DOCUMENT RESUME

ED 408 470 CE 074 271

TITLE	Effective Tech Prep Policies and Practices: Performance Assessment. Final Report.
INSTITUTION	Texas Tech Univ., Lubbock. Coll. of Education.
SPONS AGENCY	Texas Higher Education Coordinating Board, Austin.
PUB DATE	Jun 97
NOTE	147p.; For related documents, see ED 402 452-454 and CE 074 270.
PUB TYPE	Reports - Research (143) -- Tests/Questionnaires (160)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Administrator Attitudes; Advisory Committees; Educational Policy; Educational Practices; *Evaluation Methods; *Performance Based Assessment; Program Effectiveness; Questionnaires; State Surveys; *Statewide Planning; *Student Evaluation; *Tech Prep; *Vocational Education
IDENTIFIERS	*Texas

ABSTRACT

Information on effective policies/practices for assessing student performance in Texas' tech prep programs was gathered and disseminated during a project involving the following activities: formation of an advisory committee to oversee the data collection/analysis and product development processes; compilation/review of performance assessment documents from tech prep consortia throughout Texas; administration of the 1997 Tech Prep Student Outcomes Assessment Questionnaire (1,000 copies of which were mailed to Texas's 25 tech prep directors); analysis of the 115 usable questionnaires eventually returned (response rate, 11.5%); and phone interviews with 27 individuals from a sample of Texas' tech prep directors and others considered knowledgeable about student performance assessment. It was discovered that Texas tech prep practitioners are using a variety of methods to assess their students' competencies in vocational-technical subject matter, academic subject matter, employability skills, and workplace skills. Performance assessment was conducted most frequently at the course (rather than program) level. (Appendixes constituting approximately 60% of this document contain the following: list of project advisory council members; minutes of advisory council meeting; phone interview protocol; 1997 tech prep student outcome assessment questionnaire; survey-related correspondence to consortia directors; document analysis rating system; and frequencies for the questionnaire.) (MN)

Strategic Planning
SPECAP Evaluation of Curriculum
Assessment of Performance

The Final Report on

Effective Tech Prep Policies and

Practices: Performance Assessment

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Executive Summary

This is an executive summary of *The Final Report on Effective Tech Prep Policies and Practices: Performance Assessment*, a project funded by Carl Perkins funds distributed by the Texas Higher Education Coordinating Board. The purpose of the project was to gather and disseminate information on effective policies and practices for assessing the performance of students in Tech Prep programs in Texas. The project was conducted by the Strategic Planning, Evaluation of Curriculum, and Assessment of Performance (SPECAP) Research Group at Texas Tech University. The project researchers utilized document analysis, surveys, and phone interviews to gather both quantitative and qualitative data. A brief description of the products that emerged from the project are discussed in this executive summary, along with a brief summary of the conclusions and policy recommendations.

Products

Performance assessment documents were reviewed for possible inclusion in *The Tech Prep Handbook: Performance Assessment. The Tech Prep Handbook: Performance Assessment* has been designed so that Tech Prep practitioners involved in the assessment of student performance have a ready source of models that they can adapt in assessing their own students' performance.

The Final Report on Effective Tech Prep Policies and Practices: Performance Assessment is another product created by SPECAP project researchers. In *The Final*

Report, project researchers discuss in detail the activities of the SPECAP Research Group --the document analysis, phone interviews, and surveys, as well as the products created -- the handbook, final report, and conference presentations. *The Final Report* also contains the conclusions and policy recommendations of the SPECAP researchers based on their analyses of the data gathered for the project. These conclusions and recommendations are presented in the section that follows.

Conclusions and Policy Recommendations

A number of conclusions are discussed in *The Final Report on Effective Tech Prep Policies and Practices: Performance Assessment.* Upon analyses of the data gathered through the document collection process, interviews, and surveys, the SPECAP researchers arrived at the following conclusions:

- **Tech Prep practitioners are utilizing a variety of methods to assess the performance of Tech Prep students.**

- **Tech Prep student performance measures include competencies in vocational/ technical subject matter, academic subject matter, employability skills, and workplace skills.**

- **Tech Prep student performance assessment is most frequently conducted at the level of the course, rather than at the program level.**

A number of policy recommendations are also discussed in the *Final Report.* Based on the findings of the project, the following policy recommendations are suggested:

- **Assess student performance at the level of the Tech Prep program, measuring both cognitive and affective outcomes.**

- **Create longitudinal student tracking systems to track program-specific outcomes, such as student success rate on licensure exams, and student satisfaction.**

- **Create a statewide longitudinal tracking system to track consistently such Tech Prep student outcomes as graduation, transfer, and job placement rates.**

- **Involve business and industry experts in verifying mastery of employability and job competency skills in work-based components of Tech Prep programs.**

Introduction

This final report will describe the activities and the findings of the Strategic Planning, Evaluation of Curriculum, and Assessment of Performance (SPECAP) Research Group at Texas Tech University. The SPECAP Research Group was awarded a Carl Perkins grant in 1996 entitled "Effective Tech Prep Policies and Practices: Performance Assessment." The purpose of the grant project was to gather and disseminate information on effective policies and practices in the assessment of Tech Prep student performance in Texas. The grant project was designed as a continuation of the previous year's efforts by the SPECAP Research Group to identify and disseminate information on effective Tech Prep policies and practices in curriculum development and evaluation in Texas. Many of the models, processes, and products used to examine curriculum development and evaluation in 1995 were modified and refined to examine student performance assessment activities in this year's grant activities.

The model that the SPECAP researchers used to examine the assessment of student performance is shown in Figure 1. The SPECAP Performance Assessment Planning Model is an adaptation of the SPECAP Strategic Planning Model used in the 1994 grant to examine the strategic planning process in Tech Prep consortia (Figure 2). The SPECAP Performance Assessment Planning Model has five components: positioning the architects, development of the plan, implementation of the plan, evaluation of the plan, and improvement of the plan. The model was validated by the

Tech Prep experts on our SPECAP advisory council as a useful and valid description of the processes used to develop a student performance assessment plan.

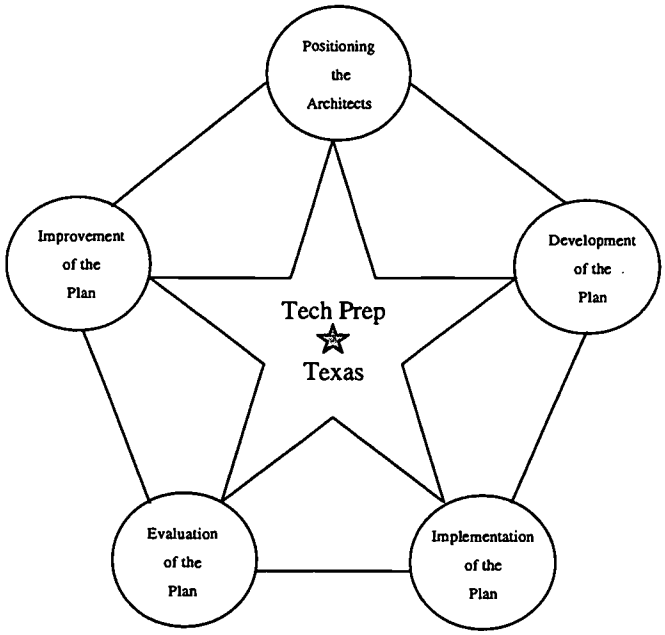

Figure 1. SPECAP Performance Assessment Planning Model.

The major activities conducted by the SPECAP Research Group during the course of this year's grant project will be described in detail in the sections that follow. These activities include: advisory council meetings, document analysis, survey activities, phone interviews, conference presentations, handbook, and final report. Following this description of activities, the final sections of the report focus on conclusions and policy recommendations.

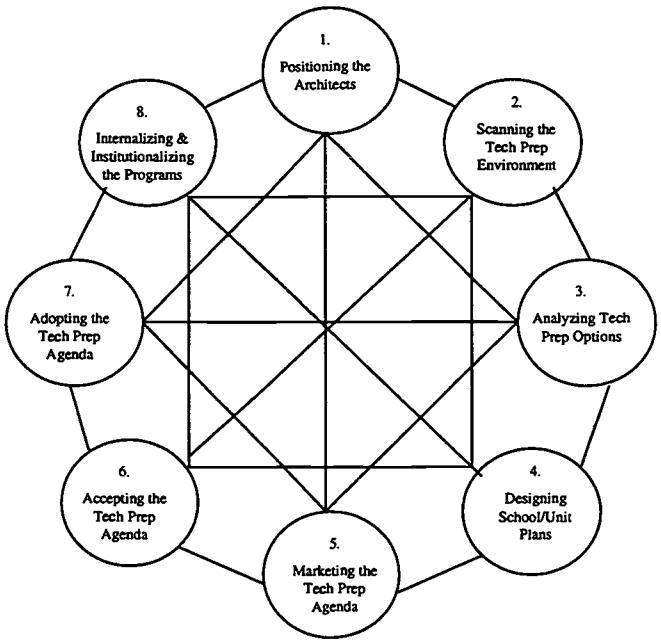

Figure 2. SPECAP Strategic Planning Model.

Advisory Council Meetings

An advisory council was formed to provide feedback to the SPECAP Research Group on grant activities and products. Appendix A lists the experts who agreed to serve on this advisory council. In selecting the advisory council members, an effort was made to choose individuals who were both knowledgeable about Tech Prep in Texas, and who worked with Tech Prep programs in different areas of the state. The advisory council members were chosen based on nominations from representatives of the Texas Higher Education Coordinating Board.

There was one advisory council meeting held in conjunction with the Texas State Tech Prep Conference in Austin in March of 1997. Appendix B contains the minutes describing the discussion that took place at this meeting. The primary purpose of this

advisory council meeting was to discuss preliminary findings from phone interviews, questionnaires, and documents used to gather data on the performance assessment planning process in Tech Prep programs. Prior to this meeting, the advisory council members had been contacted by phone on several occasions to request feedback on the contents of the phone interview protocol and questionnaire, found in Appendices C and D respectively. The advisory council members were also requested to provide feedback on the rating system used to rate the performance assessment documents to be included in the handbook. A final task of the advisory council was to provide feedback on the project products -- final report and the handbook, produced and disseminated by the SPECAP Research Group. These products were revised to incorporate changes based on the council members' recommendations.

Document Collection and Analysis Process

To more fully understand the range of Tech Prep performance assessment policies and practices, SPECAP researchers compiled Tech Prep performance assessment documents from around the state. To obtain these documents, SPECAP researchers sent letters to each Tech Prep consortium director asking for any written materials that they had describing the assessment of Tech Prep student performance. A copy of the letter that was sent to consortium directors requesting these performance assessment documents can be found in Appendix E. Documents describing performance assessment policies and practices were also requested by SPECAP researchers from the individuals selected for phone interviews.

All performance assessment documents received were then rated using the rating system found in Appendix F. The purpose of this rating system was to select for inclusion in the handbook those documents most relevant to, and representative of, performance assessment policies and practices. Each performance assessment document was scored by three different SPECAP researchers, and the average score from these three ratings was used to determine which documents would be included in the handbook.

In categorizing these documents, SPECAP researchers examined all the documents within broad categories of performance assessment. For example, performance assessment documents categorized as student competency profiles were rated as a group to choose the highest scoring example within this category for inclusion in the handbook. The same process was repeated for each of the other broad categories of performance assessment documents -- student surveys, employer surveys, and student portfolios.

1997 Tech Prep Student Outcomes Assessment Questionnaire

A survey was utilized to gather information from experts throughout the state on performance assessment policies and practices. The SPECAP Performance Assessment Model was used as the conceptual framework in designing the 1997 Tech Prep Student Outcomes Assessment Questionnaire. In addition to questions covering the five sections of this model, some basic demographic questions about the

respondents were also included. The final version of the 1997 Tech Prep Student Outcomes Assessment Questionnaire can be found in Appendix D.

In designing the questionnaire, SPECAP researchers created a pilot draft of the questionnaire for review by the advisory council. Based on their suggestions for revisions, ambiguous questions on the questionnaire were either revised or eliminated. The final version of the questionnaire was two pages long, with seventeen closed-ended questions regarding the planning for student performance assessment. To simplify data entry, the questionnaires responses were directly entered into a data file for analysis by a microcomputer statistical package.

In deciding on the sampling design for this questionnaire, the SPECAP researchers relied heavily on the advice of the advisory council members on how best to reach the performance assessment experts in their consortia. The advisory council recommended that each consortium director receive questionnaires proportional to the number of students they had enrolled in Tech Prep programs within their consortia. Based on this recommendation, the sampling was designed so that a proportional number of questionnaires was sent to each consortium director based on the most recent Tech Prep student enrollment figures obtained from the Texas Higher Education Coordinating Board. Appendix G displays these enrollment figures and the number of questionnaires that were sent to and returned from individuals within each of the twenty-five consortia.

Another recommendation made by the advisory council members was that the Tech Prep directors should decide who within their respective consortia should receive

the questionnaires. Advisory council members stated that the Tech Prep consortium directors would be the individuals most knowledgeable about who within their consortium had been involved in the development and evaluation of the student performance assessment plan. As a result of this recommendation, SPECAP researchers sent questionnaires directly to the Tech Prep directors, with a cover letter indicating that they were to choose the performance assessment experts within their consortia to receive the questionnaires. Appendix H displays the cover letter sent to consortia directors with these instructions. The directors were asked to send questionnaires to all stakeholders within their consortia who were involved in developing student performance assessment plans.

A total of 1,000 questionnaires were mailed to the 25 Tech Prep directors around the state for further distribution to the performance assessment experts within their consortia. A total of 115 usable questionnaires were received by the SPECAP researchers by the end of April of 1997. Since the SPECAP researchers have no way of knowing how many of the 1,000 questionnaires were actually mailed out by consortium directors, it is not possible to calculate an overall response rate for the survey. The questionnaires received were keypunched as they were received, and all usable questionnaires received were entered and analyzed. The results of that analysis will be presented in conjunction with the findings from the phone interviews, which will be described in the section that follows.

Phone Interviews

To more fully understand performance assessment policies and practices, a series of phone interviews were conducted by SPECAP researchers. A phone interview protocol was developed using the SPECAP Performance Assessment Model as the conceptual framework. The questions were designed to gather information about how student performance assessment plans were developed and evaluated. The phone interview data were also designed to complement the quantitative data gathered with the 1997 Tech Prep Student Outcomes Assessment Questionnaire. Feedback on a draft of the phone interview protocol was received from our advisory council members prior to pilot testing the instrument. Revisions suggested by advisory council members, along with those suggested by the individual chosen to pilot test the instrument, were incorporated into the final phone interview protocol, which can be found in Appendix C. The advisory council members also suggested that Tech Prep directors nominate the individuals most knowledgeable about performance assessment within their consortia to be included in the phone interview sample. Each of the twenty-five Tech Prep directors was included in the sample of individuals to be interviewed, along with individuals that they nominated from their consortia who they considered to be knowledgeable about student performance assessment. The phone interviews were conducted by three SPECAP researchers over a two-month period from February through March of 1997. A total of 27 interviews were completed, with each interview taking approximately thirty minutes to conduct. Each individual interviewed was promised confidentiality in the dissemination of the findings. At the completion of each interview, the SPECAP

researchers typed up their interview notes and sent a thank you card to the individual that they had interviewed.

Upon completion of all the phone interviews, the interview notes from all of the interviews were combined, and the data coded for analysis. The data gathered from the phone interviews helped SPECAP researchers more fully understand and explain the findings gathered with the survey instrument. Since the SPECAP researchers promised confidentiality to the individuals interviewed, quotes used in the findings that follow do not provide information about the names of individuals interviewed, nor identifying information about the consortia with which they are affiliated. The findings of the phone interviews are presented in conjunction with the findings from the survey so that the reader has a more complete understanding of performance assessment policies and practices in Tech Prep programs in Texas.

Findings from the Survey and Phone Interviews

The findings from the 1997 Tech Prep Student Outcomes Assessment Questionnaire and the phone interviews have been integrated for the purposes of this final report. The findings will be discussed in the following sections: response characteristics, involvement in student outcomes assessment, the assessment process, developing/implementing the student assessment plan, and evaluating/improving the student outcomes assessment plan. The frequencies for all the questions on the 1997 Tech Prep Student Outcomes Assessment Questionnaire can be found in Appendix I.

Response Characteristics

Questionnaires were received from 19 out of 25 of the Tech Prep consortia, indicating that there is geographic representation in the responses (See Appendix J). The number of responses varied considerably by consortia, ranging from a low of one to a high of 16, with an average of just over 6 responses per consortium. There were six consortia from which no responses were received. To ensure responses from all Tech Prep consortia, future surveys may require the joint sponsorship of the Texas Higher Education Coordinating Board and the SPECAP research group.

The survey respondents represented performance assessment experts from a wide diversity of career pathways.

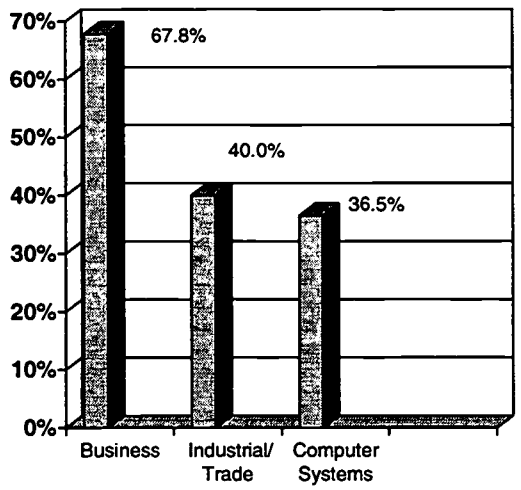

Figure 3. Career pathways of respondents to the questionnaire.

Slightly over two-thirds of respondents are affiliated with a business career pathway, with two-fifths being affiliated with an industrial/trade pathway, and slightly more than

one-third with a computer systems career. This distribution of responses indicates that the consortium directors did target questionnaires towards a wide variety of individuals within their consortia. The fact that the percentages do not add up to 100% indicates that a number of respondents, such as Tech Prep directors, are affiliated with multiple career pathways.

The Tech Prep directors were instructed to target the questionnaires they received to as many different stakeholder groups as possible. Figure 4 indicates representation from a number of different stakeholder groups in the survey responses.

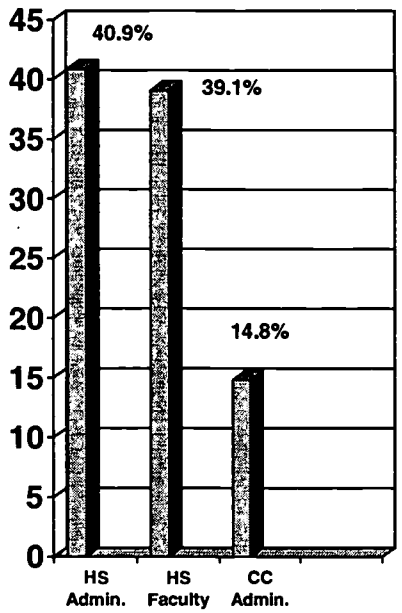

Figure 4. Respondents' stakeholder group affiliation.

The majority of the survey respondents represent either high school faculty or administrators, with a much smaller number of community college faculty and

administrators also represented among the survey respondents. The high representation of individuals from the education sector is perhaps not surprising on a questionnaire dealing with student performance assessment. Clearly, educators are in the best position to assess the school-based experiences of Tech Prep students. Less than one-tenth of the respondents come from business or industry. This percentage is low, considering that business and industry representatives are often in the best position to assess the work-based performance of Tech Prep students.

One respondent provides additional insights about how business and industry representatives participate in student performance assessment:

> The employer evaluates the student on 16 or so competencies after the first six weeks of training. The plans are developed jointly with the employer. The employer selects the competencies the student should know...The competencies are built by the employer--it is the curriculum for the student at the workplace. It takes about 40 minutes with the employer to develop the competencies . . . For the training plans we use the national standards established for high tech manufacture as well as the SCANS skills. We go through each section and take about 30 to develop with the student at that work station.

Involvement in Student Outcomes Assessment

One of the questions on the 1997 Tech Prep Student Outcomes Assessment Questionnaire asks respondents "Have you participated in any of the following student outcome assessment activities?"

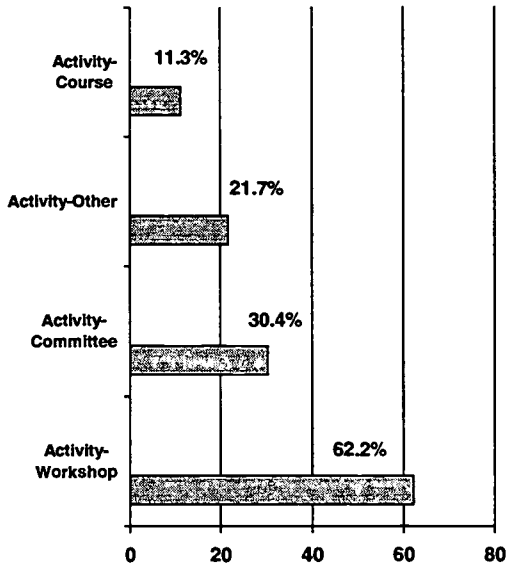

Figure 5. Top four student assessment activities in which respondents' participated.

Slightly less than two-thirds of the survey respondents (62.6%) indicate that they have attended a professional development workshop on student outcomes assessment. This suggests that professional development workshops on student outcomes assessment are available to Tech Prep practitioners. A much smaller number of respondents (30.4%) indicate that they have served on a student outcomes assessment committee, or have enrolled in a class on student outcomes assessment (11.3%). These relatively small percentages suggest that workshops on student outcome assessment are much more prevalent than are these other types of professional development/involvement.

A second question asks respondents to indicate the role(s) that they play in developing their student outcome assessment plan.

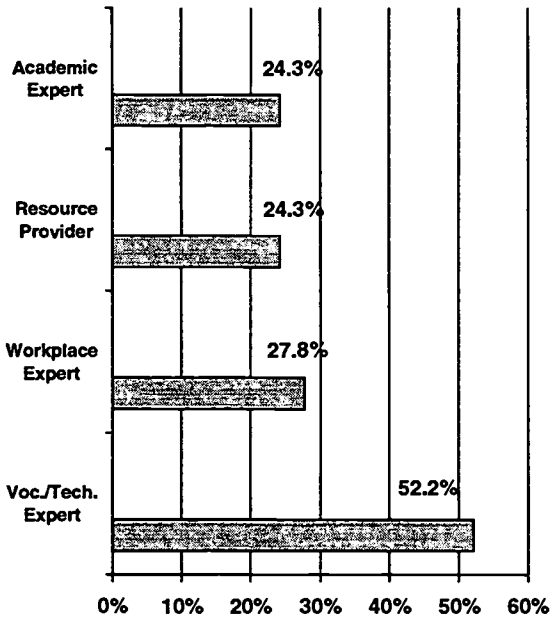

Figure 6. The role(s) respondents' play in developing student outcome assessment plans.

The role most commonly indicated (52.2%) is that of vocational/technical subject matter expert, no doubt reflecting the fact that the majority of respondents are vocational/technical faculty. Other responses give additional insights into the types of individuals who responded to the survey, with roughly a quarter indicating that they played roles as experts in workplace competencies (27.8%), academic subject matter (24.3%), or as resource providers (24.3%). These roles correspond with those one

might expect from representatives from business and industry, academic subject matter faculty, and administrators, respectively.

The Assessment Process

A number of questions on the survey elicit information on the general processes involved in developing, implementing, and evaluating the student outcomes assessment plan. One of these questions asks respondents how long it took them to develop, implement, and evaluate their student outcome assessment plan. The average number of months reported is a little over nine months, or roughly the equivalent of one academic year. Respondents are also asked what percentage of their total assigned work load did they devote to developing, implementing, and evaluating their student outcomes assessment plan. The average percentage of one's total time devoted to the assessment process is reported to be slightly under one-fifth (17.9%). The time required to develop, implement, and evaluate their student outcomes assessment plan is clearly a significant component of the total time that respondents indicate they work.

Respondents also indicated what groups have been involved in developing, implementing implementing, and evaluating their student outcome assessment plans. The groups most often reported as involved in this process include high school faculty (72.6%), community college faculty (52.2%), high school administrators (48.7%), business/industry representatives (42.5%), and community college administrators (38.1%).

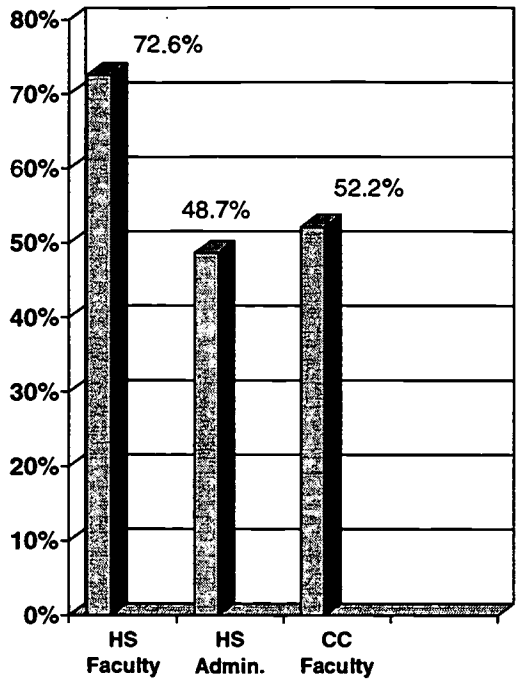

Figure 7. Groups involved in developing, implementing, and evaluating student outcome assessment plans.

It is important to note that more than two-fifths of these student outcomes assessment plans involve business/industry representatives in their development, implementation, and evaluation. Clearly, involvement of business/industry experts is seen as essential by many involved in Tech Prep programs in assessing student performance.

A final set of questions asks respondents to indicate their agreement with statements regarding their overall assessment planning process.

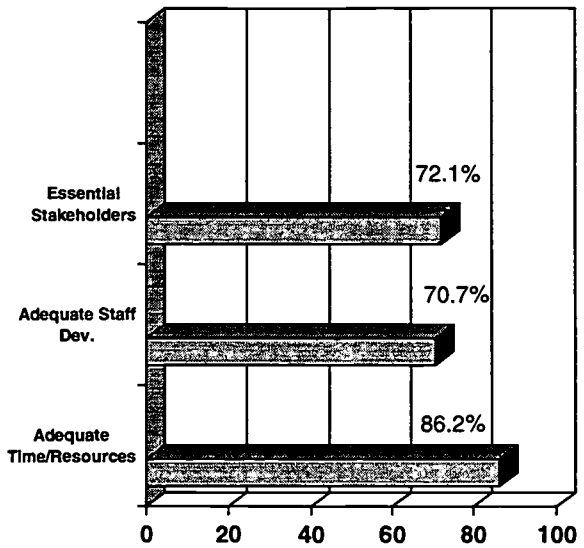

Figure 8. Respondents who "agreed" and "strongly agreed" to statements regarding their overall assessment process.

A large majority of the respondents "agreed" or "strongly agreed" that adequate time and resources were provided (86.2%); that adequate staff development was provided (70.7%); and that all essential stakeholder groups were involved (72.1%) in the assessment planning process. Clearly, the majority of respondents feel that they have had adequate resources, time, training, and involvement of essential stakeholders in planning their assessment process. This strong agreement on the adequacy of resources and personnel suggests that documenting student performance has been given a high priority by Tech Prep consortia and educational institutions.

Developing/Implementing the Student Assessment Plan

Respondents were asked a number of questions about the development and implementation process for their student assessment plan.

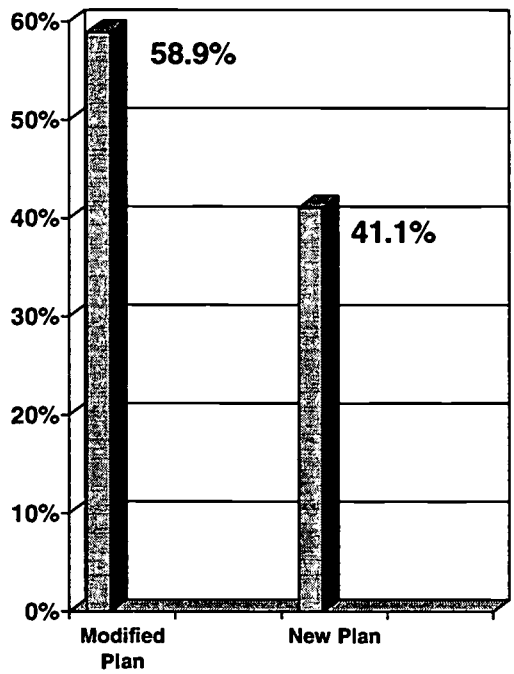

Figure 9. Respondents indicating they "agreed" and "strongly agreed" to statements regarding the development and implementation of student assessment plans.

One of the first questions is whether their assessment plan is an entirely new plan, or one that has been modified from an existing plan. The majority (58.9%) indicate that their assessment plan is a modification of an existing plan. This finding corresponds with the findings of last year's survey on curriculum development and evaluation, which

found a similar percentage reporting that their Tech Prep program curriculum is a modification of an existing curriculum.

A second question asks respondents what levels have been incorporated within their assessment plan.

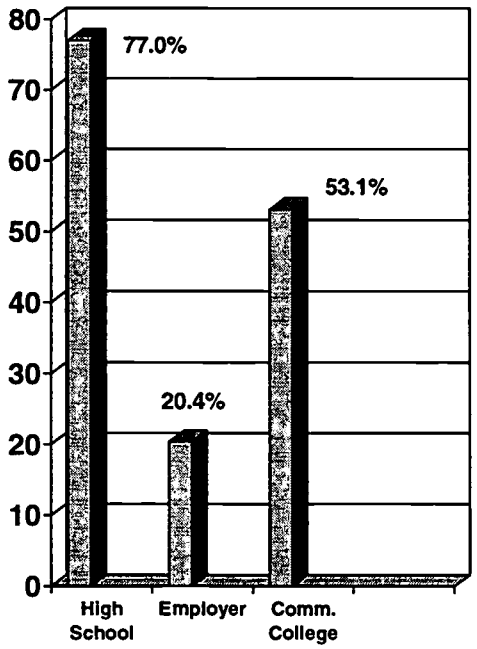

Figure 10. Top three levels incorporated into assessment plans.

The majority (77.0%) indicate that their student assessment plan includes outcomes at the high school level (77.0%) and at the two-year college level (53.1%), with a minority of respondents also indicating that their plans incorporate outcomes from employers (20.4%) and from four-year colleges (8.0%). Clearly, the relatively small number of respondents indicating that employer outcomes are included in their student assessment plans is a cause for some concern. Finding ways to encourage more Tech

Prep programs to include employer assessments of students' workplace competencies and employability skills would certainly strengthen student performance assessment plans.

Respondents were also asked to indicate what types of student outcomes assessment they presently utilize.

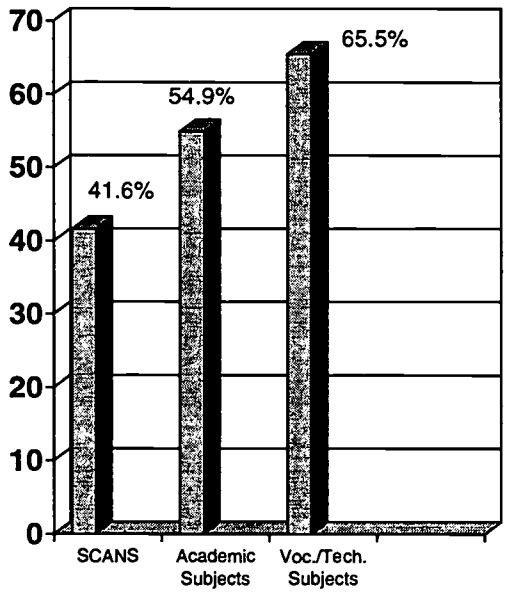

Figure 11. Types of student outcomes assessment presently being used.

The majority indicate that they assess competency in vocational/technical subject matter (65.5%), as well as in academic subject matter (54.9%). A minority of respondents indicate that they assess SCANS competencies (41.6%), job competency (38.9%), or that they use state licensure exams (30.1%) for student outcome assessment. Clearly, student assessment plans would be strengthened if greater

emphasis is placed on assessing the job and SCANS competencies of Tech Prep students.

A final question asks respondents to indicate what student outcome modalities they presently are utilizing.

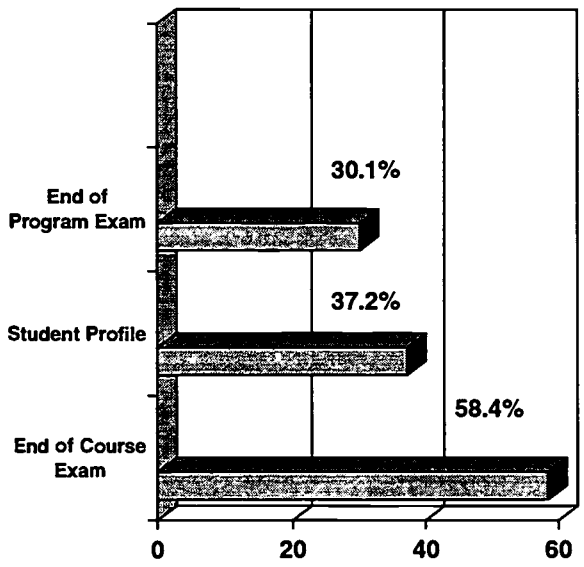

Figure 12. Modalities of student outcome assessments presently being used.

The majority of respondents indicate that they use end-of-course examinations (58.4%) as a modality for assessing student outcomes. A minority of respondents indicate that they use a number of other modalities, including: student competency profiles (37.2%); end-of-program exams (30.1%); student portfolios (26.5%); job competency examinations (23.9%); job placement tracking systems (23.9%); and student tracking

systems (23.0%). Clearly, the final exam is the most commonly utilized modality for assessing student performance.

One phone respondent discusses in more detail the challenges associated with using competency profiles.

> Getting independent school districts to send competency transcripts on time and filled out correctly is a major challenge. We have developed individual profiles on each course and for each student. When profiles are incomplete, we have to track down the teachers to have them complete them. Teachers are sometimes unwilling to complete the profiles, because they have to evaluate every student that comes to college.

Another respondent describes other challenges associated with the use of competency profiles.

> One of the biggest challenges is helping teachers learn how to document competencies. The documentation is lengthy, particularly in business careers with upwards to 75 competencies. Teachers need to document quality, because offering articulated credit for work done in high school puts the reputation of the high school teachers on the line.

Another respondent provides more detail about how they use portfolios in her consortium to assess student outcomes.

> Teachers give projects to be completed on the computer. Students work in teams, and are assessed by three different teachers. The portfolios are kept in a file system, and handed over to the student's next teacher...It gives students an idea of where they are at the moment, their capabilities, and allows them to set goals. The portfolio incorporates academic, vocational, electives, career interests, goals, talents, everything...After the students got into what the portfolios were doing and saw that they could use them to get jobs and scholarships, then it wasn't a problem when they would have to re-do them,

> perhaps a dozen times, before they were in a final form...It gives the student focus and self-esteem.

A Tech Prep director in another consortium offered her belief that portfolios of student performance would be used more often in the future.

> Portfolios are statements of what the student can do. They are very individualized and can be focused toward the employer if the student goes from secondary directly to work or toward another direction should the student want to continue with his or her education at the postsecondary level. They speak louder than resumes.

In at least one consortium, a respondent discusses how community college faculty were involved in helping high schools assess Tech Prep student performance.

> Community college faculty are in the process of designing an exit test for high school seniors to determine which students should get articulated credit from their high schools.

In yet another consortium, a Tech Prep director discusses the benefits of using end-of-course exams.

> Using the end-of-course exam has two benefits: it provides consistency at the secondary and postsecondary level--so teachers are really teaching toward the same thing in order that students can be more successful when they go into the second level of the course, and the Coordinating Board has identified end-of-course exams as a means for proving requirements have been met to the senior colleges.

Evaluating/Improving the Student Outcomes Assessment Plan

A final series of questions asks respondents about their processes for evaluating and improving their student outcomes assessment plan. The first question is how often their student outcomes assessment plan is evaluated for effectiveness.

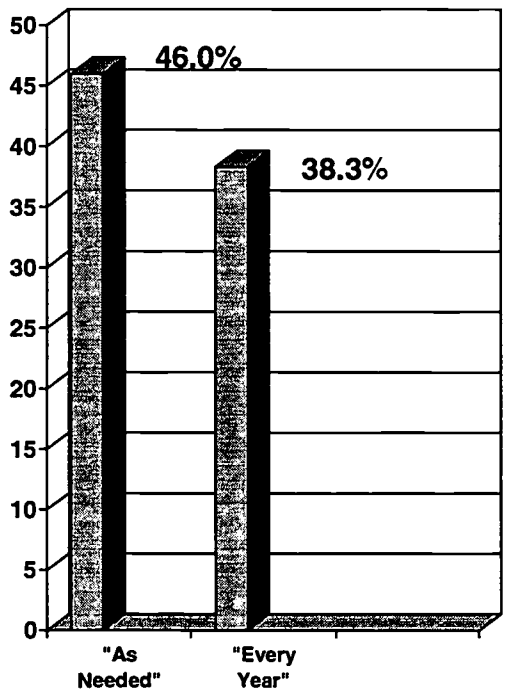

Figure 13. Top two time intervals used in evaluating assessment plans.

The majority of respondents indicate that they evaluate their plan "as needed" (46.0%); or "every year" (38.3%). This suggests that the majority of respondents closely monitor their student outcomes assessment plans for effectiveness.

A second series of questions asks respondents to indicate their agreement with statements about their student outcomes assessment plan.

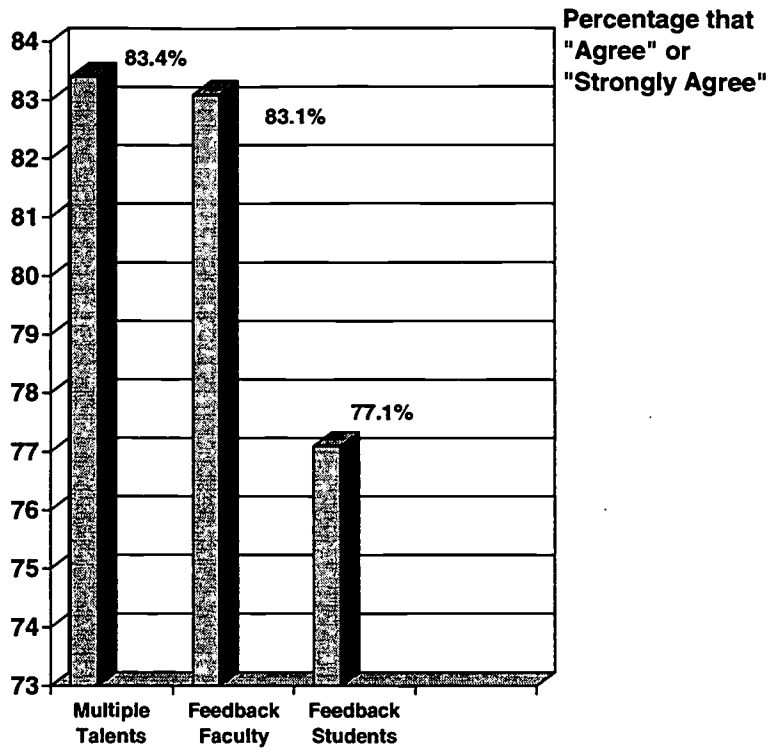

Figure 14. Respondents who "agreed" and "strongly agreed" to statements regarding their student assessment plans.

The majority of respondents "agree" or "strongly agree" that their plan captures the multiple talents that they are trying to develop in students (83.4%). A majority of respondents also "agree" or "strongly agree" that their student outcomes assessment plan provides meaningful feedback to faculty (83.1%); students (77.1%); and employers (65.6%). Clearly, respondents view their student outcome assessment plans favorably as providing meaningful feedback to relevant stakeholder groups and for being multidimensional in the outcomes assessed.

A final series of questions asks respondents to indicate their agreements with statements about the importance of student outcomes assessment and the impact of Tech Prep programs.

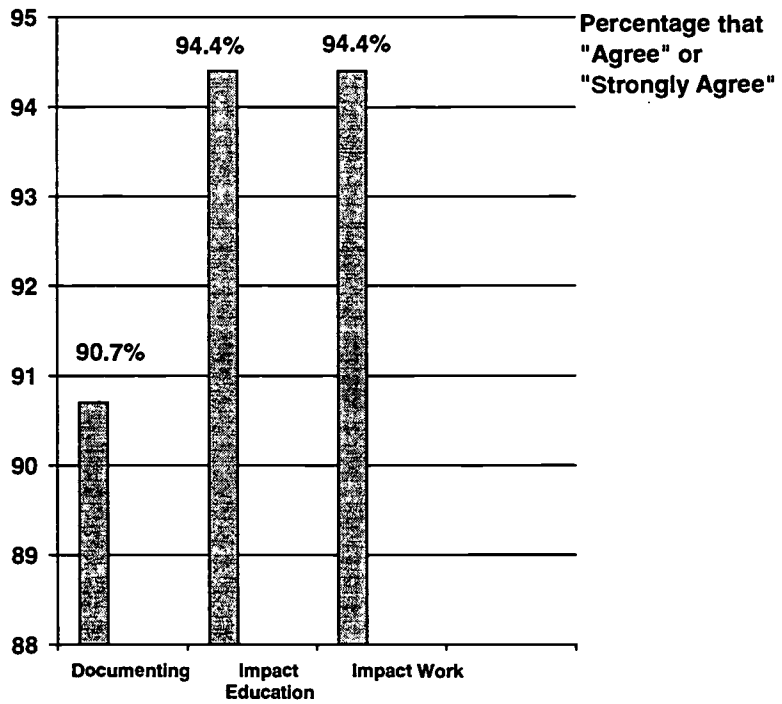

Figure 15. Respondents who "agreed" and "strongly agreed" to statements regarding the impact of Tech Prep programs.

A majority of respondents (90.7%) "agree" or "strongly agree" that documenting student outcomes is essential to Tech Prep. This widespread agreement that documenting student outcomes is essential to Tech Prep reflects a strong sentiment among respondents that those involved in Tech Prep have a responsibility to demonstrate the positive impact of their programs on students. An even greater percentage of

respondents "agree" or "strongly agree" that Tech Prep programs have had a positive impact on student preparation for further education (94.4%) and on student preparation for work (94.4%).

One respondent expressed the positive impact of Tech Prep programs in the following manner:

> Tech Prep programs help students make decisions about careers, allow them to explore some things, provide mentors in business. Students like classes in which theory is connected to application. Tech Prep programs help students to focus on finding employment and help them raise their self-esteem about their ability to handle college.

Another respondent reinforces this theme about the positive influence of Tech Prep programs.

> Tech Prep students are encouraged to go on to the community college and the four-year college. They can use their skills to earn money while in college. Tech Prep helps teach them how to work in teams, as well as academic and workforce skills.

Yet another respondent also emphasizes the positive benefits of Tech Prep programs on students:

> Tech Prep students can assess their own life goals, and assess realistically how much money they would like to make. They come to understand that they will need to delay gratification to be able to reach the salary they want. Tech Prep students are motivated to plan, and to engage in worksite learning while in high school, allowing them to make money that they can save for college. Students who are involved in worksite learning learn the need for academic classes like physics, and the importance of a neat attire.

Another respondent indicates that teachers have also received positive benefits from participation in Tech Prep.

> Tech Prep programs have a positive impact on teachers' exposure to the workplace. Teachers have a greater awareness of the workplace, and can better match their academic content to the real world. They can change their teaching strategies to better meet student needs.

Clearly, the respondents to this survey feel strongly that Tech Programs are having a positive impact on student preparation for further education and work.

Handbook

One of the purposes of the handbook is to create a sourcebook of sample performance assessment documents that Tech Prep practitioners can use as models in assessing the performance of their students. The section of the handbook with performance assessment documents has been organized so as to provide at least one representative sample for each of the broad categories of performance assessment documents that have been identified.

These representative samples of performance assessment documents have been included in the handbook so that practitioners involved in developing and evaluating student assessment have a ready source of models that they can adapt for their own use. The handbook provides a listing of all the documents included by

SPECAP researchers on performance assessment, as well as information about how to obtain a copy of the document from the source.

A second purpose of the handbook is to disseminate the results of the 1997 Tech Prep Student Outcomes Assessment Questionnaire and the phone interviews to practitioners involved in assessing student performance. The data gathered from the survey provides overview information from a large number of respondents about how student assessment plans have been developed and evaluated around the state of Texas. The data gathered with the phone interviews provide more detailed information from a smaller number of respondents about exactly how student assessment plans have been developed and evaluated. Together, the survey and phone interview data provide insights which can be used by Tech Prep practitioners in developing and evaluating their own student assessment plans.

A total of four copies of the handbook have been mailed to each of the Tech Prep consortium directors for dissemination to individuals and groups involved with the assessment of student performance. Copies of the handbook have also been mailed to state agency representatives involved in overseeing the assessment of Tech Prep student performance. An electronic copy has been mailed to Tech Lynx, for inclusion in their state clearinghouse on Tech Prep materials, and a hard copy has been mailed to the ERIC Clearinghouse on Adult and Vocational Education, for inclusion in the federal ERIC system.

Final Report

The final report is designed to describe all the activities of the SPECAP Research Group over the 1996-97 grant year. The final report describes: the conceptual framework upon which this year's grant activities is based, the activities of the SPECAP Advisory Council, and the conduct of the document analysis, phone interviews, survey, and conference presentations. Also included in the final report are descriptions of the products created by the SPECAP Research Group -- the handbook and the final report. The final report uses the findings from the data gathered this grant year to draw inferences about implications for policy and practice, and to make recommendations for improving the assessment of Tech Prep student performance in Texas.

Five copies of the final report have been distributed to representatives of the Texas Higher Education Coordinating Board to meet the reporting requirements for all Perkins grant recipients. An electronic copy of the final report has been sent to Tech Lynx for inclusion in the state clearinghouse on Tech Prep in Texas, and a copy has been sent to the ERIC Clearinghouse on Adult and Vocational Education for inclusion in the ERIC system.

Other Means of Dissemination

Another method of disseminating project findings includes making presentations at state and national conferences. The section that follows discusses these conference presentations that the SPECAP researchers used to disseminate information.

Conference Presentations

The SPECAP Research Group presented their findings at two major conferences: the National Tech Prep Network Conference in San Antonio, Texas in September of 1996, and the Texas State Tech Prep Conference in Austin, Texas, in March of 1997. The presentation for both conferences focused on describing findings from last year's grant activities on curriculum development and evaluation used by Tech Prep consortia in Texas. A Powerpoint slide presentation was prepared for the purposes of these conference presentations. These presentations helped to disseminate the findings and activities of the SPECAP Research Group to a wider state and national audience.

Recommendations and Conclusions

The data gathered by the SPECAP Research Group on student performance assessment demonstrate that Tech Prep educators are using a variety of methods to document the effectiveness of Tech Prep. The primary methods for documenting Tech

Prep student outcomes involve testing students at the end of each course, competency profiles, portfolios, and assessments of SCANS and job competencies. Additionally, in fields like nursing, state licensure examinations are an additional form of assessment of student outcomes.

Other efforts to document student outcomes include surveys of students, employers, faculty, and other consortium stakeholders, statewide tests such as the TAAS and the TASP, statewide evaluation, and longitudinal student tracking systems. Clearly, there are a number of significant efforts to document Tech Prep student outcomes at the level of the class, program, consortium, and statewide. What appears to be less common are efforts to measure the impact of Tech Prep programs using pretests and posttests to determine the "talent" that has been developed by entire Tech Prep programs. Rather than attempting to assess the impact of Tech Prep programs on students, the majority of assessment activities are class-based, using final exams, competency profiles, and portfolios to document that Tech Prep students have mastered the subject matter, employability, and job competencies covered within a specific class. Relatively few efforts were found to document Tech Prep program effects, other than in fields like nursing, where students are required to take state licensure examinations. Clearly, Tech Prep student performance assessment would be strengthened if more efforts were placed on documenting the impact of Tech Prep programs on the development of student talent.

A second approach to strengthening the assessment of Tech Prep student performance is to further involve members of business and industry in the planning for

student performance assessment. As Tech Prep programs continue to include more work-based learning components as integral parts of their program, the need for business and industry experts to become more involved in helping plan for assessing student performance will become even more essential. Business and industry representatives are presently involved in validating Tech Prep curricula, and in responding to surveys regarding their satisfaction with Tech Prep student preparation for the workplace. To further strengthen student performance assessment plans, business and industry representatives will need to become as involved as school-based faculty in ensuring that Tech Prep students have mastered job competencies and developed employability skills.

A third approach to strengthening the assessment of Tech Prep student performance is to create longitudinal student tracking systems. Some efforts at accomplishing this are being undertaken within individual colleges, like at Victoria College, and also at the state level, using wage records to track the placement of Tech Prep students into the work place. There needs to be a concerted effort to track Tech Prep students from high school, into two- or four-year colleges, and then into the work force. This will require a coordinated effort between the Tri-Agency staff of the Texas Department of Education, the Texas Higher Education Coordinating Board, and the Texas Department of Labor. A number of respondents to the phone interviews echoed this theme about the need for state assistance.

> I think we need to inquire into some sort of partnership or contracting--see what other agencies are collecting data like TEC and tap into or cross reference data. Part of the problem is the consistency of the data gathering systems...There is a

problem with limited funds available and partnerships could help alleviate that problem.

Another respondent made a similar point in talking about the need for a student tracking system.

> We need a statewide system with the information sent to the districts. We don't have the personnel to do that ourselves.

A third respondent reinforces the point about the need for help in collecting student data.

> The consortia need to see who they can partner with to streamline the information and data gathering. With only three to five employees in a Tech Prep consortium, we can't collect all this data without a lot of partnering going on.

Another respondent also emphasized the need for the state to help in collecting data.

> It is important to find out what impact Tech Prep has on students, particularly to do comparisons between Tech Prep and non Tech-Prep students. There should be long-term studies of Tech Prep students done by the state. The problem is that PEIMS will not add additional fields, because Tech Prep does not have enough clout.

A similar sentiment for state involvement in data collection was expressed by a Tech Prep director in a major urban area.

> The state needs to decide what they expect Tech Prep student outcomes to be and develop a system to gather this data. There are mechanisms in place for

schools to report data to the Coordinating Board. The fundamental question is deciding what to measure.

Another Tech Prep director from a major urban area in the state expresses his belief that the state needs to mandate that colleges track Tech Prep students.

> College presidents ask me where all the Tech Prep students are. I respond that they should have a system to identify students with articulated Tech Prep credit on their high school transcripts. I feel that TEA and THECB should mandate that colleges track students with articulated Tech Prep credit.

This same respondent goes on to discuss the challenges in documenting student outcomes in his region.

> The major barrier is that schools are not motivated to do the extra work in documenting student outcomes. Large urban schools do not have time to document student competencies. We have champions in about a third of the schools, who believe in assessment. Many of the schools will not release data with social security numbers because of concems with student's privacy. Schools are overwhelmed with the number of Tech Prep students, and only address requests for data that are tied to funding. Statewide PEIMS data is inaccurate. Having career majors in PEIMS data would be very helpful. This is a political hot potato and Tech Prep can not get the state to mandate this. We are trying to use a SCANTRON system where students fill out a form with personal information, courses they have taken, and their plans for college. This form only gets filled out if students are taking a course for articulated credit. The present survey system that they use to gather this data works in rural schools, where the regional Tech Prep director can work to get surveys filled out. However, in the urban area, only a small number of schools come to the meetings to find out how to fill out the survey.

Each state agency presently tracks students enrolled in either the secondary system, the postsecondary system, or in the workforce independently of each other. A

coordinated system between these three agencies that could track students across sectors would make documenting Tech Prep effectiveness much easier. With such a system, Tech Prep students coming out of any high school in the state could be tracked to see what percentage successfully completed a postsecondary Tech Prep program, and/or successfully gained a job in the field for which they were trained. An agency like the Texas Higher Education Coordinating could serve as the lead agency in maintaining this longitudinal student tracking system. They could issue reports to each of the Tech Prep consortia within the state with data on the graduation, transfer, and placement rates of all Tech Prep students from that consortium. The provision of such a longitudinal student tracking system by the state would lead to uniformity in the reporting of a number of Tech Prep student outcomes, and would provide the state with accountability measures for its investment in workforce education.

This request for statewide longitudinal tracking system would not obviate the need for individual Tech Prep programs to create their own longitudinal student tracking systems to document program specific student outcomes. These program-specific student outcomes might include academic outcomes, like the passage rate on a state licensure exam or other comprehensive exam, as well as measures such as student satisfaction with preparation for further education or work. The purpose of individual Tech Prep programs maintaining a longitudinal student tracking system would be to determine what experiences in their program have a positive influence on the development of particular student outcomes. With this information, stakeholders in Tech Prep programs would know how they might change their policies and practices to

maximize the development of a particular student talent. Several phone interview respondents expressed this need to collect local data.

> There are big problems in trying to track students at the state level. Student outcomes are better tracked at the local level, where the local community and business have more control over the outcomes to be assessed. At the local level, consortia have a better feel for the types of competencies that businesses are seeking. It is easy to begin assessing outcomes at the local level. We are developing a software program to enter information about student upon entering their program.

Another common theme, expressed by a number of Tech Prep directors, is that both the state and the local consortia need to be involved in documenting student performance.

> Both the local level and the state need to share responsibility for documenting student outcomes. We do not yet have a system in place to track students, but we would like to know how many Tech Prep students are matriculating in college.

A third respondent discusses the issue of focusing on employer satisfaction.

> The fundamental question is whether employers are satisfied with the preparation of Tech Prep students. We are tracking students in our Tech Prep programs, using a computerized system that is consortium-wide. We talk to employers, and use follow-up questionnaires.

Another respondent gives a more detailed description of the student tracking system that they utilize.

> We use an Access database to keep track of Tech Prep student grades, and to run comparisons of GPA with non-Tech Prep students. We gather information on ethnicity, age, courses, grades, and run reports on GPA for each program. The Tech Prep directors should be responsible for deciding outcomes, and the local consortia should be responsible for gathering outcomes data on their own students.

Yet another Tech Prep director discusses the actions taken by her consortium in developing a local student tracking system.

> We have developed a database of 200 students that came from high school who enrolled in college, with information on what program they came from in high school, how many credit hours they received. Keeping track of student outcomes gives credibility to Tech Prep programs.

Another respondents discusses the challenges of creating their own student tracking system.

> One of the biggest challenges is the issue of time. Tech Prep directors have a limited amount of time and energy. In particular, cooperation between sectors is not always easy to develop. One of the challenges is that the PEIMS data that is presently collected does not give a true picture of Tech Prep effectiveness, and is often somewhat out-of-date. We have a student tracking system that tracks students through a four-year internship program. We find out if students obtain a job after they graduate. Surveys are sent out to ISDs, and the reports are broken down by grade as to how many Tech Prep students they have. Unfortunately, we get a low response rate, which calls into question the credibility of the data.

Another Tech Prep director also discusses the challenges of gathering data on Tech Prep student outcomes:

> One of the biggest challenges is the structure of the consortium. The consortium staff are facilitators, and have little control over the colleges in the consortium. High schools and community colleges in Texas pride themselves on being independent. I feel that one of the biggest challenges is that student outcomes have not been defined in a consistent manner by the state, nor is there consensus on how to gather the data. Right now, all that is available is TAAS scores, student achievement test data, and GPA.

A Tech Prep director in a major urban area expresses his belief that local consortia must be involved in documenting student outcomes:

> I feel that documenting student outcomes is critical, to ensure that parents and employers know what students have accomplished. It is also important for students to be aware of their own progress. I believe that assessment information is essential to improve programs, and to document that efforts devoted to Tech Prep programs are worthwhile, that there is a positive return. I feel that empirical data is essential to make the case for Tech Prep funding after federal funding is no longer available. I feel that gathering local data on student outcomes is critical, but I feel ineffective in gathering data.

Clearly, Tech Prep student performance is being assessed in a variety of ways at different levels within the state of Texas. These combined efforts are a good start to documenting student outcomes in Tech Prep programs. However, as has been discussed in this report, additional steps need to be taken to further strengthen present efforts to document Tech Prep program effectiveness. The following recommendations, based on the data gathered from the 1996-97 are made as suggestions for improving efforts at Tech Prep student performance assessment:

- **Assess Tech Prep student performance at the level of the program, measuring both cognitive and affective outcomes.**

- **Create longitudinal student tracking systems to track program-specific outcomes, such as student success rate on licensure exams, and student satisfaction.**

- **Create a statewide longitudinal tracking system to track consistently such Tech Prep student outcomes as graduation, transfer, and job placement rates.**

- **Involve business and industry experts in verifying mastery of employability and job competency skills in work-based components of Tech Prep programs.**

Conclusion

Tech Prep programs have had a positive impact on Tech Prep students' preparation for further education and work. Documenting this positive impact is presently being conducted primarily at the level of the course, where Tech Prep educators have established exams, competency profiles, and portfolios to verify that students have met school- and work-based competencies. To strengthen the efforts to document the effectiveness of Tech Prep programs, additional efforts need to be made to strengthen

performance assessment at the level of the program, to further involve business and industry experts in verifying job and employability competencies, and to come up with a uniform statewide method of tracking student graduation, transfer, and job placement rates. These additional efforts to document Tech Prep student outcomes would go a long way towards demonstrating that Tech Prep educational reform has significantly improved the workforce education system in the state of Texas.

SPECAP Final Report June 1997

Appendix A

1996-97 Project Year
Advisory Council Members

1996-97 Project Year
Advisory Council Members

Mr. Robert Franks
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Dean, Division of Occupational Education
and Technology
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Appendix B

Minutes of Advisory Council Meeting

MINUTES
ADVISORY COUNCIL MEETING
March 26, 1997
Austin, Texas

Project Number:	77130001
Project Title:	Effecive Tech Prep Policies and Practices: Performance Assessment
Project Year:	July 1, 1996 through June 30, 1997

[This meeting with the Advisory Council Members is in lieu of the meeting that had been planned for May 1, 1997, in Lubbock.]

Attendees:

Dr. Lee W. Sloan (Advisory Council Member)
Dean, Division of Occupational Education and Technology
Del Mar College, West Campus
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Not Attending:

Ms. D'Arcy Poulson (Advisory Council Member)
Director, Workforce Education
Howard College
San Angelo
(915) 947-9578

Items of Discussion

I. Document Analysis

Advisory Council members had been asked for feedback on the criteria that should be used to evaluate documents for inclusion into the handbook. Based on their feedback, revisions were made to the form to be used to evaluate the documents. Three SPECAP staff members will rate each document independently and anonymously. The scores of the three reviewers will then be averaged. Documents with the highest ratings will be included in the handbook.

II. Surveys

Advisory members had provided input regarding the survey format. Changes were made to the survey based on thier feedback. One thousand surveys were distributed to all 25 Texas Tech Prep consortia. Each consortium received a

proportion of surveys based on their student Tech Prep enrollment. Directors of consortia were asked to distribute the surveys to stakeholders within their region who were most knowledgeable about the assessment processes in use. The data from surveys that have been received have been entered for statistical analysis. All usable surveys received through April 11th will be included in the analysis. Thus far, approximately 10% of the surveys have been returned. Thus far, approximately 15 surveys that have been returned are unusable, e.g., incomplete data.

III. Telephone Interviews

The telephone protocol was revised based on feedback from Advisory Council Members. We attempted to schedule telephone interviews with a staff member from every Tech Prep consoritum. We asked Tech Prep staff to identify one other individual within their consortium whom we could contact to interview regarding performance assessment. We have completed those interviews (30) and are in the process of analyzing the data.

IV. Project Products

The product for this project year will be a handbook containing findings from the document analysis, surveys, and telephone interviews. We will be asking the Advisory Members to review a copy of the product before it is printed. In addition, before publication and distribution, a draft will be sent to Dr. Brown and Mr. Laird for approval. Changes will be made per feedback from Advisory Council members and project monitors. It is anticapated that the handbook will be completed in May and distributed in June to all Tech Prep consortia.

V. Presentation at the State Conference

We will be presenting our findings from the 1995-96 project year at the state conference on Wednesday afternoon.

Appendix C

Phone Interview Protocol

1997 TECH PREP STUDENT OUTCOMES ASSESSMENT
INTERVIEW PROTOCOL
FOR
Tech Prep Consortium Staff

Consortium Affiliation

- ☐ Alamo
- ☐ Brazos Valley
- ☐ Capital
- ☐ Central Texas
- ☐ Coastal Bend
- ☐ Concho Valley
- ☐ Deep East Texas
- ☐ East Texas
- ☐ Global Edge
- ☐ Golden Crescent
- ☐ Gulf Coast
- ☐ Heart of Texas
- ☐ Lower Rio Grande Valley
- ☐ North Central Texas
- ☐ North Texas
- ☐ Panhandle
- ☐ Permian Basin
- ☐ Southeast Texas
- ☐ South Plains
- ☐ South Texas
- ☐ Star Tech Prep
- ☐ Texoma
- ☐ Upper East Texas
- ☐ Upper Rio Grande Valley
- ☐ West Central Texas

Interview was conducted on _____ with:
(Date)

Name _____

Title _____

Organization _____

Address _____

City _____

Zip Code _____

Telephone Number _____

FAX Number _____

The Impact of Tech Prep

1. How is documenting student outcomes assessment essential to the Tech Prep movement/philosophy?

2. How have Tech Prep programs impacted student preparation for continuous lifelong learning?

3. How have Tech Prep programs impacted student preparation for work?

The Assessment Process

4. With what stages of the student outcomes assessment process has your consortium been involved?

   - ☐ Development
   - ☐ Implementation
   - ☐ Evaluation
   - ☐ Improvement

5. What role(s) did your consortium play in the process? (For example, facilitator, coordinator of efforts among stakeholders, resource provider, monitor, etc.)

6. What were some of the greatest challenges your consortium encountered in developing, implementing, evaluating, and improving the student outcome assessment plans?

7. In developing the plans, what attempts were made to integrate the plans along a continuum going from secondary education, to community colleges, to senior institutions, and to the work place?

Development & Implementation

8. Please describe to me some of the best development and implementation student outcome assessment practices being used in your consortium.

Evaluation & Improvement

9. Please describe to me some of the best evaluation and improvement student outcome assessment practices being used in your consortium.

Additional Information

10 Would you like to add anything about assessment of student outcomes in your region that we may not have covered or expound on a particular topic? Or, is there anything you would like to ask me?

1997 TECH PREP STUDENT OUTCOMES ASSESSMENT
INTERVIEW PROTOCOL
for
Stakeholders

Career Pathway

- ☐ Agriculture
- ☐ Allied Health
- ☐ Business
- ☐ Computer Systems
- ☐ Engineering Technology
- ☐ Industrial/Trade
- ☐ Protection Services
- ☐ Other

Program Name _____

Consortium Affiliation

- ☐ Alamo
- ☐ Brazos Valley
- ☐ Capital
- ☐ Central Texas
- ☐ Coastal Bend
- ☐ Concho Valley
- ☐ Deep East Texas
- ☐ East Texas
- ☐ Global Edge
- ☐ Golden Crescent
- ☐ Gulf Coast
- ☐ Heart of Texas
- ☐ Lower Rio Grande Valley
- ☐ North Central Texas
- ☐ North Texas
- ☐ Panhandle
- ☐ Permian Basin
- ☐ Southeast Texas
- ☐ South Plains
- ☐ South Texas
- ☐ Star Tech Prep
- ☐ Texoma
- ☐ Upper East Texas
- ☐ Upper Rio Grande Valley
- ☐ West Central Texas

Interview on _____ **with:**
(Date)

Name _____

Title _____

Organization _____

Address _____

City _____

Zip Code _____

Telephone Number _____

FAX Number _____

The Student Outcome Assessment Stakeholder Group

1. Prior to your participation in the student outcome assessment planning process, have you previously served on a committee, attended a professional development workshop, or enrolled in a course on student outcome assessment?

☐ No.
☐ Yes. Can you tell me how they helped prepare you for your role in the student outcome performance process?

2. With what stages of the assessment of student outcomes plan have you been involved?

☐ Development ☐ Implemenation ☐ Evaluation ☐ Improvement

3. Please describe the composition of the group and the role/expertise each member brought/provided.

The Assessment Process

4. Was the student outcome assessment plan

☐ an entirely new plan or ☐ a modification of an existing plan

5. How long did it take you to develop, implement, and evaluate your student outcomes assessment plan?

6. In developing the plan(s), what attempts were made to integrate the plans along a continuum going from secondary education, to community colleges, to senior institutions, to the work place?

Development and Implementation

7. What were some of the challenges you encountered and the efforts to address these challenges in the development and implementation of the student outcome assessment plan, e.g., not enough time, antiquated computer system, legal restrictions, etc.?

Evaluation & Improvement

8. How often is the effectiveness of your student outcomes assessment plan evaluated? And, how do you go about evaluating the plan?

9. What were some of the challenges you encountered and the efforts to address these challenges in the evaluation and improvement of the student outcome assessment plan?

Additional Information

10. Would you like to add anything on the assessment of student outcomes that we may not have covered or expound on a topic?

Appendix D

1997 Tech Prep Student Outcome Assessment Questionnaire

1997 TECH PREP STUDENT OUTCOMES ASSESSMENT QUESTIONNAIRE

Directions for Answering Questionnaire

Your observance of these few directions will be most appreciated. Please focus on the assessment of student outcomes in the Tech Prep program with which you are most knowledgeable when answering the questions that follow.

- **Please make heavy marks that fill the oval.**

Example: Is this a survey on the assessment of student outcomes in Tech Prep programs?

[ ] **Yes** [ ] **No**

Part I - Demographic Characteristics

1. **Please indicate your consortium affiliation.** (Mark one only)

[ ] Alamo
[ ] Brazos Valley
[ ] Capital
[ ] Central Texas
[ ] Coastal Bend
[ ] Concho Valley
[ ] Deep East Texas
[ ] East Texas
[ ] Global Edge
[ ] Golden Crescent
[ ] Gulf Coast
[ ] Heart of Texas
[ ] Lower Rio Grande Valley
[ ] North Central Texas
[ ] North Texas
[ ] Panhandle
[ ] Permian Basin
[ ] Southeast Texas
[ ] South Plains
[ ] South Texas
[ ] Star Tech Prep
[ ] Texoma
[ ] Upper East Texas
[ ] Upper Rio Grande Valley
[ ] West Central Texas

2. **With what Tech Prep career pathway(s) are you presently affiliated?** (Mark all that apply)

[ ] Agriculture
[ ] Allied Health
[ ] Business
[ ] Computer Systems
[ ] Engineering Technology
[ ] Industrial/Trade
[ ] Protection Services
[ ] Human Services
[ ] Other

3. **Which stakeholder group(s) do you represent?** (Mark all that apply)

[ ] High school faculty
[ ] High school administrator
[ ] Community college faculty
[ ] Community college administrator
[ ] Four-year college faculty
[ ] Four-year college administrator
[ ] Business/industry representative
[ ] Labor representative
[ ] Government representative (PIC, WDB, etc.)
[ ] Other

Part II - Involvement in Student Outcomes Assessment

4. **Have you participated in any of the following student outcomes assessment activities?** (Mark all that apply)

[ ] Served on a student outcomes assessment committee
[ ] Attended a professional development workshop on student outcomes assessment
[ ] Enrolled in a course on assessing student outcomes
[ ] Other

5. **With what stage(s) of the assessment of student outcomes have you been involved?** (Mark all that apply)

[ ] Development of the assessment plan
[ ] Implementation of the assessment plan
[ ] Evaluation of the assessment plan
[ ] Improvement of the assessment plan

6. **What role(s) have you played in developing your student outcomes assessment plan?** (Mark all that apply)

[ ] Academic subject matter expert
[ ] Student outcomes assessment expert
[ ] Vocational/technical subject matter expert
[ ] Workplace competencies expert
[ ] Leader
[ ] Resource provider
[ ] Other

Part III - The Assessment Process

7. **How long did it take you to develop, implement, and evaluate your student outcomes assessment plan?** (Please indicate the number of months on the line below)

_____ months

8. **What percentage of your total time did it take to develop, implement, and evaluate your student outcomes assessment plan?** (Please indicate the percentage on the line below)

_____%

9. **What groups were involved in developing, implementing, and evaluating your student assessment plan?** (Mark all that apply)

[ ] High school faculty
[ ] High school administrators
[ ] Community college faculty
[ ] Community college administrators
[ ] Four-year college faculty
[ ] Four-year college administrators
[ ] Business/industry representatives
[ ] Labor representatives
[ ] Government representatives (PIC, WDB, etc)
[ ] Other

PLEASE TURN OVER

10. **Please indicate your agreement with each of the following statements about your assessment planning process.** (Circle one for each statement)

SA = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

Adequate time and resources were provided **SA.....A.....D.....SD**

Adequate staff development was provided **SA.....A.....D.....SD**

All essential stakeholder groups were involved **SA.....A.....D.....SD**

Part IV - Developing/Implementing the Student Assessment Plan

11. **Was your student outcomes assessment plan:** (Mark one only)

[ ] created as an entirely new plan?
[ ] modified from an existing plan?

12. **Your student assessment plan incorporates outcomes at what levels?** (Mark all that apply)

[ ] High school
[ ] Community college
[ ] Four-year college
[ ] Employer follow-up

13. **What types of student outcomes assessment do you presently utilize?** (Mark all that apply)

[ ] Academic subject matter competency assessment
[ ] Job competency assessment
[ ] SCANS competency assessment
[ ] Vocational/technical subject matter competency assessment
[ ] State licensure examination
[ ] Other

14. **What student outcomes assessment modalities do you presently utilize?** (Mark all that apply)

[ ] End-of-course examination
[ ] End-of-program examination
[ ] Job competency examination
[ ] Job placement tracking system
[ ] Student tracking system
[ ] Student competency profile
[ ] Student portfolio
[ ] Other

Part V - Evaluating/Improving the Student Outcomes Assessment Plan

15. **How often do you evaluate the effectiveness of your student outcomes assessment plan?** (Mark one only)

[ ] As needed
[ ] Every year
[ ] Every two years
[ ] Every three years

16. **Please indicate your agreement with each of the following statements about your student assessment plan.** (Circle one for each statement)

SA = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

Our plan captures the multiple talents we are developing **SA..... A ..... D ..... SD**

Our plan provides meaningful feedback to faculty **SA..... A ..... D ..... SD**

Our plan provides meaningful feedback to students **SA..... A ..... D ..... SD**

Our plan provides meaningful feedback to employers **SA..... A ..... D ..... SD**

17. **Please indicate your agreement with each of the following statements about student outcomes assessment.** (Mark one for each statement)

SA = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

Documenting student outcomes is essential to Tech Prep **SA..... A ..... D ..... SD**

Tech Prep programs have had a positive impact on student preparation for further education **SA..... A ..... D ..... SD**

Tech Prep programs have had a positive impact on student preparation for work **SA..... A ..... D ..... SD**

Please return your completed questionnaire in the postage-paid envelope to:

Texas Tech University
Business Reply Center
Box 45017
Lubbock TX 79409-9989

THANK YOU FOR YOUR PARTICIPATION!

Appendix E

Letter to Consortia Directors Requesting Performance Assessment Documents

TEXAS TECH UNIVERSITY

SPECAP Box 41071, Lubbock, TX 79409-1071
(Strategic Planning, Curriculum Evaluation, Performance Assessment)
Dr. Ronald Opp, Dr. Oliver Hensley
(806) 742-2329, (806) 742-1959, FAX (806) 742-2179

December 3, 1996

Dear Tech Prep Educator:

SPECAP has the responsibility of gathering essential and exemplary documents related to Tech Prep planning, evaluation of the curriculum and assessment of performance. In the previous two years, we have gathered and analyzed documents related to planning and the curriculum. This year, we are focusing our efforts on identifying essential assessment documents and exemplary programs related to performance assessment.

We are requesting that you and other Tech Prep stakeholders in your region consider carefully the existing performance assessment devices used in your region and in the State. If you can identify such documents, we would like for you to send SPECAP copies of these documents for inclusion in the SPECAP Inventory of Essential Assessment Documents. Your nominations and sample documents will help us to make a comprehensive document inventory and analysis.Contributors will be given an appropriate citation for each entry in the Handbook.

If you would send us your essential documents by January 15,1997, SPECAP analyses and publication schedules will be enhanced. However, we will be grateful for your contributions at anytime. All entries will be refereed by our editorial board for relevance, codified, and included in the SPECAP Inventory. In the past, your responses have helped us produce some very popular publications, which are currently being shared with Tech-Prep educators around the State and nation. We are grateful for your past contributions and look forward to receiving your new materials.

We believe that teachers and administrators have developed local tests and assessment programs that are very effective. Unfortunately, these local test and assessment programs can be identified only by you. Please send us a single copy of your essential assessment documents, as this is the best way to continue our efforts to share and disseminate information about Tech Prep in the State of Texas. To help you with your thinking about performance assessment documents, we are including a listing of some sample document topics which are currently in the SPECAP Inventory.

All contributors of essential documents will be given a complementary copy of the Inventory. We expect to have the Inventory and the Handbook:Essential Documents to Promote Effective Tech Prep Policies and Practices available in the spring of 1997.

Please send copies of your essential or exemplary performance assessment documents to:

Dr. Oliver Hensley New Phone Number: (806)742-1997 ext 281
SPECAP New Phone Number: 806 742-1997 exts 321,322, or 323
Texas Tech University
MS 1071
Lubbock, TX 79409

Sincerely,

Oliver D. Hensley Ronald Opp

12-3-96/Handbook/SPECAP#1

Appendix F

Document Analysis Rating System

Document Title

Document Rating:

Rater

(rate from 1[lowest] to 20 [highest])

1. Relevance to Student Performance Assessment..... ☐
2. Relevance to Tech Prep in Texas..... ☐

(rate from 1[lowest] to 10 [highest])

3. Clarity..... ☐
4. Usefulness to Practitioners..... ☐
5. Transferability..... ☐
6. Simplicity of Data..... ☐
7. Credibility/Source of Data..... ☐
8. Quality Standards..... ☐
9. National Importance..... ☐
10. Should a sample of the document be included..... ☐

Comments:

Enrollment Totals By Consortia
Per Status Report, April 1996: Region V Education Service Center

Consortia Name	Calculation	Actually Mailed	Enrollment Secondary	Enrollment Post Secondary
Alamo	3 %	30	4,468	475
Brazos Valley	1 %	10	1,934	201
Capital	5 %	50	5,994	1,785
Central Texas	3 %	30	2,194	2,718
Coastal Bend	4 %	40	3,775	1,886
Concho Valley	2 %	20	2,881	739
Deep East	1 %	10	1,297	652
East Texas	2 %	20	2,020	536
Global Edge	6 %	60	4,471	4,071
Golden	4 %	40	4,000	1,750
Gulf Coast	10 %	100	12,000	2,500
Heart of Texas	1 %	10	912	606
Lower Rio	2 %	20	3,000	828
North Central Texas	25 %	250	23,081	14,489
North Texas	1 %	10	1,109	432
Panhandle	5 %	50	6,000	2,000
Permian Basin	2 %	20	1,379	1,496
South Plains	2 %	20	1,500	700
South Texas	1 %	10	208	120
Southeast Texas	1 %	10	1,005	607
Star	1 %	10	890	54
Texoma	3 %	30	1,537	2,209
Upper East	1 %	10	1,200	77
Upper Rio	12 %	120	16,766	1,795
West Central Texas	3 %	30	4,000	500
Totals	100%	1,000	107,621	43,098

Appendix H

Questionnaire Cover Letter Sent to Consortia Directors

February 1997

Ms. Sylvia Kelley
Director
Tech Prep Global Edge
2200 West University Drive
McKinney, TX 75070

Dear Ms. Kelley:

This letter is to inform you in advance that we will be asking for your help in distributing a questionnaire on student performance assessment to the experts in your consortium who have knowledge of student performance assessment activities. We have greatly simplified this year's questionnaire to make it easier for the respondents in your consortium to answer.

The questionnaire is presently being printed, and we hope to have it mailed to you within the next two weeks. The number of questionnaires you receive for distribution will be proportionally based on the number of high school and community college students our records show your consortium has enrolled in Tech Prep programs. Your consortium will be receiving 40 questionaires.

We thank you in advance for your continuing support of our research endeavors to identify and disseminate information on exemplary Tech Prep policies and practices in Texas.

Sincerely,

Dr. Ronald D. Opp
Project Director

Dr. Oliver D. Hensley
Principal Investigator

Appendix I

Frequencies for Questionnaire

IMPACTWK Impact Work

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Disagree	2	6	5.3	5.6	5.6
Agree	3	41	36.3	38.3	43.9
Strongly Agree	4	60	53.1	56.1	100.0
	0	6	5.3	Missing	
	Total	113	100.0	100.0	

Valid cases 107 Missing cases 6

IMPACTED Impact Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Disagree	2	6	5.3	5.6	5.6
Agree	3	44	38.9	40.7	46.3
Strongly Agree	4	58	51.3	53.7	100.0
	0	5	4.4	Missing	
	Total	113	100.0	100.0	

Valid cases 108 Missing cases 5

FEEDFAC Feedback to Facutly

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	6	5.3	6.3	6.3
Disagree	2	10	8.8	10.5	16.8
Agree	3	67	59.3	70.5	87.4
Strongly Agree	4	12	10.6	12.6	100.0
	0	18	15.9	Missing	
	Total	113	100.0	100.0	

Valid cases 95 Missing cases 18

FEEDSTD Feedback to Students

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	4	3.5	4.2	4.2
Disagree	2	18	15.9	18.8	22.9
Agree	3	60	53.1	62.5	85.4
Strongly Agree	4	14	12.4	14.6	100.0
	0	17	15.0	Missing	
	Total	113	100.0	100.0	

Valid cases 96 Missing cases 17

MULTITAL Mutiple Talents

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	4	3.5	4.2	4.2
Disagree	2	12	10.6	12.5	16.7
Agree	3	71	62.8	74.0	90.6
Strongly Agree	4	9	8.0	9.4	100.0
	0	17	15.0	Missing	
	Total	113	100.0	100.0	

Valid cases 96 Missing cases 17

FEEDER Feedback Employer

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	5	4.4	5.4	5.4
Disagree	2	27	23.9	29.0	34.4
Agree	3	51	45.1	54.8	89.2
Strongly Agree	4	10	8.8	10.8	100.0
	0	20	17.7	Missing	
	Total	113	100.0	100.0	

Valid cases 93 Missing cases 20

ACTCOMM Activity-Committee

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	80	69.6	69.6	69.6
Marked	1	35	30.4	30.4	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ACTCOURS Activity-Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	102	88.7	88.7	88.7
Marked	1	13	11.3	11.3	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ACTOTHER Activity-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	90	78.3	78.3	78.3
Marked	1	25	21.7	21.7	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ACTWKSHP Activity-Workshop

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	43	37.4	37.4	37.4
Marked	1	72	62.6	62.6	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPBUS Grp-Business/Industry

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	105	91.3	91.3	91.3
Marked	1	10	8.7	8.7	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPCCA Grp-CC Admin.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	98	85.2	85.2	85.2
Marked	1	17	14.8	14.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPCCF Grp-CC Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	99	86.1	86.1	86.1
Marked	1	16	13.9	13.9	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPFYADM Grp-FY Admin.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	115	100.0	100.0	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPFYFAC Grp-FY Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	115	100.0	100.0	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPGVT Grp-Govt.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	112	97.4	97.4	97.4
Marked	1	3	2.6	2.6	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPHSADM Grp-HS Admin.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	68	59.1	59.1	59.1
Marked	1	47	40.9	40.9	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPHSF Grp-HS Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	70	60.9	60.9	60.9
Marked	1	45	39.1	39.1	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPLBR Grp-Labor

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	115	100.0	100.0	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

GRPOTHER Grp-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	106	92.2	92.2	92.2
Marked	1	9	7.8	7.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHAGRI Pathway-Agriculture

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	83	72.2	72.2	72.2
Marked	1	32	27.8	27.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHALI Pathway-Allied Health

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	78	67.8	67.8	67.8
Marked	1	37	32.2	32.2	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHBUS Pathway-Business

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	37	32.2	32.2	32.2
Marked	1	78	67.8	67.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHCOMP Pathway-Computer Systems

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	73	63.5	63.5	63.5
Marked	1	42	36.5	36.5	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHENG Pathway-Engineering Tech

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	83	72.2	72.2	72.2
Marked	1	32	27.8	27.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PATHINDT Pathway-Industrial/Trade

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	69	60.0	60.0	60.0
Marked	1	46	40.0	40.0	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PTHHMNSV Pathway-Human Svcs.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	79	68.7	68.7	68.7
Marked	1	36	31.3	31.3	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PTHOT Pathway-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	96	83.5	83.5	83.5
Marked	1	19	16.5	16.5	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

PTHPRTCT Pathway-Protection Svcs.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	92	80.0	80.0	80.0
Marked	1	23	20.0	20.0	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLEACAD Role-Academic Expert

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	87	75.7	75.7	75.7
Marked	1	28	24.3	24.3	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLELEAD Role-Leader

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	96	83.5	83.5	83.5
Marked	1	19	16.5	16.5	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLEOTHR Role-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	105	91.3	91.3	91.3
Marked	1	10	8.7	8.7	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLERESC Role-Resource Provider

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	87	75.7	75.7	75.7
Marked	1	28	24.3	24.3	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLESTD Role-Std Outcome

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	99	86.1	86.1	86.1
Marked	1	16	13.9	13.9	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLEVOC Role-Voc/Tech

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	55	47.8	47.8	47.8
Marked	1	60	52.2	52.2	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ROLEWORK Role-Workplace

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	83	72.2	72.2	72.2
Marked	1	32	27.8	27.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

STAGEDEV Stage-Development

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	51	44.3	44.3	44.3
Marked	1	64	55.7	55.7	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

STAGEEVA Stage-Evaluation

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	70	60.9	60.9	60.9
Marked	1	45	39.1	39.1	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

STAGEIML Stage-Implementation

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	59	51.3	51.3	51.3
Marked	1	56	48.7	48.7	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

STAGEIMR Stage-Improvement

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	75	65.2	65.2	65.2
Marked	1	40	34.8	34.8	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

ADEQSTAF Adequate Staff Development

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	7	6.2	7.6	7.6
Disagree	2	20	17.7	21.7	29.3
Agree	3	49	43.4	53.3	82.6
Strongly Agree	4	16	14.2	17.4	100.0
	0	21	18.6	Missing	
	Total	113	100.0	100.0	

Valid cases 92 Missing cases 21

ADEQSTAK Essential Stakeholders

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	7	6.2	7.5	7.5
Disagree	2	19	16.8	20.4	28.0
Agree	3	53	46.9	57.0	84.9
Strongly Agree	4	14	12.4	15.1	100.0
	0	20	17.7	Missing	
	Total	113	100.0	100.0	

Valid cases 93 Missing cases 20

ADEQTIME Adequate Time/Resources

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	3	2.7	3.2	3.2
Disagree	2	10	8.8	10.6	13.8
Agree	3	62	54.9	66.0	79.8
Strongly Agree	4	19	16.8	20.2	100.0
	0	19	16.8	Missing	
	Total	113	100.0	100.0	

Valid cases 94 Missing cases 19

EVALPLAN Evaluate Plan

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
As Needed	1	52	46.0	55.3	55.3
Evry Year	2	36	31.9	38.3	93.6
Every 2 Years	3	5	4.4	5.3	98.9
Every 3 years	4	1	.9	1.1	100.0
	0	19	16.8	Missing	
	Total	113	100.0	100.0	

Valid cases 94 Missing cases 19

HOWLONG Length of Process

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	.9	1.3	1.3
	1	3	2.7	3.9	5.2
	2	7	6.2	9.1	14.3
	3	6	5.3	7.8	22.1
	4	7	6.2	9.1	31.2
	5	1	.9	1.3	32.5
	6	8	7.1	10.4	42.9
	7	1	.9	1.3	44.2
	8	4	3.5	5.2	49.4
	9	5	4.4	6.5	55.8
	10	5	4.4	6.5	62.3
	12	17	15.0	22.1	84.4
	14	1	.9	1.3	85.7
	18	2	1.8	2.6	88.3
	24	8	7.1	10.4	98.7
	36	1	.9	1.3	100.0
	0	36	31.9	Missing	
	Total	113	100.0	100.0	

Valid cases 77 Missing cases 36

INCLUDCC Plan include CC

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	53	46.9	46.9	46.9
Marked	1	60	53.1	53.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

INCLUDER Plan include employer

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	90	79.6	79.6	79.6
Marked	1	23	20.4	20.4	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

INCLUDFY Plan include 4-year

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	104	92.0	92.0	92.0
Marked	1	9	8.0	8.0	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

INCLUDHS Plan include HS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	26	23.0	23.0	23.0
Marked	1	87	77.0	77.0	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEJOBC Mode-Job Competency

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	86	76.1	76.1	76.1
Marked	1	27	23.9	23.9	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEJOBP Mode-Job Placement

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	86	76.1	76.1	76.1
Marked	1	27	23.9	23.9	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEOTHR Mode-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	98	86.7	86.7	86.7
Marked	1	15	13.3	13.3	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEPORT Mode-Portfolio

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	83	73.5	73.5	73.5
Marked	1	30	26.5	26.5	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEPRG Mode-End Prg.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	79	69.9	69.9	69.9
Marked	1	34	30.1	30.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODEPROF Mode-Student Profile

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	71	62.8	62.8	62.8
Marked	1	42	37.2	37.2	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODETRAC Mode-Student Tracking

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	87	77.0	77.0	77.0
Marked	1	26	23.0	23.0	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

MODECOUR Mode-End-Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	47	41.6	41.6	41.6
Marked	1	66	58.4	58.4	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PLAN Was plan

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Entirely New Plan	1	39	34.5	41.1	41.1
Modified Plan	2	56	49.6	58.9	100.0
	0	18	15.9	Missing	
	Total	113	100.0	100.0	

Valid cases 95 Missing cases 18

PROCBUS Process-Business/Industry

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	65	57.5	57.5	57.5
Marked	1	48	42.5	42.5	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCCCAD Process-CC Admin.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	70	61.9	61.9	61.9
Marked	1	43	38.1	38.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCCCF Process-CC Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	54	47.8	47.8	47.8
Marked	1	59	52.2	52.2	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCFYAD Process-Four Yr Admin

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	107	94.7	94.7	94.7
Marked	1	6	5.3	5.3	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCFYF Process-Four Yr Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	105	92.9	92.9	92.9
Marked	1	8	7.1	7.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCGVT Process-Government

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	98	86.7	86.7	86.7
Marked	1	15	13.3	13.3	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCHSF Process-HS Faculty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	31	27.4	27.4	27.4
Marked	1	82	72.6	72.6	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCHSAD Process-HS Admin.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	58	51.3	51.3	51.3
Marked	1	55	48.7	48.7	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCOTHR Process-Other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	94	83.2	83.2	83.2
Marked	1	19	16.8	16.8	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

PROCLBR Process-Labor

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	96	85.0	85.0	85.0
Marked	1	17	15.0	15.0	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

TIME Percent Total Time

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	1.8	2.7	2.7
	2	5	4.4	6.7	9.3
	3	2	1.8	2.7	12.0
	5	13	11.5	17.3	29.3
	10	18	15.9	24.0	53.3
	12	1	.9	1.3	54.7
	15	8	7.1	10.7	65.3
	18	1	.9	1.3	66.7
	20	10	8.8	13.3	80.0
	22	1	.9	1.3	81.3
	25	4	3.5	5.3	86.7
	35	1	.9	1.3	88.0
	40	1	.9	1.3	89.3
	45	1	.9	1.3	90.7
	50	2	1.8	2.7	93.3
	60	1	.9	1.3	94.7
	75	2	1.8	2.7	97.3
	80	1	.9	1.3	98.7
	95	1	.9	1.3	100.0
	0	38	33.6	Missing	
	Total	113	100.0	100.0	

Valid cases 75 Missing cases 38

USEACAD Use Academic Subjt Matter

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	51	45.1	45.1	45.1
Marked	1	62	54.9	54.9	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

USEJOB Use job competencies

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	69	61.1	61.1	61.1
Marked	1	44	38.9	38.9	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

USEOTHER Use other

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	105	92.9	92.9	92.9
Marked	1	8	7.1	7.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

USESCANS Use SCANS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	66	58.4	58.4	58.4
Marked	1	47	41.6	41.6	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

USESTATE Use State Certif Exam

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	79	69.9	69.9	69.9
Marked	1	34	30.1	30.1	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

USEVOC use vocational/tech

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not Marked	0	39	34.5	34.5	34.5
Marked	1	74	65.5	65.5	100.0
	Total	113	100.0	100.0	

Valid cases 113 Missing cases 0

Appendix J

Consortia Responding to Questionnaire

CONSORT Consortium

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Brazos Valley	2	3	2.6	2.6	2.6
Capital	3	1	.9	.9	3.5
Central Texas	4	10	8.7	8.7	12.2
Concho Valley	6	4	3.5	3.5	15.7
Deep East	7	2	1.7	1.7	17.4
East Texas	8	5	4.3	4.3	21.7
Global Edge	9	8	7.0	7.0	28.7
Gulf Coast	11	16	13.9	13.9	42.6
Heart of Texas	12	3	2.6	2.6	45.2
Lower Rio Grande	13	2	1.7	1.7	47.0
North Central	14	15	13.0	13.0	60.0
North Texas	15	3	2.6	2.6	62.6
Panhandle	16	11	9.6	9.6	72.2
Permian Basin	17	6	5.2	5.2	77.4
South Texas	20	4	3.5	3.5	80.9
Star Tech Prep	21	2	1.7	1.7	82.6
Texoma	22	1	.9	.9	83.5
Upper Rio Grande	24	13	11.3	11.3	94.8
West Central	25	6	5.2	5.2	100.0
	Total	115	100.0	100.0	

Valid cases 115 Missing cases 0

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I. DOCUMENT IDENTIFICATION:

Title: The Final Report on Effective Tech Prep Policies and Practices: Performance Assessment

Author(s): Ronald D. Opp

Corporate Source: Texas Tech University, SPECAP Research Group
Lubbock, TX 79409-1071

Publication Date: June 1997

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