Communication	0%	0%	63%	38%
Overall	0%	0%	63%	38%
Grade 12 (N=51)				
Career Preparation	12%	14%	55%	20%
Analysis	16%	22%	59%	4%
Technology	39%	20%	22%	20%
Communication	8%	20%	59%	14%
Overall	16%	18%	55%	12%

Males and females scores differed with females producing higher quality portfolios than males (Table 14). Seventy-one percent of females' and 50% of males' portfolios were judged Proficient or Advanced. The dimension ratings were closest on Career Preparation where 76% of females and 69% of males had a Proficient or Advanced portfolio. The gap between females and males in the percent of Proficient or Advanced portfolios was much wider for the other CPA dimensions: 27 percentage points for Analysis, 26 percentage points for Technology, and 30 percentage points for Communication. Chi-squared analyses showed while there were no statistically significant differences between females and males overall and on the Technology

dimension, females and males differed significantly on Career Preparation, Analysis, and Communication.

Table 14

Percent of CPA portfolios at each performance level by gender

GENDER/DIMENSION	BASIC	MARGINALLY PROFICIENT	PROFICIENT	ADVANCED
Female (N=58)				
Career Preparation	3%	21%	60%	16%
Analysis	10%	17%	66%	7%
Technology	31%	10%	43%	16%
Communication	9%	10%	66%	16%
Overall	16%	14%	59%	12%
Male (N=42)				
Career Preparation	21%	10%	57%	12%
Analysis	41%	14%	41%	5%
Technology	45%	21%	19%	14%
Communication	31%	17%	45%	7%
Overall	33%	17%	38%	12%

The scores of African American, Asian/Pacific Islander, Latino/Hispanic, and White students are presented in Table 15.[9] While a series of chi-square analyses focusing on how ethnicity related to student performance found no statistically significant differences in their scores overall or on any of the dimensions, analysis by ethnicity is worth noting. The percent of Asian/Pacific Islander and White students with Proficient or Advanced portfolios was about the same, 70% and 71% respectively. For African American students, this figure was 61% while it was 45% for Latino/Hispanic students. The percent of students with Proficient or Advanced portfolios was highest for Asian/Pacific Islanders on three dimensions: Career Preparation (90%), Analysis (70%), and Technology (70%). African American students had the highest percentage of Proficient or Advanced portfolios in Communication. Latino/Hispanic students had the lowest percentage of

[9] Two students who selected "Other" as their ethnicity and three students who did not indicate their ethnicity were not included in the analysis of scores by ethnicity.

Table 15

Percent of CPA portfolios at each performance level by ethnicity

Ethnic Group/Dimension	Basic	Marginally Proficient	Proficient	Advanced
African American (N=18)				
Career Preparation	6%	28%	56%	11%
Analysis	22%	17%	56%	6%
Technology	28%	6%	44%	22%
Communication	11%	11%	61%	17%
Overall	17%	22%	44%	17%
Asian/Pacific Islander (N=10)				
Career Preparation	10%	0%	60%	30%
Analysis	30%	0%	60%	10%
Technology	20%	10%	50%	20%
Communication	30%	0%	50%	20%
Overall	30%	0%	40%	30%
Latino/Hispanic (N=20)				
Career Preparation	10%	25%	60%	5%
Analysis	40%	15%	40%	5%
Technology	45%	20%	25%	10%
Communication	45%	5%	45%	5%
Overall	40%	15%	40%	5%
White (N=47)				
Career Preparation	13%	11%	60%	17%
Analysis	17%	17%	60%	6%
Technology	40%	19%	26%	15%
Communication	9%	19%	60%	13%
Overall	15%	15%	60%	11%

Proficient or Advanced portfolios on all four dimensions. Their percentage for Career Preparation (65%) was just behind that of African American students. The gap between Latino/Hispanic and other students was greater for Analysis, Technology, and Communication.

Summary of Findings: Given that this is the first relatively broad pilot test for the CPA, it is difficult to state whether student performance was "good," "bad," or "mediocre." However, relative to the two earlier pilot tests where no formal scoring was done, student performance improved substantially. In particular, Washington and Keith, where comparison with the previous pilot tests' portfolios is possible, it appears their portfolios improved a great deal. This supports the hypothesis that experience with the CPA is a key factor in success. Perhaps more importantly, the performance of Washington, Keith,

and Kennedy students suggests strongly that the CPA is implementable Substantial numbers of students from diverse populations can complete CPA portfolios to a Proficient, or potentially "hirable," level. Student performance varied widely across gender, race, and school. The cause of variation among race and gender, perhaps explained by school, is unclear.

HOW RELIABLE IS THE CPA AS AN ASSESSMENT?

The reliability of scores given to CPA portfolios was examined in two ways. First, portfolios were identified where: (a) all four scorers agreed on the overall and dimensional ratings; (b) three of the four scorers agreed; and (c) two of the scorers agreed.[10] Second, an analysis was conducted to determine the degree to which there was consistency among pairs of scorers (educator-educator, educator-employer and employer-employer). Both of these analyses provided information about how reliably CPA portfolios could be scored and whether scoring was consistent across dimensions.

Four scores: At least three of four scorers gave the same dimension and overall scores to portfolios between 70% and 76% of the time. The highest level of agreement was on the Analysis dimension (76%), followed by the Communication dimension and the Overall rating (each at agreement 75% of the time), Technology (agreement 73% of the time), and Career Preparation (agreement 70% of the time).

Results, presented in Table 16, showed that there was total agreement among four scorers in overall scoring 32% of the time. For each dimension, **total** agreement occurred on Career Preparation for 23% of the portfolios, on Analysis for 29%, on Technology for 26%, and on Communication for 20% of portfolios. This suggests that the CPA is more reliable as an overall assessment of the CPS rather than individual dimensions or CPS.

Table 16

Percent of Time Scorers Agree

	DIMENSION				
PERCENT AGREEMENT	CAREER PREPARATION	ANALYSIS	TECHNOLOGY	COMMUNICATION	OVERALL
Four of Four Scorers	23%	29%	26%	20%	32%
At Least Three of Four Scorers	70%	76%	73%	75%	75%

[10] By definition, when four readers rate portfolios on a scale with three categories (Basic, Proficient, and Advanced), at least two readers will agree on the rating 100% of the time.

Pairs of Scores: Reliability was also measured by examining the percentage of times that pairs of scorers agreed in their assessments of the four dimensions and overall scores. Three different pairings were made to determine whether being a teacher or an employer influenced one's judgment (educator-educator, educator-employer and employer-employer). Since each portfolio was scored four times, there were six scorer pairs for each portfolio. Analyses examined how frequently each pair agreed on their ratings and how frequently their ratings were in adjacent categories (one rating was Basic and the second was Proficient or one rating was Proficient and the other was Advanced).

Generally, levels of agreement on the overall scores varied little across the three different types of pairings (63-65%). Dimensionally, agreement was more likely among teacher pairs (agreement ranged from 56-69%, depending on the dimension) than employer pairs (agreement ranged from 48-65%, depending on the dimension), with agreement among employer-teacher pairs (agreement ranged from 54-64%, depending on the dimension) generally in between teachers and employers. There were also differences among teacher pairs and employer pairs in **where** they were most likely to agree. Teacher pairs were most likely to agree when scoring the Analysis dimension while employer pairs had greatest agreement when scoring Technology. Data about the agreement of scorer pairs is presented in Table 17. The differences between the teacher pairs and the employer pairs suggest teachers approached the scoring of portfolios with more uniform perspectives than employers except in the case of Technology, which interestingly, was the dimension least clear to students.

Table 17

Percent of time scorer pairs are in agreement

Dimension	Pair Type Teacher-Teacher (N=216 Pairs)	Employer-Employer (N=128 Pairs)	Employer-Teacher (N=250 Pairs)
Career Preparation	67%	48%	54%
Analysis	69%	55%	60%
Technology	56%	65%	58%
Communication	61%	58%	54%
Overall	65%	63%	64%

Further evidence relating to the differences between how teachers and employers evaluated portfolios was provided by in-depth review of the portfolios scored by both teachers and employers. Table 18 shows the percent of teachers and the percent of employers scoring these portfolios as Basic, Proficient, and Advanced both overall, and on each of the CPA dimensions. Two findings from this analysis are evident. First, teachers and employers rated about the same percentage of portfolios as Advanced, irrespective of the area under consideration. This finding suggests that scorers had little difficulty identifying high quality work. Second, teachers and employers differed in the percent of portfolios they rated as Basic or Proficient. Both overall and on each

dimension, teachers, compared to employers, rated a greater percentage of portfolios as Proficient and fewer as Basic. For Career Preparation, Analysis, and Communication, chi-square analyses showed the differences in scores awarded to portfolios by teachers and employers were statistically significant ($p<.05$). For these three dimensions, there were apparently clear differences in what teachers and employers viewed as good work demonstrating the CPS versus work that did not, even though they were using the same scoring rubric.

Analysis of the scores from the pairs of scorers suggests that when scorers are trained particular attention might be focused on increasing teachers' understanding of the Technology dimension and employers' understanding of the Career Preparation, Analysis, and Communication dimensions and the rubric used to score them. These were dimensions where less than 60% of teacher-teacher and employer-employer pairs agreed on their rating and scorers may have more difficulty making judgments. It is also possible that the rubric may need refinements, particularly the distinctions between Basic and Proficient. Increasing scorers' understanding of these dimensions and the scoring rubric may increase how uniformly they score, thereby increasing overall reliability.

Table 18

A comparison of teachers' and employers' ratings of CPA portfolios

DIMENSION/ROLE	BASIC	PROFICIENT	ADVANCED
Career Preparation*			
Employer (n=167)	29%	58%	13%
Teacher (n=116)	15%	69%	16%
Analysis*			
Employer	38%	52%	10%
Teacher	23%	66%	11%
Technology			
Employer	43%	43%	14%
Teacher	37%	46%	17%
Communication*			
Employer	37%	49%	14%
Teacher	19%	68%	13%
Overall			
Employer	38%	52%	11%
Teacher	28%	62%	10%

*Statistically significant difference between Teachers and Employers

Summary of Findings: Given that this is the first attempt at scoring substantial numbers of portfolios from a diverse group of schools, the reliability of the CPA was promising. Perhaps more importantly, data from this year's scoring session will inform

improvements in the rubric and training techniques for scorers, which should improve reliability in subsequent years. Training diverse groups of scorers (e.g., teachers and employers) and employers in particular merit increased attention. The finding that overall scores had slightly greater reliability than dimensional scores will inform both rubric design and the description of the CPA. It may be more appropriate at this time to describe the CPA as an assessment of a set of skills rather than as an assessment of individual skills.

WHAT IS THE RELATIONSHIP BETWEEN DIMENSIONAL AND OVERALL SCORES?

Interest in the relationship between dimensional and overall scores grew out of two questions: 1) "Did the scores given to a portfolio's dimensions differ from its overall score?" and 2) "Where dimension scores differed from overall scores, was there a dimension which seemed to have greater influence the overall score?" Also, in this section, two other questions are examined: "Do scorers prefer a three-point versus a four-point scale?" and "Does proficient translate to hirable?"

Table 19 presents data on how the overall score of a portfolio related to the scores the portfolio received on its individual dimensions. The results show that in eight out of ten portfolios, 1) the portfolio received the same score (e.g., Basic, Proficient, or Advanced) on three, if not all four dimensions, and 2) received that same rating as an overall score. In these cases, it appears that the dimensional scorers aligned closely with the overall scores. This finding was true for both teachers and employers with no statistically significant differences in their response patterns. In 15% of the cases, two portfolio dimensions received one score while two other dimensions were scored in the same adjacent category, **and** the portfolio's overall score was also in one of these two categories. Here again, it appears that the dimensional scores aligned closely with the overall scores.

Another 13 portfolios (3%) had at least one dimension that was scored Basic, one scored Proficient, and one scored Advanced. These portfolios received an overall rating of Proficient. Here, it is difficult to project the role of dimensional scoring on the overall score.

In relatively few cases, the dimension scores did not appear to drive the overall score. There were eight portfolios, two percent of all the portfolios rated, where three dimensions received one score, the fourth dimension was scored in an adjacent category, and the overall rating matched the score given to that fourth dimension.

To better understand what dimension might dominate overall scoring, portfolios where dimensional scores were not in total or strong (three out of four dimensions agreeing) agreement were reviewed to see which dimension tended to "win." It was assumed that in the cases where there was not total or strong agreement, the dimensions whose scores matched the overall score carried greater weight when generating the overall score.

Table 19

Dimension ratings relation to overall ratings

STRATEGY	FREQUENCY OF USE (N=398 SCORINGS)
Same score given to three or four dimensions and the Overall score	80% of Scorings
Two dimensions received one score and two dimension scored in an adjacent category. Overall score matches one of these dimensions.	15% of Scorings
One dimension rated Basic, one rated Proficient, and one rated Advanced with Overall score of Proficient	3% of Scorings
Three dimension received one score and one dimension scored in an adjacent category. Overall score matches the one dimension.	2% of Scorings

In the cases where two portfolio dimensions received one score while two other dimensions were scored in the same adjacent category, **and** the portfolio's overall score was also in one of these two categories, the Communication dimension received the same score as the overall rating 56% of the time. Communication was followed in influence by the Analysis dimension, which dominated 47% of cases, and Technology which dominated 38% of cases. Career Preparation was the least "influential" dimension. It received the same rating as the overall score in only 32% of cases.

Where three dimensions received one score, the fourth dimension was scored in an adjacent category, and the overall rating matched the score given to that fourth dimension, Communication again emerged as the dimension which most "influenced" the overall score. In four of the eight cases, the score given to Communication matched the portfolio's overall score. Career Preparation and Technology each matched the overall score of two portfolios while Analysis was the influential dimension of one portfolio.

To further investigate which dimension was most influential, a regression analysis was conducted to determine how well the average rating that portfolios received on each of the CPA dimensions predicted the portfolios' overall scores. The correlation of each dimension with the overall score was high, ranging from .69 for Technology to .93 for Communication. The value of R^2 for the multiple regression was .91 with Communication being the dimension which made the largest contribution to the regression equation. The importance of Communication in the regression equation is

consistent with the finding that Communication was the dimension most closely associated with the overall score.

The final step in examining dimensional influence was a review of the questionnaires completed by each of the 14 portfolio scorers (eight CPA teachers and six entry-level employers) after the scoring session. The questionnaire asked scorers to make short comments about:

- the impact of assigning dimensional scores as they arrived at an overall score;
- which dimensions most influenced their scoring;
- whether the scoring rubric should have three or four score points; and
- whether a "Proficient" score was a good indicator of "hirability", hirability defined as having the skills necessary for satisfactory performance in an entry-level position.

Regarding the impact of assigning dimensional scores, almost all scorers' responses indicated that they found dimensional scoring helped when formulating an overall score. Most scorers commented that the dimensions provided a framework that they used while reviewing a portfolio. The dimensions focused their attention and, in some cases, helped scorers delineate a student's strengths and weaknesses. A few scorers wrote that they largely ignored dimensional scores when giving portfolios a overall score. They only considered the dimensional scores when a portfolio was on the borderline between two categories.

Regarding which dimensions most influenced their scoring, particularly when a portfolio appeared to fall between different performance levels, nine of the 14 scorers ranked Communication as the most influential dimension. Four other scorers ranked it as the second most influential dimension. Each of these four had ranked Career Preparation as number one. Comments from some of the scorers put their views of Communication in perspective:

- "Communication is the interface through which the student shows him or herself to us. If the interface is flawed, it is very difficult to tell the difference between a diamond and a piece of glass." (Educator)
- "The 'Communication' factor was most influential based on my personal experience that able communicators are more successful in overcoming most problems." (Employer)
- "Good communication skills seems to make the entire portfolio better." (Educator)
- "If a candidate couldn't communicate ideas and feelings in writing, it was extremely difficult to get any 'sense' of the individual. I also think that writing skills are indicative of overall preparedness." (Employer)

Given that the Communication dimension was identified as the most influential in statistical analyses and by scorers, its influence should be addressed in CPA redesign efforts regarding both the appropriate level of influence and its impact on English language learners.

Three-point versus a four-point scale: Most scorers felt a three-point rubric is preferable. These scorers felt the three-point rubric they used worked well, having another category would be confusing, and that it is better to have an odd number of categories rather than an even number. The three scorers advocating a four-point scale argued that there was a wide range in the portfolios judged "Proficient." They suggested that "Highly Proficient" be added to allow scorers to better differentiate among "Proficient" portfolios.

Proficient and "hirable": The final issue portfolio scorers considered was whether "Proficient" is a good indicator of "hirability." Most educators felt a "Proficient" portfolio indicated a student was ready to move into an entry-level job. Their comments included the following:

- "If 'Proficient' means that the employer thinks the student will be successfully employed at their company with training, then I think it is a good indicator."
- "Yes, it shows that a student will produce at least satisfactory work."
- "Yes. I think all the Proficient that I ranked were students with definite potential."

Five of the six employers responded to the question about hirability. Four of them felt "Proficient" did not necessarily equate to "hirable." They explained their reasoning in the following ways:

- "There are different levels of proficiency."
- "They may have shown developed skills with great potential but [they] still have a way to go before they could be successful on the job."
- "A student with intent to become an auto mechanic did his portfolio. I ranked his product 'Basic' but I would have no problems giving him my automobile to 'fix.' I also feel that he will be very successful."

Educators' and employers' comments show there is some confusion in two areas. First, educators and employers might not understand that a Proficient rating should be a valuable indicator suggesting that a student has the skills to succeed in an entry-level position versus the erroneous idea that the CPA portfolio is meant to indicate the student will be successful in a job. Second, employers and educators might differ on the definition of "hirable" at an entry-level position.

Summary of Findings: Dimensional scores aligned strongly with overall scores. Relatively few cases could be identified where dimensional scores did not agree with the overall score. The Communication dimension was substantially more likely than the other dimensions to align with the overall score when dimensional scores were not in total or strong agreement. This suggests that Communication was given greatest weight when determining a portfolio's overall score. Scorers generally felt a three-point scale was preferable to a four-point scale. While educators felt Proficient translated well to "hirable," employers often did not. Rubric redesign should address the issue of defining

"hirable" and, in particular, how to translate the CPS (a set of skills employers recognize as necessary for successful performance in an entry-level position) into descriptors which apply across a variety of entry-level jobs.

CONCLUSION

The pilot test shed light on the CPA's potential as a scalable, reliable assessment that supports systemic reform and improved student performance. We now know that the CPA can be implemented, at least by a range of diverse schools possessing certain preconditions, such that student performance exceeds expectations informed by six years of experience with standards-based portfolios (62% of completed portfolios were Proficient or better). Furthermore, pilot test teachers believe the CPA is a valuable teaching tool that can promote changes in classroom practice and schoolwide reform. Conversely, it is clear that successful implementation is in no way assured even when implementing schools are stronger in terms of capacity for innovation than the general school population -- the three lower-performing CPA schools went through a meaningful recruiting and selection process aimed at identifying schools well-positioned to use the CPA. Like the three higher-performing schools, the three lower-performing schools came from a pool identified as likely to be able to implement innovations well, then chose to apply to the pilot test, and then passed a screening test for implementation capacity where 75% were rejected. Furthermore, their teachers were committed enough to proactively seek out the CPA. Finally, those teachers received supporting professional development prior to implementation that they rated as good or better. In spite of all this, student performance for these three schools suggested that the CPA may not be implemented well even under relatively positive circumstances. We also now know that CPA portfolios can be scored with a reasonable level of reliability by a diverse group of scorers and that teachers and employers find the performance ratings useful. Moreover, we have data about scoring that will almost certainly lead to improved reliability. Overall, the CPA has a solid base from which to progress.

For the CPA to realize its potential and to gain greater understanding of its scalability, it must meet interrelated challenges regarding: (1) its reliability as an assessment; (2) modification of the portfolio's entries and scoring rubric to better address the needs of employers and college admissions processes; and (3) implementation in a larger number of schools representative of the general population of schools with relatively high stakes. Regarding reliability and validity, while the CPA needs improvement, it is off to a good start technically. Critically, teachers and employers already view a Basic, Proficient, or Advanced as more reliable and valid than a letter grade. Now, the CPA needs to achieve a level of reliability and validity which allows educators, employers, and parents in selected high school communities to use it as a meaningful indicator of student performance. This will not be easy given the technical obstacles associated with portfolio scoring and external audiences (e.g., parents and policy-makers) that are much more accepting of standardized test scores than of cumulative performance-based assessments. The following steps should increase reliability: revise the scoring rubric with learnings from the 1996-97 pilot test scoring in order to better define the three performance levels and dimensions, revise scorer training procedures aimed at building a common definition of the three performance levels, and continue to monitor and analyze scoring events and results. After taking these steps, reliability should equal or exceed

that of the few other available performance-based assessments measuring work readiness skills.

To increase its value as an assessment and its scalability, it must better meet the needs of employers and college admissions officers. Regarding employers, the Proficient rating must better represent "hirable" in an entry-level position. This is a significant challenge as wide variability exists for the definition of hirable among employers of entry-level workers. Regarding college admissions, while the CPS align with skills colleges want in their students, formal review and validation of the CPS by post-secondary institutions is needed. Review of the CPA's format is also necessary to see if post-secondary educators' concerns about use of portfolios in admissions processes can be addressed. Also, it may be appropriate for colleges to pilot the use of the CPA in admissions processes to see if the CPA has comparable predictive powers relative to traditional admissions indicators such as test scores and grades. Overall, reviews by employers and post-secondary admissions officers are likely to lead to changes in the structure of the CPA's entries.

Implementation in schools more representative of the general population than the pilot test schools, and with relatively high stakes (e.g., determining the grade for two or three courses or serving as a high school graduation requirement), is essential to better understand the CPA's scalability and impact on whole school change. Implementing the CPA in such a fashion would allow deeper understanding of the necessary preconditions for successful implementation, particularly with regard to implementation by teachers less interested in the CPA than those in the pilot test. It would also allow for increased study of external and consequential validity. High stakes might have a variety of impacts. They might cause student and/or teacher motivation to increase, perhaps decreasing the need for some of the preconditions for success identified in the pilot test. Also, high stakes might encourage schools to implement some components of whole school change in order to increase performance on the CPA. High stakes might also impact the sustainability of the CPA. Additionally, broader use of the CPA would provide data for improvements in reliability and scoring procedures in diverse settings. High stakes implementation of the CPA in schools more representative of the general population than the pilot test schools will require an aggressive recruiting effort and may require modification of the CPA and CPS to meet local needs. Willingness to tailor the portfolio components and standards to local needs should increase: the pool of schools interested in using the CPA as a high stakes assessment, educator desire to use performance on the CPA as meaningful data informing systemic change, employer desire to use the CPA in hiring decisions, and admissions officers' desire to use it in admissions decisions.

If the CPA meets the challenges listed above, and if preconditions necessary for successful implementation come to exist in a large number of schools, the CPA could become a scalable tool that bolsters standards-driven curriculum, performance-based assessment, and whole school change.

APPENDIX A

CAREER PREPARATION STANDARDS

CAREER PREPARATION STANDARDS (CPS)

1. **PERSONAL SKILLS.** Students will understand how personal skill development affects their employability. They will exhibit positive attitudes, self confidence, honesty, perseverance, self-discipline, and personal hygiene. They will manage time and balance priorities as well as demonstrate a capacity for lifelong learning.

2. **INTERPERSONAL SKILLS.** Students will understand key concepts in group dynamics, conflict resolution, and negotiation. They will work cooperatively, share responsibilities, accept supervision, and assume leadership roles. They will demonstrate cooperative working relationships across gender and cultural groups.

3. **THINKING AND PROBLEM SOLVING SKILLS.** Students will exhibit critical and creative thinking skills, logical reasoning, and problem solving. They will apply numerical estimation, measurement, and calculation, as appropriate. They will recognize problem situations; identify, locate, and organize needed information or data; and propose, evaluate, and select from alternative solutions.

4. **COMMUNICATION SKILLS.** Students will understand principles of effective communication. They will communicate both orally and in writing. They will listen attentively and follow instructions, requesting clarification or additional information as needed.

5. **OCCUPATIONAL SAFETY.** Students will understand occupational safety issues including the avoidance of physical hazards in the work environment. They will operate equipment safely so as not to endanger themselves or others. They will demonstrate proper handling of hazardous materials.

6. **EMPLOYMENT LITERACY.** Students will understand career paths and strategies for obtaining employment within their chosen fields. They will assume responsibility for professional growth. They will understand and promote the role of their field within a productive society, including the purpose of professional organizations.

7. **TECHNOLOGY LITERACY.** Students will understand and adapt to changing technology by identifying, learning, and applying new skills to improve job performance. They will effectively employ technologies relevant to their fields.

APPENDIX B

DATA COLLECTION INSTRUMENTS

CPA Teacher Survey, 1996-97

This is a survey about the Career Preparation Assessment (CPA). Because the CPA is new, we are collecting information to help guide its development. Your feedback in this survey is critical to the CPA. Please answer as honestly and completely as you can.

ABOUT YOUR SCHOOL AND CLASS(ES)

1. We are interested in reform efforts at your school. Please check off **all** activities listed below which apply to your school **and** the approximate number of <u>semesters</u> your school has been engaged in each.

	Activity		Number of Semesters
a.	_____	Setting Standards (not including the Career Preparation Standards for Student Performance)	_____
b.	_____	Involving Parents, Students, Employers, or Community Members in Setting Standards	_____
c.	_____	Developing Standards-Based Assessments (not including the CPA)	_____
d.	_____	Performance-based Assessments (not including the CPA)	_____
e.	_____	Integrated Curriculum	_____
f.	_____	Block Scheduling	_____
g.	_____	Team Teaching	_____
h.	_____	Career Academies	_____

2. In what subject(s) did you use the CPA? 1._____ 2._____ 3._____

3. In how many of your classes did you use the CPA? 1 2 3 4 5 6 7

4. What percentage of your students attempted some part of the CPA? _____%

5. What percentage of your students completed all the entries they attempted? _____%

6. By what month did you comprehensively introduce the Career Preparation Standards to your students?
   Sept. Oct. Nov. Dec. Jan. Feb. March April May

7. In what month did your students begin to create their first CPA portfolio entry?
   Sept. Oct. Nov. Dec. Jan. Feb. March April May

8. In what month had your students completed at least first drafts of half the portfolio entries?
   Sept. Oct. Nov. Dec. Jan. Feb. March April May

9. On average, what percentage of class time was devoted exclusively to the CPA? _____%

ABOUT THE CPA OVERALL

The following are a series of statements about the CPA. Please circle the response which best shows how much you agree with each statement.

10. The CPA portfolio is important for my students.

Strongly Agree Agree Neutral Disagree Strongly Disagree

11. My students were motivated and interested in participating in the CPA.

Strongly Agree Agree Neutral Disagree Strongly Disagree

12. The Career Preparation Standards represent skills valued by employers.

Strongly Agree Agree Neutral Disagree Strongly Disagree

13. The Career Preparation Standards represent skills valued by post-secondary educational institutions.

Strongly Agree Agree Neutral Disagree Strongly Disagree

14. The CPA is a valuable assessment tool for me.

Strongly Agree Agree Neutral Disagree Strongly Disagree

15. The CPA assesses the Career Preparation Standards well.

Strongly Agree Agree Neutral Disagree Strongly Disagree

16. Doing the CPA portfolio is a good way for students to learn or master the Career Preparation Standards.

Strongly Agree Agree Neutral Disagree Strongly Disagree

17. Using the CPA improves students' academic work.

Strongly Agree Agree Neutral Disagree Strongly Disagree

(over)

18. CPA portfolios are of interest to employers.

Strongly Agree Agree Neutral Disagree Strongly Disagree

19. CPA portfolios are of interest to post-secondary educational institutions.

Strongly Agree Agree Neutral Disagree Strongly Disagree

20. I used the Career Preparation Standards to structure my curriculum.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

21. Using the Career Preparation Standards made me alter or rethink my teaching methods.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

22. Using the CPA portfolio as a means of organizing student work made me alter or rethink my teaching methods.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

23. After seeing CPA-related student work I decided to alter or rethink my teaching methods.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

24. Analyzing disaggregated data from the CPA would be valuable.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

25. Our school or program has changed its structure, procedures, or curriculum based on CPA-related student work.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

26. The CPA is, or could be, a valuable support for implementing standards-based curriculum and assessment schoolwide.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

27. I intend to continue using the CPA next year.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please explain: _____

_____

_____

28. What factors or resources contributed to the success of the CPA in your classroom? Please check off the 5 **most important** factors.

a. ___ Integrated curriculum
b. ___ Previous experience with standards-based assessment
c. ___ Previous experience with performance-based assessment
d. ___ Block scheduling
e. ___ Significant numbers of students in common with other teachers using the CPA
f. ___ Team teaching
i. ___ Career academies
k. ___ Professional development related to the CPA
l. ___ More class time for the CPA
m. ___ More experience with the CPS and CPA
n. ___ CPA guidelines
o. ___ More experience with portfolios
p. ___ Students with more experience with portfolios
q. ___ More parent understanding of portfolios
r. ___ More schoolwide support of Career Preparation Standards
s. ___ More schoolwide support of portfolios
t. ___ More schoolwide support of the CPA
u. ___ Other (Please list): _____

29. What factors or resources that you did not have this past year would have made the CPA more successful in your classroom? Please check off the 5 **most important** factors.

a. ___ Integrated curriculum
b. ___ Previous experience with standards-based assessment
c. ___ Previous experience with performance-based assessment
d. ___ Block scheduling
e. ___ Significant numbers of students in common with other teachers using the CPA
f. ___ Team teaching
i. ___ Career academies
k. ___ More professional development related to the CPA
l. ___ Different professional development related to the CPA than we received
m. ___ More class time for the CPA
n. ___ More experience with the CPS and CPA
o. ___ Different CPA guidelines
p. ___ More experience with portfolios
q. ___ Students with more experience with portfolios
r. ___ More parent understanding of portfolios
s. ___ More schoolwide support of Career Preparation Standards
t. ___ More schoolwide support of portfolios
u. ___ More schoolwide support of the CPA
v. ___ Other (Please list): _____

30. What changes would you recommend making at your site to support implementation of the CPA?

_____

_____

_____

_____

31. Outside of the CPA and CPS, are you aware of any activities at your school where standards are being developed or used to define what students should know or be able to do? (Please circle your response.)

Yes No

If you responded, "Yes," please describe what those standards are and how the CPA relates to them.

_____

_____

_____

_____

(over)

ABOUT PROFESSIONAL DEVELOPMENT FOR THE CPA

This section is designed to gather information about the professional development you received for the Career Preparation Assessment, now that you have worked with it. Please circle the number which best shows how much you agree with each of the following statements.

After the CPA professional development workshops, I understood:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
32. the purposes of the CPA portfolio.	**SA**	**A**	**N**	**D**	**SD**
33. the Career Preparation Standards.	**SA**	**A**	**N**	**D**	**SD**
34. the components of the CPA.	**SA**	**A**	**N**	**D**	**SD**
35. the nature of tasks that elicit work demonstrating the CPS.	**SA**	**A**	**N**	**D**	**SD**
36. how to judge when student work demonstrates the CPS	**SA**	**A**	**N**	**D**	**SD**
37. how to use the CPA rubric.	**SA**	**A**	**N**	**D**	**SD**
38. how to design assignments which help students demonstrate the CPS.	**SA**	**A**	**N**	**D**	**SD**
39. how to integrate the CPA into my curriculum plans.	**SA**	**A**	**N**	**D**	**SD**

40. Please share your comments or suggestions for improving the CPA-related professional development your received.

_____

_____

_____

_____

_____

41. Please share your overall comments or suggestions below for improving the CPA portfolio.

_____

_____

_____

_____

_____

_____

Thank you for your feedback

CPA Student Survey, 1996-97

This is a survey about the Career Preparation Assessment (CPA), a portfolio you have been involved in this year. Because the CPA is new, we are collecting information to help improve it. Please answer the survey questions as honestly and completely as you can. Your feedback is critical to us. Thank you for your time and thoughtfulness.

ABOUT YOU

1. Age: _____

2. Grade: (circle one)

   9 10 11 12

3. Gender: (circle one)

   M F

4. Ethnicity: (check one)
   1. ____ American Indian
   2. ____ Asian
   3. ____ Pacific Islander
   4. ____ Filipino
   5. ____ Hispanic
   6. ____ Black
   7. ____ White
   8. ____ Other (please describe: _____)
   9. ____ Decline to state

5. Name of the class or classes where you worked on the Career Preparation Assessment (CPA) Portfolio:

   a. _____
   b. _____
   c. _____
   d. _____
   e. _____

6. Did you complete all the entries (personal statement, resume, application, letter of recommendation, work samples, writing sample, interpersonal skills evaluation) in a CPA portfolio? (Please circle one.)

   Yes No I do not know

(OVER)

DIRECTIONS: Please circle the number that most correctly corresponds to how much you agree with each of the statements in the survey.

ABOUT THE CAREER PREPARATION STANDARDS (CPS)

7. I understood the Career Preparation Standards (Thinking and Problem-Solving, Communication, Technology Literacy, Personal, Interpersonal, Employment Literacy, and Occupational Safety).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

8. My teachers spent enough time explaining the Career Preparation Standards (CPS).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

9. Employers want to hire people who have the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

10. Colleges want to admit students who have the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

11. Having the CPS skills will help me in the future.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

12. The CPS are important to my teachers.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

13. I can give an accurate assessment of how well I have mastered the CPS.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

ABOUT COMPLETEING THE CAREER PREPARATION ASSESSMENT (CPA) PORTFOLIO

14. I understood how to do the entries (resume, work samples, personal statement, etc.) that make up the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

15. Overall, I received all the information, help, and support I needed to be successful with the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

16. The CPA "Guidelines For Students" was useful to me.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

17. Doing the CPA portfolio will help me in the future.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

18. I recommend that other students do the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

ABOUT THE VALUE OF YOUR CPA PORTFOLIO

19. After doing the CPA portfolio, I <u>have a better understanding</u> of what skills <u>employers and colleges want</u>.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

(OVER)

20. Doing the CPA portfolio helped me get the skills I need to have after I finish high school.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

21. Having a CPA portfolio will help me in getting a job.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

22. Having a CPA portfolio will help me in getting into college.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

23. The CPA is a good way to learn and master the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

24. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

_____
_____
_____
_____
_____

25. I learn and master the CPS skills better in classes where I use the CPA **than in classes where I do not use the CPA.**

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

26. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

_____
_____
_____
_____
_____

27. Using the CPA helps to improve my academic work.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

28. Teachers who use the CPA teach differently or ask me to do different kinds of assignments than **teachers who do not use the CPA.**

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

29. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

_____

_____

_____

_____

30. My teachers thought the CPA portfolio was important.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

31. The CPA is a good teaching and learning tool.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know
1	2	3	4	5	6

ABOUT IMPROVING THE CPA

32. How would you change the CPA to make it better?

_____

_____

_____

33. What should teachers do to help students perform well on the CPA?

_____

_____

_____

Please write on the back side of this page if you need more room.

THANK YOU VERY MUCH!!!!!

EVALUATION

Career Preparation Assessment Workshop

1. We would like to know what support services we may offer that would be helpful to you in implementing the CPA. Please check all that apply and indicate whether you feel the service would be; a) not essential, b) helpful, or c) critical, to your success.

_____ site visits to your school and individual classes
_____ local standards development (tailored CPS)
_____ local rubric development
_____ presentations to parents, local employers, and/or community members
_____ scoring workshops

2. The quality of the facilitators/presenters was:

❒ Excellent ❒ Good ❒ Fair ❒ Poor

3. The quality of the meeting materials were:

❒ Excellent ❒ Good ❒ Fair ❒ Poor

4. In terms of personal enjoyment, I found the meeting:

❒ Excellent ❒ Good ❒ Fair ❒ Poor

5. As a use of my time, the meeting was:

❒ Excellent ❒ Good ❒ Fair ❒ Poor

6. The meeting achieved Goal 1:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

7. The meeting achieved Goal 2:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

8. The meeting achieved Goal 3:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

9. The meeting achieved Goal 4:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

10. The meeting achieved Goal 5:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

11. The meeting achieved Goal 6:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

12. The meeting achieved Goal 7:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

11. Overall, I would describe attainment of the meeting goals as:

❒ Very Well ❒ Well ❒ Somewhat ❒ Not at all

12. What in the meeting could have been better/improved?

13. What in the meeting was particularly useful to you?

14. Other Comments:

CPA Evaluation Workshop #2

Evaluation Form

Agree=1 Somewhat Agree=2 No Opinion = 3 Somewhat Disagree=4 Disagree=5

1. The goals for the meeting were appropriate. ____
Comments _____

2. Goal #1 was accomplished. ____
Comments _____

3. Goal #2 was accomplished. ____
Comments _____

4. Goal #3 was accomplished. ____
Comments _____

5. Goal #4 was accomplished. ____
Comments _____

6. Facilitator was knowledgeable and helpful. ____
Comments _____

7. Sufficient time was allowed for large/small group work. ____
Comments _____

8. My questions were answered satisfactorily. ____
Comments _____

9. This meeting was a good use of my time. ____
Comments _____

10. What I liked most: _____
_____

11. What I liked least: _____
_____

12. Suggestions for next time or general comments: _____
_____

CPA Evaluation Workshop #3

Evaluation Form

Agree=1 Somewhat Agree=2 No Opinion = 3 Somewhat Disagree=4 Disagree=5

1. The goals for the meeting were appropriate. ____
Comments _____

2. Goal #1 was accomplished. ____
Comments _____

3. Goal #2 was accomplished. ____
Comments _____

4. Goal #3 was accomplished. ____
Comments _____

5. Goal #4 was accomplished. ____
Comments _____

6. Facilitator was knowledgeable and helpful. ____
Comments _____

7. Sufficient time was allowed for large/small group work. ____
Comments _____

8. My questions were answered satisfactorily. ____
Comments _____

9. This meeting was a good use of my time. ____
Comments _____

10. What I liked most: _____
_____

11. What I liked least: _____
_____

12. Suggestions for next time or general comments: _____
_____

CPA Scorer Survey

Name: Educator or Employer

Did dimensional scoring: 1 *help* 2 hinder 3 not have an impact on 4 **other** arriving at a holistic score? Please circle one of the four choices and write at least two sentences explaining your answer.

Please rank order the dimensions in terms of influence over your scoring when a portfolio wavered between different performance levels. "1" is the most influential. Please write at least two sentences explaining your answer.

Career Preparation ___
Analysis ___
Technology ___
Communication ___

Should the rubric have 4 score points? 1 Yes 2 No 3 Other. Please circle one of the 3 choices and write at least two sentences explaining your answer.

Is Proficient a good indicator of "hireability"? Yes, two more sentences please.

APPENDIX C

Results from

CPA TEACHER SURVEY

CPA STUDENT SURVEY

Spring, 1997

CPA Teacher Survey, 1996-97

This is a survey about the Career Preparation Assessment (CPA). Because the CPA is new, we are collecting information to help guide its development. Your feedback in this survey is critical to the CPA. Please answer as honestly and completely as you can.

ABOUT YOUR SCHOOL AND CLASS(ES)

1. We are interested in reform efforts at your school. Please check off **all** activities listed below which apply to your school **and** the approximate number of semesters your school has been engaged in each.

	Activity		Number of Semesters
a.	86%	Setting Standards (not including the Career Preparation Standards for Student Performance)	_____
b.	72%	Involving Parents, Students, Employers, or Community Members in Setting Standards	_____
c.	56%	Developing Standards-Based Assessments (not including the CPA)	_____
d.	58%	Performance-based Assessments (not including the CPA)	_____
e.	89%	Integrated Curriculum	_____
f.	31%	Block Scheduling	_____
g.	61%	Team Teaching	_____
h.	69%	Career Academies	_____

2. In what subject(s) did you use the CPA?1._____2._____3._____

3. In how many of your classes did you use the CPA?

1	2	3	4	5	6	7	No Response
11%	22%	36%	17%	11%	0%	0%	3%

4. What percentage of your students attempted some part of the CPA? _____%

5. What percentage of your students completed all the entries they attempted? _____%

6. By what month did you comprehensively introduce the Career Preparation Standards to your students?

Sept.	Oct.	Nov.	Dec	Jan.	Feb	March	April	May	No Response
6%	11%	28%	11%	0%	31%	6%	6%	0%	3%

7. In what month did your students begin to create their first CPA portfolio entry?

Sept.	Oct.	Nov.	Dec	Jan.	Feb	March	April	May	No Response
8%	6%	22%	8%	11%	25%	14%	3%	0%	3%

(over)

8. In what month had your students completed at least first drafts of half the portfolio entries?

Sept.	Oct.	Nov.	Dec	Jan.	Feb	March	April	May	No Response
3%	0%	3%	3%	6%	28%	17%	25%	8%	8%

9. On average, what percentage of class time was devoted exclusively to the CPA? _____%

ABOUT THE CPA OVERALL

The following are a series of statements about the CPA. Please circle the response which best shows how much you agree with each statement.

10. The CPA portfolio is important for my students.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
36%	58%	3%	0%	0%	3%

11. My students were motivated and interested in participating in the CPA.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
8%	64%	17%	8%	0%	3%

12. The Career Preparation Standards represent skills valued by employers.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
53%	36%	6%	0%	0%	6%

13. The Career Preparation Standards represent skills valued by post-secondary educational institutions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
19%	64%	8%	3%	0%	6%

14. The CPA is a valuable assessment tool for me.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
11%	64%	17%	6%	0%	3%

15. The CPA assesses the Career Preparation Standards well.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
36%	44%	17%	0%	0%	3%

16. Doing the CPA portfolio is a good way for students to learn or master the Career Preparation Standards.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
36%	50%	11%	0%	0%	3%

17. Using the CPA improves students' academic work.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
17%	58%	19%	3%	0%	3%

18. CPA portfolios are of interest to employers.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
22%	56%	22%	0%	0%	0%

19. CPA portfolios are of interest to post-secondary educational institutions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
14%	36%	33%	14%	0%	3%

20. I used the Career Preparation Standards to structure my curriculum.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
3%	39%	33%	19%	3%	3%

Please explain: _____

_____

_____

21. Using the Career Preparation Standards made me alter or rethink my teaching methods.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
6%	53%	33%	3%	3%	3%

Please explain: _____

_____

_____

22. Using the CPA portfolio as a means of organizing student work made me alter or rethink my teaching methods.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
3%	56%	31%	0%	3%	8%

Please explain: _____

_____

_____

23. After seeing CPA-related student work I decided to alter or rethink my teaching methods.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
6%	47%	39%	6%	3%	0%

Please explain: _____

_____

_____

24. Analyzing disaggregated data from the CPA would be valuable.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
3%	31%	36%	7%	0%	25%

Please explain: _____

_____

_____

25. Our school or program has changed its structure, procedures, or curriculum based on CPA-related student work.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
8%	36%	25%	22%	6%	3%

Please explain: _____

_____

_____

26. The CPA is, or could be, a valuable support for implementing standards-based curriculum and assessment schoolwide.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
33%	50%	17%	0%	0%	0%

Please explain: _____

_____

_____

27. I intend to continue using the CPA next year.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
36%	56%	3%	0%	3%	3%

Please explain: _____

_____

_____

28. What factors or resources contributed to the success of the CPA in your classroom? Please check off the 5 **most important** factors.

a.	53%	Integrated curriculum
b.	19%	Previous experience with standards-based assessment
c.	19%	Previous experience with performance-based assessment
d.	14%	Block scheduling
e.	67%	Significant numbers of students in common with other teachers using the CPA
f.	22%	Team teaching
i.	44%	Career academies
k.	42%	Professional development related to the CPA
l.	17%	More class time for the CPA
m.	14%	More experience with the CPS and CPA
n.	36%	CPA guidelines
o.	28%	More experience with portfolios
p.	25%	Students with more experience with portfolios
q.	0%	More parent understanding of portfolios
r.	11%	More schoolwide support of Career Preparation Standards
s.	14%	More schoolwide support of portfolios
t.	6%	More schoolwide support of the CPA
u.	___	Other (Please list): _____

29. What factors or resources that you did not have this past year would have made the CPA more successful in your classroom? Please check off the 5 **most important** factors.

a.	17%	Integrated curriculum
b.	19%	Previous experience with standards-based assessment
c.	22%	Previous experience with performance-based assessment
d.	22%	Block scheduling
e.	3%	Significant numbers of students in common with other teachers using the CPA
f.	11%	Team teaching
i.	11%	Career academies
k.	42%	More professional development related to the CPA
l.	11%	Different professional development related to the CPA than we received
m.	39%	More class time for the CPA
n.	50%	More experience with the CPS and CPA
o.	6%	Different CPA guidelines
p.	39%	More experience with portfolios
q.	22%	Students with more experience with portfolios
r.	22%	More parent understanding of portfolios
s.	31%	More schoolwide support of Career Preparation Standards
t.	19%	More schoolwide support of portfolios
u.	25%	More schoolwide support of the CPA
v.	___	Other (Please list): _____

30. What changes would you recommend making at your site to support implementation of the CPA?

_____

_____

_____

_____

31. Outside of the CPA and CPS, are you aware of any activities at your school where standards are being developed or used to define what students should know or be able to do? (Please circle your response.)

Yes 61% No 39%

If you responded, "Yes," please describe what those standards are and how the CPA relates to them.

_____

_____

_____

_____

ABOUT PROFESSIONAL DEVELOPMENT FOR THE CPA

This section is designed to gather information about the professional development you received for the Career Preparation Assessment, now that you have worked with it. Please circle the number which best shows how much you agree with each of the following statements.

After the CPA professional development workshops, I understood:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response
32. the purposes of the CPA portfolio.	47%	42%	3%	0%	0%	8%
33. the Career Preparation Standards.	36%	47%	8%	0%	0%	8%
34. the components of the CPA.	44%	39%	8%	0%	0%	8%
35. the nature of tasks that elicit work demonstrating the CPS.	14%	53%	19%	6%	0%	8%
36. how to judge when student work demonstrates the CPS	8%	61%	17%	6%	0%	8%
37. how to use the CPA rubric.	17%	50%	22%	3%	0%	8%
38. how to design assignments which help students demonstrate the CPS.	11%	28%	42%	8%	0%	11%
39. how to integrate the CPA into my curriculum plans.	17%	25%	39%	6%	3%	11%

40. Please share your comments or suggestions for improving the CPA-related professional development your received.

_____

_____

_____

_____

_____

41. Please share your overall comments or suggestions below for improving the CPA portfolio.

_____

_____

_____

_____

_____

_____

Thank you for your feedback

CPA Student Survey, 1996-97

This is a survey about the Career Preparation Assessment (CPA), a portfolio you have been involved in this year. Because the CPA is new, we are collecting information to help improve it. Please answer the survey questions as honestly and completely as you can. Your feedback is critical to us. Thank you for your time and thoughtfulness.

ABOUT YOU

1. Age: _____

2. Grade: (circle one)

9	*10*	*11*	*12*	*No Response*
22%	25%	28%	23%	2%

3. Gender: (circle one)

M	*F*	*No Response*
42%	57%	1%

4. Ethnicity: (check one)

1%	American Indian
2%	Asian
1%	Pacific Islander
4%	Filipino
34%	Hispanic
26%	Black
14%	White
9%	Other (please describe: _____)
8%	Decline to state

5. Name of the class or classes where you worked on the Career Preparation Assessment (CPA) Portfolio:

e. _____
f. _____
g. _____
h. _____
i. _____

6. Did you complete all the entries (personal statement, resume, application, letter of recommendation, work samples, writing sample, interpersonal skills evaluation) in a CPA portfolio? (Please circle one.)

Yes	*No*	*I do not know*	*No Response*
46%	37%	17%	1%

DIRECTIONS: Please circle the number that most correctly corresponds to how much you agree with each of the statements in the survey.

ABOUT THE CAREER PREPARATION STANDARDS

7. I understood the Career Preparation Standards (Thinking and Problem-Solving, Communication, Technology Literacy, Personal, Interpersonal, Employment Literacy, and Occupational Safety).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
17%	*46%*	*25%*	*4%*	*1%*	*5%*	*2%*

8. My teachers spent enough time explaining the Career Preparation Standards (CPS).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
19%	*35%*	*26%*	*12%*	*6%*	*2%*	*1%*

9. Employers want to hire people who have the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
33%	*38%*	*16%*	*2%*	*2%*	*6%*	*3%*

10. Colleges want to admit students who have the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
29%	*37%*	*21%*	*4%*	*2%*	*6%*	*1%*

11. Having the CPS skills will help me in the future.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
42%	*40%*	*11%*	*2%*	*1%*	*3%*	*1%*

12. The CPS are important to my teachers.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
22%	*36%*	*27%*	*6%*	*2%*	*7%*	*1%*

13. I can give an accurate assessment of how well I have mastered the CPS.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
8	*37*	*35*	*10*	*3*	*7*	*1%*

ABOUT COMPLETING THE CAREER PREPARATION ASSESSMENT (CPA) PORTFOLIO

14. I understood how to do the entries (resume, work samples, personal statement, etc.) that make up the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
27	*44*	*19*	*6*	*1*	*3*	*1%*

15. Overall, I received all the information, help, and support I needed to be successful with the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
17	*38*	*27*	*13*	*3*	*2*	*1%*

16. The CPA "Guidelines For Students" was useful to me.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
15	*42*	*29*	*6*	*3*	*5*	*1%*

17. Doing the CPA portfolio will help me in the future.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
26	*45*	*18*	*4*	*1*	*4*	*1%*

18. I recommend that other students do the CPA portfolio.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
26	*39*	*21*	*7*	*3*	*3*	*1%*

ABOUT THE VALUE OF YOUR CPA PORTFOLIO

19. After doing the CPA portfolio, I have a better understanding of what skills employers and colleges want.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
24	*43*	*22*	*6*	*1*	*3*	*1%*

20. Doing the CPA portfolio helped me get the skills I need to have after I finish high school.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
12	*40*	*31*	*9*	*3*	*3*	*3%*

21. Having a CPA portfolio will help me in getting a job.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
19	*45*	*23*	*5*	*1*	*3*	*3%*

22. Having a CPA portfolio will help me in getting into college.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
14	*40*	*29*	*6*	*2*	*6*	*3%*

23. The CPA is a good way to learn and master the CPS skills.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
16	*45*	*23*	*4*	*1*	*8*	*3%*

24. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

25. I learn and master the CPS skills better in classes where I use the CPA **than in classes where I do not use the CPA.**

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
10	*27*	*29*	*9*	*2*	*16*	*6%*

26. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

27. Using the CPA helps to improve my academic work.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
8	*38*	*34*	*8*	*2*	*5*	*5%*

28. Teachers who use the CPA teach differently or ask me to do different kinds of assignments than **teachers who do not use the CPA.**

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
10	*34*	*25*	*11*	*3*	*12*	*6%*

29. Please explain your answer to the previous question. **Why** did you give the rating (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) to the last question?

30. My teachers thought the CPA portfolio was important.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
36	*40*	*10*	*2*	*1*	*5*	*6*

31. The CPA is a good teaching and learning tool.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Do Not Know	No Response
1	2	3	4	5	6	
19	*45*	*20*	*4*	*2*	*4*	*6*

ABOUT IMPROVING THE CPA

32. How would you change the CPA to make it better?

_____

_____

_____

33. What should teachers do to help students perform well on the CPA?

_____

_____

_____

Please write on the back side of this page if you need more room.

THANK YOU VERY MUCH!!!!!

APPENDIX D

CAREER PREPARATION ASSESSMENT RATING GUIDE

Career Preparation Assessment (CPA) Rating Guide

	CAREER PREPARATION • Personal qualities needed for employment • Interpersonal skills needed for employment • Career planning and employment literacy	ANALYSIS • Analytic thinking • Evaluation	TECHNOLOGY • Presentation of work using technology • Application of technology other than word processing	COMMUNICATION • Attention to audience • Using own ideas • Organization and clarity • Accuracy and completeness • Language mechanics, sentence structure, and vocabulary
BASIC (Not ready to show employer or college)	• Does not identify own personal qualities needed to be successfully employed • Shows little or no ability to work productively with others • Shows little evidence of planning for a career	• Reasoning is unclear, illogical, or superficial; interprets or calculates information inaccurately; makes statements with little explanation • Gives incomplete or sketchy evaluation of own work	• Does not use technology to present work (Appearance interferes with presentation of work) • Application of technology other than word processing is ineffective or lacking	• Shows little or no awareness of the audience • Writing is not original; copies the ideas of others • Ideas are presented in a disorganized way • Work lacks accuracy and completeness • Writing contains errors in language use that make ideas difficult to understand
PROFICIENT (Ready to show employer or college)	• Identifies own personal qualities needed to be successfully employed • Shows ability to work productively with others • Shows evidence of planning and developing a career	• Reasoning is clear and logical; interprets or calculates information accurately; supports statements with explanation • Gives accurate evaluation of own work	• Uses technology to present work • Effectively applies technology other than word processing	• Effectively presents self and ideas to outside reviewer • Writing is original • Writing is clear and organized • Work is accurate and fully developed • Writing contains minor language errors; ideas are understandable
ADVANCED (Superior quality, may exceed expectations of employer or college)	• Consistently highlights own personal qualities needed to be successfully employed • Shows leadership and strong ability to work productively with others • Shows excellent understanding of career planning; describes realistic plan for achieving career	• Reasoning is clear, logical, and thorough; interprets or calculates information accurately and creatively; supports statements with evidence • Shows understanding and insight in evaluating own work	• Uses technology to enhance presentation of work • Effectively applies technology other than word processing that is relevant to chosen field	• Self and ideas "come alive" to outside reviewer • Writing is original and may be creative • Writing is clear and well organized throughout portfolio • Work is accurate and complete with consistent and superior development; shows attention to detail • Writing is almost free of language errors and is easy to understand

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