ED 402 452 CE 073 099

AUTHOR Opp, Ronald D., Ed.; And Others

TITLE Effective Policies and Practices in Selected Career

Fields. Final Report.

INSTITUTION Texas Tech Univ., Lubbock.

SPONS AGENCY Texas Higher Education Coordinating Board, Austin.

PUB DATE 15 Aug 96

NOTE 245p.; Product of the Strategic Planning, Evaluation

of Curriculum, Assessment of Performance Research Group. For related documents, see CE 073 100-101.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC10 Plus Postage.

DESCRIPTORS *Allied Health Occupations Education; *Articulation

(Education); Business Administration; Career Guidance; Cooperative Programs; Curriculum; Educational Planning; *Educational Practices;

Education Work Relationship; Engineering Technology; Guidelines; High Schools; *Institutional Cooperation; Program Development; Program Effectiveness; Program Implementation; School Business Relationship; State Programs; *Tech Prep; Two Year Colleges; *Work

Experience Programs

IDENTIFIERS *Texas

ABSTRACT

A research team gathered and disseminated information on effective tech prep policies and practices for developing and evaluating program curriculums in the broad career pathways of allied health, business, and engineering technology in Texas. Data were gathered through interviews, site visits, document analysis, and surveys. Curricular documents were analyzed for 255 tech prep programs in the 3 fields. Some of the conclusions were as follows: (1) the tech prep educational reform has had a significant positive influence on the work force development system in Texas; (2) tech prep programs have captured the attention and commitment of both the education and the business and industry sectors; and (3) the range of benefits of tech prep educational reform are obscured if only the aggregate numbers collected by state agencies are examined. Policy recommendations based on the findings of the study include the following: the Texas Higher Education Coordinating Board should continue efforts to capture the more subtle benefits of tech prep educational reform; the board should make data available by program area and career pathway; and efforts should be increased to provide money to inform high school and community college counselors about tech prep reform. Products created during the project include a tech prep handbook and a monograph, "The Texas Tech Prep Consortia: Strategies for Advancing Technical Education." (The report includes 13 appendixes of project documents, containing survey form, telephone interview protocol, and data analysis.) (KC)

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



The Final Report on Effective Policies and Practices in Selected Career Fields

Carl Perkins Grant No. 66180003 FICE CODE 003644

submitted to the Texas Higher Education Coordinating Board

August 15, 1996

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

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

 Points of view or opinions stated in this document do not necessarily represent official OERI position or policy. edited by

Dr. Ronald D. Opp Dr. Oliver D. Hensley Ms. Gloria Stewart Ms. Bethany Rivers PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Table of Contents

Executive Summary 1 - 3
Introduction
Advisory Council Meetings 6 - 8
Document Collection and Analysis Process 8 - 9
Site Visits 10 - 11
1996 Tech Prep Curriculum Questionnaire 11 - 13
Phone Interviews 13 - 15
Findings from the Survey and Phone Interviews
Response Characteristics 16 - 18
Importance of Tech Prep Funds 18 - 20
Curriculum Development
Curriculum Implementation
Curriculum Evaluation
Program Improvements
Future of the Programs 41 - 46
Exemplary Components
Areas for Improvement 55 - 56
Monograph
Handbook
Final Report 65 - 66
Other Means of Dissemination
Conference Presentations 66 - 67
Development of SPECAP Home Page 67 - 68
Conclusions and Recommendations 69 - 73



Executive Summary

This is an executive summary of *The Final Report on Effective Tech Prep Policies and Practices in Selected Career Fields*, 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 Tech Prep policies and practices for developing and evaluating program curricula in the broad career pathways of allied health, business, and engineering technology in Texas. The project was conducted by the Strategic Planning, Curriculum Evaluation, and Assessment of Performance (SPECAP) Research Group at Texas Tech University. The project researchers utilized interviews, site visits, document analysis, and surveys 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

Curricular documents were analyzed for 255 different Tech Prep programs in the fields of allied health, business, and engineering technology to gather the documents necessary to create *The Tech Prep Handbook*. The documents in *The Tech Prep Handbook* are organized into 11 sections representing the different sectors that are impacted by Tech Prep curricula: consortia, independent school districts, colleges, disciplines, exemplars, students, government, home and public, industry, economic development, and others. *The Tech Prep Handbook* has been designed so that practitioners



involved in developing and evaluating Tech Prep curricula within each of these eleven sectors have a ready source of models that they can adapt in designing and evaluating their own Tech Prep program curricula.

A monograph, The Texas Tech Prep Consortia: Strategies for Advancing Technical Education, is another product compiled and edited by SPECAP researchers. This monograph provides an overview of the strategic planning policies and practices used by Tech Prep consortia to develop Tech Prep programs in Texas. The thirty papers in this monograph provide a series of diverse pictures of how the workforce education system in Texas has developed since the advent of Tech Prep. The monograph is divided into sections focusing on: consortia contributions, independent school district collaborations, community college and university advancements, curriculum development, government strategies, industry partnerships, and economic development. The monograph is designed to publicize exemplary Tech Prep programs so that their policies and practices can be disseminated to a wider state and national audience.

The Final Report on Effective Tech Prep Policies and Practices in Selected Career Fields 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 site visits, document analysis, interviews, surveys, as well as the products created -- the monograph, handbook, final report, conference presentations, and the SPECAP Web page. 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 The Final Report on Effective Tech Prep Policies and Practices in Selected Career Fields. Upon analyses of the data gathered through the site visits, document collection process, interviews, and surveys, the SPECAP researchers arrived at the following conclusions:

- Tech Prep educational reform has had a significant positive influence on the workforce development system in Texas.
- Tech Prep programs have captured the attention and commitment of both the education and business and industry sectors.
- The range of benefits of Tech Prep educational reform are obscured when examining only aggregate numbers collected by state agencies.

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

- The Texas Higher Education Coordinating Board continue efforts to capture the more subtle benefits of Tech Prep educational reform.
- The Texas Higher Education Coordinating Board make data available by program area and career pathway.
- Efforts should be redoubled to provide money to further educate high school and community college counselors about Tech Prep reform.

3



R

Introduction

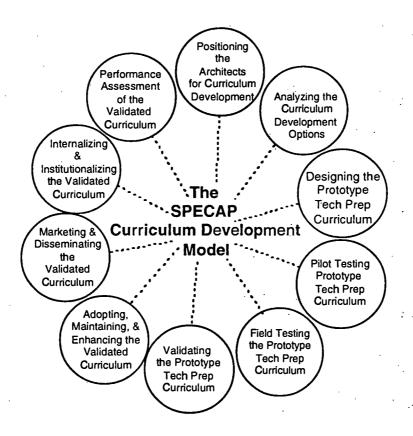
This final report will describe the activities and the findings of the Strategic Planning, Evaluation of Curriculum, and Assessment of Performance (SPECAP) Research Group at Texas Tech University. The SPECAP Research Group was awarded a Carl Perkins grant in 1995 entitled "Effective Tech Prep Policies and Practices in Selected Career Areas." The purpose of the grant project was to identify and describe effective policies and practices in the development and evaluation of Tech Prep program curricula in the career pathways of allied health, business, and engineering technology in Texas. The grant project was designed as a continuation of the previous year's efforts by the SPECAP Research Group to identify and describe effective policies and practices in strategic planning in Tech Prep consortia in Texas. Many of the models, processes, and products used to examine strategic planning in 1994 were modified and refined to examine curriculum development and evaluation activities in this year's grant activities.

The model that the SPECAP researchers used to examine the development of Tech Prep Program curriculum is shown in Figure 1. The SPECAP Curriculum Development Model is an adaptation of the SPECAP Strategic Planning Model used in 1994 to examine the strategic planning process in Tech Prep consortia (Figure 2). The SPECAP Curriculum Development Model has nine components: positioning the architects, analyzing curriculum development options, designing the curriculum, pilot testing the curriculum, field testing the curriculum, validating the curriculum,



adopting and enhancing the curriculum, internalizing and institutionalizing the curriculum, and assessing the performance of the curriculum. The model was validated by the Tech Prep experts on our SPECAP advisory council as a useful and valid description of the curriculum development and evaluation process utilized by Tech Prep consortia to develop programs.

Figure 1. SPECAP Curriculum Development Model.

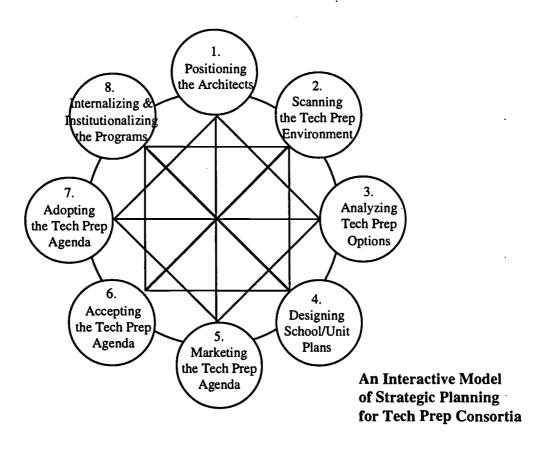


The major activities conducted by the SPECAP Research Group during the course of this year's grant project will be described in detail in the sections



of this final report that follow. These activities include: advisory council meetings, document analysis, site visits, survey activities, phone interviews, conference presentations, handbook, monograph, and final report.

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 represented consortia from



diverse geographic areas of the state. Advisory council members were chosen so that there was representation from the education sector as well as the business and industry sector. Several of the advisory council members were chosen based on nominations from representatives of the Texas Higher Education Coordinating Board.

There were three advisory council meetings held at various locations around the state to discuss and approve the major activities and products of the SPECAP Research Group. Appendix B contains the minutes describing actions taken at each of the three advisory council meetings held throughout the year. One of the major initial tasks of the advisory council was to validate the SPECAP Curriculum Development Model. After revising and validating this model, advisory council members examined and approved the document checklist used to analyze the six-year programs submitted to the Texas Higher Education Coordinating Board in the areas of allied health, business, and engineering technology.

Another major task of the advisory council was to examine and approve the sampling and the design of the phone interview protocol and questionnaire designed to gather data on the curriculum development and evaluation process in Tech Prep programs. The members suggested a number of improvements to the sampling design for the phone interviews and survey, and made substantive revisions to the questionnaire and the phone interview protocol found in Appendices C and D respectively. Advisory council members provided us with valuable suggestions about how best to reach the experts on curriculum



development and evaluation within their consortia. Their suggestions were invaluable in ensuring that the questionnaires and phone interviews reached Tech Prep curricular experts, and that the data gathering processes minimized the time and energy required of the Tech Prep consortium directors.

A final task of the advisory council was to provide feedback on the documents to be produced and disseminated by the SPECAP Research Group. These documents included the final report, the handbook, and the monograph. These products were revised to incorporate changes based on the council's recommendations. Advisory members also made suggestions about how best to disseminate these documents to reach the widest possible audience. The council's recommended strategies helped make the documents more useful to their intended audiences, and significantly improved their dissemination.

Document Collection and Analysis Process

To more fully understand the complexity of Tech Prep curricular policies and practices, SPECAP researchers compiled a comprehensive collection of curricular documents submitted to the Coordinating Board in the career pathways of allied health, business, and engineering technology. In order to obtain the documents necessary for this collection, a SPECAP researcher made copies of all Tech Prep curricular documents in allied health, business, and engineering technology that had been submitted to the Texas Higher Education Coordinating Board. SPECAP researchers also sent letters to each Tech Prep consortium director asking for any additional materials that they had describing the design and evaluation of curriculum in the areas of allied health, business,



and engineering technology. A copy of the letter that was sent to consortium directors requesting this curricular material can be found in Appendix H.

Curricular documentation was collected on 255 different Tech Prep programs in allied health, business, and engineering technology career pathways. To organize the curricular documents on each program, each page of each document was marked to indicate its consortium and program affiliation. Each document collected was then analyzed to determine if it could be categorized according to the general purpose that it served in the curriculum development process. Through this document analysis process, SPECAP researchers created a classification system for all the curricular documents that they had collected. The classification system that was created can be found in Appendix I. The classification system includes categories such as program revisions, advisory board minutes, and articulation agreements.

In categorizing these documents, SPECAP researchers examined all the documents by program within the same broad category. For example, 149 documents categorized as program revision documents were analyzed to better understand the program revision process, and to choose one or more examples of a program revision document for inclusion in the Tech Prep Handbook. The same process was repeated for each of the other broad categories of documents in the classification system that was created. The matrix found in Appendix I indicates the categories created for the classification system, and the numbers of documents that were collected within each category according to Tech Prep program.



Site Visits

Site visits helped the SPECAP group ascertain several things. First, it allowed us to see first hand how different Tech Prep programs actually operated and what connections they considered important. Second, it allowed us a chance to look intimately at the process and gather important documents from different consortia--documents that would be easily overlooked on a general document scan. Third, site visits gave us the opportunity to actually see that the consortia are, in deed, using the documents and following the "practices and procedures" that were established.

A few visits with Ms. Stephanie Stone, the director of the South Plains Tech Prep Consortium in Lubbock, helped us set the ground work. These visits were followed by a trip to Angelina College in Lufkin to speak with Dr. Lovelady and, then, on to Navarro College in Corsicana to meet with Mr. Robert Franks.

In San Antonio, our representative met with the curriculum specialist from Alamo Consortium and then traveled to Seguin to meet with Janette Lawlis and the Seguin Center for Career Excellence. Going north, Austin was the next stop, meeting with Cassy Key, the director of the Capital Tech Prep Consortium. While in Austin, our representative joined in on a tour of Texas Instruments with Smithville ISD students and visited both Austin Community College and Dell University.

Mr. Jimmy Roberts from Temple, Texas, hosted the tour of Central Texas Consortium. In addition, there was a tour of Whitney High School provided by the principal and Tech Prep advocate Gene Schatz. Ms. Jewel Lockridge,



director of the Heart of Texas Tech Prep Consortium, along with her assistant, Charlotte Roppolo, scheduled a most informative "round table" meeting with representatives from a sundry of Tech Prep stakeholders in her region.

While in Houston for the Tech Prep Conference, we took advantage of the opportunity to meet with Dr. Burl McKinnerney, Dean Vice Chancellor of the San Jacinto College District, and Ms. Joyce White from the College of the Mainland. There was also a short stop at the Brazos Valley Consortium to visit with Mr. Rick Hernandez, director of the consortium.

A brief sojourn was made to Abilene, accompanied by administrators from Texas Tech, to meet with facuty and representatives of West Central Texas Consortium in order to observe the articulation process in action.

1996 Tech Prep Curriculum Questionnaire

A survey was utilized to gather information from curricular experts throughout the state on curricular policies and practices in developing and evaluating Tech Prep programs in allied health, business, and engineering technology. The SPECAP Curriculum Development Model was used as the theoretical framework in designing the questionnaire. In addition to questions covering the nine sections of this model, some basic demographic questions about the respondents were also included. The final version of the 1996 Tech Prep Curriculum Questionnaire can be found in Appendix C.

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



14

either revised or eliminated. The final version of the questionnaire was three pages long, with twenty-nine closed-ended questions regarding the Tech Prep curriculum development and evaluation process. To simplify data entry, the questionnaires were printed in a format that permitted the responses to be optically scanned.

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 curricular experts in their consortia. The advisory council recommended that each consortium director receive questionnaires proportional to the number of students 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 E displays these enrollment figures and the number of questionnaires sent and returned by each of the consortia.

Another recommendation made by advisory council members was that questionnaire recipients should be determined by the Tech Prep director within each consortium. 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 Tech Prep programs in allied health, business, and engineering technology. As a result of this recommendation, SPECAP researchers sent questionnaires

12



directly to the Tech Prep directors, with a cover letter indicating that they were to choose the curricular experts within their consortia to receive the questionnaires. Appendix F displays the cover letter sent to consortia directors with these instructions. The directors were instructed to send questionnaires to all of their stakeholders involved in the curriculum development and evaluation process, including those in the education, business and industry, labor, and government sectors.

A total of 2,530 questionnaires were mailed to Tech Prep directors around the state for further distribution to the curricular experts within their consortia. A total of 292 questionnaires were received by the SPECAP researchers by the end of May of 1996. Since the SPECAP researchers have no way of knowing how many of the 2,530 questionnaires were mailed out by the consortium directors, it is not possible to calculate an overall response rate for the survey. The questionnaires received were optically scanned in early June of 1996, and resulting data set was analyzed by SPECAP researchers. 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 curriculum development and evaluation policies and practices, a series of phone interviews were conducted by SPECAP researchers. A phone interview protocol was developed using the SPECAP Curriculum Development Model as the conceptual framework. The questions were designed to gather information about how Tech Prep curricula



₁₃ 16

in allied health, business, and engineering technology programs are developed and evaluated. The phone interview data were also designed to complement the quantitative data gathered with the 1996 Tech Prep Curriculum 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 individuals chosen to pilot test the instrument, were incorporated into the final phone interview protocol, which can be found in Appendix D. The advisory council members also suggested that Tech Prep directors nominate the individuals most knowledgeable about curriculum development and evaluation within their consortia to be included in the phone interview sample.

At the February Tech Prep Directors' meeting, Tech Prep directors nominated the top Tech Prep programs in the state in the areas of allied health, business, and engineering technology. The three programs in each career pathway receiving the most nominations by Tech Prep directors were selected for the phone interview sample. The nine Tech Prep programs chosen for the phone interview sample represented a total of seven different Tech Prep consortia within the state. Tech Prep directors affiliated with these nine programs were asked to complete a form identifying the individuals most knowledgeable about the development and evaluation of curricula within these programs. The form used to gather the names, titles, and phone numbers of these curricular experts from Tech Prep directors can be found in Appendix G. Once these nominations were received by the SPECAP staff, individual



14 17

appointments for phone interviews were scheduled with each of the nominated individuals. The phone interviews were conducted by three SPECAP researchers over a two-month period from April through May of 1996. A total of 30 interviews were completed, with each interview taking approximately forty-five minutes to conduct. Each individual interviewed was promised confidentiality in the public 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 30 interviews, the interview notes from the separate 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 or 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 curricular policies and practices in allied health, business, and engineering technology programs.

Findings from the Survey and Phone Interviews

The findings from the 1996 Tech Prep Curriculum 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,



18

importance of Tech Prep funding, curriculum development, curriculum implementation, curriculum evaluation, program improvements, future of Tech Prep programs, exemplary components, and areas of concern. The frequencies for all the questions on the 1996 Tech Prep Curriculum Questonnaire can be found in Appendix M.

Response Characteristics

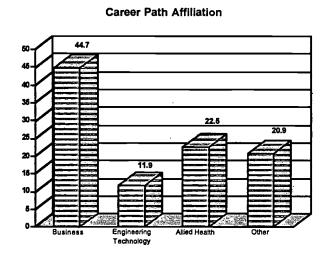
Questionnaires received from 21 out of 25 of the Tech Prep consortia indicate that there is geographic representation in the responses (See Appendix E). The number of responses varied considerably by consortia, ranging from a low of one to a high of 49, with an average of just under 15 responses per consortium. It would appear that four consortia directors did not distribute questionnaires to curricular experts within their consortia. One way to ensure 100% participation by consortia directors in future surveys may require cover letters to directors under the joint sponsorship of the Texas Higher Education Coordinating Board and the SPECAP research group.

The survey respondents represented curricular experts in each of the three broad career pathways under study in this project: allied health, business, and engineering technology. Slightly under half of the respondents were affiliated with a business career pathway, with slightly under a quarter affiliated with an allied health career pathway, and slightly more than one tenth with an engineering technology career pathway (See Figure 3). This distribution of responses indicates that the consortium directors did target questionnaires towards individuals within their consortia involved in these three career



pathways. However, a sizable percentage of the respondents (20.9%) indicated that they were affiliated either with some other career pathway, or with no career pathway. This finding suggests that at least some questionnaires were sent to experts involved with curriculum development and evaluation in other career pathways, or perhaps to experts involved in curriculum development across a number of career pathways.

Figure 3. Career Pathway Affiliation of Respondents.

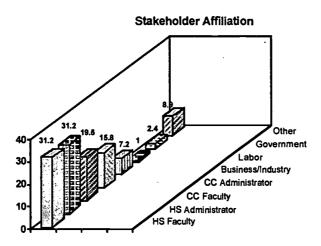


The Tech Prep directors were asked to target the questionnaires to as many different stakeholder groups as possible. Figure 4 indicates representation from a number of different stakeholder groups in the survey responses. The majority of the survey respondents represented either high school faculty or administrators, with a sizable number of community college faculty and administrators also represented among the survey respondents. Relatively few responses came from representatives from the business and industry, labor, or government sectors. The high representation of individuals



from the education sector is perhaps not surprising on a questionnaire dealing with curriculum development and evaluation. Given their expertise in

Figure 4. Stakeholder Affiliation of Respondents.



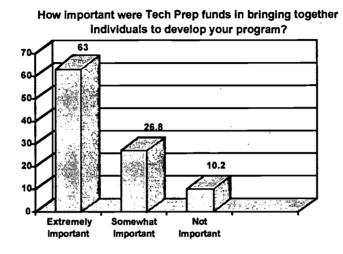
curriculum development, it is likely that faculty and administrators from the education sector played a dominant role in developing curriculum for Tech Prep programs in Texas. It is also possible that the representatives from sectors other than education did not feel as competent in responding to the questionnaire as those from the education sector.

Importance of Tech Prep Funds

One of the questions on the 1996 Tech Prep Curriculum Questionnaire was "How important were state Tech Prep funds in bringing together individuals to develop your program?" (See Figure 5). Almost nine in ten survey respondents indicated that Tech Prep funds were somewhat or extremely important in bringing together individuals to develop their programs.



Figure 5. Importance of Tech Prep Funds.



The phone interview responses provided rich details about how individuals in Tech Prep programs utilized Tech Prep funds. A Perkins Coordinator at a community college indicated that

Tech Prep funds were used to bring together individuals to create the skeletal vocational nursing program in the consortium.

A district career counselor affiliated with a surgical tech program, said

Tech Prep funds were the key in getting people from academic and technical departments to work together. The Tech Prep funds paid for subs and stipends for teachers to work nights and weekends.

An administrator from a high school who was a stakeholder in a management information technology program, recalled that

Tech Prep funds allowed them to obtain a grant for additional communication materials, provided the moneys for a manufacturing graphics lab, and pay for a consultant to advise them on their manufacturing graphics program. The funds also allowed them to produce a video used during presentations they make about the Tech Prep programs at their school.



According to one community college faculty member associated with a professional secretary program,

Tech Prep funds were used to provide training sessions on the campuses to help teachers use laptop computers and relay information on processing competencies.

These imaginative uses of Tech Prep funds to develop Tech Prep programs helps explain why 90%--an overwhelming majority of survey respondents--felt that Tech Prep funds were important in bringing people together.

This is strong evidence that the presence of Tech Prep funds served as a catalyst to bringing together individuals who might not otherwise have had an incentive to work with one another. The phone interviews illustrate the creativity of the architects of Tech Prep and the range of activities that have been supported by Tech Prep funds: paying for release time for teachers, providing stipends for teachers to work on developing program curricula, in-service training for teachers, and making videos regarding Tech Prep programs. Clearly, Tech Prep funds have served as an important ingredient in promoting collaboration between the individuals necessary to develop Tech Prep programs.

Curriculum Development

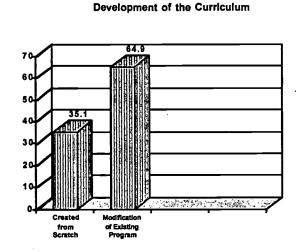
A number of questions on the survey elicited information on the policies and practices associated with curriculum development in various Tech Prep programs areas of allied health, business, and engineering technology. Slightly less than two-thirds of the survey respondents (64.9%) indicated that their Tech

20



Prep program was a modification of an already existing program. Of those programs modified, slightly more than a quarter were the result of a merger of two or more pre-existing curricula (See Figure 6). The remaining one-third were created from scratch. Clearly, the majority of Tech Prep program curricula in these three career pathways were modifications rather than curricula created from scratch.

Figure 6. Curriculum Development.

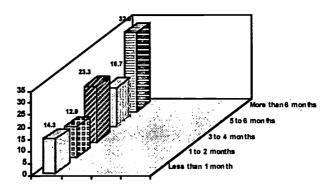


Slightly more than two-thirds of the survey respondents (67.1%) indicated that it took them six months or less to modify their curriculum to create their Tech Prep program (See Figure 7).



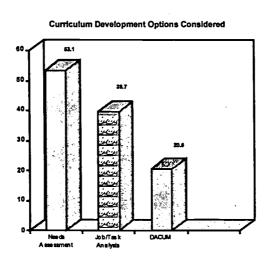
Figure 7. Duration of Curriculum Modification Process.





In creating or modifying the Tech Prep program curricula, slightly more than half indicated that they conducted a needs assessment, slightly less than four in ten conducted a job/task analysis, and slightly more than one-fifth conducted a DACUM process (See Figure 8).

Figure 8. Curriculum Development Options.





The phone interview responses provided additional insights on curriculum development policies and practices.

In an associate degree nursing program, a Tech Prep director indicated that

a mini-DACUM process had been used because the nursing program must be certified by the state. Also, a needs analysis had been conducted for the associate degree nurses.

The division chair of nursing in the same program indicated that they modified an already existing associate degree nursing program to create a Tech Prep program.

The existing program was subdivided to better fit the format of the high school curriculum.

A director of career and technical education stated that they had modified their vocational nursing program by modifying a two-year program in grades 11 and 12 into a four-year 9-12 program, blocking English, math and science with health occupations courses. A needs assessment had identified health occupation jobs available in their service area.

The Perkins coordinator for the same vocational nursing program indicated that

some advanced skills courses, related to border health problems, were developed from scratch.

The director of a surgical tech program relayed that they had

completed a DACUM for the program and modified the curriculum by adding more internships, and creating an advanced certificate.

Programs in the business career pathway also tended to be modifications of already existing programs.



A university professor indicated that the process of curriculum development for a management information technology program included

the involvement of a group of business representatives in a competency task analysis. The management program at the community college was modified based on the analysis.

A high school teacher in a management development program discussed

translating college material into high school material, adding activities, modifying teaching styles and techniques, teaching students how to work in teams, and modifying vocabulary.

A community college faculty member in a professional secretary program discussed their needs assessment process.

We looked at the job market forecast and gathered information from other colleges and from the Professional Secretaries International Association.

A similar modification process was at work in the engineering technology programs. A technical training foreman who helped develop a petrochemical program stated the curriculum development group, of which he was a member, visited three sites with similar programs. He also explained how they had converted DACUM tasks to competencies.

A supervisor of operations and training in the same program discussed how they

conducted a condensed DACUM by bringing 12 subject matter experts from area plants to identify skills and competencies needed to perform the job.

The head of an aerospace flight training division discussed how they used a DACUM process to develop the aerospace program.



A curriculum already in place at [an aerospace organization] was modified for Tech Prep.

A community college dean, referring to a graphics and design program, explained how

surveys were distributed to engineering graphics companies to gather information about salaries and job titles. An associate degree in Engineering Graphics and Design was modified to create their Tech Prep program.

Clearly, although the phone interviews highlight considerable variation in the composite of groups involved in the curriculum development process as well as methods used to develop Tech Prep program curricula, the survey responses demonstrate that the majority (64.9%) of programs are modifications of already existing curricula and that a job/task analysis or a DACUM process are most frequently used in curriculum development.

The types of modifications include such changes as subdividing college courses to better fit the high school curriculum, adding advanced skills courses, adding more internships, and modifying teaching styles and techniques. These modifications have increased collaboration among high school teachers and administrators, community college faculty and administrators, and business and industry, and resulted in a number of new articulation agreements. Clearly, Tech Prep educational reform has fostered collaboration between secondary and postsecondary levels, and resulted in partnerships between education and business and industry that in many cases did not previously exist.



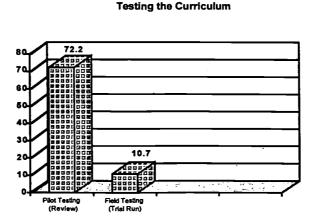
Curriculum Implementation

A number of questions on the questionnaire asked respondents how they went about implementing their Tech Prep program curricula. In particular, the survey asked whether curriculum designers had the curriculum reviewed or pilot tested prior to implementation.

Slightly less than three-quarters of the respondents (72.2%) indicated that various stakeholder groups reviewed their curricula, but only one in ten respondents indicated that there was a trial run of their program curriculum prior to implementation (See Figure 9). The small number of respondents indicating a trial run of their curriculum undoubtedly reflects the fact that the majority of programs did not need a pilot test, since they were modifications of already existing curricula.

The major stakeholder groups involved in reviewing the curriculum included: program faculty (58.2%), high school/college representatives

Figure 9. Pilot Testing and Field Testing.

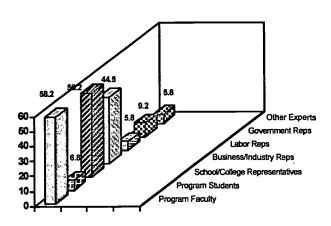




(56.2%), and business and industry representatives (44.5%) (See Figure 10). Three-quarters of the respondents (75.6%) indicated that their program curriculum was reviewed by 15 or less individuals.

Figure 10. Review of the Curriculum.

Curriculum Reviewers



Telephone interviews provided additional insights into the curriculum implementation processes being used in Tech Prep programs.

According to one division chair of an associate degree nursing program

the program curriculum was reviewed by the program advisory committee, the Tech Prep office, the college administration, and the State Board of Nursing Examiners, before it was ultimately reviewed by the Coordinating Board.

A health occupations coordinator involved with a vocational nursing program indicated that their



program advisory committe reviewed the curriculum, along with hospital staff, and the dean from the nursing school at the four-year college.

The Perkins coordinator involved with the same program also mentioned review by a crossdisciplinary curriculum committee at the college.

A district career counselor at a community college involved with a surgical tech program explained that

the college faculty as well as health occupations teachers in the high schools reviewed the program curriculum, along with the advisory council.

The director of the program added that part-time faculty and the associate dean at the college reviewed the program curriculum as well.

Similar variations were noted in the methods and individuals involved in reviewing the program curricula in the business career pathway.

A community college MIT curriculum coordinator stated

high school personnel, community college representatives, a fouryear college representative, as well as representatives from business and industry, and government reviewed the program.

A community college administrator involved in developing the curriculum in a management development program elaborated on the review of their program by

industry representatives, high school faculty, community representatives, and other college deans.

While a college faculty member involved with the development of a professional secretary program added that their review included

the vice president for instruction, and the program advisory council.



A similar pattern emerged in the review process in the engineering technology pathway.

A technical training foreman in industry affiliated with a petrochemical program described how the curriculum development committee

brought the curriculum to the plant and shared its design with management, operators, and foremen.

A supervisor in operations and training added that

the curriculum was also reviewed by local high school instructors, as well as union and non-union representatives and the local management team.

An industry training project manager affiliated with an aerospace program explained how their curriculum was reviewed by in-house experts.

A community college dean added

the aerospace curriculum was reviewed by school, college and government representatives, as well as by outside experts.

In the construction of a graphics and design program, a community college dean noted

the curriculum was reviewed by the curriculum and instruction committee at the college, and the vice president of academic affairs.

A high school teacher added

the program curriculum was reviewed by industry, local college and university representatives, as well as the program advisory committee at the high school.

The phone interview and survey data indicate the curricula of the majority of Tech Prep programs were reviewed by a number of stakeholder groups before implementation. Although faculty and administrators in the education



sector were most frequently mentioned as involved in the review process, business, industry, labor, and government representatives were also frequently mentioned as members of the program advisory committees that also reviewed program curricula.

The involvement of a number of different stakeholder groups in the review of Tech Prep program curricula appears to be an exemplary component of the curriculum development and evaluation process in Texas. Conversely, the small number of respondents who indicated that they formally pilot tested their curriculum before implementation suggests that pilot testing of curricula is a relatively weak component of the curriculum development and evaluation process in Texas.

Another implication of the findings is that one of the strengths of the Tech Prep curriculum development process is the variety of stakeholder groups involved in the curriculum review process. More than half of the survey respondents indicated that their program was reviewed by both program faculty and high school and college representatives, and more than two fifths indicated that business and industry representatives were also involved in reviewing their program curricula.

The phone interviews provide additional information on the variety of stakeholders involved in curriculum review, including high school faculty and administrators, community college faculty and administrators, four-year college faculty and administrators, program advisory committees, business and industry, union, and government representatives, and outside experts. The

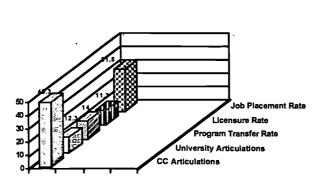


curricula of Tech Prep programs are reviewed by a diverse group of stakeholders, helping to ensure that program curricula are valid, comprehensive, and up-to-date. The comprehensiveness of the review process is a positive consequence of the partnerships that have developed as the result of Tech Prep educational reform.

Curriculum Evaluation

A number of questions on the survey asked respondents to describe how they evaluated their curriculum and from whom they received feedback on its effectiveness. Survey respondents indicated that the three groups most involved in evaluating the effectiveness of program curriculum are faculty (56.8%), students (47.6%), and employers (40.4%). The indicators of curricular effectiveness most frequently mentioned by respondents included: the number of articulation agreements with two-year colleges (48.3%), and program job placement rates (31.5%) (See Figure 11).

Figure 11. Indicators of Curricular Effectiveness.

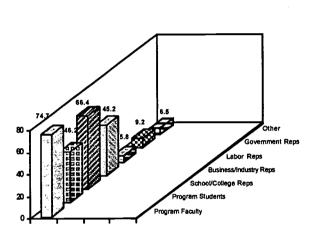


Indicators of Effectiveness



The four groups most frequently mentioned as providing feedback about the effectiveness of program curricula are: program faculty (74.7%); school/college representatives (66.4%); program students (46.2%); and business/industry representatives (45.2%) (See Figure 12).

Figure 12. Feedback on Curricular Effectiveness.



Feedback on Curriculum Effectiveness

The importance of these groups and indicators in evaluating program curricula is highlighted in the data from the phone interviews. The phone interviews of individuals involved in allied health programs describe in detail who provides feedback on their curricula and what indicators of curricular effectiveness they utilize.

A Tech Prep director associated with an associate degree nursing program indicated

measures of the effectiveness of the curriculum include examining the number of students involved in the program and the placement rate for program students. The students' success in the program



and if they actually went to work in the field for which they were trained are also monitored.

The division chair of nursing at the community college in the same program describes how she

received feedback on the program from health occupations teachers in the local high schools and from high school students who come to campus to do extra work in the computer lab. There were other indicators as well, including the attrition/retention rate for the nursing students, student grades in nursing courses, and the passage rate on the state licensure exam. Also, entry and exit surveys of students were conducted in order to obtain feedback on the program. [We] expect to conduct employer surveys and to monitor placement rates as nursing students enter in the job market.

As mentioned by a community college faculty member who teaches in an associate degree nursing program, casual and professional communication with counterparts at the high school level during clinical rotations often yields information on students' progress in the program and after they have entered the workforce.

A director of career and technical education in a vocational nursing program noted

feedback is received from clinical faculty at the hospital, as well as from employers who hire their students and from the community college faculty who have had visits from their students. [We] also document student job placement rates, the number of students going on to college in the health field, and employer satisfaction with the graduates. All are used as indicators of effectiveness.

A health occupations coordinator added that they also use

the success rate of students in college and whether students are still working several years after graduation as indicators of effectiveness.



The Perkins coordinator mentioned other factors as effectiveness indicators, including the success rate of their students on the licensure exam, and the stability of the enrollment.

The health occupations division chair for this program pointed to

the signing of articulation agreements with high schools and the fact that high schools fund their part of the vocational nursing program with their own funds.

Another approach in evaluating effectiveness, was described by a district career counselor affiliated with a surgical tech program.

[We] use the number of students who pick up credits as a way of evaluating the curriculum, as well as conducting an employer follow-up of students after high school.

The director of a surgical tech program stated that they

survey graduates, and have current students evaluate clinical facilities and faculty. [We] also use the placement rate of students, and find out informally from employers whether students are still employed.

A coordinator of hospital staff development noted that in addition to faculty evaluation of the program, the licensure passage rate provides information on the effectivenss of the program.

A high school coordinator of health science technology mentioned that
the student retention after a year at the community college proved
to be a valuable indicator.

Interviews with stakeholders involved with business programs revealed similar patterns of feedback and indicators of effectiveness.

A university professor described how feedback on a MIT program was provided by



high school and community college faculty who were teaching the classes. Effectiveness was also assessed through instructor input, student feedback, and the use of an outside consultant brought in to evaluate the program.

A high school administrator reflected that effectiveness of their program is determined by feedback from counselors, employers, students, parents, and the community.

A high school teacher involved with a management development program described how

feedback on the program was provided by students who completed evaluations of the program and from teachers who met to discuss issues and situations that arose. Employers who hired students in coop programs also provided feedback on how students were performing.

A Tech Prep coordinator at the secondary level affiliated with a professional secretary program commented that

feedback from the instructors of the more advanced level college courses was the most relevant feedback for instructors of the basic courses at the secondary level. Also vital in determining effectiveness was feedback from business and industry people. [We] plan to conduct formal surveys as students enter the workforce, as well as solicit feedback from parents and counselors.

A college faculty in the same program described how they used information from the Texas Employment Commission to track where students are employed and the types of positions they are holding.

A technical training foreman involved with a process technology program indicated that

human resource staff and manufacturers provide feedback on students who had been placed in their industries. Students are asked to complete written evaluations twice during the course of



their program. Students' job placement rates, course availability, and diversity among program students were also used as indicators of effectiveness.

A supervisor of operations and training in industry stated that they sought feedback from students, instructors, and employers where the students are placed.

An industry training project manager affiliated with an aerospace program, stated

effectiveness is measured by working with the students and getting a feel for what they can do.

A community college dean indicated that

the contractors with whom students did their internships would provide input on student progress. Additionally, program effectiveness is judged by evaluations from students and employers, and from job placement rates.

A head of a space flight division commented that

[l] would go and observe classrooms to check on the progress of students. The number of high school and community college students participating in the program are also good indicators.

A high school teacher in a graphics and design program finds that effectiveness can be measured by the number of high school students participating in the program and the number of articulation agreements.

A community college dean added

feedback on the program is provided by the program advisory committee, high school faculty, and from vocational directors at high schools. [We] also plan to measure effectiveness by examining the job placement rate and through surveys of employer satisfaction.



Survey data revealed that respondents focus on articulation agreements with two-year colleges and job placement rates as the primary indicators of the effectiveness of their program curricula. The interviews added a broader perspective of the range of indicators used to measure effectiveness: the number and diversity of students in programs, the retention rate of students at the two-year college, the GPA of high school and community college Tech Prep students, passage rates on licensure exams, exit surveys of students, and employer surveys.

Clearly, a number of process as well as product indicators are used as indicators of the effectiveness of Tech Prep program curricula. Noticeably absent from this list of indicators are longitudinal student outcome assessments measuring the development of skills and abilities, values and attitudes from the beginning to the end of a Tech Prep program.

Program Improvements

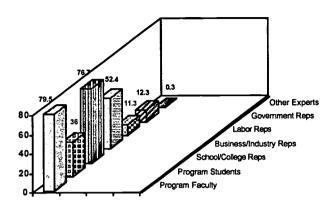
One of the questions on the survey asked respondents to indicate what groups are currently involved with improving their Tech Prep program curriculum. The groups most involved in the improvement process are: program faculty (79.5%); school/college representatives (76.7%); and business/industry representatives (52.4%) (See Figure 13).

The phone interviews provide much richer descriptions of the types of program improvements that were undertaken.



Figure 13. Curriculum Improvement.

Groups Involved in Curriculum Improvement



The division chair in a associate degree nursing program spoke about

always looking for more ways to articulate with area high schools. [I'm] looking at reconfiguring the nursing aide program into a Tech Prep format.

A Perkins coordinator involved with a vocational nursing program detailed how their program had been enhanced by adding advanced skills courses related to border health as well as public health and cultural issues.

A director of career and technical education stated they

created a health academy magnet high school, remodeled facilities, changed teachers' schedules, and received release time for teachers to work on the development of the magnet school.

The health academy is part of a national study of academies. As a result of discussions with other academies, they have made many program improvements.

The director of the surgical tech program outlined how there had been a



multimillion dollar renovation of facilities, with 1600 square feet devoted to operating room suites. Increased funding has been provided to the program, and hospitals have donated operating room lights and film, and four part-time faculty have been added to the program.

A community college dean overseeing a management information technology program stated

the department staff meet on a weekly basis to update articulation agreements and to increase the number of schools with which they are articulating.

A community college administrator, in discussing improvements to a management development program, commented

Every year I thought it couldn't get any better and every year it did. It was just great!

An industry representative in the same program provided another insight into what has made the program successful.

Ownership was in the hands of teachers, who have a vested interest in seeing the program succeed. The teachers study the content, and revalidate it with community resources.

A high school Tech Prep coordinator commenting on a professional secretary program added

[We] have developed a number of options that students can apply their articulated credit towards, including a certificate program in word processing, medical transcription certificate program, as well as the associate of applied science degree with the advanced skills component, and a professional secretary AAS program with a legal option.

An industry supervisor of operations and training indicated that, as part of the process technology program, they were developing a process



troubleshooting course that would be offered all over the world through distance learning modalities.

A technical training foreman in the same program described

a student tracking system created by a vendor that tracks student mastery of competencies and test scores. It is also capable of monitoring student attendance and program demographics.

A community college associate dean described how all faculty in this program are required to take a course on Interactive Instruction Techniques before being allowed to teach in the program.

A community college dean involved in a graphics and design course proudly announced that

the program has grown in three years from 25 to 130 students.

Vocational/technical education programs in Texas have been improved as a result of Tech Prep education reform in a variety of ways. The types of program improvements mentioned by individuals in the phone interviews included: adding advanced skills courses, changes in teachers' schedules, renovation of facilities, increased program funding, the addition of program faculty, updating of articulation agreements, increased program options, and the creation of student tracking systems.

Along with these improvements to already existing programs, entirely new vocational/technical programs have also been developed as a result of the impetus of Tech Prep educational reform. Taken together, the creation of new programs, and the improvements to existing programs, provides evidence of the

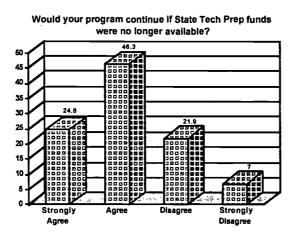


impact that Tech Prep has had on the improvement of the Texas workforce development system.

Future of the Programs

Two questions on the survey asked respondents to comment on the future of their Tech Prep programs. When asked if they believed that their Tech Prep program would continue if state Tech Prep funds were no longer available,

Figure 14. Program Institutionalization.



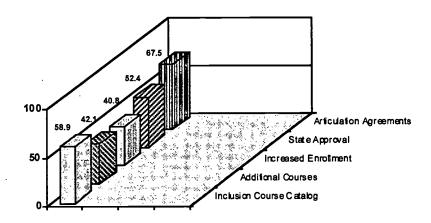
more than two-thirds of respondents (71.1%) agreed or strongly agreed that their program would continue (See Figure 14).

When asked to point to indicators of the permanency of their program, the most frequently mentioned indicators of permanency were: articulation agreements (67.5%); program inclusion in the course catalogue (58.9%); state approval of the program (52.4%); additional course offerings (42.1%); and increased program enrollment (40.8%) (See Figure 15).



Figure 15. Indicators of Institutionalization.

Indicators of Institutionalization of the Curriculum



Greater detail about the beliefs of respondents regarding the future of their Tech Prep programs is provided in the phone interviews.

The division chair of nursing in an associate degree nursing program strongly agrees that the program would continue without TP funds and expects increased enrollments in the college's Tech Prep; while a health occupations coordinator of a vocational nursing program felt that the school district is committed to the program.

The Perkins coordinator thought that

the program would continue without state Tech Prep funds, since the program is partly supported with the basic institutional allocation of Carl Perkins funds.

A district career counselor indicated that their surgical tech program will continue



because Tech Prep has helped make connections between secondary and postsecondary sectors and business and industry. But [we] need money to continue getting teachers involved in job shadowing and for creating new programs, which may not be available when Tech Prep funds are removed.

A coordinator of hospital staff development also stated that although finances and money are always needed, she feels that her community college is committed to the program.

In describing the future of the management information technology program, a high school administrator stated

the lab cost \$70,000, so with that much of an investment [we] won't eliminate the program. [But] until Tech Prep is on the state's report card, the schools won't go at it wholeheartedly. Tech Prep programs will continue because Tech Prep is about making school relevant.

A university professor in the same program believed that

the program would continue at the college level without Tech Prep funds, but that it's less likely at the high school level, since the Tech Prep consortium was paying the high school teachers for classes being taught for college credit.

A community college curriculum coordinator disagreed with this assessment, arguing that

the number of Tech Prep students is small, and in some cases, the courses would require adding dollars to support them, and the school is not ready to do that. At the program level there may be faculty to teach the courses, but no equipment to do so. The advanced certificate program would be the weakest part, since no funds have been put into this.

A high school teacher, in referring to the future of the management development program, stated that

there is a great likelihood that the program will continue, since every year there is an increase in enrollment, and it is accepted by



the community. The teachers are in favor of the program, and that there are even inquiries from other schools about their program.

A community college administrator in referring to the future of the same program countered that

there is no evidence that there is an infrastructure in place to support the program after Tech Prep funds are removed. It takes a tremendous amount of coordination and that is what Tech Prep does. It would not be as effective without Tech Prep. I would recommend that there be a full-time, permanent coordinator.

A college faculty in the same program concurred that the management development program would continue without Tech Prep funding, but that it would be hard.

An industry representative had a different viewpoint about the future of the management development program.

Teachers fight for the program because they have pride in it. The curriculum has rigor and depth, and is a collaborative effort, which makes it a robust curriculum, not easily dismissed as a fad. The program is institutionalized. School folk think it is vital to have integrated learning. There are too many right things, too much ownership, buy-in, and the resources are available to renew the curriculum. The program has demonstrated its effectiveness through the growth in the number of students, parents believing in its usefulness, and the curriculum having been validated by business and industry.

A college faculty in a professional secretary program argued that funds are needed to keep up with technology and the curriculum, and that the program would not continue without Tech Prep funds.

There was much more consensus about the future of the programs in the engineering technology pathway.



A supervisor in operations and training indicated that he felt their process technology program would continue with Tech Prep funds because

the program is industry driven and industry has a lot at stake and a lot to benefit from hiring students.

A training consultant in industry concurred with this assessment of the future of this process tech program, stating

scholarships have been established, and there are more job offers than they know what to do with.

A plant manager agreed that there is enough interest in the program that it would continue without Tech Prep funds to some degree.

A similar optimism was expressed by individuals affiliated with an aerospace program.

An industry training project manager commented that

the word is out about the program and others now want to participate. Companies continue to support the program by hiring students in the summer months.

A community college dean said

the program is included in the course catalogue, new staff and courses have been added, funding is adequate, the state has approved the program, the program has been accredited, and there are articulation agreements with the high school and neighboring university. The program will continue regardless of Tech Prep funds.

The head of a space flight training division concurred, indicating that the aerospace program has become a permanent part of the college curriculum, and that it is to the community college's benefit to keep the flow going.

Finally, in discussing the future of a graphics and design program, a high school teacher related that



the program has been included in the catalog, there are additional course offerings, there is increased enrollment, and articulation agreements. The number of classes offered per semester has grown from one to six to accommodate students. The program will continue without Tech Prep funds because no state funds were used to modify the program.

The majority of survey respondents agreed or strongly agreed that their Tech Prep program would continue even after state Tech Prep funds were no longer available. This suggests that the majority of the Tech Prep program have become institutionalized, and will continue to be supported by the institutions in which they are located even without Tech Prep funds from the state.

Although the future of many Tech Prep programs appears secure, the phone interviews provide some insight about things which might be jeopardized if state funds were no longer available. These include money to continue having teachers involved in job shadowing, the creation of new programs, money to buy equipment, support for advanced certificate courses, and coordination in support of overall Tech Prep efforts.

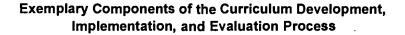
Exemplary Components

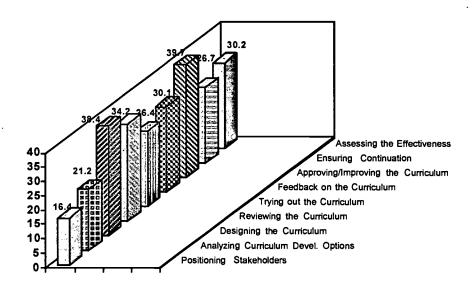
Using the components of the SPECAP Curriculum Development Model, survey respondents were asked to indicate what components of their curriculum development and evaluation process they considered to be exemplary. Of the nine components of the model, the three most frequently mentioned by respondents as exemplary are: approving/improving the curriculum (39.7%); designing the curriculum (38.4%); and reviewing the curriculum (34.2%) (See Figure 16).

46



Figure 16. Exemplary Components.





A divison chair in nursing commented that she believes

the strength of her Tech Prep nursing program comes from the program faculty who are open to ways to work with high school faculty. The community college faculty spent a lot of time working with high school faculty. They gave them competency profiles, and offered college resources to health occupations teachers, including audio-visual materials and computer technology.

A health occupations coordinator involved with a vocational nursing program commented that they were

the first Tech Prep approved nursing program in Texas. It was a faculty driven process with lots of buy-in. [We] had the luxury of release time to make bridge building in the community possible. The school allowed this out of their own funds. Classroom teachers are often locked into a classroom all day, and need community liaisons to break the "ivory tower" syndrome.



The diversity of the students in the program is an exemplary component. Many of the students are first generation students from homes without indoor plumbing. Ninty-nine percent are minority from low SES backgrounds. Eighty percent have parents who have not graduated from high school, and where English is not spoken at home.

The Perkins coordinator, in discussing the strength of the same program, mentioned that the program is strong because of the efforts that were made to enhance the curriculum with border health courses.

A community college director of career and technology education added that the relationship between high school and college faculty and administration is outstanding.

If we see a problem in the curriculum, we immediately correct it without the red tape. This is a good hands on program with plenty of opportunities for students to be in the real world with adults as role models. Students mature, become focused, and their grades go up as they see why they need algebra and speech and writing. They also see what jobs are out there in the hospitals.

Tech Prep has its place and it is an important resource. It helps build linkages and not duplicate efforts. Because of Tech Prep everything is running smoothly.

In discussing the exemplary components of a surgical tech program, a district career counselor mentioned

job shadowing, where biology and occupational teachers went to a prosthetics firm, and developed units of study based on their visit. And the teacher training, where secondary and postsecondary teachers shared how they taught the medical terminology class, and showed each other how to use computer programs. Also, there are ongoing conversations between high school and community college faculty. Partnerships make the Tech Prep programs work.



The director of the surgical tech program felt the exemplary component had to do with the faculty and administrators involved with the program.

People are dedicated. The associate dean empowers directors and encourages free thinking. The part-time faculty produce a quality product, where the community is the customer.

A high school coordinator of health science technology added that their exemplary component is dual credit which greatly enhances student participation.

Students can transfer credit to four-year colleges if students go out of the area. Dual credit gives the medical terminology class status, and the course is moving to the honors program.

A coordinator of hospital staff development found exemplary that

people are committed to adult education -- flexible and open to new ideas. This openness is a tribute to the faculty.

Exemplary components were also identified by those individuals interviewed in business-related Tech Prep programs.

A high school administrator cited a number of factors which he considered exemplary in their management information technology program.

Our partners are so valuable to us because that's where we learn what is relevant. The career pathways program is outstanding. It has been presented at numerous schools and conferences. There is good feedback from outside the school that the program is exemplary. They also have published a career pathways booklet that shows graduation plans.

A university professor affiliated with the same program commented that

the curriculum is exemplary. Tech Prep's networking with business and industry, getting the experts, was exemplary. The Tech Prep director was instrumental in getting people together. She's a master of networking.



A community college curriculum coordinator indicated that positioning the architects was the most exemplary component of the same program.

There is continuing contact with employers. We have an outstanding department head who is knowledgeable and dedicated. He has been involved in the initial management program 8-10 years ago and he keeps up with developments in the industry.

In referring to a management development program, a high school teacher praised the Tech Prep consortium.

They keep us all glued in together. The feedback is also excellent because the Tech Prep consortium, the colleges, and the schools all communicate.

In referring to the same program, a community college administrator stated that

all the components are exemplary. It was started from scratch based on what industry wants. Students are active in the process, reporting their accomplishments and achievements to the college board. Some of the schools have received special grants, and brought Tech Prep programs into their schools. I like the idea of a seamless curriculum, because then the students win, and the schools, industry, and college wins.

An industry representative also cited the collaborative aspect of the management development program as exemplary.

The program is the result of a collaborative effort. The development was broad-based with input from community sources and resources who took the consortium idea to heart in that it was a collaborative, broad-based, with expertise and wisdom from many areas of the county. People take pride in the program. Collaborative leadership in teams leads to valid courses, and thousands of students who are better prepared.

A high school teacher had high praise for the management development program.



I think it's a wonderful program. I've seen the positive effects on students who thought they couldn't go to college and did. There is a good relationship between the high school and college. The high school teachers and professors are 'meeting as equals'. I like the program, and think it is one of the better things we've come up with in the last few years when we tried to improve education.

In critiquing a professional secretary program, a college faculty member commented that

their positioning of the architects and review of the curriculum are particularly exemplary. They are constantly looking forward to ways to make things better. They have 'super' people in business who provide feedback and help in any way they can.

A Tech Prep coordinator at the secondary level added that analyzing curriculum options and designing the curriculum are their most exemplary features, and believes

Designing the courses around the essential elements was a strength of the curriculum development process.

The interviewees in engineering-related technology programs brought out a number of features that they considered exemplary in their programs.

A technical training foreman in a process technology program felt that the positioning of the stakeholders, the feedback, and the assessment components are most exemplary. He cited a Houston based company that made modifications to an employee training record system to track student mastery of competencies in their Tech Prep programs.

The key to Tech Prep is partnerships between educators and industry members.

54

He praised the fact that one of the chemical companies loaned the community college an employee for 18 months at 80% time at the college to help



implement the program. The "loaned" employee's time at the college was gradually phased down to 10% at the college. The salary for the "loaned" employee was paid for by the college with the company supplementing his pay and benefits to equal his regular salary with the chemical company.

This individual was a key factor, and it would have taken much longer to implement the program without this arrangement with the company.

He also noted that

students need to be made aware of professional opportunities so that they become motivated. Tech Prep helps to open students' eyes and motivates them, which in turn impacts dropout rates. Educators need to emphasize that individuals need to make a living, and need to connect schooling with where students see themselves going in their lives. Tech Prep does this and that is a step in the right direction.

A supervisor in charge of operations and training affiliated with the same process technology program stated that there were a number of exemplary components to their program. He believes

industry support and commitment is the key. He has made presentations on the program throughout the U.S. and there are not programs out there like this. All seven petrochemical plants have been supportive, hiring students from the program. The ability to attract female and minority students is another exemplary component, as is the quality of the instructors on their staff. All the classes are taught by adjunct faculty who are current or recently retired industry employees.

Some of these exemplary components were also cited by a training consultant in the same program.

This is the first time in the history of this city that all major companies came together to create something for all to use. Plants gave people and time.



A plant manager indicated that the success of the same program is

based on commitment -- an industry driven curriculum. Sometimes individuals from industry worked on the advisory committee full-time at industry's cost as advisors and faculty.

A community college associate dean cited nine features of the process technology program that he believes make it exemplary

- significant industry involvement
- industry providing individuals to work on these projects
- a DACUM based curriculum with specific outcomes
- an annual retreat to evaluate the program
- implementation of a continuous improvement model
- student/faculty input; industry evaluation
- a competency-based transcript
- a project review update sent to industry; and,
- vendor cost breaks on training materials.

In summing up the key to the success of this program, he believes that

dialogue with industry has been essential. Some institutions are sadly mistaken to think that they can do it alone. Technology moves too quickly.

Similar comments were heard from individuals interviewed in an aerospace program.

An industry training project manager indicated that

industry was involved in developing two of the courses in this program. That's what makes this program good. And, there was lots of good support from the schools -- working as a team.



A community college dean in the same program felt there were five features that help make their aerospace program unique

- an introductory course written by industry
- a summer industry internship
- a capstone course
- regular consortium meetings; and
- very good industry support.

In analyzing the strength of his graphics and design curriculum, a community college dean indicated that analyzing the curriculum options and designing the curriculum were exemplary components.

The program was greatly enhanced by the DACUM panel of industry experts who indicated what skills and abilities were to be covered in the Tech Prep program.

The exemplary components of Tech Prep curriculum development efforts center on the benefits of collaboration and its effects on the curriculum. The phone interviews elaborated on some of these positive consequences of collaboration that included: the increased communication between high school community college faculty, increased communication between and representatives of the education and business and industry sectors, the elimination of redundancy in the curriculum, and the improvements in the relevancy, validity, and comprehensiveness of Tech Prep curricula. Clearly, collaboration and partnerships are widely viewed as the essential ingredients in the success of Tech Prep program curricula.



Areas for Improvement

Although a question on areas of curriculum development and evaluation in need of improvement was not asked on either the survey or on the phone interview protocol, a number of comments were made by individuals interviewed that fall into this category. These comments will be highlighted, since they have obvious implications for the recommendations to improve policy and practice to be covered in the final section of this report.

A college faculty involved in teaching in an associate degree nursing program, believes that

more communication between high school and community college faculty is necessary focusing on the desired student outcomes. We looked at competencies at an administrative level, without a whole lot of communication at the level of the faculty. I feel that more communication would increase the number of high school Tech Prep students that enroll at the community college level.

A health occupations coordinator in a vocational nursing program is concerned that the intake counselors at the community college are not all that familiar with Tech Prep programs, and that there is a problem with turnover among the counselors.

A college faculty member involved with a management development program echoed a similar concern.

One of the biggest difficulties are the high school counselors. They should be able to identify the students to go into Tech Prep. The counselors need to believe in it and be sold on it and not fight it. School administrators and teachers work well with it -- but not the counselors. They are more concerned about getting students to college -- but many students will not be going.



A Tech Prep coordinator affiliated with a professional secretary program mentioned a similar concern.

Counselors are not as involved in Tech Prep programs as they should be. Students need to be informed at the seventh and eight grade about their options in Tech Prep.

Finally, a slightly different perspective was expressed by an technical training foreman in the process technology program.

The associate dean at the college was stretched too far to provide attention to program development. It takes an industry person to spearhead this. Education is spending time and resources on general education. This effort is wasted, because students don't have any direction.

The most frequently mentioned area for improvement in the future development of Tech Prep programs is the involvement and support of high school and community college counselors. Individuals interviewed by phone indicated that there were a number of problems involving counselors, including: the lack of familiarity of community college counselors with Tech Prep programs, high turnover of counseling staff, and a lack of counselor support for Tech Prep options at the high school level. These concerns underscore the pivotal importance of counseling staff in supporting Tech Prep efforts at both the high school and community college levels.

Monograph

The monograph, *The Texas Tech Prep Consortia: Strategies for Advancing Technical Education,* provides an overview of the strategic planning policies and procedures that the state of Texas and its Tech Prep consortia used to develop Tech Prep programs. Currently, Tech Prep practitioners across



the state of Texas and the country need documented examples of strategic planning that have lead to the development of Tech Prep programs that make higher education more affordable and accessible to public school and college students through seamless options and multiple opportunities. The 30 papers in this SPECAP monograph provide documentation of the impact strategic planning has had on the development of the Tech Prep system in Texas. The contributors to the monograph include Tech Prep stakeholders selected from throughout the state, as well as the principal investigators of the SPECAP Research Group.

The SPECAP monograph documents the impact of planning, marketing of programs, and institutionalization on the success of Tech Prep programs within the state. The Texas Tech Prep Consortia: Strategies for Advancing Technical Education provides a series of diverse pictures of what has happened to the workforce development system in Texas since the advent of Tech Prep. The monograph recognizes and describes exemplary programs so that their policies and practices can be disseminated to a wider state and national audience.

In addition to disseminating the findings generated by SPECAP researchers, the monograph publishes papers contributed by presenters to the 1996 Texas State Tech Prep Conference. This conference is sponsored each year by the Tech Prep Director's Association of Texas to share ideas about Tech Prep among thousands of Tech Prep stakeholders. At the 1996 Texas Tech Prep State Conference, more than two hundred papers were presented to



several thousand conference participants. In the spring of 1996, SPECAP researchers asked their advisory council to nominate the top papers from this group of 200 that described the best examples of exemplary strategic planning in developing Tech Prep. Fifty-six papers were identified by either the advisory council or by the SPECAP Research Group for possible inclusion in the monograph. The authors of these 56 papers were sent a letter soliciting their paper as a possible chapter in the monograph. The letter sent to the presenters at the 1996 Tech Prep State Conference can be found in Appendix J. Manuscripts were submitted for possible inclusion in the monograph through a peer review process.

Another group of contributors to the monograph included the Tech Prep consortium directors, and others that had a statewide perspective on the development of the Tech Prep system. Letters requesting contributions to the monograph were sent to all 25 Tech Prep consortium directors, as well as to other individuals identified by our advisory council as having a statewide perspective on Tech Prep. The letter sent to these individuals can be found in Appendix K. After a peer review process, eight of the manuscripts were selected for inclusion in the monograph.

All the manuscripts selected for inclusion in the monograph went through a two-step peer review process. Every manuscript submitted for inclusion in the monograph was first read by the SPECAP editorial staff, consisting of four members of the SPECAP research staff. Each of the SPECAP reviewers used a standardized protocol in reviewing each of the manuscripts, and assigned a



point total to each manuscript based on standard criteria. The protocol used in reviewing each manuscript can be found in Appendix L.

After the in-house review, each manuscript was sent at random to two different outside reviewers--individuals who had submitted a manuscript for possible inclusion in the monograph--ensuring that no individual reviewed his/her own manuscript. These outside reviewers used the same protocol used for the in-house review found in Appendix L. After receiving the outside reviews, the SPECAP editorial staff averaged the point totals for all the reviews conducted on each manuscript. The twenty-nine manuscripts receiving the highest average point totals in these reviews were included in the manuscript. The manuscripts that were accepted were formatted and proofed by the editorial staff, and galley proofs were sent to each chapter author for final proofing before they were sent to the printer for printing and binding.

Two copies of the monograph will be sent to each of the twenty-five consortium directors, and state agency staff, and one copy will be sent to each individual who had a manuscript accepted for publication in the monograph. An electronic copy of the monograph will be sent to Tech Lynx, the state clearinghouse for Tech Prep materials, and a copy will be sent to the Eric Clearinghouse on Community Colleges for inclusion in the ERIC system. Remaining copies will be mailed on a first-come-first-serve basis to those individuals who request a copy of the monograph.

Table 1 shows the table of contents, and indicates the scope of coverage of topics included in the monograph.



Table 1. Monograph Table of Contents

The Texas Tech Prep Consortia: Strategies for Advancing Technical Education Preface

Hensley, O.; Opp, R.; Cooper, P. & Rivers, B. Acknowledgements

I. An Introduction to Tech Prep in Texas

The Identity of Tech Prep in Texas
 Tunstall, Ken

II. Consortia Contributions

- The Tech Prep Consortia Directors: The Architects for the Future of Texas
 Hensley, Oliver, Opp, Ronald, & Cooper, Pamela
- Tech Prep: Jewel in the Crown
 Pickle, Douglas L.
- Synthesis of Literature Related to Tech-Prep Outcomes
 Key, Cassy
- North Texas Tech Prep Consortium
 Vaughan, Ramona
- 6. The Rationale for Tech Prep in the Panhandle of Texas

 McGee, Lynn

III. Independent School District Collaborations

7. The Seguin Center for Career Excellence
Lawlis, Janette



- 8. Career Preparation Today for Tomorrow
 Elmore, Geralyn
- Making Our Students Marketable
 Schatz, Gene
- Collaboration at its Best
 Pfeifer, Jeri
- Career Pathways: A Holistic Approach
 Sanford, Patsy
- Shadowing Programs for Small Rural Communities
 Wendt, Charles
- IV. Community College and University Advancements
- 13. Apprenticeship Training: The Electromechanical Technology and Agricultural
 Science and Technology Connection
 Lovelady, Jim
- 14. Transfer Planning Guides: A Southwest Texas Approach to Transfer OpportunityDe Leon, John E.
- 15. Working with Senior State Institutions to Establish Transfer Credits for VariousDepartments and MajorsSpringer, Stephen
- V. Curriculum Development
- SCANning The Curriculum: Teaching Workplace Skills
 Hull, Pamela
- 17. Integration of Academics with Career and TechnologyThrough Development of Community ContactsDuke, Sarah



- 18. Epistecybernetics: A New Way of Thinking about Developing, Articulating, and Evaluating Tech Prep Curricula

 Hensley, Oliver & Rivers, Bethany
- 19. The Calculus Knowledge Register for Tech PrepSisler, Peter
- VI. Government Strategies for Tech Prep Advancement
- 20. Creating an Information, Market-Driven Education and Workforce Development System: The Role of Labor Market and Follow-up Information Froeschle, Richard
- 21. An Analysis of Tech Prep Strategic Planning Hensley, Oliver, Opp, Ronald, Cooper, Pamela; Rivers, Bethany, & Stewart, Gloria
- 22. A SWOT Analysis of the Texas Approach to Tech Prep Development Opp, Ronald D.
- 23. Tech Prep, the English Translation: An American Health Occupations Teacher Visits London to Share Tech Prep Tips Sutliff, Lynda
- 24. The "Summer Jobs for Youth" Program: An Investment in the Future Well Worth
 the Price
 Bloomquist, Denise M. & Lackey, Cynthia
- VII. Industry & Tech Prep Partnerships
- 25. The Importance of Private-Sector Leadership in Tech Prep Academic and Technical Education
 Maldonado, Cesar & Pat Bubb
- 26. Motorola Career Pathways Program: From School-to-Work to Workforce DevelopmentGreen, Sharon Knotts



- 27. Work that Educates: How to Make Structured Work-Based Learning Work

 Egloff, Robert
- 28. Dialogue Between Educators and Industry: The Link to Institutionalization of Tech Prep Programs
 Krause, Steve
- VIII. Economic Development from Tech Prep
- 29. Education, Technology and the World of Work: Creating the Future Schmitz, Charles & Schmitz, Elizabeth About the Authors
 References

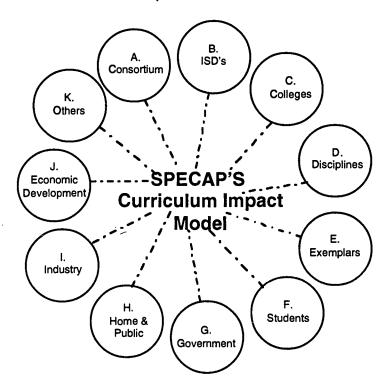
Handbook

The purpose of the document collection and analysis process was to create a handbook of sample curricular documents that Tech Prep practitioners could use as models in developing and evaluating their own program curricula. The handbook has been designed to organize and codify the primary curricular documents involved in the curriculum design and evaluation process for Tech Prep programs.

To organize the handbook, a model showing the impacts of the Tech Prep curriculum on different sectors has been used as the conceptual framework. The model used to organize the handbook is illustrated in Figure 17. The Curriculum Impact Model consists of 11 different sectors: consortia, independent school districts, colleges, disciplines, exemplars, students, government, home and public, industry, economic development, and others.



Figure 17. SPECAP Curriculum Impact Model.



Using the classification system created in the document analysis process, each document found in the handbook has been categorized as pertaining primarily to one of these eleven sectors. For example, a document containing minutes from a high school program advisory council meeting has been placed with the documents pertaining to the independent school district sector within the handbook.

The fundamental purpose of the handbook is to provide a comprehensive sampling of the diverse types of curricular documents utilized in designing and evaluating Tech Prep program curricula. The handbook has been designed so that practitioners involved in developing and evaluating Tech Prep curricula within all the major sectors have a ready source of models that



they can adapt in designing and evaluating their own Tech Prep program curricula. Using the Curriculum Impact Model, the handbook has been organized so that individuals in the different sectors involved in Tech Prep curriculum development and evaluation may find curricular documents of relevance to their sector in one location.

A total of ten copies of the handbook will be mailed to each of the Tech Prep consortium directors for dissemination to individuals within their consortia involved with curriculum development and evaluation. Additional copies of the handbook will be mailed to state agency representatives involved in overseeing Tech Prep curricular development in Texas. An electronic copy will be mailed to Tech Lynx, for inclusion in their state clearinghouse on Tech Prep materials, and a hard copy will be mailed to the ERIC Clearinghouse on Community Colleges, for inclusion in the federal ERIC system. Selected information about the handbook will also be placed on the SPECAP Home Page.

Final Report

This final report is designed to describe all the activities of the SPECAP Research Group over the 1995-96 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, site visits, phone interviews, and survey. Also included in the final report are descriptions of the products created by the SPECAP Research Group, including the handbook, monograph, final report, conference presentations, and the creation of the home page. 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 Tech Prep curriculum development and evaluation in Texas.

Five copies of the final report will be 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 will be sent to Tech Lynx for inclusion in the clearinghouse on Tech Prep in Texas, and a copy will be sent to the ERIC Clearinghouse on Community Colleges for inclusion in the ERIC system. An overview of the final report will be made available on the SPECAP Home Page to those with access to the Internet, and additional copies of the final report will be made available upon request from the SPECAP Research Group.

Other Means of Dissemination

There were a number of means of disseminating the findings of the SPECAP Research Group other than through publication of the monograph, handbook, and this final report. Other methods of dissemination included making presentations at state and national conferences, and by disseminating information about SPECAP products and activities electronically through the creation of a SPECAP Home Page. The sections that follow will discuss these other methods that the SPECAP researchers used to disseminate information.

Conference Presentations

The SPECAP Research Group presented their findings at two major conferences: the 1996 Texas State Tech Prep Conference in Austin, Texas,



March 27 - 30, 1996, and at the Workforce 2000 Conference in Atlanta, Georgia, January 31 - February 2, 1996. The presentation for both conferences focused on describing exemplary policies and practices in strategic planning used by Tech Prep consortia in Texas, based on findings from last year's grant activities. A Powerpoint slide presentation was prepared for the purposes of these conference presentations. A shorter version was used at the September meeting of the Texas Tech Prep Director's meeting. These presentations helped to disseminate the findings and activities of the SPECAP Research Group to a wider state and national audience. An overview of this presentation has been placed on the SPECAP Home Page that is described in the section that follows, and a copy will be mailed to Tech Lynx, for inclusion in their state clearinghouse on Tech Prep activities. A copy of the Powerpoint presentation on an IBM formatted disk is available upon request from the SPECAP Research Group to individuals or groups interested in using the slide show as part of their own presentations on strategic planning in Texas.

Development of SPECAP Home Page

A SPECAP team member has designed and implemented a SPECAP Home Page describing the activities and displaying the products of the SPECAP Research Group over the last two grant years. The web page includes an introduction, selected portions of the handbooks that have been produced in 1995 and 1996, the table of contents from the SPECAP monograph, an overview of a Powerpoint presentation on strategic planning,



the vitae of the principal investigators in the SPECAP Research Group, along with page links to other web sites describing information related to Tech Prep.

With the insertion of the site address into several databases, several million people have access to the SPECAP Home Page, and an estimated two to three thousand hits a day are expected. The author has linked the SPECAP Home Page to several other education and Tech Prep organizations, and more links are anticipated.

The long-range plan for the SPECAP Home Page is to allow for electronic dissemination of all research and information produced by the SPECAP Research Group, with links provided to governmental organizations such as the Texas Higher Education Coordinating Board, the Texas Department of Commerce, and the Texas Education Agency, as well as links to educational organizations such as community colleges in Texas.

Creating a SPECAP Home Page provides users in other states and around the world a chance to learn more about the Texas approach to Tech Prep strategic planning, curriculum development and evaluation, and performance assessment. The Home Page is seen as a supplement to hard copies of the products that SPECAP researchers create, allowing for cost effective dissemination of products and information to a much wider audience than would be otherwise possible through non-electronic means. The SPECAP Home Page is now operational, and may be accessed at the following web site address:

HTTP://www.ttu.edu/~specap



Conclusions and Recommendations

Tech Prep educational reform has had a significant positive influence on the workforce development system in Texas. The data gathered by the SPECAP Research Group demonstrate that a number of vocational/technical programs have been improved, and others created from scratch, through the impetus of partnerships stimulated by Tech Prep funding. It is axiomatic that educators tend to pay attention when the federal government provides money to develop components of the educational system, and Tech Prep funding through the Perkins Act is no exception to that rule.

Tech Prep funding has captured the attention and the commitment of educators in the secondary and postsecondary levels, who in turn have worked successfully to develop partnerships with the business, industry, labor, and government sectors to improve the workforce development system in Texas. These partnerships have been the catalyst to improve the system, and would not have occurred on such a scale without the availability of Tech Prep funds. There are now new vocational/technical programs not previously available, many new options and improvements to previously existing programs, and new workforce education components that are the direct result of Tech Prep funding and the attention that it has generated on improving vocational/technical education in Texas.

One observation about the many benefits of Tech Prep educational reform is that they tend to be hidden by the aggregate numbers collected by state agencies responsible for tracking Tech Prep programs. Data is readily



available to indicate how Tech Prep educational reform has resulted in the growth in the number of students enrolled in Tech Prep programs at both the secondary and postsecondary levels. Growth in numbers is viewed by state representatives as a good proxy for the effectiveness of Tech Prep educational reform. The assumption is that if Tech Prep enrollments are steadily increasing, then students and their parents must view Tech Prep efforts as an option worthy of their participation. These student enrollment numbers, along with trends showing the growth in the number of approved programs and approved options to programs, are used to justify continued funding for Tech Prep programs by the state.

Aggregrate data do not indicate many of the benefits of Tech Prep educational reform. Most noticeably with the phone interviews and the site visits, SPECAP researchers learned first hand the more subtle, less easily measurable benefits of Tech Prep educational reform. Tech Prep practitioners informed us of the many improvements that they have made to their vocational/technical programs as a result of Tech Prep funding and the ensuing partnerships that have been created with other sectors, notably business and industry. Other practitioners described how Tech Prep funding served as a catalyst to create new programs that resulted from communication between secondary and postsecondary representatives talking with business and industry about what they needed to help develop the workforce in their regions. The synergy created by partnerships between sectors, that may not have had much communication with one another prior to Tech Prep educational reform, is



a powerful force that is not easily captured in data on student enrollment and growth in programs.

One recommendation that we make is that the state continues efforts to capture these more subtle benefits of Tech Prep educational reform through site visits, phone interviews, and other methods of qualitative data gathering, along with its continuing efforts to document growth in student numbers and approved programs. Without this qualitative data, one does not have a complete picture of the full range of benefits that Texas has enjoyed as a result of Tech Prep educational reform.

A second observation is that Tech Prep programs in Texas have developed in each of the twenty-five consortia with minimal regulation and control by the state. SPECAP researchers were unable to gather data from the Texas Higher Education Coordinating Board, or from any other state agency, regarding the number of students enrolled in Tech Prep programs by career pathway or by program. All data on Tech Prep student enrollments is aggregated by level, and by institution, but is not readily available by program at the postsecondary level, or even by broad career pathway at the secondary level. This makes it difficult to conduct research focusing on particular career pathways, and to track trends in student enrollments and program development within broad career pathways.

Should Texas want to lay claim to having a state system of workforce development, such data would seem to be essential. Without such data, it is difficult to know if there is duplication of effort in program offerings in one region



of the state, or gaps in program offerings in other regions. It also makes it difficult to compare competencies across similar programs in different regions of the state, which will become increasingly necessary if the state is to move to a system of skills standards for measuring program effectiveness. To remedy this deficiency, the SPECAP Research Group recommends that the state begin gathering, and making data available, by program area and career pathway, as well as by institution and level.

A final observation flows from the concerns expressed by a number of individuals interviewed about the pivotal role of counselors in Tech Prep educational reform. From the very outset of the Tech Prep effort, experts argued that high school and community college counselors needed to play a crucial role in providing advice and information to students about the Tech Prep option. As the Tech Prep system has evolved, the role of counselors has become even more pronounced. A number of individuals interviewed noted that counselors needed to spend more time providing information to students in junior high school about the Tech Prep option. Other individuals mentioned that high school counselors were not always as committed to the Tech Prep option as they were about the college prep option. Still others noted that community college counselors were not always aware of the Tech Prep option, and that counseling staff turnover sometimes made it difficult to provide smooth articulation between the secondary and postsecondary levels for students.

These concerns underscore one of the key growing pains of the Tech

Prep educational reform effort. Counselors are in a pivotal position to continue



the institutionalization of Tech Prep programs, or to subtly undermine such efforts. The concerns of Tech Prep practitioners that counselors need to be advocates of Tech Prep educational reform is a very real one, and an issue that needs to be addressed if Tech Prep is going to continue to grow and flourish. Based on these findings, the SPECAP Research Group recommends that the state double its efforts to provide money for staff development targeting high school and community college counselors. Dedicating resources to making counselors advocates for the Tech Prep option is an essential element in advancing Tech Prep educational reform in Texas.



APPENDIX A

ADVISORY COUNCIL: LISTING OF ADVISORY COUNCIL

MEMBERS



SPECAP Advisory Council Members 1995-96

Ms. Myrna Albin Vocational Specialist Ysleta ISD El Paso

Mr. Robert Franks Director, Tech Prep at Navarro College Corsicana

Mr. Luis de la Garza Director, South Texas Tech Prep Laredo

Dr. Jim Lovelady Director, Technical-Vocational Division Angelina College Lufkin

Ms. Debra Nicholas Director, Alamo Tech Prep San Antonio

Ms. Becky Weber Educational Program Advisor Central Power and Light Company Corpus Christi

Dr. Douglas Pickle Professor & Division Chair of Industrial Technology Amarillo College Amarillo

Ms. D'Arcy Poulson Director, Concho Valley Tech Prep San Angelo

Dr. Lee Sloan Dean, Division of Occupational Education & Technology Del Mar College, West Campus Corpus Christi



APPENDIX B

ADVISORY COUNCIL: MINUTES OF ADVISORY COUNCIL
MEETINGS



SPECAP Advisory Council Meeting San Antonio, Texas

November 15, 1995 9:00 a.m. to 1:00 p.m.

Project Title:

Effective Policies and Practices in Selected Career Fields

Project Number:

66180003

Attendees:

Mr. Robert Franks
Director, Tech Prep at Navarro College
Corsicana, Texas
Phone: (903) 874-6501

Dr. Jim Lovelady
Director, Technical-Vocational Division
Angelina College
Lufkin, Texas
Phone: (409) 633-4299

Ms. Debra Nicholas
Director, Alamo Tech Prep Consortium
San Antonio, Texas
Phone: (210) 733-2093

Dr. Douglas L. Pickle
Professor and Division Chair of Industrial Technology
Amarillo College
Amarillo, Texas
Phone: (806) 371-3000

Ms. D'Arcy Poulson Director, Concho Valley Tech Prep Consortium San Angelo, Texas Phone: (915) 947-9552



Dr. Carrie Brown

Director, Tech Prep/School-to-Work Initiative Management Project

Beaumont, Texas

Phone: (409) 838-5555 Ext. 305

Micah Dial

Houston Community College

Houston, Texas

Phone: (713) 871-9349

Dr. Ronald Opp

Assistant Professor and SPECAP Project Director

Texas Tech University

Lubbock, Texas

Phone: (806) 742-2329

Dr. Oliver D. Hensley

Professor and SPECAP Principal Investigator

Texas Tech University

Lubbock, Texas

Phone: (806) 742-1959

Ms. Bethany Rivers

SPECAP Research Assistant

Texas Tech University

Lubbock, Texas

Phone: (806) 742-2916

Ms. Gloria Stewart

SPECAP Research Assistant

Texas Tech University

Lubbock, Texas

Phone: (806) 742-3124

Absent:

Dr. Lee W. Sloan

Dean, Division of Occupational Education and Technology

Del Mar College

Corpus Christi, Texas

Phone: (512) 886-1200



Ms. Becky North
Educational Program Advisor
Central Power and Light Company
Corpus Christi, Texas
Phone: (512) 881-5496

Ms. Myrna Albin Vocational Specialist Ysleta ISD

Phone: (915) 595-5734

Mr. Luis de la Garza, Jr.
Director, South Texas Tech Prep Consortium
Laredo, Texas
Phone: (210) 721-5393

Purpose and Intent of the Meeting

As outlined in the goals and objectives of the grant, this was the first of three meetings of SPECAP Advisory Council. As a continuation of the research on effective Tech Prep policies and practices, the focus of this meeting was obtaining feedback from the advisory council members regarding the conceptual framework, scope, and methodology of this year's research project -- the identification of exemplary curricular activities in the Texas Tech Prep programs of allied health, business, and engineering technology.

Summary of Discussions

Following the introduction of attendees (those present and those absent), a slide presentation introduced the SPECAP staff, the proposed conceptual framework for the research, the 1994-95 project which provides the methodological foundation for this year's project, and a plan for the current project scope, methodology, and products. Agenda and handouts were provided to all attendees. Attendees were requested to complete an evaluation of project implementation elements and meeting format.

Sharing of Resources.

There are several groups and individuals who are looking at various aspects of Tech Prep programs, e.g., SPECAP, Micah Dial, etc. It is important that all are aware of each other's projects and share resources in order to produce the most comprehensive and valuable products to the Tech Prep consortia. For example, Micah Dial suggested sharing one to two members of the advisory group with



SPECAP in order that both boards would be aware of each others' project yet each project would still maintain its individuality.

1994-95 Research Conducted by Kay Hodge.

Kay Hodge, Texas Tech University, completed a research project regarding student satisfaction with Tech Prep programs in Texas. This project has not, perhaps, been given the attention it should have been given. Attempts will be made to get a press release on the findings of the study which indicated a high level of satisfaction with the Tech Prep program by high school students.

Publicity and Presentations.

It was suggested that care be taken in press releases and any presentation material that the terminology not insinuate that Tech Prep programs are geared to students who are "less than college grade material. It should be emphasized that Tech Prep is an option. It provides multiple options as well as multiple exitentry points throughout the life span. It was suggested that the program be marketed as "The Tech Prep Option." It was suggested that all press releases flow through the Tech Prep Directors' marketing committee. Also, a copy of the press release from Texas Tech should be sent to all Texas Tech Prep directors for release to their local newspapers.

Gaining Advocacy.

There is still much work to be done to get information out to the public and to legislators regarding the availability and successes of the Tech Prep programs. It was suggested that post cards be written to Texas legislators relaying sentiments on the need to continue Tech Prep programs. Efforts also need to be concentrated on public awareness of "The Tech Prep Option."

Conceptual Framework.

It was suggested that the conceptual model which provides the framework for the research be modified to include economic development. Since Tech Prep is a Tri-Agency endeavor, it is important to address the focus/requirements of each agency. It was emphasized that there must be communication between education and business/industry and an understanding of the driving forces of industry. Economic impact data might be secured using the Socrates database.

Tech Prep Curriculum.

There may be some difficulty in the identification of curricular processes and documents because:



- 1. There are currently no guidelines regarding whether a student is to receive credit for a class at a particular junior college or institution of higher education. This transferability issue is currently being dealt with on a case by case, course by course basis. Most of the decisions are being made by the registrars of each institution. Dr. Brown is currently collecting data regarding the acceptance of credit for courses from high schools by community colleges. She will share her findings when her study is completed.
- 2. The identification of career areas may be difficult as currently none of the regions cluster in the same way. There are no clear career areas in Texas. Dorothy McNutt may be collecting data regarding articulation and, perhaps, should be contacted regarding her findings. Efforts should be expended toward developing a statewide system of transfer guidelines, perhaps, one of the educational agencies taking the initiative in course coding. It was suggested that rather than standards, "guidelines" would be a more acceptable approach.
- 3. Perhaps a program to program rather than course to course approach should be used.
- 4. One of the difficulties is getting the process down to the level of the students. They need to declare a major. There was discussion about five ISDs in the Hill Country that have required all students to declare a career pathway and the benefits they receive.

Document Analysis

The SPECAP group requested Tech Prep directors provide curricular documents for use in the document analysis. Regarding the document analysis:

- 1. When designing a Tech Prep major, one must look at all the components, e.g., Does it contain the math as needed by industry? How are the SCANS competencies incorporated? It was suggested that further information be gained from phone interviews such as how the curriculum process was started, e.g., By SCANS competencies? Are requirements academic, technical or both? Is there a vertical attack of the problem?
- 2. In addition to the Texas consortia SPECAP also conducts a nationwide survey of Tech Prep to inquire what else is being done and if there are any curriculum evaluation models in existence. For consortia identified as exemplary, the criteria used in the selection process should be obtained.

Questionnaires and Telephone Protocol.

The Advisory Council was reminded that the focus of the research this year will be solely on curriculum. The questionnaires will seek information regarding how



the curriculum is developed and how the curriculum is being evaluated. The questionnaires will be sent to the Tech Prep directors who can then identify the individuals in their consortium who should respond. Each consortium will be reimbursed for postage. It was suggested that the surveys need to be made very simple. Last year, they were too complicated and too long -- making it difficult for individuals to respond. Council members cautioned the SPECAP group about terminology, e.g., the high schools define developing curriculum as looking at a single course while the community colleges use the same term for designing the whole 72 hour program. SPECAP will send a prototype of the questionnaire to council members for review before sending the instrument to the consortia.

The process for the telephone protocols will be as follows. At the February Tech Prep Directors' Meeting, the directors will be provided a list of consortia with allied health, electronic technology, and business programs. A checklist based on Tech Prep curriculum development guidelines and the SPECAP model for the development process will be distributed to program directors. The directors will then "self-rate" their own programs. The exemplary programs will thus be identified.

Monograph.

SPECAP will be seeking additional moneys to produce a monograph. Those involved in Tech Prep will be asked to submit material for the publication. It was suggested that at least one of the chapters address commonalities.

Future Advisory Council Meetings.

In order to conserve time, the second Advisory Council Meeting will be held in conjunction with but before commencement of the Statewide Tech Prep Directors' Meeting in Houston in February 1996. The Advisory Council will meet from 8:00 a.m. to 12 noon on Tuesday, February 20th. The third meeting will be in Lubbock from 12 noon until 4:00 p.m. on May 1, 1996.

Decisions/Action Items

1. Sharing Resources

Douglas Pickle is serving on both an advisory committee for Micah Dial and on the SPECAP Advisory Council.

2. 1994-95 Research conducted by Kay Hodge Kay's research project regarding student satisfaction with Tech Prep will be included in presentation, publication, and publicity endeavors.



3. Publicity and Presentations

- (a) The press release by TTU will be shared with all Tech Prep directors. They will, in turn, be asked to share this information with their local news media.
- (b) The term "Tech Prep Option" shall be used to describe the Tech Prep program.

4. Gaining Advocacy

Post cards will be sent to legislators lauding the efficacy of the Tech Prep Option.

5. Conceptual Framework

The model will be modified to include economic development.

6. Document Analysis

Components of curricular documents will be analyzed. The regulating boards comparable to the Coordinating Board in Texas will be contacted regarding exemplary Tech Prep curriculum development and implementation in their states. Attempts will be made to secure those documents.

7. Questionnaires

Two aspects of primary concern this year in construction of the instrument will be (a) simplification and (b) not as lengthy as last year. A draft of the questionnaire will be sent to Advisory Council Members for review and comment.

8. Monograph

At least one of the chapters in the monograph shall focus on common elements of Tech Prep curricular documents.

9. Future Advisory Council Meetings

The second meeting shall be held in the morning of February 20th.



Project Title: Effective Policies and Practices in Selected Career Fields

Project Number: 66180003 Fiscal Agent: Dr. Ronald Opp

Texas Tech University

Lubbock, Texas 79409-1071

MINUTES SECOND SPECAP ADVISORY COUNCIL MEETING Houston, Texas

Wednesday, February 21, 1996 8:00 a.m. to 11:30 a.m.

Attending:

Ms. Becky Colvin, Project Specialist, Gulf Coast Tech Prep Consortia

Phone: 713-591-3531

Mr. Rob Franks, Director, Tech Prep at Navarro College

Phone: 903-874-6501

Luis de la Garza, Director, South Texas Tech Prep

Phone: 210-721-5165

Dr. Oliver Hensley, Principal Investigator, SPECAP

Phone: 806-742-1959

Mr. Steve Krause, Research Assistant, SPECAP

Phone: 806-742-3124

Dr. Ron Opp, Project Director, SPECAP

Phone: 806-742-2329

Dr. Douglas Pickle, Professor/Division Chair of Industrial Technology

Amarillo College; Phone: 806-371-5000

Ms. Bethany Rivers, Research Assistant, SPECAP

Phone: 806-794-2916

Dr. Lee Sloan, Dean Division of Occupational Education and

Technology, Del Mar College, West Campus

Phone: 512-886-1700

Ms. Gloria Stewart, Research Assistant, SPECAP

Phone: 806-742-3124

Absent:

Ms. Myrna Albin, Vocational Specialist, Ysleta ISD

Phone: 915-595-5734

Dr. Jim Lovelady, Director, Technical-Vocational Division,

Angelina College; Phone: 409-633-4299

Ms. Debra Nicholas, Director, Alamo Tech Prep

Phone: 210-733-2093

Ms. Becky North, Educational Program Advisor,

Central Power and Light Company; Phone: 512-881-5496

Ms. D'Arcy Poulson, Director, Concho Valley Tech Prep

Phone: 915-947-9552



SUMMARY OF DISCUSSIONS, DECISIONS, AND AGREEMENTS

I. Welcome and Introductions

Packets containing the agenda, a directory of Advisory Council members, copies of the slides to be viewed during the presentation, a copy of the preliminary telephone protocol, and an evaluation form were distributed to attendees as they arrived.

II. Dissemination Efforts

Members were informed that the <u>Education Connection</u>, a publication of the College of Education at Texas Tech, contained an article concerning Tech Prep and the research project. The magazine has been distributed at workshops and conferences.

Dr. Opp presented findings of the 1994-95 Phase I project -- Effective Policies and Practices -- at the Workforce 2000 conference in Florida. He indicated that participants were eager for more information regarding "best practices" in Texas. Two participants requested additional detailed information -- one attendee requested more information regarding a student tracking system and the other attendee wanted copies of the presentation slides and speaker notes.

Discussion items included: It was suggested that more presentations should be given to groups not already intimately involved with Tech Prep, such as the Texas Business Coalition and the Superintendent's Conference, and greater dissemination of information at national conferences. For example, it could be stressed that Texas is a "leg up" on other states regarding articulation. Also, we need to get into other arenas such as showing Tech Prep's impact on economic development. We need to show that there are "real and positive" things happening, e.g., Texas is a leader in systematic development of Tech Prep programs. Often the Tech Prep directors don't see what they are doing as "exemplary" because they are things that they "do everyday." It was also suggested that all those involved in Tech Prep share the data collected they have collected with those who would be willing to make presentations.

Dr. Hensley reported on the upcoming Abilene Workshop on February 22 that Bill Daugherty had recommended. Workshop participants will include Tech Prep staff, secondary school principals from the region, and Texas Tech administrators. The focus of the workshop is a discussion of the status of articulation among the stakeholders' respective institutions.

Discussion items included: Tech Prep was designed as a "linkage" program and not a "transfer credit" program. The Texas Common Course Technical Manual project, led by Dorothy McNutt, is attempting to develop a working



model that would form the basis of matters such as standardized titles, contact hours, credits, etc.

Dr. Hensley reported that last year, site visits were concentrated in West Texas and this year in Central Texas. Fourteen out of twenty-five consortia have been visited thus far. The site visits have given us the opportunity to gather qualitative data from consortia staff, students, and industry partners regarding "best practices" and programs.

Discussion items included: Amarillo Community College is moving forward in their efforts to develop a "seamless" education and a "new way to think" by establishing a partnership with the local ISD to offer the automotive program at the high school. There is more and more training being conducted at work sites. Carl Perkins required that there were collaborative efforts outside the institutions and this mandate has provided the needed "seed money" that makes Tech Prep successful. Collaboration is the "key." Tech Prep facilitates individuals from the various sectors coming together to talk things out. Tech Prep consortia are "change agents."

III. Document Analysis

Dr. Hensley advised that we have and still are gathering exemplary curricular documents that drive policy and practice. More than 150 documents have been identified and coded in our inventory. The majority of these documents are "program-to-program." Advisory members will be asked to comment on the usefulness and efficacy of the documents. Based on the "Systems Validation Model," we are currently at Stage 5 -- the Prototype Construction. Data collected thus far indicate that there are about ten items on articulation agreements that would constitute what is minimally required in such agreements. Attendees were also advised that the "Impact Model" was modified based on suggestions at the first Advisory Council Meeting.

Discussion items included: Most of the articulation agreements are programto-program with an emphasis on competencies within specified timeframes. Additionally, programs must be in the CBI format.

IV. Questionnaire Methodology and Telephone Protocol

Dr. Opp indicated that the design of the questionnaire was in progress. Advisory Members had commented that last year's questionnaire was too complicated. Based on this suggestion, this year the questionnaire will focus on the program perspective and be simplified. There will be two or three questions about each of the steps portrayed in the model. The questionnaires will be mailed to the Tech prep Directors who will then forward the questionnaire to faculty in the high school, community college, and work sites.



Using this approach, each consortium will have to be reimbursed mailing costs "after the fact."

Discussion items included: One attendee suggested that, because consortia were inundated with requests for information, the consortia provide SPECAP with their databases and then SPECAP mail the questionnaires directly to the participants. It was noted that this approach was tried last year and very few consortia provided the information and of those that did, much of the data provided did not allow us to identify prospective participants. Another attendee suggested sending the questionnaire only to those teachers immersed in the program and not just teaching a course. Ultimately, because of the unique aspects of each of the consortia, it was decided that it would be better to send the questionnaires to the Tech Prep directors and have them distribute them. Deciding the number of questionnaires to send to each consortium remains a problem. The only true database we have is PIMS but some school districts do not report students as Tech Prep because of their concern on the impact on the vocational formula funding. Since the number of participants will vary by consortia size, it was suggested to send 10 questionnaires and have the directors contact SPECAP for additional questionnaires. The forms should be pre-coded by SPECAP according to consortia. Although the method used to disseminate the questionnaires will cause us to get a varied sample, this does not appear to be a great problem.

Attendees were given a copy of the survey that would be distributed at the Tech Prep Directors' Meeting that afternoon. The survey is divided by consortia, community college partnerships, and programs in allied health, business, and engineering technology. The directors will be asked to identify three exemplary consortia in each of the career fields and their respective exemplary programs.

Discussion items included: Since most curriculum was not pilot tested or field tested (just implemented and revised as needed) when conducting the interviews, the researchers should be careful not to use terms such as prototype, validation, and model infrastructure. Instead, ask about the initial implementation process and changes thereafter. Use simpler language.

V. Handbook

Along with the final report, there will be another handbook published this year. We need to get the information about Tech Prep out to more individuals throughout the country. The handbook is a good vehicle.

VI. Monograph

Ms. Rivers advised that we did not receive the Supplemental Grant that would have assisted with publication costs for the monograph but that we would



continue with our commitment to produce one. Three chapters have been completed and there are eleven other chapters committed.

Discussion items included: Attendees suggested that we could provide each consortium with a disk or paper copy of a photo-ready monograph and let them print their own, and/or ask consortia to contribute to the cost of printing and distribution, and/or put the monograph on the internet using a linkage with the Coordinating Board.

VII. Concluding Discussion

With so few advisory members being able to attend the meeting, suggestions on increasing our attendance were discussed. Though suggested, it was decided that computer conferencing would not be adequate in obtaining feedback from the members. Also, meetings that do not require an overnight stay are preferred. Attendees felt that the next meeting scheduled in Lubbock from noon to 4 p.m. on May 1st would accommodate the majority of the members.

VIII. Closure

Attendees were requested to complete the "Meeting Evaluation" form asking for their feedback regarding our strategies, the agenda, and meeting room accommodations.



MINUTES

Third SPECAP Advisory Council Meeting
May 1, 1996
Lubbock, Texas
12 noon to 4:00 p.m.

Project Title:
Effective Policies and Practices in Selected Career Fields
Project Number:
66180003
Fiscal Agent:
Dr. Ronald D. Opp, Project Director
Texas Tech University
College of Education
Lubbock, Texas 79409-1071

Attendees:

Mr. Ismael Amaya Student Assistant, SPECAP Texas Tech University Lubbock, TX 79409 Phone: 806-742-3124

Ms. Brooke Buskin Student Assistant, SPECAP Texas Tech University Lubbock, TX 79409 Phone: 806-742-2916

Ms. Ariana Cox SPECAP Support Staff Texas Tech University Lubbock, TX 79409 Phone: 806-742-3124

Ms. Jessica Creswell Student Assistant, SPECAP Texas Tech University Lubbock, TX 79409 Phone: 806-742-2916



Mr. Robert Franks
Director, Tech Prep at Navarro College
3200 West 7th Ave.
Corsicana, TX 75110
Phone: 903-874-6501

Dr. Oliver Hensley Professor and SPECAP Principal Investigator Texas Tech University Lubbock, TX 79409 Phone: 806-742-1959

Mr. Steve Krause Research Assistant Texas Tech University Lubbock, TX 79409 Phone: 806-742-3124

Dr. Ronald Opp Professor and SPECAP Project Director Texas Tech University Lubbock, TX 79409 Phone: 806-742-2329

Ms. D'Arcy Poulson Director, Concho Valley Tech Prep Consortium 3197 Executive Drive San Angelo, TX 76904 Phone: 915-947-9552

Ms. Bethany Rivers Research Assistant Texas Tech University Lubbock, TX 79409 Phone: 806-742-2916

Dr. Lee Sloan
Dean, Division of Occupational Education & Technology
Del Mar College, West Campus
Corpus Christi, TX 78404-3897
Phone: 512-886-1200



Ms. Tara Standifer Student Assistant, SPECAP Texas Tech University Lubbock, TX 79409 Phone: 806-742-3124

Ms. Gloria Stewart Research Assistant Texas Tech University Lubbock, TX 79409 Phone: 806-742-3124

Not Attending:

Ms. Myrna Albin Vocational Specialist Ysleta ISD El Paso, TX 79925 915-595-5734

Mr. Luis de la Garza, Jr.
Director, South Texas Tech Prep Consortium
Laredo Junior College
West End Washington Street
Lardeo, TX 78040
Phone: 210-721-5165

Dr. Jim Lovelady Director, Technical-Vocational Division Angelina College P.O. Box 1768 Lufkin, TX 75902 Phone: 409-639-4299

Ms. Debra Nicholas
Director, Alamo Tech Prep Consortium
1300 San Pedro
San Antonio, TX 78212
Phone: 210-733-2093



Mrs. Becky Weaver Educational Program Advisor Central Power and Light Company P.O. Box 2121 Corpus Christi, TX 78403

Phone: 512-881-5496

Dr. Douglas Pickle
Professor & Division Chair of Industrial Technology
Amarillo College
P.O. Box 447
Amarillo, TX 79178
Phone: 806-371-5000

Discussion and Action Items

I. Introduction

Attendees introduced themselves.

Dr. Opp thanked advisory council members for all the support and assistance they had provided SPECAP this year and distributed certificates of appreciation to attendees. Certificates will be mailed to those members who were unable to attend.

II. Questionnaires

Attendees were given a copy of the questionnaire and cover letter that had been distributed to the Tech Prep consortia. A draft of the questionnaire had been sent to advisory council members for review and comment. The final product was based on the feedback we had received from our advisory members.

Thursday, April 25th, the 2500 questionnaires were sent to the twenty-five Tech Prep consortia. Each consortium received a proportion equivalent to the number of Tech Prep students in their region. Directors were asked to mail a copy of the questionnaire to those individuals within their consortium who would be considered experts in the curriculum development, implementation, and evaluation process for Tech Prep programs. Directors were advised that SPECAP would reimburse them for cost of labels and mailing of questionnaires. Survey respondents would be able to return the questionnaire to Texas Tech in a pre-paid, pre-addressed enveloped they were provided.

The questionnaires will be scanned and data analyzed. Because of the design of the questionnaire, data for each consortium can be culled and analyzed.

Advisory members had no suggestions for changes needed in to future.



Action Items: None.

III. Telephone Interviews

Dr. Opp described the process that had been used to identify the "best" consortia and programs in the areas of business, engineering technology, and allied health. Tech Prep directors had nominated exemplary consortia and exemplary programs within those consortia. Directors of consortia and programs within those consortia receiving the largest number of votes were contacted. They were asked to provide us with five individuals from each program (a total of nine programs) who we should interview. Those individuals were contacted and a time for a telephone interview scheduled.

About two thirds of the interviews have been completed. The interviews are taking from 15 minutes to over an hour to conduct. The data from the interviews will be analyzed according to themes that emerge.

No suggestions to change the telephone interviews from Advisory Council members.

Action items: None.

IV. Document Analysis/Site Visits

Dr. Hensley advised that 135 documents that Tech Prep directors deal with on a regular basis have been identified. These were listed on the handout labeled "The Classification System for Modeling Tech Prep Curriculum Development Systems in Texas." Dr. Hensley asked members to review this list and recommend modifications, additions, deletions. Advisory members who were unable to attend will also be receiving this listing and asked to review it.

Qualitative data gathered from site visits have been invaluable. An opportunity to speak with Tech Prep staff, students, faculty, and business stakeholders will provide rich descriptions for the handbook and final report.

Action items: Advisory Council members will review "The Classification System for Modeling Tech Prep Curriculum Development Systems in Texas" and provide feedback within two weeks.

V. Handbook and Final Report

The format of the handbook will be driven from the Impact Model while the Systems Model will be the basis of validation of information provided. The handbook will be at least double the length it was last year and will be in a "loose-leaf binder" format. It will contain a listing of documents and if someone



would like to obtain a copy of the document, they can contact us or, if we do not have the complete document, we will refer the person to the consortium to obtain a copy of the document.

The final report will also be expanded from last year. It will provide the details of research findings along with copies of the printouts from quantitative data analysis.

Action Items: None.

VI. Monograph

Articles submitted should be no longer than ten double-spaced pages. Deadline for submission is May 15th. We hope to have the monograph to press by June 15th.

The monograph is anticipated to contain sixteen chapters. Requests for articles were solicited from Tech Prep stakeholders. Dr. Hensley asked advisory members to assist with a peer review of the articles for the monograph and provided the "Peer Review Guidelines for Assessing Articles for Inclusion in the Tech Prep Research Monographs" form to be completed. Each article is to be rated from 0 (No Points) to 10 (Maximum Points). The form will be sent to advisory members who were unable to attend to complete and return.

Action items: Advisory Council members will conduct a peer review of potential monograph articles and return the form within two weeks.

VII. Demonstration of Web Page for SPECAP Tech Prep

Advisory Council members were given a demonstration of the Web Page that has been set up. The address is

http://www.ttu.edu/~specap

Suggestions for linkages, format, and content were solicited. Among the linkages suggested were National Tech Prep, Coordinating Board, and several others. Members were also advised that, among the capabilities of the Web Page was the opportunity to put a survey on the Web Page for them and download the responses to an email address.

Action items: SPECAP staff will refine the Web Page content and format.



Additional discussion items:

SPECAP has submitted a request for third year funding. If approved, the advisory members suggested:

- 1. the first advisory meeting be held between mid-September and the end of September;
- 2. the questionnaires be distributed between mid-November through Christmas:
- 3. conduct telephone interviews the end of January;
- 4. the best time to solicit assistance from Tech Prep directors is June through July;
- 5. a focus on the institutionalization of the Tech Prep process asking questions such as "What measures do you have in place?" "Will the components (partnerships) continue to exist?".



APPENDIX C

QUESTIONNAIRE: 1996 TECH PREP CURRICULUM

QUESTIONNAIRE



1996 TECH PREP CURRICULUM QUESTIONNAIRE

1000 120111121 001111	
Directions: Your observance of these few directions will be most appreciated. Please focus on the curriculum of a single program when answering the questions.	5. What was your key role in developing your Tech Prep program curriculum? (Mark one only)
Use a blue or black pen to complete this survey.Make heavy marks that fill the oval.	[] Resource acquisition (funding, capital, human resources, etc.) [] Leadership
Example: Is this a survey on the development and evaluation of Tech Prep program curricula?	[] Political finesse [] Curriculum development [] Curriculum implementation
[]Yes []No	[] Curriculum evaluation [] Subject matter expertise [] Administration
Part I - Demographic Characteristics	[] Teaching [] Academic Advising [] Other (Please specify below)
1. Please indicate your consortium affiliation.	
[] Alamo [] North Central Texas [] Brazos Valley [] North Texas [] Capital [] Panhandle [] Central Texas [] Permian Basin [] Coastal Bend [] Southeast Texas	Part III - Analyzing the Curriculum Development Options 6. What distance learning delivery modalities did you
[] Concho Valley [] South Plains [] Deep East Texas [] South Texas [] East Texas [] Star Tech Prep [] Global Edge [] Texoma [] Golden Crescent [] Upper East Texas [] Gulf Coast [] Upper Rio Grande [] Heart of Texas Valley [] Lower Rio Grande [] West Central Texas Valley	consider? (Mark all that apply) [] Off-campus teaching [] Correspondence courses [] Televised courses [] Videotaped courses [] Interactive network courses [] Internet courses [] Other (Please specify below)
2. With what Tech Prep career pathway are you presently affiliated? (Mark one only)	7. What curriculum development options did you consider? (Mark all that apply)
[] Business [] Engineering Technology [] Allied Health [] Other (Please specify career pathway below) Part II - Positioning the Architects	[] Needs assessment [] Job/task analysis [] DACUM process [] Input from subject matter experts in the field [] Input from curriculum design experts [] Creation of new curriculum [] Modification of pre-existing curriculum [] Merging of two or more pre-existing curricula
3. Which stakeholder group do you represent? (Mark all that apply)	Part IV - Designing the Curriculum
[] High school faculty [] High school administrator [] Community college faculty	8. Was your Tech Prep program curriculum created from scratch?
[] Community college administrator [] Business/industry representative [] Labor representative	[] Yes If yes, please answer questions 9 & 10. [] No If no, please skip to question 11.
[] Government representative (PIC, QWFPC, etc.) [] Other (Please specify below)	 How long did it take to design your initial program curriculum? (Mark one only)
4. How important were state Tech Prep funds in bringing together individuals to develop your program? (Mark one only)	[] Less than 3 months [] Three to six months [] Six to nine months [] Nine to twelve months [] Over a year
[] Extremely important [] Somewhat important [] Not important	10. How frequently did you meet as a group to design the curriculum for your Tech Prep program? (Mark one only)
	[] Never (0 times) [] Rarely (1-2 times) [] Occasionally (3-4 times) [] Frequently (5 or more times)



100

modification of	ep program curriculum a an existing curriculum?	19.	How many courses were offered in the trial run? (Mark one only)				
	s, please answer question 12. skip to question 13.		[] One [] Two [] Three				
12. How long did it program curricu	take to modify your existing ulum? (Mark one only)		[] Four [] Five or more				
[] Less than a mo [] One to two mo [] Three to four to [] Five to six mo [] More than six	onths nonths nths	20.	How many students were involved in the trial run of your curriculum? (Mark one only) [] 1-25 [] 26-50				
13. Have you previo	ously participated in any of the ulum development activities?		[] 51-75 [] 76-100 [] more than 100				
[] Attended a pro on curricult	urriculum development course ofessional development workshop om development orriculum development committee	Part VII - Validating the Curriculum21. What groups provided you with feedback for your program curriculum? (Mark all that apply)					
Part V. Pilot Te	sting the Curriculum		[] Program faculty [] Program students [] School/college representatives				
	ners review your Tech Prep llum before implementing it?		[] Business/industry representatives [] Labor representatives				
	es, please answer question 15 & 16. o, skip to question 17.		[] Government representatives [] Outside experts (Please specify below)				
	ed in reviewing your program ark all that apply)	Par	t VIII - Adopting and Enhancing the Curriculum				
[] Labor represer	nts e representatives stry representatives ntatives	22.	What groups were involved in obtaining state approval of your Tech Prep program curriculum? (Mark all that apply) [] Program faculty [] Program students [] School/college representatives				
	viduals were involved in the review curriculum? (Mark one only)		[] Business/industry representatives [] Labor representatives [] Government representatives [] Outside experts (Please specify below)				
[] 1-5 [] 6-10 [] 11-15 [] 16-20 [] more than 20		23.	What groups are currently involved with improving your Tech Prep program curriculum? (Mark all that apply)				
Part VI - Field	Testing the Curriculum		[] Program faculty [] Program students				
	l run conducted of your ram curriculum?		[] School/college representatives [] Business/industry representatives [] Labor representatives				
	s, please answer questions 18-20. , skip to question 21.		[] Government representatives [] Outside experts (Please specify below)				
	ed in the trial run of your ulum? (Mark all that apply)	24.	How often do you review your Tech Prep program curriculum? (Mark one only)				
[] Labor represe [] Government r	ents e representatives stry representatives ntatives		[] As needed [] Every year [] Every two years [] Every three years				



the Curriculum 25. What indicates that your program has become a permanent part of your school or college? (Mark all that apply) [] Inclusion in course catalog [] New staff added [] Additional course offerings [] Increased enrollments [] Adequate/increased funding [] State approval of program [] Accreditation of program [] Approval of licensing agency [] Articulation agreements [] Other (Please specify below) 26. Do you believe that your program would continue if state Tech Prep funds were no longer available? [] Strongly agree that it would continue [] Agree that it would continue [] Disagree that it would continue [] Strongly disagree that it would continue Part X- Performance Assessment of the Curriculum 27. Have you personally participated in the following curriculum evaluation activities? (Mark all that apply) [] Completed a course on curriculum evaluation [] Attended a professional development workshop on curriculum evaluation [] Served on a curriculum evaluation committee How do you assess the effectiveness of your Tech Prep program curriculum? (Mark all that apply) [] Student evaluation of curriculum [] Faculty evaluation of curriculum [] Employer evaluation of curriculum [] Number of high school students participating in program [] Number of community college students participating in program [] Number of articulation agreements with two-year colleges [] Number of articulation agreements with four-year colleges

[] Program transfer rate
[] Licensure passage rate
[] Program job placement rate
[] Other (Please specify below)

Part IX - Internalizing and Institutionalizing

29.	Please indicate the components of your Tech Prep program curriculum development and evaluation process that you consider to be exemplary. (Mark all that apply)					
	[] Positioning stakeholders					
	[] Analyzing the curriculum development options					
	[] Designing the curriculum					
	[] Reviewing the curriculum					
	[] Trying out the curriculum					
	[] Obtaining feedback on the curriculum					
	[] Approving/improving the curriculum					

[] Ensuring the continuation of the curriculum

[] Assessing the effectiveness of the curriculum

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!



APPENDIX D

PHONE INTERVIEW: PHONE INTERVIEW PROTOCOL



CURRICULUM TELEPHONE PROTOCOL

Part I - Demographic Char-	acteristics
Date:	
Full Title of Program:	
Your Name is:	
Your Job Title is:	
Your Telephone Number is:	
Your FAX Number is:	
The name and address of your	organization is:
1. Please indicate your	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 TexasValley	[] North Central Texas [] North Texas [] Panhandle [] Permian Basin [] Southeast Texas [] South Plains [] South Texas [] Star Tech Prep [] Texoma [] Upper East Texas [] Upper Rio Grande
[] Lower Rio Grande Valley	[] West Central Texas



2.	With	what	Tech	Prep	care	er pa	athway	y are yo	u Į	presently	affiliat	ted?	(Mark	one o	only
	[] [] []	Busine Engine Allied Other	eering Healtl	1		er pa	thway l	below)							
Part	II -	Positio	oning	the A	Archi	tects									
3.		h stal			oup (do y	ou rej	present?							
	[] Hig [] Co [] Bu [] Lal [] Go	gh scho gh scho mmuni mmuni siness/i bor reprevernme (PIC, ther (PIe	ol adn ty coll ty coll ndustr esenta ent repr	ege face ege ad y represtive resenta PC, etc	culty minist sentat tive	ive									
4.		impo lop yo				Tec	ch Pre	p funds	i in	ı bringir	ng toge	ther	indivi	iduals	; to
	[]So	tremely mewhat of impo	t impo												



5.	What was your key role in developing your Tech Prep program curriculum? (Mark one only)
	[] Resource acquisition (funding, capital, human resources, etc.) [] Leadership [] Political finesse [] Curriculum development [] Curriculum implementation [] Curriculum evaluation [] Subject matter expertise
	[] Administration [] Teaching
	[] Academic Advising
	[] Other (Please specify below)
	
•	
Part	III - Analyzing the Curriculum Development Options
6.	What distance learning delivery modalities did you consider? (Mark all that apply)
	[] Off-campus teaching
	[] Correspondence courses [] Televised courses
	[] Videotaped courses
	[] Interactive network courses
	[] Internet courses
	[] Other (Please specify below)



7.	What curriculum develo	pment options did	you co	nsider?	(Mark	all that	apply)
	[] Needs assessment [] Job/task analysis [] DACUM process [] Input from subject matter [] Input from curriculum de [] Creation of new curriculu [] Modification of pre-exist [] Merging of two or more p	experts in the field sign experts im ing curriculum	•				
Part	t IV - Designing the Cur	rriculum					
8.	Was your Tech Prep pro	gram curriculum o	reated	from so	ratch?		
		answer questions 9 & kip to question 11.	10.				



9.	How long did it take to design your initial program curriculum? (Mark one only)
	[] Less than 3 months [] Three to six months [] Six to nine months [] Nine to twelve months [] Over a year
	*
10	TV 6 41 111 when the second of
10.	How frequently did you meet as a group to design the curriculum for your Tech Prep program? (Mark one only)
	[] Never (0 times) [] Rarely (1-2 times) [] Occasionally (3-4 times) [] Frequently (5 or more times)



11.	Is your T	ech Prep pi	ogram cu	rriculur	n a mo	dification	of an	existing	curricu	lum?
	[] Yes [] No	If yes, plea If no, skip			2.					
								•	-	
12.	How long	did it take	to modify	your e	xisting	program	curricul	um? (Ma	ark one	only)
	[] Five to	wo months four months								



13.	Have you previously participated in any of the following curriculum developme activities? (Mark all that apply)	<u>nt</u>
	[] Completed a curriculum development course [] Attended a professional development workshop on curriculum development [] Served on a curriculum development committee	
	•	

14.	Did you	have	others	review	your	Tech	Prep	program	curriculum	before
	impleme	nting	it?							

[] Yes	If ves.	please answer	auestion	15	&	16.
[]163	m yes,	picase answer	question	10	~	10.

[] No If no, skip to question 17.



	[] Program faculty [] Program students [] School/college representatives [] Business/industry representatives [] Labor representatives [] Government representatives [] Outside experts (Please specify below)	_						
16.	How many individuals were involved in (Mark one only)	in the	review	process	for	your	curriculu	ım?
	(Mark one only) [] 1-5 [] 6-10 [] 11-15 [] 16-20 [] more than 20							



Part VI - Field Testing the Curriculum

17.	Was there	a trial run conducted of your tech Frep program curriculum:
	[] Yes [] No	If yes, please answer questions 18-20. If no, skip to question 21.
,		
18.	Who was	involved in the trial run of your program curriculum? (Mark all that apply)
	[] Progran	faculty
	[] Program	
	[] School/	ollege representatives
		/industry representatives
		presentatives nent representatives
		experts (Please specify below)
		



19.	How many	courses v	vere or	ierea in	the trial	run?	(Mark (one of	niy)	
	[] One [] Two [] Three [] Four [] Five or me	ore								
			,							
20.	How many (Mark one o		were	involved	in the	trial r	un of	your	curriculu	m?
	[] 1-25 [] 26-50 [] 51-75 [] 76-100 [] more than	ı 100								



Part VII - Validating the Curriculum

21.	What groups provided you with feedback for your program curriculum? (Mark all that apply)
	[] Program faculty [] Program students [] School/college representatives [] Business/industry representatives [] Labor representatives [] Government representatives
	[] Outside experts (Please specify below)
Part	VIII - Adopting and Enhancing the Curriculum
22.	What groups were involved in obtaining state approval of your Tech Prep program curriculum? (Mark all that apply)
	[] Program faculty [] Program students
	[] School/college representatives
	[] Business/industry representatives
	[] Labor representatives
	[] Government representatives
	[] Outside experts (Please specify below)



23.	What groups are currently involved with incurriculum? (Mark all that apply)	improving your Tech Prep program	n
	[] Program faculty [] Program students [] School/college representatives [] Business/industry representatives [] Labor representatives [] Government representatives [] Outside experts (Please specify below)		
24.	How often do you review your Tech Prep por [] As needed [] Every year [] Every two years [] Every three years	rogram curriculum? (Mark one only)



Part IX - Internalizing and Institutionalizing the Curriculum

5.	What indicates that your program has become a permanent part of your school college? (Mark all that apply)	10
	[] Inclusion in course catalog [] New staff added [] Additional course offerings [] Increased enrollments [] Adequate/increased funding [] State approval of program [] Accreditation of program [] Approval of licensing agency [] Articulation agreements [] Other (Please specify below)	
	De la la company de la continue de contra Tech Prop fonde mon	
26.	Do you believe that your program would continue if state Tech Prep funds wer no longer available? [] Strongly agree that it would continue [] Disagree that it would continue [] Strongly disagree that it would continue [] Strongly disagree that it would continue	·e



Part X- Performance Assessment of the Curriculum

27.	Have you personally participated in the following curriculum evaluation activities? (Mark all that apply)
	[] Completed a course on curriculum evaluation [] Attended a professional development workshop on curriculum evaluation
	[] Served on a curriculum evaluation committee
28.	How do you assess the effectiveness of your Tech Prep program curriculum? (Mark all that apply)
	[] Student evaluation of curriculum
	[] Faculty evaluation of curriculum [] Employer evaluation of curriculum
	[] Number of high school students
	participating in program
	[] Number of community college
	students participating in program [] Number of articulation agreements with
	two-year colleges
	[] Number of articulation agreements with four-year colleges
	[] Program transfer rate
	[] Licensure passage rate
	[] Program job placement rate
	[] Other (Please specify below)



29. Please indicate the components of your Tech Prep program curriculum development and evaluation process that you consider to be exemplary. (Mark all that apply)

[] Positioning stakeholders

[] Analyzing the curriculum development options

[] Designing the curriculum

[] Reviewing the curriculum

[] Trying out the curriculum

- [] Obtaining feedback on the curriculum
- [] Approving/improving the curriculum
- [] Ensuring the continuation of the curriculum
- [] Assessing the effectiveness of the curriculum



APPENDIX E

QUESTIONNAIRE: QUESTIONNAIRE DISTRIBUTION/RETURN
TALLY



QUESTIONNAIRE DISTRIBUTION/RETURN TALLY

Consortium Name	Enrollment*	Surveys	Surveys
	Secondary + Post Secondary	Mailed	Returned
Alamo	1500	50	1
Brazos	1188	32	0
Capital	7242	190	0
Central Texas	515	15	14
Coastal Bend	5641	150	15
Concho Valley	1617	45	17
Deep East	832	23	10
East Texas	920	25	10
Global Edge	4777	125	1
Golden Cresant	3500	95	0
Gulf Coast	3800	95	2
Heart of Texas	1083	35	11
Lower Rio Grande	1857	48	9
North Central Texas	18426	470	49
North Texas	581	15	29
Panhandle	5481	140	13
Permian Basin	2748	68	14
South Plains	2547	65	4
South Texas	1300	35	15
Southeast Texas	2620	68	15
Star	610	18	5
Texoma	4000	100	0
Upper East	1010	35	14
Upper Rio Grande Va	alley 11821	453	32
West Central Texas	4863	135	2
No Consortium Identi on Survey	fied		10
Total	90479	2530	292

^{*1994-95 1}st Quarter End Enrollment Figures



APPENDIX F

QUESTIONNAIRE: COVER LETTER TO TECH PREP DIRECTORS



April 5, 1996

Dear {TECH PREP DIRECTOR}:

This letter is to inform you in advance that we will be asking for your help in distributing a questionnaire on curriculum development and evaluation to the experts involved with allied health, engineering technology, and business Tech Prep programs in your consortium. We recognize that you are the expert in your consortium best able to make an informed judgment about the individuals in your consortium that should receive this questionnaire.

The questionnaire is presently at the printer, and we hope to have it mailed to you within the next two weeks. As we did last year, we will reimburse your consortium for all postage costs involved in mailing out these questionnaires. The number of questionnaires you receive for distribution will be proportionally based on the number of high school and community college students your consortium has enrolled in Tech Prep programs. We have greatly simplified this year's questionnaire to make it easier for the respondents in your consortium to answer.

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



April 1996

NAME TITLE ADDRESS CITY, STATE ZIP

Dear {TECH PREP DIRECTOR}:

As you may recall from our previous letter, we asked for your assistance in disseminating sealed questionnaires on curriculum development and evaluation of selected career pathways within Tech Prep. Because of your position within your consortium, you are best able to make an informed judgment about individuals (stakeholders) in your consortium that should receive this questionnaire.

Instructions: We have provided you with a proportion of questionnaires to mail or distribute to stakeholders whom you believe are the experts involved in curriculum development and evaluation for programs associated with the career pathways of *allied health*, *engineering technology*, *and business* within your Tech Prep consortium. Please distribute the sealed questionnaires as soon as possible to help us expedite dissemination using these few easy instructions:

• Select stakeholders who represent the following career pathways (a) Allied Health, (b) Business, and (c) Engineering Technology (instructions for each participant are included in the sealed envelopes).

• Stakeholders may consist of (a) high school faculty (b) high school administrators, (c) community college faculty, (d) community college administrators, (e) business/industry representatives, (f) labor representatives, (g) government representatives, or (h) other.

 Add addresses of selected stakeholders to the sealed envelopes provided (we will reimburse you for the cost of postage and labels).

 Distribute/mail a single questionnaire to each stakeholder you have identified to participate in the survey.

Thank you for your continued support of our research on Tech Prep policies and practices in Texas. Your knowledge of the stakeholders who develop and evaluate curriculum within your consortium is an essential ingredient to the success of this survey. Your efforts will make a significant impact on the number of individuals who participate in this study.

Dr. Ronald D. Opp, Ph.D. Project Director

Dr. Oliver D. Hensley, Ph.D. Professor

Enclosures: sealed questionnaires



APPENDIX G

PHONE INTERVIEWS: FORM UTILIZED TO IDENTIFY
PARTICIPANTS



March 25, 1996

Dear

In continuing our research into the "best" curriculum development, implementation, and evaluation practices and policies, we requested that the Tech Prep Directors identify those consortia and programs they believed were exemplary. Based on the results of our survey, your

were selected.

We would like to interview five (5) individuals who were involved in the curriculum development/implementation/evaluation process for each program and request that you provide us with the name, organizational affiliation, address, and phone number of the persons you believe we should contact to share their expertise and experience with us regarding the process.

We anticipate the telephone interview to take from 20 to 40 minutes. Time permitting, a copy of the interview questions will be mailed to participants in advance.

We request that you enter the information regarding the persons to contact on the attached form and, please, FAX the form to us by Friday, April 5th. Our FAX number is 806-742-2179.

Thank you for your continued assistance and cooperation.

Sincerely,

Dr. Ronald D. Opp

Dr. Oliver D. Hensley



TELEPHONE INTERVIEWS

{Career Pathway} {Program Name}

{Name TP Consortium}
{Name/Title TP Consortium Director}
{Phone # of TP Consortium}
{FAX # of TP Consortium}

1. Name Title Organization Address

Phone Number

2. Name Title Organization Address

Phone Number

3. Name Title Organization Address

Phone Number

4. Name Title Organization Address

Phone Number

5. Name Title Organization Address

Phone Number



APPENDIX H

DOCUMENT ANALYSIS: LETTER REQUESTING CURRICULAR
MATERIAL





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

October 27, 1995

Name
Director, Tech Prep
Consortium
Street
City, TX ZIP

Dear (director):

The SPECAP Research group at Texas Tech has again been awarded a Carl Perkins grant to examine specific components developed in Tech Prep programs in Texas. The overall purpose of the project is to identify, describe, and promote exemplary policies and practices in the consortia around the state. This year's project is focusing on the area of Tech Prep curriculum development and evaluation.

In the SPECAP 1995 Final Report, as researchers, we noted that Tech Prep Consortium directors were the architects of the future as they lead planning for the schools, industry and government agencies of their regions. In the same way, we hope that we can demonstrate that the curriculum coordinators are the builders of the 21st century educational process, and our subsequent economic vitality.

We would greatly appreciate your input regarding the development and evaluation of your curricula in all areas. We are committed to analyzing Engineering Technology, Allied Health, and Business curricula. Already, we have copies of your program applications and revisions from the Coordinating Board. Now we are particularly interested in any career cluster descriptions, syllabi/lesson plans, matchbooks, articulation agreements, course descriptions, evaluation of curricula, or other printed materials that you have available. This information will greatly facilitate our research in determining the exemplary Tech Prep curricula of Texas. If you can help us with the initial curriculum planning processes as well, we would be extremely grateful.

The curricula can be mailed to the above address, or, preferably, for your convenience, we will be available at the Tech Prep Director's conference to pick them up from you. If we can answer any questions, please feel free to contact one of the principal investigators, or Bethany or Gloria at 806/742-3124. We intend to promote the Tech Prep programs that you recommend in several publications. Your time and help in letting us know what is exemplary advances the general cause of technical education in the state of Texas, and is greatly appreciated.

Sincerely,

Dr. Ronald Opp Dr. Oliver Hensley



APPENDIX I

DOCUMENT ANALYSIS: DOCUMENT CLASSIFICATION SCHEME



•																	_								_
Техота	Office Admin.	N. Central Texas Coll	В	53	×	×		×					_	×											
Texoma	Management	N. Central Texas Coll	В	88	×	×		×	×	×				\times											
Техота	Bulsun NDA	N. Central Texas Coll	٨	27	×		Š	\times	×																
Техота	Paramedicine	N. Central Texas Coll	٨	56	×		×	×	×	×					×				•		\cdot				
Техота	Emerg. Med. Services	N. Central Texas Coll	٨	25	×		χ	×	×	×	\neg														
Техота	Occup. Therapy Assis	Cooke Connty Colleg	٨	24	×		Š	×	×	×			×		×										
Техота	Electronics	Cooke Conuty Colleg	ပ	23	×	×	Ϋ́	×	×	×			×		. :										
Техота	Occup. Therapy Assis	N. Central Texas Coll	٨	22	×	×	ΧP	×	×	×			×			-].
Permian	Off. System Tech.	bilbiM	В	21	×		ΧP	×	×	×					×				Ī	\Box		·	I		
Permian	Stenographic & Gen.	Midland	В	20	×	×		×	×	×		•													7
Permian	Drafting Technology	bnslbiM	၁	19	×		Ϋ́	×	×	×			×	×	×		\times						-		7
Permian	Child Care & Dev.	Midland	Α	18	×	×	Ϋ́	×	×	×	Ī			×	×		\times	·							
Permian	Electronics Tech.	Midland	ပ	17	×		XCF	×	×	×					×							T	T	T	
Permian	Comp. Info. Systems	Midland	၁	16	×			×	X	×			×	×	×		×			1	\exists		T		
Heart	Legal Secry./Off. Adn	МсСеппап	В	15	×			×	×	×			×								\Box			I	
Heart	Med.Secry./Off. Admi	МсСеппап	В	14	×			×	×	×			×				Ì								
Heart	Off Admin.:Info. Proce	МсLеппап	В	13	×		XP	×	×	×			×		×							\Box			
Неап	Child Development	МсLеппап	⋖	12	×	×	×	×	×	×			×			-	·								
Heart	Microcomp. Appli.\Off	МсLennan	В	11	X			×	×	×			×		·						П		\exists		
South Tex	Emerg. Med. Service:	Laredo	4	10	×		ΑX		×	×			×	×		×									
South Tex	Aed. Off. Assis. Aed	Laredo	4	6	X		ХP	×	×	×			×	×		×									
Southeast	SissA evistratinimbA	Lamar Univ. / Pt. Arth	m	8	×		×	×	×						×										
South Tex	SAA .sissA .ttO .beM	Laredo	⋖	7	×			×	×	×															
Southeast	Office Technology	Lamar Univ. @ Orang	B	9	×	×	XP	×	×	×					×										
Southeast	Mursing	-amar Univ. @ Orang	<	5	×	×	ΧP	×	×	×												·			
JInb	StramaganaM	egelloD ee	ıω	4	×			×	×	×	×				×					П					
- ilu	Business Admin.	ee College	m	3	×			×	×		×				×					П				\Box	
iluə	Emerg. Med. Tech.	egelloO ee	۷	2	×	×	×		×		×	×	×	×	×		.*							T	
Jlub	Assoc. Degree Nursin	ee College	۲	-	×	×	ΧP	×	×	×	×	×	×	×	×		-								
			3.0		ation				_	ites				S	suts				Ħ		ents	ts		٦	
			S:A.	_	ıstific	S	ions	١	nlu	ᆵ	<u></u>		es	encie	eme	eys			mer		irem	men		catio	
) N	form	on/in	ision	šcript	ricul	irric	bard	of AB	<u>s</u>	ectiv	npet	agre	Surv	10	ŀ	agree	entor	redu	quire		appli	
			OF F	ation	evisi	e rev	es des	it cur	sed c	√ B	ses	gog	j obj	€ cor	ation	orce	atics	S	hip	inv.	sion	er re	sət	Sion	
			TYPE OF PROG:A.B.C	Application form	Prog. revision/justification	Course revisions	Course descriptions	Current curriculum	Proposed curriculum	Advisory Board minutes	Addresses of	Course goals	Course objectives	Course competencies	Articulation agreements	Workforce surveys	Schematics	SCANS	Internship agreement	Course inventory	Admission requirements	Teacher requirements	Timelines	Admission application	
ĬC	<u></u>	<u> </u>	ĮΈ	Į₹	٥	ĮŎ	O	ر آ	٥	Įĕ	۲	<u> ŭ</u>	<u> Ŭ</u>	Ŏ	₹	≥	ŏ	ĭŏ	<u>=</u>	ΙŎ	Ĭ	Ĕ	ΙÏ	ۆ∣	

Brooke - cbdoc.xls

List of papers from the Coordinating Board 10/18/95

Brooke - cbdoc.xls

S

· · ·																									_
Jlub	Off. Admin.(Med. Off.	San Jacinto-No	AB	58								[
Gulf	Asnagement Dev.(Re	San Jacinto-No	В	22																					کے
- iluə	Accounting	San Jacinto-Ontrl	В	56	×	×	Ϋ́	×	×	×	×			×	×			×							-C.
Gulf	Management Dev.(Ma	San Jacinto-Criti	В	55	×	×		×	×	×	×			×	I			×]
Gulf	Engin.Drafting Tech.	San Jacinto-Cntrl	ပ	54	×	×	Ϋ́	×	×	×	- ;		×											T	
Gulf	Electronicss Tech.	San Jacinto-No	၁	53																			·	T	
iluĐ	Process Technology	San Jacinto-Cntrl	خ	52	×		Ϋ́	×	×	×	×				×								╗	T	7
tsəW	Secretarial/Office Occ	Hanger .	В	51																Ì					1
Gulf	Respiratory Therapist	San Jacinto-Cntrl	٧	20	×	×	ΧP	×	×	×	×			×	×	ĺ					·		1	T	7
Gulf	Off. Admin.(Info. Proc	San Jacinto-Cntrl	В	49																			٦	T	7
JIng	Off. Admin.(Bilingual	San Jacinto-Cntrl	В	48																					1
Gulf	Off. Admin.(Exec. Sed	San Jacinto-Cntrl	В	47													1								7
Gulf	Office Admin.(Legal S	San Jacinto-Cntrl	В	46			:					·									٦		1	T	7
Gulf	Off. Admin.(Med. Off.	San Jacinto-Cntrl	AB	45													1	7	T					T	1
	aR).vəQ inəməgsnaM		В	44													Ì	1						十	7
Alub	Electrical Technology	oM-otniost ns2	ပ	43	×	×	ΧP	×	×	×	×				×	٠		×						T	7
JIng	Instrumentation Tech	San Jacinto-Cntrl	ပ	42	×	×	ΧP	×	×	×	×				×		1	×						十	7
Gulf	Electronics Tech.		\vdash	Н	\vdash	Н				×	Н		×			\times			×					十	7
Gulf	Comp. Info. Systems	San Jacinto-Cntrl	В	40	×	×		×	×	×	×			×		7	1	×		·				Ť	1
omsIA	Off. Systems Speciali	oinotnA ns2	В	39	×		XP	×	×	×		П		×	×			\overline{x}				·		\top	1
omsIA			O	38	×				\vdash	\vdash	-	П	×	×	T	1		\overline{x}						1	1.
tsəW	Microcomputer App.	Ranger	В	37	×	×	XP	×	×	×		П			×	×		7			_			\top	1
	Professional Secry./2		•	•	-	_		×	_	_					×							·		十	1
Upper Eas			⋖	35	×		ΧP	×	×						×									\top	1
omsIA	Off. Systems Tech./2	otlA ols	B	34	×		Н	×	×	×	×	П	×	×	×			×				П		\top	1
Permian	_	_	m	33	×	×	XP	×	×	×				×	×			×						十	1
Upper Eas	Professional Secry./3		₩	⊢	⊢	⊢		×	×	×														1	1
	Office Administration		m	31	×		×	×	×	×			×	×		×								\top	7
Gulf	Drafting Technology	V. Harris Montgomen	U	30	×	F	Α N	×	×	×		Н	×			×								\top	7
			╁	┢	_	ـــــ	Ė	T	T	Г		П		П	ts						ıts	П	H	\top	
	·		A.B.		tifica		ဋ	ے		inute				cies	men	Ş			ent		mer	ents		E G	1
			TYPE OF PROG:A,B,C	۱ř	Prog. revision/justification	ions	Course descriptions	Current curriculum	Proposed curriculum	Advisory Board minutes	AB		Course objectives	Course competencies	agreements	Workforce surveys			Internship agreement	tony	Admission requirements	Teacher requirements		Admission application	.
			FPH	Application form	risior	Course revisions	lesci	ürrik	lno p	Boa	Addresses of AB	Course goals	bjec	Juo:		ns əx	S		p ag	Course inventory	in re	redu	S	n ag	
			E 01	icati	ē	se r	se d	ent c	ose	sory	esse	se g	se o	se c	Articulation	forc	Schematics	NS	nshi	se ir	Issio	her	Timelines	issic	
				da	ĮŠ.	֓֓֞֓֓֓֓֓֓֓֓֟֟֟ <u>֚֚֚֚֚֚֚֚֚֚֚֚֚֚֚֚֚֚</u>	Į	馬	16	įš	ğ	М	jo	Νğ	\rtic	Ş	sche	SCANS	nteri	Пo	E M	eac	ime	E E	

Brooke - cbdoc.xls List bragers from the Coordinating Board 10/18/95

																	_	_	_	_	_				
North Cen	Child Development	DCCCD-Brookhaven	A?	203	×	×	×		×	×	×		×	×			×			}			\prod	\exists	\Box
Central			_		_	_	_	_	×	×			-	1	×									\exists	ヿ
Central	Word Processing Spe					-	_	_	-	×	М				×										٦
Global	Management Dev.						ХСF	×	×	×	,		×		×						×	×			٦
Global	Comp. Aided Drafting	Collin County	C5	199	×	_			-	×				Ì											
Central	Office Management	Central Texas	В	198	×	×	Α	×	×	×					×									٦	\neg
Central	Early Childhood Profe	Central Texas	i	197	×		Ϋ́	×	×	×			×	Ì											٦
Gulf	Office Administration	College of the Mainlar	В	196	×	×	×		×	×			Ì	×	×										٦
Gulf	Emerg. Med. Services	College of the Mainlar	<u>)</u>	195	×		×		×	×			×		×		×				×				-
tsəW	Office & Comp. Tech.	Ot oosiO	Α	194		×			×	×	×														
Bulf	Office Mgt. Tech.	Brazosport	В	193			Α		×	·		•			×	×	×								
Gulf	Engin. Graphics & De	Brazosport	С	192	×	×	XCF			×	×		×	Ì	×	×	×							1	
Brazos	Med. Off. Mgt.	nnil8	AB	191						×	×									•					
Brazos	Off. TechMed./2	nnil8	AB	190	×	×	×	×	×							×								T	٦
Brazos	S\gnifnuoccA	nnil8	В	189	×	×	Š			×			×		×										٦
Brazos	Child Development	nnil8	Α	188	×	×	×		×	×			×		×								П		
Coastal	General Bus. Tech.	Bee County	В	187	×	×	Š		×	×			×											T	٦
Coastal	Off. System Tech./Off.	Bee County	ż	186	×	×	Š		×	×					×									\exists	
Coastal	QuifinuocoA			_	_	_		Т	×	×	П		T												\neg
Coastal	Drafting & Design Te	Bee County	၁	184	×		Š	×	×	×														T	
Coastal	Child Development	Bee County	A?	183	×		Š	×	×	×						×				×			\prod		
Capital	Off. Systems Tech./2	OO nitsuA	В	182		×	×	×	×	×	П	×	×		×										
Capital	Marketing	OD nitsuA	В	181	×	×	Š	×	×	×					×										
Capital	Printing & Desktop Pr	OO nitsuA	خ	180	×	×	Ϋ́	×	×	×													П		
Capital	Engin. Design Graphi	OO nitsuA	ပ	179			×		×				×		×			×					П		٦
Capital	Electronic Tech.	OO nitsuA	ပ	178		×	XCH	×	×	×					×			×					П		\Box
Deep East	Management Dev.	1			×			×	×	×			×										П		
Panhandle	Commercial Service							×	×	×			×		×								П		
Deep East	Child & Family Dev.	_								×				×	×								П	\sqcap	
			Г		Prog. revision/justification		St	_	Ę	nutes				cies	nents	3			ent		ments	ents		tion	
			YPE OF PROG:A,B,C	form	on/just	Course revisions	Course descriptions	Current curriculum	Proposed curriculum	Advisory Board minutes	Addresses of AB	ıls	Course objectives	Course competencies	Articulation agreements	Workforce surveys	_ ا		Internship agreement	Course inventory	Admission requirements	eacher requirements	-	Admission application	
			OFF	ation	evisi	ev.	e des	t cur	sed c	₹	ses	ege e	3 obje	e con	ation	orce (natics	S	hip a	inve	sion I	er rec	Set	sion :	
			YPE	Application form		ourse	ourse	urren	ropos	dviso	ddres	Course goals	ourse	ourse	rticul	orkfc	Schematics	SCANS	terns	ourse	dmiss	sache	Fimelines	Jmiss	
	<u> </u>		H	Ø	ام	<u> </u>	ĮΟ	ĮΩ	<u>آم</u>]₹	Ž	O	Ö	Ŏ	₹	≥	Š	Ñ	LΞ	ပြ	Įĕ	Ľ	匠	ĕ	

List of papers from the Coordinating Board 10/18/95

Brooke - cbdoc.xls

137

																									_	
Panhandle	Electronics Tech.	ollinsmA-DT2T	၁	87	×		×		×	×					×											
Panhandle	Comp. Science Tech.	ollinsmA-DTST	Ċ	86	X		×		×	×			×		×											C
Star ·	Bus. Off. Occupations	SexaT W2	В	85	X	X	×	X	×	×	×	×	×	×	×								$oldsymbol{ol}}}}}}}}}}}}}}}}}}$		- 1	4
Star	Office Systems Tech.	SexaT W2	В	84	X	X			×						·											
Star -	Management	Sexas WS	В	83	×	×			×								٠									
Gulf	Electronics Tech.	o2-otniosL ns2	ပ	82														-								
Gulf "	Engin. Drafting Tech.	o2-otniosL ns2	ပ	81																						
Gulf	Management Dev.(Ma	o2-otniosL ns2	В	80																						
Gulf	Accounting	o2-otniosL ns2	В	79																						
Gulf	Off. Admin.(Info. Proc	o2-otniosL ns2	В	78																						
Gulf	Off. Admin.(Exec. Se	o2-otniosL ns2	В	77																						
Gulf -	off. Admin.(Legal Sec	San Jacinto-So	B	92																						
Gulf	Off. Admin.(Med. Off.	og-ofiniseL nag	AB	75																	\blacksquare				$ begin{array}{c} beg$	
Gulf	Management Dev.(Re	San Jacinto-So	В	74																		\Box				
South Plain	Radiologic Technolog	South Plains	⋖	73													,									
South Plain	Respiratory Care	South Plains	۷	72																						
South Plai	Accounting Associate	South Plains	В	71																						
South Plai	Administrative Secry.	South Plains	В	70																						
South Plai	Legal Secretary	South Plains	В	69																						
South-Plai	S\.sissA .ofnl .beM	South Plains	⋖	88																						
South Plai	Health Info. Services	South Plains	⋖	67	×	×	Ř	×	×	×	×		×]	
South Plain	Drafting Technology	South Plains	ပ	99	×		×	×	×	×			×	٠.	×			×					\Box	\Box		
South Plai	Microcomputing	South Plains	B	65	×	×		×	×	×	×											П	П		7	
Gulf	Engin. Drafting Tech.	San Jacinto-No	ပ	64	×	×	Α̈́	×	×	×	×				×		×	×								
Gulf	Management Dev.(M	San Jacinto-No	В	63																П	П		T		7	
Gulf	Accounting	San Jacinto-No	B	62					-														T		7	
Gulf	Dorg. Ofnl).nimbA .ftO	San Jacinto-No	В	61			Ī													П						
- ilua	off. Admin.(Legal Sec	San Jacinto-No	B	9																				T	\rceil	
Gulf	off. Admin.(Legal Se	San Jacinto-No	B	59														Г			П				7	
			PROG:A.B.C	n form	sion/justification	visions	scriptions	rriculum	curriculum	soard minutes	of AB	als	jectives	mpetencies	n agreements	surveys	Ş		agreement	entory	requirements	equirements		application	oc	

ß

Brooke - cbdoc.xls

																							_		_
Panhandle			В	232	×		ΧP	×	×	×	×		×												
Upper Rio	Office Administration	El Paso	В	231	×	×	ΧP	×	×				×												
Upper rio	Vocational Nursing C												×												7
Upper Rio	SAA gnisuN	El Paso	∢	229	×	×	XP	×	×	×					×					,		Ì	\exists	T	
Upper Rio	Drafting & Design Te		_	_	_	_							×		\times		T		Ì					T	٦
Coastal	Comp. Info. Systems	Del Mar	خ	227		×	×	×	×										Ī	Ì				\exists	٦
Coastal	Professional Med. Se	Del Mar	AB	226	×										\times		Ì						\exists	T	
Coastal	General Office/2	Del Mar	B	225																					
Coastal	Professional Secry.	Del Mar	В	224	×	×	XP		×	×	×		×	×	×									T	٦
Coastal	S\gnifnuoccA	Del Mar	В	223	×	×			×	×	×		×		×	\times		×							
Coastal	Drafting Technology	Del Mar	ပ	222		×	×		×	×	×		×		×		Î							\exists	
Coastal	Electronics/Process T	Del Mar	ပ	221	×	×			×										·				\sqcap	T	
Coastal	Electronics/Instrumen	Del Mar	ပ	220	×	×	×	×	×	×	×		×												
Coastal	Computer Tech.	Del Mar	٠	219	×		ΧP		×	×				×	×										
North Cen	Off. Tech.:Admin. Ass	DCCCD-Richland	В	218													i								
Morth Cen	Off. Tech.:Admin. Ass	DCCCD-Иоцр Гаке	В	217	×								×												
Morth Cen	Office Technology: A	DCCCD-Mountain Vie	В	216																					
North Cen	Off. Tech.:Admin. Ass	DCCCD-EI Centro	В	215	×			X	×	×			×	\times			×	×					\Box	П	
North Cen	Electronics Tech.	DCCCD-Mountain Vie	ပ	214	×		X	×					×	×			×							Т	
Morth Cent	Assoc. Degree Nursin		٨	213	×	×	X	×	×	×			×	×	×	×	×				×		×	×	
North Cen	Surgical Tech. Option		Æ	212	×	×	XP	×	×	×			×										\neg		
иод ИроИ	eA .nimbA :.dɔəT .tlO	DCCCD-Eastfield	В	211	×			×	×	×			×	×			×	×							
пэО проИ	Child Development	DCCCD-Eastfield	A?	210	×																				
North Cent	DeT .qmoO\cinotbel3	DCCCD-Eastfield	ပ်	209	×			×	×				×			*	×								
North Cen	Marketing Careers/3	DCCCD-Cedar Valley	В	208	×		×	×	×	×	×			×			×							\prod	
North Cen	off. Tech.: Admin. As	DCCCD-Cedar Valley	В	1.4				×	×	×			×	\times			×	×							
North Cent	Marketing Careers/3	DCCCD-Brookhaven	В	206			×	×	×	×	×			×			×								
Central	Mgt. & Marketing	Central Texas	m	100	×		Α	×	×						×						•			П	
North Cent	off. Tech.: Admin. As	DCCCD-Brookhaven	m	204	×			×	×	×			×	×			×	×							
_			ပ		iţi	Γ				es					ıts						ıts	ļ	П	П	_
	·		A B		tifica		us	_	١	in			اررا	cies	mer	Ş			ent		me	ents		ij	
			TYPE OF PROG:A.B.C	Ę	Prog. revision/justification	ons	Course descriptions	Current curriculum	Proposed curriculum	Advisory Board minutes	AB		Course objectives	Course competencies	Articulation agreements	Workforce surveys			Internship agreement	tony	Admission requirements	Teacher requirements		Admission application	
			PR	5	Sion	visic	escr	urric	Sur	Boa	s of	oals	bjec	틹	ัก ac	ns e	SS		agi	veni	i rec	edn		l ap	
			P	iğ İ:Ş	ē	ë E	e de	티	sed	2	sse	ie go	e O	ğ	latic	orce	mati	<u>S</u>	ship	e in	sion	ier r	nes	Sion	
			YPE	Application form	6	Course revisions	ours	urre	100	dvis	Addresses of AB	Course goals	ours	ours	rticu	ork	Schematics	SCANS	tern	Course inventory	dmis	each	Timelines		
<u> </u>	<u> </u>		<u> </u>	ا≼	lσ	ĮΟ	lO	ျပ	<u> </u>	ĮΫ	⋖	O	O	O	4	>	S	Ś	드	ပ	Þ	ΙĒ	F	۷	_

Comp. Info. Systems (Central

Comp. Info. Systems(Central

Automated Off. Tech. Lower Rio

Drafting & Design Te∮Lower Rio

Building Const. Tech. Lower Rio

Biomed. Equip. Tech.∣Lower Rio

Automated ManufactdLower Rio

اnstrumentation Tech∤Lower Rio

Info. Management Te|Lower Rio

Med. Laboratory Techloorth Cen

Lower Rio

Lower Rio

North Cen

North Cen

North Cen

North Cent

North Cen

North Cent

North Cent

Applied Science/Draffice?

Chem. Tech.

Electronic Tech.

Med. Record Tech.

Phy. Therapist Assis.

Emerg. Med. Tech.

Respiratory Therapy

Radiologic Tech.

Business

Dental Hygiene

o Temple √

Temple

Texarkana

TSTC-Harlingen

TSTC-Harlingen

TSTC-Harlingen

TSTC-Harlingen

TSTC-Harlingen

negnih&H-OT21

TSTC-Harlingen

TSTC-Harlingen

TSTC-Harlingen

TSTC-Harlingen

Tarrant-NE

Tarrant-NE

Tarrant-NE

Tarrant-NE

Tarrant-NE

Tarrant-NE

Tarrant-NE

■Tarrant-NE

109

108

107

106

105

104

103

102

101

100

66

86

97

96

L
-
APP

DI BI
BIBL
-
2000
C
$\bar{\mathbb{C}}$
c/
PSUS A
$\tilde{\alpha}$

×

Brooke - cbdoc.xls

				261					Γ	П											1	ī	П	Т	\neg
							_		L	H		-	_	\dashv	\dashv	\dashv	_				\dashv	┥	\dashv	+	\dashv
_				9 260			_	L	L		Н	Н	_	\dashv	\dashv	\dashv	_			\dashv	4	\dashv	\dashv	\dashv	\dashv
			Н	8 259			_		L	_	Н				4						4	\dashv	\dashv	4	4
				7 258			L	L			Ц				_					\Box		_	\dashv	\dashv	4
				257				L			Ц											_	_	\dashv	_
			Ц	256									Ш		\Box							╛	\sqcup	ightharpoonup	
				255										Ц									\Box	\bot	_
				254																	:			$oldsymbol{\perp}$	╝
Gulf	Aerospace	nivlA	?C	253			×	×	×	X											,	Ī			
Gulf	Criminal Justice/Corre	nivlA	?	252			×		×	×	×			×	×	×		×				Ì			
East Texa	Computer Science	Kilgore	5	251	×	×	×	×	×	×					×									T	7
East Texa	Office Administration				×					×													7	T	7
East Texa					×			×	×	×													╗	一	7
East Texa	Drafting Design Tech.						×	×	×	×										П				T	7
East Texa	Child Development						×	t		1	×	×	×	×	×									\Box	٦
Permian/C	Secretarial Science A					×	Š	×	×	×			×		×		×							寸	ヿ
Permian/C									$\overline{}$	×	П		×	×	×		×						┪	T	1
Permian/C	Health Info. AAS/2(M								×	×				×	×		×	×						T	٦
	Comp. Info. Systems													×	×	×								\exists	٦
Gulf	Physical Therapist													×	×			×							7
Gulf	Drafting & Design Ted	Houston	ပ	241	X	×	×	×	×	×				×	×			×						一	1
Gulf	Electronic Engin. Tec		\mathbf{I}	0		3	×	×	×	×				×	×			×							7
Gulf	Comp. Sciences Tect		5	239 24	×		T	•		-	×			×		××		×						一	٦
Heart	Info. Processing	II!H	5	238	×		×	T	1	×			X	×											7
Heart	Drafting & Design Te	II!H		237	×	×		×		×	×			×									П	П	٦
Texoma	Asso. Degree Nursing	Grayson County	4	236			XCP P	×	×	×														П	
Texoma	Paramedicine/1							×	×	×													П	\Box	٦
Texoma	Med. Lab. Tech.		1	_	×	×	XCP	×	×	×															一
Gulf	Nursing/2	notsevlsD	⋖				×		×		-	×	×	Г										П	┨
	·									es				٦	ıts		Γ				nts		П		ヿ
			A,B		tifica		မြ	ا	<u>E</u>	oin ut			ြွ	ncies	mer	s/			nent		eme	nents		ation	
			TYPE OF PROG:A,B,C	ELIC	Prog. revision/justification	ions	Course descriptions	Current curriculum	Proposed curriculum	Advisory Board minutes	f AB		Course objectives	Course competencies	agreements	Workforce surveys			Internship agreement	tony	Admission requirements	Teacher requirements		Admission application	
			FPF	Application form	visio	Course revisions	Jesc	Suria Lina	no p	Bog	Addresses of AB	Course goals	bjec) mo:	ion a	se st	tics		p ag	Course inventory	on re	requ	S	n a	
			É O	licati	Fe]	rse r	rse	ent	ose	sory	ress	rse	rse (rse (Articulation	kforc	Schematics	SN	nshi	rse i	issic	cher	Timelines	issic	
			TYP	App	Pro	တြ	Col	Cur	Pro	Adv	Add	Con	ပ္ပြ	Con	Artic	Įŏ M	Sch	SCANS	Inte	Con	Adn	Теа	ĬĬ	Adn	ŀ

List of papers from the Coordinating Board 10/18/95 $\mathbb{1}44$

Brooke - cbdoc.xls

ω

																						•	•	1	
١		T						·				×		·	×	×	×	ΧP	×	×	126	V	Vernon	Electronics	иопр Тех
		T	\neg	\exists						\exists	Ì										125	١٠	Temple	Comp. Info. Systems(Central
				\Box	\prod																124	ΙC	Temple	Manufacturing Tech.	Central
] ,																					123	ΙC	Jemple	Drafting & Design Gra	Central
0																					122	1 ⊲	Temple	Med. Lab. Tech.	Central
,		\prod																					Temple	Med. Off. Info. Systen	Central
																					120		[Somputer Science	North Cen
																								ssənisu8	North Cen
																					118	Тα	Temple	General Off. Tech.	Central
,																					117	Τα	Temple	Off. Info. Systems	Central
146	Admission application	Timelines	Teacher requirements	Admission requirements	Course inventory	Internship agreement	SCANS	Schematics	Workforce surveys	Articulation agreements	Course competencies	Course objectives	Course goals	Addresses of AB	Advisory Board minutes	Proposed curriculum	Current curriculum	Course descriptions	Course revisions	Prog. revision/justification	Application form	TYPE OF PROG-A B.C.			

145

1<u>4</u>4)

143

141

140

139

138

137

136

135

134

133

132

131

130

129

128

ΧP

√TSTC-Sweetwater

O TSTC-Sweetwater

OTSTC-Sweetwater

TSTC-Sweetwater

TSTC-Sweetwater

OZ-InshaTIO

OS-frant-SO

OS-frant-SO

OS-frantaT @

TSTC-Waco

TSTC-Waco

TSTC-Waco

Victoria

O Victoria

O Victoria

Wictoria 5

Victoria

Victoria

TSTC-Sweetwater

tseW

tseW

North Cen

North Cent

North Cent

North Cen

Heart

Golden

Golden

Golden

Golden

Telecommunications

Automation/Robotics

Manufacturing Engin.

Electronics Tech.

Diesel Mechanics

Comp. Prog. Tech.

Off. Systems Tech.

Microcomp. Tech.

Drafting Tech.

Business Mgt

Marketing

Automated Systems

Air Cond. & Refrig. TeWest

Drafting & Design TedWest

Automated Off. Tech. West

Meat Proc. & Bus. MgHeart

Instrumentation Tech Heart

Electronics/Instrumen|Golden

Asso. Degree NursingGolden

Brooke - cbdoc.xls List of papers from the Coordinating Board 10/18/95

APPENDIX J

MONOGRAPH: LETTER TO CONFERENCE PRESENTERS

May 30, 1996

Budde Rule Tivy High School 1607 Sidney Baker Kerrville, TX 78028

Dear Mr. Rule,

According to our Advisory Board, and our own observations, your presentation at the State Tech Prep conference was very well done. Congratulations on your hard work! We would like to invite you to put your presentation into an article-length paper, and submit it to us for possible publication in our 1996 SPECAP Monograph. We are looking for an article about 8-10 pages, double-spaced. We will be happy to retype or edit any submissions; we ask for a disk and a hard copy if possible. Otherwise, let us know what we can do to help.

The catch for this is that the article should be completed before the second week in June. We apologize for the rush, but hope that it does not dissuade your interest.

Sincerely,

Dr. Oliver Hensley



APPENDIX K

MONOGRAPH: LETTER TO CONSORTIA DIRECTORS



January 25, 1996

Mr. Gene Schatz Whitney High School Box 518 Whitney, TX 76692

Dear Mr. Schatz:

The Strategic Planning, Evaluation of Curriculum, and Assessment of Performance (SPECAP) Research Group at Texas Tech has noted that Tech Prep consortium directors in Texas are the architects of the future as they lead planning with schools and colleges, business and industry, and government agencies in their regions. To publicize this fact nationally, we would like to publish a monograph highlighting Tech Prep efforts in Texas.

In order to publish such a monograph promoting Tech Prep in Texas nationally, we need your help. As a major player in the Texas Tech Prep program, we believe that your expertise needs to be shared with others involved with Tech Prep programs around the country. We would like you to consider contributing an 8-10 page article (double-spaced) for this monograph detailing what you consider to be the most significant policies and practices that have contributed to your success.

We are prepared to provide you with typing, transcribing, and editing support in helping you to prepare your article describing your significant policies and practices. We have enclosed a form that we ask you to complete indicating your interest in contributing a article to the monograph, and a self-addressed envelope for your convenience in returning the form. Since we are under a tight timeline in publishing this monograph, we ask that you mail the form back to us no later than **February 5th**. Your article contribution for inclusion in the monograph will need to be sent to us no later than **February 23th** in order to meet our publishing deadline. If we can answer any questions about the monograph or our request for your participation, please feel free to contact us at the number above, or Ms. Bethany Rivers, the SPECAP staff member responsible for monograph preparation, at (806) 742-3124. We thank you for your continuing support of our efforts to promote your Tech Prep efforts in Texas.

Sincerely,

Dr. Ronald D. Opp enclosures: (3)

Dr. Oliver D. Hensley



monltr.doc/c:\bcr - oh hddrv 8/5/96

	help you by writing a article about	
	Please keep in touch, and I wi	ll let you know if I have quest
This is a great idea,	but at the present moment, I feel that I can	nnot offer my services to you.
however know of so	me people that might be able to contribut	te a chapter. Try contacting
	(name) OR	(name)
	(position/co.)	(position/co.)
	(street)	(street)
	(street) (city, zip)	

Please return this by January 24th in the enclosed envelope, or to Dr. Oliver Hensley

College of Education

Texas Tech University

Box 41071

Lubbock, TX 79409-1071

Formatting information:

8-10 pages, double spaced, 12 point Times New Roman, with one-inch margins.

Please send your article in both hard copy and disk form, if possible. The monograph will be done in a WORD 6.0 format, either IBM or Macintosh, so if possible, save your article as Word, or as an ASCII/all text file.

However, if needed, we would be happy to retype and/or edit any submissions. If you have any questions, or if we can help in any way, please call Bethany Rivers 806/742-2916.

Please mail the final article by February 23rd, with disk, to:

Dr. Oliver Hensley College of Education Texas Tech University Box 41071 Lubbock, TX 79409-1071



monltr.doc/c:\bcr - oh hddrv 8/5/96

APPENDIX L

MONOGRAPH: ARTICLE REVIEW PROTOCOL





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

May 15, 1996

Romona Vaughan Director, North Texas Tech Prep 4105 Maplewood Wichita Falls, TX 76308

Dear Romona,

Thank you very much for your submission to the 1996 SPECAP Monograph. We truly appreciate your time and effort. We would, however, like to ask you one more favor. Enclosed are two other articles submitted for publication. Can you take some time and evaluate them using our peer review checklist? We value your input, and believe this review process will strengthen the quality of the monograph. Thank you very much, and as always, if you have questions, please feel free to call Bethany at (806) 742-2916.

Sincerely,

Dr. Oliver Hensley



Peer Review for Tech Perp Articles Peer3/Memos/ SPECAP-0 7/29/96 3:23 PM

PEER REVIEW GUIDELINES FOR ASSESSING ARTICLES FOR INCLUSION IN THE TECH PREP RESEARCH MONOGRAPHS

Author:
Title:
Consortium:
Author's Affiliation: Consortium Business/Industry Secondary Post Secondary Government Other:
1. To what extent does the article advance the Tech Prep philosophy?
2. To what extent does the article allow the reader to use the information to implement in their own program?
3. To what extent does the article include supporting data, documentation, or testimonials?
4. Is the article comprehensive in its description of the Tech Prep processes and activities?
5. Does the article make a substantial contribution to Tech Prep?
6. Is the article valuable to practitioners?
7. Does the article contribute the literature on Tech Prep?
8. Does the article effectively show what is happening in Texas?
9. To what extent does the article show organization and clarity of purpose?
10. Overall, should this article be included?
Total Points (Not to exceed 100) 010 No Maximum Points Points
Comments to support your ratings for inclusion or noninclusion of the article.





J	ul	y 23,	1	99	6

Dear author:

At last! Enclosed is a galley proof of your article, as we have it ready for publication. It has been edited and peer reviewed, as you are aware, and possibly, multiple changes have been made. Please review your article carefully, to make sure that content has not been altered, and that you agree with those changes. In addition, we have enclosed an additional sheet of reviewer's comments and questions. Please look this over, and respond accordingly. When this has been done, Please mark the appropriate box and fax or mail this top sheet within the next five days. If you have made any corrections, please mark your article and return it as well.

Yes, this article has my approval to be published in the SPECAP 1996 monograph as is.
Yes, this article has my approval to be published in the SPECAP 1996 monograph, with changes as marked. (My galley proof has been returned to you to make corrections.)

If we do not receive this sheet back, we cannot publish your article.

With your permission, we reserve the right to make any minor editorial changes we deem necessary. Also, though we reserve the right to make additional copies to send out on request, you, as author, retain the copyright to publish, and distribute your article as you see fit. Please pay special attention to the address we have listed for you. It will be published in this format, so that if there are interested readers, they can contact you individually for further information. If there are any questions, please feel free to call Bethany at (806)742-1959.

This article will be published in a monograph entitled <u>The Texas Tech Prep Consortia</u>: <u>Strategies for Advancing Technical Education</u>, and distributed to the Texas Higher Education Coordinating Board, and each Texas Tech Prep consortium. In addition, each author will receive a copy, around September of this year. We have really enjoyed working with you. We thank you very much for all of your help producing this, and hope it is beyond your expectations.

Sincerely yours,

Oliver D. Hensley



APPENDIX M

QUESTIONNAIRE: DATA ANALYSIS



15 of the product of	For IBM 9 This soft	1-521 -e is function	al through August	t 31, 1996.	License Number 1272	
The new SPS documentation for more information on these new features. The new SPS documentation for more information on these new features. The new SPS documentation for more information on these new features. The new SPS documentation for more information on these new features. The new SPS documentation for more information on these new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information of the new features. The new SPS documentation for more information for the new features. The new SPS documentation for more information for the new features. The new SPS documentation for the new features. The new SPS documentation for the new features. The new SPS documentation for the new features of the new features. The new SPS documentation for the new features of the new features. The new SPS documentation for the new features of the new features. The new SPS documentation for the new features of the new features. The new SPS documentation for the new features of the new features. The new SPS documentation features in the new features of the new features. The new SPS documentation features in the new features of the new features. The new SPS documentation features in the new features of the new features. The new SPS documentation features in the new features of the new features. The new SPS documentation features in the new features. The new SPS documentation features in the new feature	the r OGISTI XAMINE LIP	new SPSS Kelease IC REGRESSION pro procedure to ex transpose data	4 features: cedure plore data files		IES Option: int. analysis spondence analysis	
1 0 FILE HANDE F78.3 COLUMNIA 11 OF THE MAN THE PART OF THE MAN TH	ATRIX	Interface to SPSS		* * :	REL and PRELIS Options	
CCAMPIN 11-11 BUSREP 12-12 LABOREP 13-13 GOVINEP 14-14 CCAMPIN 11-11 BUSREP 12-12 LABOREP 13-13 GOVINEP 14-14 CCAMPIN 11-11 BUSREP 12-12 LABOREP 13-13 GOVINEP 14-14 CCAMPIN 11-11 BUSREP 12-12 LABOREP 13-13 GOVINEP 13-1	‡ _;	FILE HANDLE TP96	ation for more 1 .DAT PECOROS	mation on	Ž.	
15 Company 24 Company 24 Company 24 Company 25 Company 25 Company 26 Company 27 Company		/1 RECID 1-4 CO CCFAC 10-10 CC	NSORT 5-6 CAREE ADMIN 11-11 BUS	7 HSFAC 8-8 12-12 LABORRI	HSADMIN 9-9 P 13-13 GOVTREP OFFCAMP 19-19	
CONTINUE 25 STATE CONTINUE 25 STATE 25 ST		CORRESP 20-20 INTERNET 24-24	TV 21-21 VIDE OTHERMOD 25-25	-22 NET	33-23 38TASK	
15 15 15 15 15 15 15 15		MODCURR 32-32 GRPMEET 36-36	MERGE 33-33 C EXISTING 37-37	EXP. 50-5 E 34-34 WLONG 38-	35-35 35-35 35-36 35-36	
CONTINUE STATE S		SIDSREV 40-40 LABRREV 44 HS	CREV 45 INDUSR OVIREV 48	SEW 46-46 RREV 49	Cr A	
STOTING 67 HSCINGT 63 BUSINGT 65 STOAPPRL 69 CONTINENT 8 LOSAPPRL 1 LIBRAPPRL 69 O CHAPPRL 4 FACIAPRY 5 STOAPPRL 1 CURREN 12 CALALOS 13 STATEOK 18 CALCOS 12 CALALOS 13 STATEOK 18 CALCOS 12 CALALOS 13 STATEOK 18 CALCOS 12 CALALOS 13 STATEOK 18 CALALOS 14 STATEOK 18 CALALOS 17 STATEOK 18 CALALOS 18 STATEOK 18 CALANOS 18 STATEOK 18 CALALOS 18 STATEOK 18 CALALOS 18 STATEOK 18		CCTRIAL 54	BUSTRIAL 55	FACTRIAL 52 LBRTRIAL 56 STDTRIAL 60	STDTRIL GOVTRIA FACINPU	
0 (12 APPRIL 1) USBAPPRIL 1 USBAPPRIL 2 GVIAPPRIL 3 (12 APPRIL 3) (13 APPRIL 4) (14 APPRIL 4) (15 APPRIL 5) (15 AP		STOINPUT 62 GVIINPUT 66	HSCINPUT 63	SINPUT 64	LBRINPUT 65 STDAPPRL 69	
0 0THAPPR 4 LACITIPRY 5 STOTITIPRY 6 HSCITIPRY 7 LACREDING 13 NEWSTAFF 14 ADDICASS 15 LACREDING 13 LACREDING 13 LACREDING 13 LACREDING 14 LACREDING 14 LACREDING 13 LACREDING 14 LAC		HSCAPPRL 70	BUSAPPRL 1	LBRAPPRL 2		
COPPERING			FACIMPRV 5 LBRIMPRV 9 CATALOG 13	TDIMPRV VTIMPRV STAFF 14	≳≳≒	
0 FACEVAL 28 EREVAL 29 HSSTOS 30 CCSTOS 31 0 ARTICCC 32 ARTICUN 33 TRANSFR 34 LICRATE 35 0 DELGAN 43 0 DELGAN 40 ASSESSING 46 FEEDBACK 43 0 IMPROVING 44 CONTIUNG 45 ASSESSING 46 0 COPPLIENT COMPLIES AND RECODES 60 HERE 159	100 8			STATEOK 18 OTHPERM 22 EVALCOMM 24		
D DESIGN 40 REVIEWS 41 TRYOUT 42 FEEDBACK 43 O CONTIUNG 45 ASSESSING 46 O CONTIUNG 4	3		, , ,	DS 30 NSFR 34	STDS 31 LICRATE 35	
59 DEET CODY AVAILABLE 16	1988, 282	COMMENT COMPUTES	EVIEWNG 41 CONTINUE 45 AND RECODES 60	17 42 17 42 SSESSNG 46	DBACK 43	
59 DEET CODY AVAILABLE 16						
59 DEET CODY AVAILABLE 16						
		N		DEG	CODY AVAILABLE	ပ

Variable Kac Start CARENT CAR		3				\$ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
CORRECT HSFAC		3	4	F4.0						
CCFAC CCCAC CCCANTIN CCCANTIN CCCANTIN CCCANTIN CONTREP COFFICATIO	12.14.14.1		0 - 80	0.00						
LABORREP 1 13 13 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	4	1 10 1 11 1 12	10 11 12	F1.0 F1.0						
FUNDSTAK 1 16 16 16 16 VOURDOLE 1 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19			14 14 17	0.17						
CORRESP 1 20 20 20 20 20 20 20 20 20 20 20 20 20		1 16	16 18 19	F2.0						
NETACRICAL 1 24 24 24 24 24 24 24 24 24 24 24 24 24		20 21 21 22	20 21	0.1.1						
NEEDS 1		1 23 1 24 24	23 24 25	0.00						
DACURE 1		1 26 1 27	26 27	000						
NEW COURT 1 51 51 51 51 51 51 51		1 29	30 30 30		,					
Check Chec		1 32 1 33 1 33	32 33 33							
HOALONG 1 38 38 38 38 CURRDEV 1 39 39 39 39 39 39 20 39 39 39 39 39 39 39 39 39 39 39 39 39		1 35 1 36 1	35 36 37	0.00						
CURRCOFF 1 41 41 FI. REVIEW 1 42 42 FI. FACREV 1 43 43 FI. STORNEY 1 45 46 FI. INDUSREY 1 46 46 FI. LABREV 1 47 47 FI. COVENTER 1 49 49 FI. NOREVIEW 1 50 50 FI. TRIALRUN 1 50 50 FI. STOTRIAL 1 54 54 FI. CCTRIAL 1 54 54 FI.		1 38 1 39 10 60	K W W	0.01						
STDSREV 444 44 44 F1 NSCREV 455 45 F1 INDUSREV 466 F1 LABREV 47 47 F1 GOVTREV 48 48 F1 OTHERREV 49 F1 NOREVIEW 51 51 F1 FICH 51 52 F1 STOTRIA 54 54 F1		1 1 42 1 43	451 421	0.00						
LABRREV 1 47 47 F1. GOVTREV 1 48 48 F1. OTHERREV 1 49 49 F1. NOREVIEM 1 50 50 F1. TRIALRUN 1 51 51 F1. FACINIAL 1 52 52 F1. STÖTRIL 1 54 54 F1. CCTRIAL 1 54 54 F1.		1 1 45 1 66	33							
NOREVIEW 50 50 F1. NOREVIEW 50 50 F1. F1. F2. F2. F3.		1 47	47 48 60	0.0.0						
STORIAL 1 52 52 F1: STORIAL 1 53 53 F1: CCTRIAL 1 54 54 F1:		1 50 1 51	50	000						
6		53	53	0.11						
2 2	25 25 25 25 25 25 25 25 25 25 25 25 25 2									



Column C	55 55 55 55 55 55 55 55 55 55 55 55 55	
28.83.23.23.23.23.23.23.23.23.23.23.23.23.23	22 22 22 22 22 22 22 22 22 22 22 22 22	28.82.82.82.82.82.82.82.82.82.82.82.82.8
2822223282826	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	28222222222222222222222222222222222222
2223223252-unanonanonanonanonanonanonanonanonanonan	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22222232222222222222222222222222222222
22202222222222222222222222222222222222	22 22 22 22 22 22 22 22 22 23 23 23 23 2	232832322-unasaa-aa-aa-aa-aa-aa-aa-aa-aa-aa-aa-aa-aa
25.25.25.25.25.25.25.25.25.25.25.25.25.2	22 22 22 22 22 22 22 22 22 22 22 22 22	2
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2022 202 - cum a man con con con con con con con con con co
	22 22 22 22 22 22 22 22 22 22 23 33 33 3	252 255 - 224 - 24
1	22 22 22 22 22 22 22 23 33 34 34 34 34 34 34 34 34 34 34 34 34	200000 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	22 22 22 22 22 22 22 22 23 33 34 34 34 34 34 34 34 34 34 34 34 34	20
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	200 000 000 000 000 000 000 000 000 000
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20000000000000000000000000000000000000
	22 22 22 22 22 22 22 22 22 22 23 23 23 2	2000年度
18年 20 20 20 20 20 20 20 20 20 20 20 20 20	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 22 22 22 22 22 22 22 22 22 22 22 22
20000000000000000000000000000000000000	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22222222222222222222222222222222222222
22222222222222222222222222222222222222	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 22 22 22 22 22 22 22 22 22 22 22 22
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22222222222222222222222222222222222222
2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 22 22 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24
2 110 110 FF10 2 112 111 FF10 2 113 113 FF10 2 114 FF10 2 115 FF10 2 116 FF10 2 117 FF10 2 118 FF10 3 118 FF10 4 110 4 110 6 11	2 10 11 11 12 12 12 13 13 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	2 110 110 110 110 110 110 110 110 110 11
2 11 11	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
22 23 23 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25
2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
22 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 23 23 23 23 23 23 23 23 23 23 23 23 2
22 23 23 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 20 20 19 F1.0 2 20 20 70 F1.0 2 22 22 F1.0 2 23 23 F1.0 2 28 28 F1.0 2 28 39 F1.0 2 38 39 F1.0	22 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 20 20 E1.0 2 23 23 E1.0 2 24 24 E1.0 2 25 25 E1.0 2 28 28 E1.0 2 28 28 E1.0 2 28 28 E1.0 2 31 31 E1.0 2 35 35 E1.0 2 37 77 F1.0 2 38 38 E1.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 23 24 25 71.0 2 25 25 71.0 2 25 25 71.0 2 25 25 71.0 2 27 20 71.0 2 2 29 29 71.0 2 31 31 71.0 2 31 32 71.0 2 31 31 71.0 2 32 35 71.0 2 33 71 71.0 2 34 34 71.0	2 23 23 23 23 24 24 24 24 24 24 24 24 24 24 24 24 24	2 23 23 11.0 2 25 25 25 11.0 2 2 25 25 25 11.0 2 2 27 26 11.0 2 2 27 28 11.0 2 2 30 30 11.0 2 31 31 11.0 2 32 35 11.0 2 33 35 11.0 2 35 36 11.0 2 35 36 11.0 2 35 36 11.0
2 23 23 F1.0 2 25 25 F1.0 2 25 26 F1.0 2 2 20 29 F1.0 2 30 30 F1.0 2 31 31 F1.0 2 35 5 F1.0 2 37 36 F1.0 2 38 36 F1.0 2 39 36 F1.0 2 37 36 F1.0 2 37 36 F1.0	2 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24	2 23 23 F1.0 2 26 26 F1.0 2 2 26 F1.0 2 2 28 28 F1.0 2 33 33 F1.0 2 35 36 F1.0 2 35 35 F1.0 2 35 35 F1.0 2 36 75 F1.0 2 37 7 F1.0
2 25 24 F1.0 2 25 25 F1.0 2 27 27 F1.0 2 28 28 F1.0 2 29 30 F1.0 2 31 31 F1.0 2 33 33 F1.0 2 34 5 F1.0 2 35 36 F1.0 2 3 3 7 F1.0 2 3 5 F1.0 2 3 5 F1.0 2 3 5 F1.0 2 3 5 F1.0 4 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 25 25 10.0 2 25 25 25 10.0 2 2 26 27 27 27 27 27 27 27 27 27 27 27 27 27
2 26 26 F1.0 2 26 26 F1.0 2 29 29 F1.0 2 30 30 F1.0 2 33 33 F1.0 2 35 35 F1.0 2 35 35 F1.0 2 35 35 F1.0 2 35 51.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 25 25 F1.0 2 26 26 F1.0 2 27 29 F1.0 2 29 29 F1.0 2 30 30 F1.0 2 31 31 F1.0 2 34 F1.0 2 35 F1.0 2 35 F1.0 2 36 F1.0 2 37 F1.0
2 25 25 F1.0 2 28 28 F1.0 2 29 29 F1.0 2 31 31 F1.0 2 33 F1.0 2 34 F1.0 2 35 F1.0 2 35 F1.0 2 37 7 F1.0 2 37 7 F1.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 20 20 11.0 2 28 28 28 71.0 2 30 30 71.0 2 31 31 71.0 2 31 31 71.0 2 32 34 71.0 2 35 35 71.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 28 28 F1.0 2 28 28 F1.0 2 30 30 F1.0 2 31 31 F1.0 2 35 35 F1.0 2 35 36 F1.0 2 35 36 F1.0 2 37 F1.0
2 29 29 F1.0 2 33 30 F1.0 2 33 32 F1.0 2 33 33 F1.0 2 34 34 F1.0 2 35 36 F1.0 2 37 37 F1.0 2 37 37 F1.0	2 28 28 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29	2 29 29 F1.0 2 30 30 F1.0 2 31 31 F1.0 2 33 33 F1.0 2 35 F1.0 2 35 F1.0 2 35 F1.0 2 35 F1.0 2 36 F1.0 2 37 F1.0
2 29 20 E1.0 2 31 31 F1.0 2 33 33 F1.0 2 34 35 F1.0 2 35 75 F1.0 2 35 F1.0 2 37 37 F1.0 4 D.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 29 20 E1.0 2 30 30 F1.0 2 33 33 F1.0 2 34 34 F1.0 2 35 36 F1.0 2 37 F1.0 2 38 38 F1.0
2 31 51 F1.0 2 33 33 F1.0 2 34 34 F1.0 2 35 35 F1.0 2 36 F1.0 2 37 37 F1.0 4 C.0	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 30 50 F1.0 2 31 51 F1.0 2 35 35 F1.0 2 35 35 F1.0 2 37 F1.0 2 38 38 F1.0
2 31 51 61.0 1	2 33 33 33 33 33 33 33 33 33 33 33 33 33	2 31 31 F1.0 2 32 33 F1.0 2 34 34 F1.0 2 35 35 F1.0 2 37 37 F1.0
2 35 35 F1.0 2 35 35 F1.0 2 36 36 F1.0 2 37 37 F1.0 4 D.0	2 33 33 33 33 33 34 FE	2 32 31 F1.0 2 34 35 F1.0 2 36 36 F1.0 2 37 37 F1.0
2 34 34 F1.0 2 35 35 F1.0 2 35 35 F1.0 2 37 F1.0 4 C.0	2 33 33 34 34 FI	2 34 10 2 35 36 F1.0 2 35 36 F1.0 2 37 37 F1.0
2 34 F1.0 2 35 35 F1.0 2 37 F1.0 2 38 38 F1.0	2 35 36 FI 2 35 35 FI 2 37 FI 2 38 37 FI	2 34 34 F1.0 2 35 35 F1.0 2 37 F1.0 2 38 38 F1.0
2 35 35 F1.0 2 35 36 F1.0 2 37 F1.0 4 C.0	2 35 35 35 2 37 87 FI	2 36 F1.0 2 37 F1.0 2 38 38 F1.0
2 36 F1.0 2 37 F1.0 4 C.D	2 36 36 FI 2 37 37 FI 2 38 38 FI	2 36 F1.0 2 38 38 F1.0
2 37 F1.0 2 38 38 F1.0 4 f.Q	2 37 37 F1 2 38 38 F1	2 37 57 F1.0 2 38 58 F1.0
2 38 F1.0	2 38 38 FI	2 38 F1.0
164		91
164		91
104		
46.2		
46.2		



1

,^^ (; ;

ANAL YZNG			0.	
DESIGN	22 41 41	40 F1.0	0.	
TRYOUT			0.	
IMPROVNG				
ASSESSIG	2 45 2 45	45 46	0:	
33 0	VARIABLE LABELS			
0	RECID	'RECORD ID'		
8 8 0 0	CAREER	CAREER PATHMAN	CONSOR! CONSOR! LUT AFFILTATION: CAREER 'CAREER PATHWAY AFFILTATION'	
0	HSFAC	HIGH SCHOOL FA	ACULTY STAKEHLDR'	
-	CCFAC	CC FACULTY STA	DITIN STAKEHLUK AKEHLDR"	
0	CCADMIN	CC ADMIN STAKE	EHLOR'	
-	LABORREP	LABOR REP STAK	SIKI KET SIANEHLUK KEHLUR'	
0	GOVIREP	GOVERNMENT REF	P_STAKEHLDR"	
-	OTHERREP	TIMPORT FUNDS E	KEHLDK: BRING STAKEHLDR TOGETHER:	
0	YOURROLE	YOUR KEY ROLE	IN DEV THE CURRIC'	
00	OFFCAMP	OFF CAMPUS TEA	ACH MODALITY!	
90	TOWNEST	TELEVISED COUR	RSES MODALITY.	
0	VIDEO	VIDEOTAPED COL	URSES MODALITY	
90	TATERNET	INTERNET COURS	EIWUKN CUUNSES TUUALLIT SES MODALITY	
0	OTHERMOD	OTHER MODALIT	IES CONSIDERED'	
90	NEEUS JOBTASK	JOB/TASK ANAL	FINE OF TON	
•	DACUM	DACUM PROCESS	OPTION	
0	SUBJEXPT	SUBJECT MATTE	R EXPERT OPTION'	
0	NEWCURR	CREATION NEW (CURRIC OPTION	
0	MODCURR	MOD OF EXISTI	NG CURRIC OPTION'	
	CREATE	CREATED FROM S	SCRATCH?	
0	DESGN	HOM LONG TO DE	ESIGN NEW CURRIC?"	
90	GRPMEET	TS THIS COPY	AS GRP 10 DESIGN CORRICT. OF EXISTING CURRICT.	
0	HOMLONG	HOM LONG TO ME	ODIFY CURRIC?	
- C	CURRDEV	COMPLETE COUR	SE ON CURR DEV.	
	CURRCOM	SERVE ON COMP	ITTEE FOR CURR DEV	
0	REVIEW	WAS CURR REVIE	EMED BEFORE IMPLEMENT?	
90	STDSREV	PRG STUDENTS F	REVIEW CURRIC	
0	HSCREV	SCHOOL/COLLEGE R	E REPS REVIEW CURRIC.	
- C	INDUSREV	BUSINESS/INDU	SIKY REPS REVIEW CORKIC.	
0	GOVTREV	GOVERNMENTS RE	EPS REVIEW CURRIC.	
0	OTHERREV	OTHER EXPERTS	REVIEW CURRIC.	
		Charles and the charles and the contract of th	· 100 · 10 · 100	



16 STORY OF STREET, BY	89 N		NOI DEN INDIAID INVOLVED CORRES NEVIEW!	
BUSINESS, INDUSTRIA, WAY, ON TRAIL RAW, BUSTRIAL, WAS INDUSTRIAL RAW, BUSTRIAL R	4	TRIALRUN FACTRIAL STRIBII	RUN7	
CONTRINAL STORE NOW TRAIL AND THE STORE ST		CCTRIAL	RIAL RUN' LAK ON TRAIL	
CUSTRIAN, WITCHES THE RELEASE. CUSTRIAN THE STORY OF THE CONTRICT OF THE PROVIDE REDBACK. CUSTRIAN THE STORY OF THE PROVIDE REDBACK. CUSTRIAN THE PR	ŀ	LBRTRIAL	LABOR REPS LK ON TRIAL RUN.	
FOLHALL FIGE STORM FOLHALL FIGURA FOLHALL FIGURA FOLHALL FIGURA FOLHALL FIGURA		EXPTRIAL CISTRIAL	EXPERIS TO TAIL RUN.	
BUSINELL SER PROVIDE FERBACK: BUSINELL SERVE PROVIDE FERBACK: BU		STOTRIAL	NUM STUDENTS IN TRIAL RUN.	
HASTINGTON STRINGS TROUGH FEEDBACK HASTINGS TROUGH FEEDBACK		FACINPUT	'PRG FAC PROVIDE FEEDBACK' 'PRG STD PROVIDE FEEDBACK'	
OTHER OF THE SERVING FEDERACY.		HSCINPUT	'SCHOOL/COLLEGE PROVIDE FEEDBACK' 'RISTNESS/INDISTRY PROVIDE FEEDBACK'	
FUNDER STROWN OF PERSONAL PERS		LBRINPUT	LABOR REPS PROVIDE INPUT:	
FIGURERY STONE HE PARTONAL: O STARPEL SCHOOL COLLEGE HELP A APPROVAL: O STARPEL SCHOOL		GVTINPUT	'GOVT REPS PROVIDE FEEDBACK' 'EXPERTS PROVIDE FEEDBACK'	
SECRETAL STRONG COLLEGE REP A PEPROVAL: OUTUPPEL CONT RES RELP A APPROVAL: OUTUPPEL CONT RES RELP A IPPROVE OUTUPPEL CONTROL OF ROBANIA OUTUPPEL CONTROL ON REPRETIVENESS OUTUPPEL CONTROL OF ROBANIA OUTUPPEL CONTROL ON REPRETIVENESS OUTUPPER CONTROL ON REPRETIV	l.	FACAPPRL	'PRG FAC HELP W APPROVAL'	
BESTPER BATTHESS LINGER FOR HELP IN APPROVAL: COTATERED FOR THE PATENCY IN THE P		STDAPPRL	*PRG STD HELP W APPROVAL* *SCHOOL/COLLEGE HELP W APPROVAL*	
0 UNAPPRI CONT REPS HELP HAPROVAL' 0 ONTAPPRI CONT REPS HELP HAPROVAL' 0 ONTAPPRI CONT REPS HELP HAPROVAL' 0 ONTAPPRI CONTRIBUTE HAPPOVAL' 0 ONTAPPRI CONTRIBU		BUSAPPRL	'BUSINESS/INDUSTRY HELP W APPROVAL'	
0 FACINTRY PRE FEC HELP WITHROVE TO THROUGH TH		LBRAPPRL GVTAPPRL	'LABOR REPS HELP M APPROVAL' 'GOVT REPS HELP M APPROVAL'	
STRIPPRY STRIPPRY STRIPPROVE. BUSINERY SURVEY STRIPPROVE. BUSINERY SURVEY STRIPPROVE. CONTRIENT STRIPPROVE. CO	- 1	OTHAPPRL	'EXPERTS HELP W APPROVAL'	
0 HISTIPRY SCHOOL COLLEGE HE H ITPROVE' 0 LIBITIPRY SCHOOL COLLEGE HE H ITPROVE' 0 CATTIPRY 'GAUT REPS HELP H ITPROVE' 1 CATALOG 'INCURSE THE H ITPROVE' 0 CATTIPRY 'GAUT REPS HELP H ITPROVE' 1 CATALOG 'INCURSE CATALOG' 0 CATTIPRY 'GAUT REPS HELP H ITPROVE' 0 CATTIPRY 'GAUT REPS HAND H ITER HAND' 0 CATTIPRY 'GAUT REPS HAND' 0 CASTIDOS 'GC SHOW FFRECTIVENESS'	-1, i	STDIMPRV	PRG STD HELP W IMPROVE	
LIGATIPEN LIAGOR REST HELP A ITPROVET OTTITIPEN GOVT RESPONDED CAURREY HELP A ITPROVET OTTITIPEN GOVT RESPONDED CAURREY HOLD OF RESTANDED ENGLAS HELP A ITPROVET OTTITICHED BY THE COURSE OFFER INGS ENGLAS HOLD INCREASED FUNDING STATEORY STATE APPROVAL OF PROGRAM' OTTITICHED FOR DEV HICKSHING AGENCY ACCREDIT ALTON AGREEMENTS OTHER HOLD FOR DEV HICKSHING SONE? EVALUEN ARTICULATION AGREEMENTS OTHER HOLD FOR DEV HICKSHING SONE? EVALUEN ARTICULATION AGREEMENTS EVALUEN ATTICULATION AGREEMENTS EVALUEN ATTICULATION FOR EVAL CONTITIER EVALUEN STUDENT EVAL EFFECTIVENESS: ERECAL ERECAL ERECAL ERECAL ENDLY STUDENT STUDENT FOR EFFECTIVENESS: CHARLED ARTICCA ARTICCA ARTICLA ARTICLA REFERENCES ERECAL ENDLY ENDLY STUDENT STUDENT FOR EFFECTIVENESS: CHARLED ARTICCA ARTICLA ARTICLA ARTICLARIES ERECAL ARTICLA ARTICLARIES ERECAL ERE		HSCIMPRV	SCHOOL/COLLEGE HELP W IMPROVE:	
0 OTH LIPPAY GOVER'S HELP M INFORMED COURRED. 1 CATALOG INCLUSION IN COURSE CATALOG 1 HELST AFF HELP M INFORMED CATALOG 1 HELP M INFORMED CATALOG 1 HELP M INFORMED CATALOG 1 HELST AFF HELP M INFORMED CATALOG 1 HELP M INFORMED CATALO		LBRIMPRV	LABOR REPS HELP M IMPROVE	
CATALOG CAT	1	GVI IMPRV OTH IMPRV	GOVI KEPS HELP M IMPROVE' "EXPERTS HELP M IMPROVE"	
NEW STAFF NEW STAFF ADDED	347	CURRREV	"HOW OFT REVIEW CURRIC?"	
ABOULASS ADDITIONAL COURSE OFFRIANS'	1	NEWSTAFF	'NEW STAFF ADDED'	
FUNDS STATE APROVAL OF PROGRAM' STATE APROVAL OF PROGRAM' O ACCREDITATION OF PROGRAM' O ACCREDITATION OF PROGRAM' O ACCREDITATION OF PROGRAM' O LICAPPAL APPROVAL OF LICAPPAL APPROVAL OF LICAPPAR O ARTICOLATION AGREENENTS O TPCOMITIN O COMPLETED CURRIC CANTING FRA CONTINUE IF TO PURSSIP FOR EVAL OF STORE EFECTIVENESS O EVALUARIP STUDENT EVAL EFECTIVENESS O EVENAL EFECTIVENESS O ARTICOL ARTIC AGREE W ON SHOW EFFECTIVENESS O ARTIC AGREE W ON SHOW EFFECTIV		ADDCL ASS ENROLL MT	'ADDITIONAL COURSE OFFERINGS'	
1 CAPPEL - STATE ATTOWN OF PROGRAM' 1 LICAPPEL - APPROVAL OF LICENTING AGENCY 1 APPROVAL OF LICENTING AGENCY 1 APPROVAL OF LICENTING FOR THE APPROVAL OF LICENTAINS AGENCY 1 APPROVAL OF LICENTING FOR PROGRAM' 1 THORD PROGRAM	1.00	FUNDS	ADEQUATE/INCREASED FUNDING	
1 LICAPPRI. APPROVAL OF LICENSING AGENCY. 1 LICAPPRI. ARTICULATION AGREEFIENTS. 1 OTHIRE M. OTHIRE INDICATIONS GENET. 1 OFFICIAL OFFICIAL SCHOOL OFFICIAL S		ACCREDIT	SIMIE AFFROVAL UF FRUSKAT *ACCREDITATION OF PROGRAM!	
1 FCONTIN OTHER LOUISE PERMANENT OTHER LOUISE CONTINUE IF P FUNDS GONE? 1 FOCALIN		LICAPPRL	'APPROVAL OF LICENSING AGENCY' 'ABITCH ATION ACCEMENTS'	
1 PCONTIN 'WLD PRG CONTINUE IF TP FUNDS GONE?' 1 EVALUENP 'ATTENDED PROFIC EVAL COURSE EVAL.' 2 EVALUENP 'ATTENDED PROFIC EVAL CORPITITEE' 3 STERVED ON CURR EVAL COPPLITIEE' 5 STUDENT EVAL EFFECTIVENESS' 6 FREVAL 'EFFCTIVENESS' 7 CCSTDS 'CCSTDS PARTICPATING FOR EFFECTIVENESS' 8 ARTICCO 'ARTIC AGREE W CC SHOW EFFECTIVENESS' 9 ARTICCO 'ARTIC AGREE W CC SHOW EFFECTIVENESS' 1 6 7	i	OTHPERM	OTHER INDICATORS PERMANENT	
CEVALLISH TO TITENDED PROFINE EVAL. CONTINUENCE TO COMPANY TO COM	. i.e.	TPCONTIN	- COMPLETED CLIBETE EVAL CALIBRE.	
0 EVALCOM SERVED ON CURR EVAL COMMITTEE' 0 FACEVAL 'STUDENT EFFECTIVENESS' 0 FACEVAL 'FACULITY EVAL EFFECTIVENESS' 0 FACEVAL 'FACULITY EVAL EFFECTIVENESS' 0 HSS STOS PARTICPATING FOR EFFECTIVENESS' 0 ARTICC 'ARTIC AGREE W UNI SHOW EFFECTIVENESS' 0 ARTICUN 'ARTIC AGREE W UNI SHOW EFFECTIVENESS'	3 - 1	EVALMSHP	'ATTENDED PROF DEV WAKSHP FOR EVAL'	
6 FACEVAL FACULTY EVAL EFFECTIVENESS: 0 FREVAL FEPECTIVENESS: 0 CCSTDS CC STDS PARTICPATING FOR EFFECTIVENESS: 0 ARTICCA 'ARTIC AGREE W CC SHOW EFFECTIVENESS: 0 ARTICUN 'ARTIC AGREE W UNI SHOW EFFECTIVENESS: 16/7		EVALCOMM STDEVAL	'SERVED ON CURR EVAL COMMITTEE' 'STUDENT EVAL EFFECTIVENESS'	
LESTOR HENTON HE	1	FACEVAL	Ä.	
0 CCSTOS CONTROLLING FOR EFFECTIVENESS' 0 ARTICCA 'ARTIC AGREE W UNI SHOW EFFECTIVENESS' 1 6 7	.S.,	EKEVAL HSSTDS	HS STDS PARTICPATING FOR EFFECTIVENESS:	
articum 'Artic Agree w UC Show effectiveness' 167		CCS TDS	CC SIDS PARTICPATING FOR EFFECTIVENESS!	
2.9		ARTICCC	'ARTIC AGREE M.CC SHOW EFFECTIVENESS' 'ARTIC AGREE W UNI SHOW EFFECTIVENESS'	
2,9				
	- 1			9
	1 E			

LICANNIE TITGE SIGNA EFFECTIVENESS' LICANTE TITGE SIGNA EFFECTIVENESS' PLACETT '0.09 PLACEMENT RATE SHOW EFFECTIVENESS' STAKILDR 'POSITIONING THE STAKEHOLDERS' BESTGN 'POSITIONING THE CURRIC' TRYING OF LACEMENT CONTINUS: DESIGNANG THE CURRIC' TRYING OUT THE CURRIC' TRYING OUT THE CURRIC' TRYING OUT THE CURRIC' CONTINUS 'REVIEWED' TRYING OUT THE CURRIC' TRYING OUT THE CURRIC' CONTINUS 'REVIEWED' TRYING OUT THE CURRIC' CONTINUS 'REVIEWED' TRYING OUT THE CURRIC' CONTINUS 'REVIEWED' TRYING OUT THE CURRIC' TRYING O
--



- 1	NEEDS TO MERGE
187 0 188 0 189 0	0 :NOT MAKED AS OPTION CONSIDERED. 1 : MARKED AS OPTION CONSIDERED'/ CREATE
190 0 191 0 192 0	0 'NOT MARKED AS CREATED FROM SCRATCH' 1 'CREATED FROM SCRATCH(TO DESIGN AND GRPMEET)' 2 'NOT CREATED FROM SCRATCH(TO EXISTING)'/
193 0 194 0 195 0	DESGN O HOT MARKED FOR HOW LONG TO DESIGN:
4	+ TO 6 MONTHS TO DESIGN 7 TO 9 MONTHS TO DESIGN 10 TO 12 MONTHS TO DESIGN
4 1 500	<u>Š 'ÔVER A YEAR TO DESIGN'/</u> GRPMEET
95 I	1 'NEVER'O GRP MEET TO DESIGN' 2 'RARELY'I TO 2 GRP MEET TO DESIGN' 3 'CARELY'I TO SET TO DESIGN'
	UENTLY/5
eisil	1 'YES EXISTING CURRIC (TO HOWLONG)' 1 'YES EXISTING CURRIC (TO HOWLONG)' 1 ON EXISTING CURRIC (TO CURRDEV THRU CURRCOMM)'/
100	TO THAT MARKED FOR HOW TO MODIFY CURRIC! 1 'LESS THAN I MONTH TO MODIFY CURRIC! 2 :1 TO 2 MONTHS TO MODIFY CURRIC!
4	3 '3 TO 4 MONTHS TO MODIFY CURRIC. 4 '5 TO 6 MONTHS TO MODIFY CURRIC. 5 'MORE THAN 6 MONTHS TO MODIFY CURRIC./
38.5%	EV TO CURRCOMM 101 MARKED FOR CURR DEV 1ARKED FOR CURR DEV ACTI
1	REVIEW 1 'VES BEVIEWEFORE IMPLEMENT' 1 'VES BEVIEWEFORE IMPLEMENT'
Beer St.	2 NOT REVIEWED BEFORE IMPLEMENT'/ FACREY TO OTHERREY O'NOT MARKED FOR INDIVID INVOLVED IN REVIEW
226 227 228 0	NOTE THANKED FUR INDIVID INVOLVED IN REVIEW O 'NOT MARKED FUR INDIVID DOING CURRIC REVIEW'
229 231 232 232 0 233 0	11 TO 5 IN GRP REVIEWING: 6 TO 10 IN GRP REVIEWING: 11 TO 15 IN GRP REVIEWING 16 TO 20 IN GRP REVIEWING: PRORE THAN 20 IN GRP REVIE
11,59%	TRIALRUN 1 NARKEO FOR TRIAL RUN: 1 YES TRIAL RUN (TO FACTRIAL THRU STOTRIAL)' 2 YES TRIAL RUN (TO FACTRIAL THRU OTHINPUT)'/ 2 A TRIAL RUN (TO FACINPUT THRU OTHINPUT)'/ 5 A TRIAL RUN (TO FACINPUT THRU OTHINPUT)'/
32.3	jo 💮
	171
	s

(

(

- a	
240	1 - MARKED FO
243	11 COURSE IN TRIAL RUN' 2 COURSES IN TRIAL RUN'
245	3 3 COURSES 4 4 COURSES
747 248 248	0 STDINE COURSES IN TRIAL ROW (0 STDINE HAWKED FOR NUM STD IN TRIAL RUN'
250 251 252	1 '1 TO 25 STDS IN TRIAL RU 2 '26 TO 50 STDS IN TRIAL R 3 '51 TO 75 STDS IN TRIAL R
₫	0 O I MARKED FOR PROVIDED FEEDBACK' 0 I MARKED THAT PROVIDED FEEDBACK'/ 0 EACABBBI TO USCABBBI
	0 'NOT MARKED FOR HELP IN APPROVAL' 0 1 'MARKED FOR HELP IN APPROVAL''/
262 263 263	0 'NOT MARKED FOR HELP W APPROVAL' 0 I 'NOT MARKED FOR HELP W APPROVAL' 0 I MARKED FOR HELP W APPROVAL' 0 CASTADRA TO STUTMEN
3000 i	O NOT MARKED FOR HELP W IMPROVEMENT! O NOT MARKED FOR HELP W IMPROVEMENT! O NOT MARKED FOR HELP W IMPROVEMENT!
	3 TEVERY 2 YR REVIEW CURRIC! 0 4 'EVERY 3 YR REVIEW CURRIC'!
275 275 275	
	0 ITCOMIAN MARKED PRG CONT W/O FUNDS! 0 1 'STRONGLY AGREE WLD CONT IF FUNDS GONE' 0 2 'AGREE WIN CONT IF FINDS GONE'
4 280 4 281	
46 283 46 284 47 284 48 284	0 EVALUEY IN EVALUATION CURR EVAL ACTIVITY. 0 1 TO PARTIC IN CURR EVAL ACTIVITY./
4 286 4 287	
288 289 290	STACHLUR TO ASSESSING 0 'NOT MARKED THAT THIS IS EXEMPLARY!' 1 'MARKED THAT THIS IS EXEMPLARY!'
FF 292	O MISSING VALUES CONSOR CAREER FUNDS FAR TOURKULE CARATE O DESGN GRPMEET EXISTING HOWLONG REVIEW O NOREVIEW TRIALRUN CLSTRIAL STDTRIAL
222	
3 3 3 3	
3 9	

294 0 FREQUENCIE 295 0 FREQUENCIE 296 0 /SIATIS	294 0 CURREY TPCONTIN (0) 295 0 FREQUENCIES VARIABLES#ALL 296 0 /STATISTICS#ALL		
here are 2,057,08 he largest contig	There are 2,057,080 bytes of memory available. The largest contiguous area has 2,047,368 bytes.		
hemory allows a to There may be up to	Memory allows a total of 32,767 values accumulated across all variables. There may be up to 8,192 value labels for each variable:	ed across all variables. ariable:	
			4
122			



	~ - •	2222	22222	######################################	2222	****	E 2 2 2 2	# # # # # # # # # # # # # # # # # # #	2 2 2 2 2 2 (***************************	
				0.000000						
								7 (1.22) 41 88 (1.24) 61		
							1.0000000 1.00000000 1.00000000			
								10000000 10000000000000000000000000000		
								0.203		
99999999999999999999999999999999999999	١									
	Cum Percent	WL041	-4148	– m ∞ – m ∞	∽ πω∞∨πο	000000	MOOMO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-0 t-7t	
	E S		NUNNE	444000	99777	. 8 8 8 0 0 0	`20 <u>27</u> 2	100mm	44666	
	ے						70000000000000000000000000000000000000			
	- t	MMMM	MMMMMM	MMMMM	MMMMMM	MMMMMM	MMMMM	1 MMM MM M	мммммм	
	Val1d Percent							เพพพพพพ		
	ية ح									
	<u> </u>									
	Percent	WWWWK	MMMMMM	MWWWW	WWWWWW	MMMMMM	ımmmmı	าพพพพพพ	MMMMMM	
	ို့									
	ے									
	ۆ									
	Ĕ								100000	
	Frequer									
	Ē									
		- OMA	10000-	- 02 t MO	. 80 0 - 0.7	14110100	O-0MJ	2 % W W G G G	7074W	
	Value		7-			1000000	IMMMMM	r t mmmm t	たしたした	
	5							1000000		
									300 0000 300 0000	
A										
RECORD ID										
8										
2	7				200000	00000000 00000000000000000000000000000				
	Label									
RECID	Value									
RECID	₹									
- 04 to - 15	<u> </u>	• = = = =	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			2222	22277	28222	2 2 2 2 2 2 2	2882233
							·			
0										
RIC.										
xt Provided by ERIC										



~ ~ ~	* * *	~ * *	2 2 2	2 2 2	222	2 2 2	222	* * *	222	= = =	* * *	× × ×	3 7 3	2 2 2	* : :	* # # # # # # # # # # # # # # # # # # #	2 2 2			3 3 3 3		Ē
Ξ																			U	8		
<u>o</u>																			Anna A	:1		
Page																						Š.
														,							3/83	
																				8.		
																		.]				
521		m 10	m 0.10	w 0/10	6 2 5	Ø 57 70	0 M 0	0 m v	0 M N	0 10 10	040	- + N	- → 0	— N &	— 10 α	10 KD 60	o no	200	7	1		
1	.9	6.1	8.8	866	50.2	20.	22.22.22.22	332	333	ល្អសំ	9.9	7.7.	888	29.	222	32.5	325	2.00 MMMM	¥.			
- 2	135.5																					. P.
0																						
₩ ₩																						
IBM 9121-521	m							www														
IBM 9	ĸ.																					
18M 9		www	MMM	www	www.	www	mm.	www	£.	www	mmm.	www	MMM	www	M.M.K	mmm	mm,	ij'n'nĸ	K			
IBM 9		www	MMM	www	www.	www	mm.		£.	www	mmm.	www	MMM	www	M.M.K	mmm	mm,	ij'n'nĸ	K			
IBM 9		www	MMM	www	www.	www	mm.	www	£.	www	mmm.	www	MMM	www	M.M.K	mmm	mm,	ij'n'nĸ	K			
IBM 9		www	MMM	www	www.	www	mm.	www	£.	www	mmm.	www	MMM	www	M.M.K	mmm	mm,	ij'n'nĸ	K			
W		www	MMM	www	www.	www	mm.	www	£.	www	mmm.	www	MMM	www	M.M.K	mmm	MMN	ij'n'nĸ	K			
W		www	MMM	www	www.	www	mm.	www	£.	www	mmm.	www	MMM	www	M.M.K	mmm	MMN	ij'n'nĸ	K			
W	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
FOR IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	www	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
FOR IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
4.1 FOR IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
4.1 FOR IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
4.1 FOR IBM OS/MVS	48 1 .3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
4.1 FOR IBM OS/MVS	48 1 .3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
FOR IBM OS/MVS	48 1 .3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
SPSS RELEASE 4.1 FOR IBM OS/MVS	£: 1		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
SPSS RELEASE 4.1 FOR IBM OS/MVS	RECORD ID 48 1 ; 3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			6
SPSS RELEASE 4.1 FOR IBM OS/MVS	RECORD ID 48 1 ; 3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			
4.1 FOR IBM OS/MVS	48 1 .3		M M M		.3 .3 1 .3 .3 1 .3 .3	unn.	E	1 1 1 1 1 1 1 1 1 1	1 .3 .3 1 .3 .3	m.m.m.	E. E.			m, m, m,		M.W.W.	m m m		F			



(

102 1 103 1 104 1		
•		
1		
4 -4 -		
-		
•		
-		
→		
1		



156 157 13 13 13 13 13 13 13 1										₩a.
	หม่ เล่น	wwww	ว่ะเล่นพพ	าพพัพพพ	mmmmm.	น์ พ.่พ.่ พ.่ พ.่ พ.่ ห	น์ พ ่ เมษาพพ ห	าพพพพพ	ข้ามันที่มี ผ	i wiw
										4-4-4



į

(

SPSS RELEASE 4.1 FOR IBM OS/MVS

70.9 77.1.2 77.1.2 77.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3 7.1.3
www.www.www.www.www.ww.ww.ww.ww.ww.ww.w
200 200 200 200 200 200 200 200 200 200
KECORD: ID
RECID

RECID RECORD ID		1 260	M.			
	· 4 (4 ()	261 1 262 1 263 1	พัพพั	.3 89.4 .3 89.7		
		264 265 266	www			
		268 268 270 1 271 272 1 273	i wiwiwi wiwi b	**************************************		
		274 275 276 1 278 1 279	ม เม่า เม่า เม่า เม่า			
		280 281 282 284 285 1		www.ww.ww.		
		2887 1 2887 1 2889 1 1 2900 1 2900 1 2900 1 1 2900 1 2000 1 2000 1 2000 1 2000 1 2000 1 2000 1 2000 1 2000	บ ์ พ.พ.พ.พ. พ	28 28 28 28 28 28 28 28 28 28 28 28 28 2		
Mean 146.500 Pode 1.000	v v v	E - 3 5	Median Varian	146 7129		
80	Sum Mis	291.000 42778.000 9 cases				
	2.2		BEST	BEST COPY AVAIL # 91	u it	00

	SORTIUM AF	FILIATION				·				•	
Value Label	<u> </u>		Frequency		Valid Percent	Cum Percent					
			98 J.	.3		.4 5.3		- 7.75			1 1977 2
LAMO CENTRAL TEXAS COASTAL BEND	S	4 5	14 15	4.8 5.1	5.3	10.6					
CONCHO VALLE		6 7	4,	5.8 3.4	6.0 3.5	16.7 20.2					
DEEP EAST TX		8	10	7 4	3.5	23.8 24.1		10.07		1 1 35 1	
SLOBAL EDGE SULF COAST HEART OF TX		11	1 2		.7	24.8					
EART OF TX	1156	1 <u>2</u> 13	11 <u>11 -</u>	3.8	3.7	28.7 31.9	<u>i.e.</u>			<u> </u>	
OWER RIO GR	ANDE	14	49	16.8	17.4	49.3 59.6					-
		15 9890 - 16 16	29 13	4.5	10.3	64.2					- PY 4.
NORTH TX PANHANDLE PERMIAN BASI SOUTHEAST TX	N	17	14	4.8 5.1	5.0 5.3	69.1 74.5				٠.	
SOUTHEAST TX SOUTH PLAINS				1.4	1.4	75.9 81.2			<u> </u>		-
SOUTH TX		20 21	15 5	5.1 1.7	1.8	83.0				· .	
STAR Upper east t	X		14 32	4.8 11.0	5.0 11.3	87.9 99.3			3	4 T 24	
UPPER EAST T UPPER RIO GR WEST CENTRAL	ANDE TX	25 25	2	.7	7_	100.0					
NOT MARKED		0		3.4	Missing						
		Total	292	100.0	100.0		 .				
Mean		Std err Std dev	.366	Med	ian	15.000 37.789					• +
Mode Kurtosis	14.000 857	Std dev S E Kurt	.289 24.000	Var Ske	iance kness	149					
S E Skew	.145 25.000	Range Sum	24.000 4122.000	Min	i mum	1.000					
Maximum	25.000					٠,			•		
Valid cases	282	Missing	cases 1	0							
		 									1000
	1.4										
			<u> </u>					*			
	-, 	1 2 1 1 1							•		×
			· · · · · · · · · · · · · · · · · · ·								
											
			,	Ļ							
<u> </u>	· .	<u> </u>	<u>' · · · · · · · · · · · · · · · · · · ·</u>								
	 										



一一百列 计中央算证据 陕西							
Value Label	Value Fr	equency	Valid Percent Percent	Cum Percent			
BUSINESS CAREER PATH ENGINEERING TECH CAR ALLIED_HEALTH_CAREER		109	37.3 44.7	44.7	11. T. 1		Har 12 11
ENGINEERING TECH CAR	2	29	9.9 11.9	56.6			•
ALLIEO HEALTH CAREER	<u>. (specific etc. 3 fer e</u> c	55 51	18.8 22.5 17.5 20.9	79,1	· -		·
OTHER CAREER PATH AF NOT MARKED FOR CAREE	0	48	17.5 20.7 16.4 Missing				
	_		=				***
	Total	292	100.0 100.0	· · · · · · · · · · · · · · · · · · ·			
Mann 2 197	Std err	078	Median	2.000	- 1 mg <u>(</u>	<u> </u>	<u></u>
Mean 2.197 Mode 1.000	Std dev	1.215	Variance	1.476			
Kurtosis -1.515	S E Kurt	.310	2K6MU622	.325			
S E Skew .156 Maximum 4.000	Range Sum	3.000	<u>Minimum</u>	1.000	 		# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Max1 mum 4.000	JUIII	936.000					
		<u> </u>	·				
Valid cases 244	Missing case	es 48	1				
							
			· '}.				
HSFAC HIGH SCHOOL	FACULTY STAKEH	LOR					
			Valid	Cum			
Value Label	Value F	requency	Percent Percent	Percent	*.		
	4 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· **					
MAT MARKER CTAKEUI DO	Temperatura 🙀 🗖 🔭 (b.)	201	400 400	.68.8			ा १५ (स्ट्रास्ट्रास्ट्रा <mark>स्ट्रास्</mark>
NOT MARKED STAKEHLDR MARKED STAKEHLDR GRP	1	201 91	68.8 68.8 31.2 31.2	68.8			F. P. Helly P. Cold
NOT MARKED STAKEHLDR MARKED STAKEHLOR GRP	1	91	31.2 31.2		<u> </u>		i in depole, que
MARKED STAKEHLOR GRP	Total	91 	100.0 100.0	100.0	<u> </u>		i in defenda di R
MARKED STAKEHLOR GRP	Total Std err	292 .027	31.2 31.2 100.0 100.0 Median	.000	<u> </u>		
Mean .312 Mode .000	Total Std err Std dev	.027 .464	100.0 100.0	.000 .000 .215 .818	****		
Mean .312 Mode .000 Kurtosis -1.341 S E SkeH .143	Std err Std dev S E Kurt Range	.027 .464 .284	31.2 31.2 100.0 100.0 Median Variance	.000			
Mean .312 Mode .000 Kurtosis -1.341	Total Std err Std dev S E Kurt	.027 .464 .284	31.2 31.2 100.0 100.0 Median Variance Skewness	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skew .143 Maximum 1.000	Total Std err Std dev S E Kurt Range Sum	.027 .464 .284	31.2 31.2 100.0 100.0 Median Variance Skewness	.000 .000 .215 .818			1 2 14/4 2 412
Mean .312 Mode .000 Kurtosis -1.341 S E Skew .143 Maximum 1.000	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E SkeH .143	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	<u> </u>		
Mean .312 Mode .000 Kurtosis -1.341 S E Skew .143 Maximum 1.000	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	**************************************		
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	* * * * * * * * * * * * * * * * * * *		
Mean .312 Mode .000 Kurtosis -1.341 S E Skew .143 Maximum 1.000	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	<u> </u>		
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	*		
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum	.027 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818	<u> </u>		
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum Missing cas	91 -92 .027 .464 .284 1.000 91.000	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum Missing cas	91 	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum Missing cas	91 	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum Missing cas	91 	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			
Mean .312 Mode .000 Kurtosis -1.341 S E Skeh .143 Maximum 1.000 Valid cases .292	Total Std err Std dev S E Kurt Range Sum Missing cas	91 	31.2 31.2 100.0 100.0 Median Variance Skewness Minimum	.000 .000 .215 .818			

Value Label Value Frequency Percent Percent Percent	RSADMIN HIGH SCHOOL	ADMIN STAKEH	LDR						
Total 292 100.0 100.0	/alue Label	Value	Frequency	Percent (Valid Percent	Cum Percent			
Total 292 100.0 100.0 Impart 312 Std err .027 Median .000 Inde .000 Std dev .464 Variance .215 SE SKew .143 Range .1.000 Hinimum .000 Indication .1.000 Sum .91.000 Indication .1.000 Sum .91.000 Indication .1.000 Sum .000 NOT MARKED STAKEHLDR 1ARKED STAKEHLDR GRP		91	31.2	31.2	68.8 100.0	<u> </u>	er er geligelike George		
	· · · · · · · · · · · · · · · · · · ·	Total	292	100.0	100.0				
	2312 2006 000 341 341 341 343 34	Std err Std dev S E Kurt Range	.027 .464 .284 1.000	Media Varta Skeыn Minim	n nce ess um	.000 .215 .818 .000	.:	e de la companya de l	
Valid Cum	iaximum 1.000	Sum	91.000						•
Valid Cum	alid cases 292	Missing c	ases. O)					
Value Label Value Frequency Percent Percent			#	<i>-</i>					
### ARKED STAKEHLDR			Francy	Barcent	Valid	Cum			
Tean .195 Std err .023 Median .000 Tode .000 Std dev .397 Variance .158 Curtosis .393 S E Kurt .284 Skewness 1.546 S E Skew .143 Range 1.000 Minimum .000 Taximum 1.000 Sum 57.000									
Mean .195 Std err .023 Median .000 Mode .000 Std dev .397 Variance .158 Kurtosis .393 S E Kurt .284 Skewness 1.546 S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum .57.000 Valid cases 292 Missing cases 0	TARKED STAKEHLDR GRP	Ĭ Total	292	19.5	19.5	100.0			
S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 57.000 Valid cases 292 Missing cases 0	Mean .195	Std err	.023	Media Varia	n	.000			
	LUTTOSIS 393 SESKEM 143 Taximum 1.000	S E Kurt Range Sum	.284 1.000 57.000	Skewn Minim	088	1.546			
	Jalid cases 292	Missing C	ases (.					
					भ भ				
					:			4 4.85	
	<u> </u>	<u> </u>				<u>. </u>			
			· .						

25-Jul-96 SPSS RELEASE 4.1 FOR IBM 0S/MVS 14:16:57

Value Label	Value	Frequency	Valid Percent Percent	Cum Percent		
NOT MARKED STAKEHLDR MARKED STAKEHLDR GRP	0	246 46	84.2 84.2 15.8 15.8	84.2 100.0	v	
	Total	292	100.0 100.0			_
Mean .158 Mode .000 Kurtosis 1.582 S E Skew .143	S E Kurt <u>Range</u>	.021 .365 .284 1.000	Median Variance Skewness Minimum	.000 .133 1.890 .000		
Maximum 1.000	Sum	46.000				
Valid cases 292	Missing c	ases O				
DUCTOR OF THE PART	NOUSTRY REP ST	AVEUL DO				
BUSREP 8USINESS/	INDUSTRT KEF ST	AKERLUK	11 11 11 11 11 11			
			Valid_	Cum		
Value Label	Value	Frequency	Valid Percent Percent		<u>. ,</u>	
Value Label	Value O	Frequency 271	92.8 92.8 7.2 7.2	Percent 92.8 100.0		
Value Label	Value O Total Std err	271 21 292 292	92.8 92.8 7.2 7.2	Percent 92.8	·	
Value Label NOT MARKED STAKEHLDR MARKED STAKEHLDR GRE Mean .072 Mode .000	Value O Total Std err Std dev SE Kurt	271 21 292 .015 .259	92.8 92.8 7.2 7.2 100.0 100.0 Median Variance Skewness Minimum	92.8 100.0		
Mean .072 Mode .000 Kurtosis 9.159 S E Skew .143 Meximum 1.000	Value O Total Std err Std dev S E Kurt Range Sum	271 21 292 .015 .259 .284 1.000 21.000	Percent Percent 92.8 92.8 7.2 7.2 100.0 100.0 Median Variance Skewness Minimum	92.8 100.0 .000 .067 3.331		
Value Label NOT MARKED STAKEHLDR MARKED STAKEHLDR GRE Mean .072 Mode .000 Kurtosis 9.159 S E Skew .143 Maximum 1.000 Valid cases 292	Value O Total Std err Std dev S E Kurt Range Sum	271 21 292 .015 .259 .284 1.000 21.000	Percent Percent 92.8 92.8 7.2 7.2 100.0 100.0 Median Variance Skewness Minimum	92.8 100.0 .000 .067 3.331		

Valid Cum		New Pro-		20.00 2000 200		120	1116868	7123127	
Value Frequency Percent Percent Percent	ABORREP LABOR REP STA	KEHLDR				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			<u> </u>
Total 292 100.0 100.0	/alue Label	Value F	requency	Percent Percent	Percent				
Total 292 100.0 100.0 lean .010 Std err .006 Hedian .000 lode .000 Std dev .101 Variance .010 lurtosis 93.965 S E Kurt .284 Skeiness 9.763 E Skem .143 Range 1.000 Hinimum .000 laximum 1.000 Sum 3.000 Alid cases 292 Hissing cases 0	OT MARKED STAKEHLUR IARKED STAKEHLUR GRP	0	289 3	99.0 99.0 1.0 1.0	99.0 100.0				The first and the second second
Dock 0.00		Total	292	100.0 100.0					
	lode .000	Std err Std dev S E Kurt	.006 .101 .284	Median Variance Skewness	.010 9.763				
Value Label Value Frequency Percent Percent			1.000 3.000	Minimum_	.000	<u> </u>		_	<u>* </u>
Valid Cum		The Art of the Control of the Control			-				
Value Label	OVERNMENT R	EP STAKEHLDR							
Total				Valid	Cum			(1.28 e) (3.71)	
Total			•						
Std err	TARKED STAKEHLDR GRP	i ja	7	2.4 2.4		.:	1 1		
Curtosis 37.397 S E Kurt ,284 Skewness 6.256 S E Skew ,143 Range 1.000 Minimum .000 Sum 7.000 /alid cases 292 Missing cases 0	1ean .024	Std err Std dev	.009	Median Variance	.023				
	Curtosis 37.397	S E Kurt Range	.284 1.000	Skewness Minimum				· · · · ·	
	/alid cases 292	<u>Missing car</u>	<u>ses 0</u>					·	
						<u>.</u>		· ·	
		the state of the s	···						
			1.7				<u>.</u>		
			g in the second						



25-Jul-96 SPSS RELEASE 4.1 FOR IBM OS/MVS
1 14:16:57

OTHERREP O	THER REP ST	AKEHLOR		<u> </u>				
Value Label			Frequency		Valid Percent	Cum Percent		
NOT MARKED STAK	ETAPEUL DO	1 4 5 5 5 5 5 5 5 5 6 5 6 6 6 6 6 6 6 6 6	266 26	91.1 8.9	91.1 8.9	91.1 100.0		
		T-1-1	292	100.0	100.0			
Mean	.089	Std err	.017	Media	en	.000		
Mode	.000	Std dev S E Kurt Range	.285 .284	Varia Skeнr	ance	.081 2.901		
Kurtosis S E Skeн	.143	Range	1.000	Minin		.000		
Maximum	1.000	Sum	26.000					
Valid cases	292	Missing c	3565 C	<u> </u>				
						·		
				. = =				
FUNDSTAK I	MPORT FUNDS	S BRING STAKE	HLOR TOGETH	IER				
						0		
Value Label			Frequency	Percent	Valid Percent	Cum Percent		
EXTREMELY I	MPORT FUN	1	179	61.3	63.0	63.0		
SOMEWHAT IM	PORT FLIND	2	76 29	26.0	26.8 10.2	89.8 100.0	1	
NOT IMPORT NOT MARKED	FUNDS GET	3 0		2.7	Missing			
		Total	292	100.0	100.0			
Mean	1.472	Std err	.040	Media		1.000		
Mode Kurtosis	1.000 017	. Ora alex	288	Varia Skew		.455 1.112		
S E Sken	. 145 3.000	Range Sum	2.000 418.000	Minir	mum	1.000		
Maximum								
Valid cases	284	Missing o	ases (3				
:	<u></u>							
					_			
							-	
		<u>-</u>						· ·
<u>-</u>	- 					A		A 000 0
		<u> </u>	· ·		88	SICOP	YAVAIL	ABLE -
			194					
	· · · · · · · · · · · · · · · · · · ·		···		.			
				;				· •



OURROLE YOUR KEY R				•			:		• • • • • • • • • • • • • • • • • • • •
		Frequency	Percent	Valid Percent	Cum Percent	·			
RESOURCE ACQUISTION EADERSHIP AS KEY RO CURRIC DEV AS KEY RO			6.2	6.7	6.7	M. 1			
ENDERSHIP AS KEY PO	r 1890 – 1822	65	22.3	24.3	31.1				
HIDDIC DEV AS KEY PO	4	49	16.8	24.3 18.4	49.4			<u> </u>	
URRIC IMPLEMENTATIO	5	15	5.1	5.6	55.1				
URRIC EVAL AS KEY R	6	5	1.7	1.9	56.9				
THE PERSON AND ADDRESS OF THE PERSON AND PER		20	40	7 .5	64.4_				
DMINISTRATION AS KE	8	45	15.4	16.9	81.3	ja Kale Lefe		· · · .	
FACHING AS KEY ROLE	9	33	11.3	12.4	93.6				
OBJECT MATTER EXPENDMINISTRATION AS KE TEACHING AS KEY ROLE ACADEMIC ADVISING AS	10	14	4.8	5.2	98.9				
THER AS KEY KULE	11		4.0		100.0				_
OT MARKED FOR YOUR			8.6	_					
	Total	292	100.0	100.0		1	_		
		1.00			E 000				
1ean 5.315	<u>Std err</u>	. 183	— near	an	8.916				
1ode 2.000	Std dev	2.986	Vari	ance	.098				
Curtosis -1.452	5 E Kurt	10.000	SKE	imum	1.000				
<u>S E Skeн . 149</u>	Kange	10.000		3 (18.81)	1.000				To Fillwares
taximum 11.000	Std err Std dev S E Kurt Range Sum	1417.000	••						
	Missing o	a firedit		.11 3	. : .				
		<u> </u>		· ·		**************************************		+ + - ,*.	
OFFCAMP OFF CAMPU	S TEACH MODALI	ry			*			*	
DFFCAMP OFF CAMPU	S TEACH MODALI	<u>ry</u>	Pancont	Valid	Cum				
OFFCAMP OFF CAMPU	S TEACH MODALI	Frequency	•	Percent	Percent				
OFFCAMP OFF CAMPU	S TEACH MODALI	Frequency	E2 1	Percent 52 1	Percent				
OFFCAMP OFF CAMPU	S TEACH MODALI	Frequency 152 140	<u>52.1</u> 47.9	Percent 52.1 47.9	Percent				
OFFCAMP OFF CAMPU	Value Value Total	Frequency 152 140 	52.1 47.9	52.1 47.9	Percent 52.1 100.0				
OFFCAMP OFF CAMPUS Value Label NOT MARKED FOR MODALITY	Value Value Total	Frequency 152 140 292	52.1 47.9 100.0	52.1 47.9	52.1 100.0				
Value Label NOT MARKED FOR MODALITY Mean .479	Value Value Total Std err	Frequency 152 140 292 .029	52.1 47.9 100.0 Med	52.1 47.9 100.0 ian	Percent 52.1 100.0 .000 .250				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007	Value Value Total Std err	Frequency 152 140 292 .029	52.1 47.9 100.0 Med	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007	Value Value Total Std err	Frequency 152 140 292 .029	52.1 47.9 100.0 Med	52.1 47.9 100.0 ian	Percent 52.1 100.0 .000 .250				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007 S E Skew .143	Value Value Total Std err	Frequency 152 140 292	52.1 47.9 100.0 Med	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007	Value Value Total Std err	Frequency 152 140 292 .029	52.1 47.9 100.0 Med	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007 S E Skew .143 Maximum 1.000	S TEACH MODALI Value O Total Std err Std dev S E Kurt Range Sum	Frequency 152 140	52.1 47.9 100.0 Med Var Sker Min	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007	S TEACH MODALI Value O Total Std err Std dev S E Kurt Range Sum	Frequency 152 140	52.1 47.9 100.0 Med Var Sker Min	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007 S E Skew .143 Maximum 1.000	S TEACH MODALI Value O Total Std err Std dev S E Kurt Range Sum	Frequency 152 140	52.1 47.9 100.0 Med Var Sker Min	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007 S E Skew .143 Maximum 1.000	S TEACH MODALI Value O Total Std err Std dev S E Kurt Range Sum	Frequency 152 140	52.1 47.9 100.0 Med Var Sker Min	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				
Value Label NOT MARKED FOR MODALITY Mean .479 Mode .000 Kurtosis -2.007 S E Skew .143 Maximum 1.000	S TEACH MODALI Value O Total Std err Std dev S E Kurt Range Sum	Frequency 152 140	52.1 47.9 100.0 Med Var Sker Min	Percent 52.1 47.9 100.0 ian iance wness	.000 .250 .083				

195

BEST COPY AVAILABLE



25-Jul-96 SPSS RELEASE 4.1 FOR IBM OS/MVS 14:16:57

ORRESP CORRESPONDEN	CE MODALITY							
/alue Label			Valid Percent Percent	Cum Percent			·	
OT MARKED FOR MODAL MARKED FOR MODALITY	0	261 31	89.4 89.4 10.6 10.6	89.4 100.0			Fattages, 12	:
	Total	292	100.0 100.0			<u> </u>		
lean .106	Std err	.018	Median	.000			_	
lode .000 Curtosis 4.638	Std dev	.309	Variance	. 095				3.1
Curtosis 4.638	S E Kurt	.284 1.000	Skewness Minimum	2.570 .000				3.50
E Skew .143	Range Sum	1.000 31.000	rii ri <u>i muis</u>	000		· · · · · · · · · · · · · · · · · · ·		
								
Valid cases 292	A 404 A 4							
	<u> </u>	1, 1, 14,	er e e e <u>e e</u>	:			+ + + 14	
								
TELEVISED CO	URSES MODALITY							
			Valid				44.5	•
			1/2144	C				
/alue Label	Value F	reguency F	Percent Percent	Cum Percent		 		
	ABTMG L							
OT MARKED FOR MODAL	0	224	76.7 76.7	<u>76.7</u>			110 717	
		: 68 '	25.5 23.3	100.0				
TARKED FOR MODALITY					•	•	AV YOUR	4.
MARKED FOR MODALITY	Total	292	100.0 100.0		· · ·	<u></u>		* :
TARKED FOR MODALITY					· ·			· :
14RKED FOR MODALITY	Std err	.025	Median Variance	.000	· .			* 2
14RKED FOR MODALITY	Std err	.025	Median Variance	.000 .179 1.271	· · · · · · · · · · · · · · · · · · ·		1	;
14RKED FOR MODALITY	Std err	.025	Median Variance	.000 .179	· · · · · · · · · · · · · · · · · · ·		1	
TARKED FOR MODALITY	Std err	.025	Median Variance	.000 .179 1.271	· · · · · · · · · · · · · · · · · · ·			
100 1.000 1.	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271			1	
1ean .233 1ode .000 (urtosis -388 S E Skew .143 1aximum 1.000	Std err	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271			1	;
16an	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271	<u> </u>		# 1 <u>X</u> .	;
1ean .233 1ode .000 (urtosis -388 S E Skew .143 1aximum 1.000	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271			# 1 <u>X</u> .	
16an	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271			# 1 <u>X</u> .	;
ARKED FOR MODALITY	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance Skewness Minimum	.000 .179 1.271			# 1 <u>X</u> .	-
16an .233 10de .000 (urtosis .388 S E Skew .143 1eximum 1.000 /alid cases 292	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance	.000 .179 1.271				
ARKED FOR MODALITY	Std err Std dev S E Kurt Range Sum	.025 .423 .284 1.000 68.000	Median Variance Skewness Minimum	.000 .179 1.271				-
16an .233 10de .000 (urtosis .388 S E Skew .143 1eximum 1.000 /alid cases 292	Std err Std dev S E Kurt Range Sum Missing cas	.025 .423 .284 1.000 68.000	Median Variance Skewness Minimum	.000 .179 1.271				-
16an	Std err Std dev S E Kurt Range Sum Missing cas	.025 .423 .284 1.000 68.000	Median Variance Skewness Minimum	.000 .179 1.271				*:
16an	Std err Std dev S E Kurt Range Sum Missing cas	.025 .423 .284 1.000 68.000	Median Variance Skewness Minimum	.000 .179 1.271				



		ITY	꽃으로 불하는것 :		
Value Label	Value	Frequency	Valid Percent Percent		
NOT MARKED FOR MODAL MARKED FOR MODALITY	0	234 58	80.1 80.1 19.9 19.9	80.1 100.0	
	Total	292	100.0 100.0		
1ean .199	Std err	.023	Median Variance	.000	
Tode .000 (urtosis .308 S E Skew .143	S E Kurt	.284	Median Variance Skewness Minimum	1.519	
SESKOW 1.000	Sum	58.000	Lii ti) urwii	. 000	<u></u>
Valid cases 292	Missing	ases 0			
NETWORK INTERACTION	TE NETLINDY COLI	TI MODAL TI	. <u> </u>		,
			Valid	Cum	
Value Label		, ,	Percent Percent		
NOT MARKED FOR MODAL MARKED FOR MODALITY	L 0	234 58	80.1 80.1 19.9 19.9	80.1 100.0	
					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Maza 199	Std err	.023	Median <u>Variance</u>	.000	
Mode .000	Std dev	.400	variance	. 160	
Mode 0000 Kurtosis 308 S E Skew 143 Maximum 1.000	Std dev S E Kurt Range Sum	.400 .284 1.000 58.000	Skewness Minimum	1.519	
National 300	Range Sum	1.000 58.000	Variance Skewness Minimum	1.519	
National 300	Range Sum	1.000 58.000	Variance Skewness Minimum	1.519	
Nurtosis 1306 S E Skew 143 Maximum 1.000 Valid cases 292	Ranga Sum Missing o	1.000 58.000	Variance Skewness Minimum	1.519	
Nurtosis 1306 S E Skew 143 Maximum 1.000 Valid cases 292	Ranga Sum Missing o	.284 1.000 58.000	Variance Skewness Minimum	1.519	
Kurtosis 143 SE Skew 143 Maximum 1.000 Valid cases 292	Ranga Sum Missing o	.284 1.000 58.000	Variance Skewness Minimum	1.519	
	Ranga Sum Missing o	.284 1.000 58.000	Variance Skewness Minimum	1.519	



25-Jul-96 SPSS RELEASE 4.1 FOR IBM OS/MVS 1 14:16:57

INTERNET IN	TERNET COUR	SES MODALIT	Y			
Value Label		Value	Frequency		Cum t Percent	
NOT MARKED F MARKED FOR 1	OR MODAL IODALITY	0	257 35	88.0 88.0 12.0 12.0	100.0	
		Total	292	100.0 100.0		
Mean Mode	.120	Std err	.019	<u>Median</u>		
Mode	.000	Std dev		variance	.106 2.353	
Kurtosis S E Skew	3.560	Pance	1 000	Skewness Minimum	.000	
Maximum	1.000	Sum	35.000	11/1///		
Valid cases	292	/ Missing c	ases 0	1 1,1		
			المرازية الإثبيل	*** <u>*</u>		
						
OTHERMOD O						
Value Label	<u> </u>	Value	Frequency	Valid Percent Percen	t Percent	
NOT MARKED I	OR MODAL	0	272	93.2 93.2	93.2	<u> </u>
MARKED FOR I	100ALITY	1	20	6.8 6.8		
<u> </u>	<u>i jiya alisi</u>	Total	292	100.0 100.0		<u></u>
Mean	.068	Std err	.015	Modian	.000	
<u>Mode</u> Kurtosis	9.862	Std dev S E Kurt			3.434	
S E Sken	9.862 .143 1.000	Range	1.000	Minimum	.000	
<u>Maximum</u>	1.000	Sum	20.000	<u>.:</u>	<u> </u>	
Valid cases	292	Missing c	ases ()		
<u>. ; ; </u>	<u> </u>	ue du <u>l'illiani</u>	<u> </u>		<u> </u>	<u></u>
,,,						A A A A BUIL
Y				•		



NEEDS NE	EDS ASSES	SMENT OPTION			· **:	. · · · · · · · · · · · · · · · · · · ·			(1907) 	
Value Label			Frequency		Valid Percent		-			
OT MARKED A 1ARKED AS OP	S OPTION TION CON	1	137 155	46.9 53.1	46.9 53.1	46.9 100.0				
		Total	292	100.0	100.0					·
ean	.531	Std err	.029	<u>Medi</u> Vaci	an ance	1.000 .250			· (1) (1) (1) (1)	
urtosis E Skew	-1.998 .143	Std dev S E Kurt Range		Ske Mini	iness mum	124				다. 여러 구시한다. 유통하는 기계를
lax i mum	1.000	Sum	155.000				·			
alid cases		Missing o	ases 0							<u> </u>
	<u>: 183</u>		<u> </u>	·						
1, 1, 1, 1		IALYSIS OPTION	♥ Prijude jude	:			•			
1	<u> </u>				Valid	Cum				
alue Label			Frequency							
<u>iot marked a</u> Iarked as op	S OPTION	<u>0</u>	176 116	60.3 39.7		60.3 100.0			.,	
See Ex	<u> </u>	1 Total	292	100.0	100.0				· .	
lean lode	.397 .000	Std err Std dev	.029 .490	Medi Vant	an ance	.000 .240				
urtosis E Skew laximum	-1.834	S E Kurt Range Sum	. 284 1 000		iness	. 422				
alid cases	292	Missina a	ases 0							
	·									3 + 11 + 1 1 + 1 + 1 + 1 + 1
· wiji	19.									
· · · · .		· · ·							. :	
	*	• •								
			<u> </u>							
· .;					_	· · ·				
	in the			•				٠		•••
			 			-				
			<u> </u>							





25-Jul-96 SPSS RELEASE 4.1 FOR IBM OS/MVS 1 14:16:57

OPTION				
	ency Percent Pe	alid Cum rcent Percent		
if it is a \mathbf{i} - \mathbf{i} - \mathbf{i}	60 20.5	20.5 100.0		
Total 2	292 100.0 1	00.0		
		.000		
Std dev S E Kurt			•	
Range 1.		.000		<u> </u>
SUM 60.	.000			
Missing cases	0	-		no sua gilliona si e
		· · · · · · · · · · · · · · · · · · ·		
	 			
R EXPERT OPTION				
<u> </u>				
•	•			
	1 <u>42 48.6</u> 150 51.4	48.6 48.6 51.4 100.0		
			•	
Std dev	.501 Variand	e .251		
S E Kurt	.284 Skewnes		•	
Missing cases				
		•		
· · · · · · · · · · · · · · · · · · ·		·		
	o Agrica			
· · .	.::			<u></u>
	<u>. *. 3.3 (5.7)</u>			The state of the s
	Value Freque O 1 Total Std err Std dev S E Kurt Range 1 Sum 60 Missing cases EXPERT OPTION Value Freque O 1 Total Std err Std dev S E Kurt Range 1 Sum 150 Missing cases	Value Frequency Percent Perc	Value Frequency Percent Percent Percent	Value Frequency Percent Percent Percent



Value Label Value Frequency Percent Percent Value Label Value Frequency Percent Percent	CORREAL TO	KKIC DESIG	N EXPERT OPT								- 14: 4조 - + - <u></u>
Total 292 100.0 100.0 Total 292 100.0 100.0 Team .182 Std err .023 Mediam .000 Mediam .000 Std dev .366 Variance .149 Kurtosis .755 S E Kurt .284 Skewness 1.661 SE Skew .143 Range .1,000 Minimum .000 Valid cases 292 Missing cases 0 NEMCURR CREATION NEW CURRIC OPTION Value Label Value Frequency Percent Percent NOT MARKED AS OPTION 0 205 70.2 70.2 70.2 HARKED AS OPTION ON 1 87 29.8 29.8 100.0 Total 298 Std err .027 Mediam .000 Mean .298 Std err .027 Mediam .000 Mean .000 Std dev .458 Variance .210 Kurtosis .1220 S E Kurt .284 Skewness .888 S E Skew .143 Range .1,000 Minimum .000 Maximum 1.000 Sum 87.000 Walid cases 292 Missing cases 0						Valid Percent	Cum Percent				
Total 292 100.0 100.0 Mean .182 Std err .023 Median .000 Mode .000 Std dev .886 Variance .149 Kurtosis .765 S E Kurt .284 Skewness 1.661 S E Skew .143 Range .1000 Hinimum .000 Main .000 Sum .53.000 Valid cases 292 Hissing cases 0 NELCURR CREATION NEW CURRIC OPTION Value Label Value Frequency Percent Percent Value Label Value Frequency Percent Percent NOT MARKED AS OPTION 0 .205 .70.2 .70.2 .70.2 MARKED AS OPTION CON 1 .87 .29.8 .29.8 .100.0 Total .292 .100.0 .100.0 Mean .298 Std err .027 Median .000 Mode .000 Std dev .458 Variance .210 Kurtosis .1.20 S E Kurt .244 Skewness .888 STSKew .1.20 S E Kurt .264 Skewness .888 Marinum .000 Sum .87.000 Valid cases .292 Hissing cases 0	NOT MARKED A MARKED AS OP	S OPTION TION CON		53	18.2	18.2		: · · ·		i	
NEWCURR CREATION NEW CURRIC OPTION Valid Cum			Total	292	100.0	100.0					
Same	1ean	. 182	Std err	.023	Medi	an	.000				
Sum St. St.	1ode (urtosis S E Skew	.765 .143	Sto dev S E Kurt Range	.284 1.000	Vari Sker Mini	ance iness mum	1,661		· · · · · · · · · · · · · · · · · · ·		
Value Cum	lax i mum	1.000	Sum	53.000							-
Valid Cum	Valid cases	292	Missing c	ises (
Value Frequency Percent Percent	JEWCHER CE	FATTON NEW	CURRIC OPTI	 DN						_	
NOT MARKED AS OPTION 0 205 70.2 70.2 70.2 MARKED AS OPTION CON 1 67 29.8 29.8 100.0 Total 292 100.0 100.0 Total 292 100.0 100.0 Mean .298 Std err .027 Median .000 Mode .000 Std dev .458 Variance .210 Kurtosis -1.220 S E Kurt .284 Skewness .888 S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 87.000 Valid cases 292 Missing cases 0						Valid	Cum	· · · · · · · · · · · · · · · · · · ·	and the second second		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Total 292 100.0 100.0 Total 292 100.0 100.0 Tean .298 Std err .027 Median .000 tode .000 Std dev .458 Variance .210 Kurtosis -1.220 S.E.Kurt .284 Skewness .888 S.E.S.Kewl .143 Range 1.000 Hinimum .000 taximum 1.000 Sum 87.000 Valid cases 292 Missing cases 0	/alue Label		Value	Frequency							
Total 292 100.0 100.0 Tean .298 Std err .027 Median .000 tode .000 Std dev .458 Variance .210 (urtosis -1.220 S E Kurt .284 Skewness .888 S E Skew .143 Range 1.000 Minimum .000 Taximum 1.000 Sum 87.000 Valid cases 292 Missing cases 0	TARKED AS OF	TION CON		87	29.8	29.8	70.2 100.0	14 12 12 12 12 12 12 12 12 12 12 12 12 12			
Mode .000 Std dev .458 Variance .210 Kurtosis -1.220 S E Kurt .284 Skewness .888 S E Skew .143 Ranga 1.000 Minimum .000 Maximum 1.000 Sum 87.000 Valid cases 292 Missing cases 0		<u> </u>	Total	292	100.0	100.0				18 90 6	S. sudding and T. co.
Kurtosis -1.220 S.E.Kurt .284 Skewness .888 S.E.Skew .143 Ranga 1.000 Minimum .000 Maximum 1.000 Sum 87.000 Valid cases 292 Missing cases 0	Mean Mode	000	Std err Std_dev	.027 .458	Med Var	an ance	.210				
	Kurtosis S E Skew Maximum	-1.220 .143 1.000	S E Kurt Range Sum	,284 1,000 87.000	Skei Min	i mum Iness					
	/alid cases	292	Missing C	ases _	0 _						
					· (4年) 1						
	· · · · · · · · · · · · · · · · · · ·			-							
			<u> </u>		·: .					<u>.</u>	<u> </u>
				<u> </u>							· · · · .
					<u> </u>	·	··				<u> </u>
			.								

201

BEST COPY AVAILABLE



25-Ju1-96 SPSS RELEASE 4.1 FOR IBM OS/MVS 1 14:16:57

	(ISTING CURRIC D				
Value Label			Valid Percent Percent	Cum Percent	
NOT MARKED AS OPTIC MARKED AS OPTION CO	O	91 201	31.2 31.2 68.8 68.8	31.2 100.0	
·	Total	292	100.0 100.0		
Mean .688	Std err	.027	Median Variance	1.000	
Mode 1.000 Kurtosis -1.341 <u>S E Skew .143</u> Maximum 1.000	1 SEKurt <u>Range</u>	.284	Skewness Minimum	818	
maximum 1.000	y Sum	201.000			
Valid cases 292	2 Missing c	ases 0			
					
MERGE MERGING	OR MORE EXIST	CURRIC OPTI	<u> </u>		
			Valid	Cum	
Value Label		Frequency	Percent Percent		
NOT MARKED AS OPTION	DN O	215	73.6 73.6	73.6	
MARKED AS OPTION CO			26.4 26.4 100.0 100.0	100.0	
	14144	292		.000	
Mean .269 Mode .000	0 Std dev	.026	Median <u>Variance</u>	.195	
Kurtosis844 S E Skew .14 Maximum 1.000	3 Range		Skewness Minimum	1.078	
Valid cases292	2 Missing o	ases ()		
<u> </u>		•	·		
·	•				

<u></u>	<u> </u>	·			



CREATE CR		M SCRATCH?		Hi - 1				
Value Label	<u> </u>	<u>-</u>	Frequency	Percent	Valid Percent	Cum		
REATED FROM NOT CREATED NOT MARKED	1 SCRATCH FROM SCR AS CREATE		98 181 13	33.6 62.0 4.5	35.1 64.9 Missing	35.1 100.0		
		Total	292	100.0	100.0			
lean lode (urtosis	1.649 2.000 -1.619	S E Kurt	.478 .291	2K6r	iance wness	2.000 .229 627		
E Skew laximum	.146 2.000	Range Sum		Min	1 mum	1.000		
/alid cases	279	Missing c	cases 13	.				
				. -				
DESGN HO	OW LONG TO	Design New C					<u></u>	
Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent		
LESS THAN 3 4 TO 6 MONTH 7 TO 9 MONTH	MONTHS T HS TO DES HS TO DES	2 3	23 32 14	7.9 11.0 4.8	18.9 26.2 11.5	45.1 56.6		
10 TO 12 MON DVER A YEAR NOT MARKED F	NTHS TO D TO DESIG FOR HOW L	5 0	19 34 170	6.5 11.6 58.2	15.6 27.9 Missing		_ _	
		Total	292	100.0	100.0			
Mean Mode Kurtosis	3.074 5.000 -1.517	Std err Std dev S E Kurt	.137 1.517 .435	Med Vari Skel	lian iance wness	3.000 2.300 .032		
S E Skeu	5.000	Range Sum	4.000 375.000	Ain	imum	1.000		利は押りなり 事務で再覧
Valid cases	122	Missing c	cases 170	,	_			
:								
			· ·			-		

25-Jul-96 SPSS RELEASE 4.1 FOR IBM OS/MVS

Valid Cum	GRPMEET HOW OFT ME							
Value Label Value Frequency Percent Percent Percent	<u> </u>	<u>.**** . * * *</u>			Cum			
RARELY 1 TO 2 GRP ME 2 21 7.2 16.7 25.4 OCCASIONALLY 3 TO 4 3 53 18.2 42.1 67.5 RECOURTLY 1/5 OR MORE 4 11 14.0 32.5 100.0 NOT MARKED FOR HOM 0 0 16.6 56.8 Missing	Value Label	Value	Frequency		Percent			
RARELY1 TO 2 GRP ME 2 21 7.2 16.7 25.4 CCASIONALLY/3 TO 4 3 5.1 81.2 42.1 57.5 CCASIONALLY/5 OR HORE 4 41 14.0 32.5 100.0 CCASIONALLY/5 OR HORE 4 41 14.0 32.5 100.0 CCASIONALLY/5 OR HORE 4 41 14.0 32.5 100.0 CCASIONALLY/5 OR HORE 5.8 Hissing CASE MISSING CONTROL 100.0 CCASIONALLY/5 OR HISSING CONTROL 100.0 CCASIONALLY/5 OR HISSING CONTROL 100.0 CCASIONALLY/5 CCASIONALLY			11			٠.		market a tel
Total 14 14 15 10 10 10 10 10 10 10	RARELY/1 TO 2 GRP ME	2	21					
Total 292 100.0 100.0	DCCASIONALLY/3 10 4 EDECLIENTLY/5 OP MORE							
Total 292 100.0 100.0	NOT MARKED FOR HOW	j ò	166	56.8 Missing	_			
Note		Total	292		:			j. Pari Kaji
Mode 3.000 Std dev 921 Variance .046		Std opp	1082	Modian	3.000			
Kurtosis - 342 S E Kurt . 428 Skewness656 S E Skew . 216 Range 3.000 Minimum 1.000 Sum 376.000		CTM MAU	421	Variance				
Valid cases 126 Missing cases 166	Kurtosis342	S E Kurt	.428	Skewness				
Valid cases 126 Missing cases 166	S E Skew .216	Range	3.000	Minimum	1.000			
Valid cases 126 Missing cases 166	Maximum 4.000	Sum	376.000	and the second	s			
Valid cases 126 Missing cases 166		williafer the set				•		
Valid Cum								· · ·
Value Label Value Frequency Percent Percent Percent	14114 04545							
Valid Cum							 	1. Hilly 1.
Valid Cum								- 1 AMGa. 1
NOT EXISTING CURRIC 2 60 20.5 22.2 100.0 NOT MARKED IF EXISTI 0 22 7.5 Missing	•							
Total 292 100.0 100.0	NOT EXISTING CURRIC			20.5 22.2	100.0			
Total 292 100.0 100.0 Mean 1.222 Std err .025 Median 1.000 Mode 1.000 Std dev .417 Variance .173 Kurtosis196 S E Kurt .295 Skewness 1.344 S E Skew .148 Range 1.000 Minimum 1.000 Maximum 2.000 Sum 330.000 Valid cases 270 Missing cases 22								
Mean 1.222 Std err .025 Median 1.000 Mode 1.000 Std dev .417 Variance .173 Kurtosis 196 S E Kurt .295 Skewness 1.344 S E Skew .148 Range 1.000 Minimum 1.000 Maximum 2.000 Sum 330.000 Valid cases 22		Total	292					
Mode 1.000 Std dev .417 Variance .173 Kurtosis196 SE Kurt .295 Skewness 1.344 SE Skew .148 Range 1.000 Minimum 1.000 Maximum 2.000 Sum 330.000 Valid cases 270 Missing cases 22	u 1 222	Std err		Modian	1.000			
Kurtosis196 S E Kurt .295 Skewness 1.344 S E Skew .148 Range 1.000 Minimum 1.000 Maximum 2.000 Sum 330.000 Valid cases 270 Missing cases 22	Mode	Std dev	417	Variance	: 173			
Maximum 2.000 Sum 330.000 Valid cases 270 Missing cases 22	Kurtosis196	S E Kurt	.295	Skewness	1.344			
Maximum 2.000 Sum 330.000 Valid cases 270 Missing cases 22	S E SkeH . 148	Range	1.000	Minimum	1.000			
Valid cases 270 Missing cases 22	Maximum 2.000	Sum	330.000					
		MI			·			<u></u>
	Valid cases 270	missing o	:ases 2:	.				
			•					
		<u> </u>			<u> </u>			<u> </u>



Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent				
LESS THAN 1 MONTH TO 1 TO 2 MONTHS TO MOD 3 TO 4 MONTHS TO MOD 5 TO 6 MONTHS TO MOD	N	27 49	9.2 16.8	12.9 23.3	14.3 27.1 50.5	* *****		1-11	
MORE THAN 6 MONTHS T NOT MARKED FOR HOW L	5 0	69 82	12.0 23.6 28.1	16.7 32.9 Missing	67.1 100.0				
	Total	292	100.0	100.0		.::.	· · · · · · · · · · · · · · · · · · ·	·	
10de 5.000	Std dev	1.422	Vari	ance iness	3.000 2.023 359				
E Skew .168 taximum 5.000	Range Sum	4.000	Mini	mum .	1.000				
/alid cases 210	Missing ca	ases 82							
		707 E. 7. 7. 7. 7.					· ·	·	
	OURSE ON CURR D					_			
/alue Label	Value	Frequency	Percent	Valid Percent	Cum Percent	:.	. ; ^v	1 11848	
Value Label NOT MARKED FOR CURR MARKED FOR CURR DEV	Value 0 1	186 106	Percent 63.7 36.3	Valid Percent 63.7 36.3	Cum Percent 63.7 100.0	:.	, ; ^T	1	
Value Label NOT MARKED FOR CURR 1ARKED FOR CURR DEV	Value 0 1 Total	186 106 292	63.7 36.3 	63.7 36.3 	63.7 100.0	i.	. 1 7	1 1848 2	
Value Label NOT MARKED FOR CURR MARKED FOR CURR DEV Mean .363 Mode .000 Kurtosis -1.684	Value 0 1 Total Std err Std dev S E Kurt	186 106 292 .028 .482 .284 1.000	63.7 36.3 100.0 Medi Vari Skew	63.7 36.3 	63.7 100.0	# # # # # # # # # # # # # # # # # # #	, i ^T		
Value Label NOT MARKED FOR CURR HARKED FOR CURR DEV Tean .363 Hode .000 Kurtosis -1.684 S E Skew .143 Haximum 1.000	Value 0 1 Total Std err Std dev S E Kurt Range Sum	186 106 292 .028 .482 .284 1.000	63.7 36.3 100.0 Medi Vari Skew Mini	63.7 36.3 100.0 an_ance	.000 .232 .573		. i *	1 1848 2 2	
Mean .363 Mode .000 Kurtosis -1.684 S E Skew .143 Maximum 1.000	Value 0 1 Total Std err Std dev S E Kurt Range	186 106 292 .028 .482 .284 1.000	63.7 36.3 100.0 Medi Vari Skew Mini	63.7 36.3 	.000 .232 .573		. i *	10.00 (10	
Mean .363 Mode .000 Kurtosis -1.684 S E Skew 1.43 Maximum 1.000	Value 0 1 Total Std err Std dev S E Kurt Range Sum	186 106 292 .028 .482 .284 1.000	63.7 36.3 100.0 Medi Vari Skew Mini	63.7 36.3 	.000 .232 .573		, i T		





IBM 9121-521

Value Label Value Frequency Percent Value Percent Percent Percent	CURRUSHP ATTEND SRKS	IP ON CURR DEV			
Total 181 62.0 62.0 100.0 100.0			Vallo	r Cum	
Total 292 100.0 100.0	NOT MARKED FOR CURR MARKED FOR CURR DEV	0	111 38.0 38.0 181 62.0 62.0) 100.0	
Total 292 100.0 1.000	4,794	Total	292 100.0 100.0)	
Fode 1.000 Std dev 486	Mean .620	Std err	.028 <u>Median</u>	1.000	
Valid cases 292 Missing cases 0	Mode 1.000 Kurtosis -1.766	Std dev S E Kurt	.486 Variance .284 Skewness	.236	
Value Label Value Frequency Percent Percent	Maximum 1.000	Sum 18	1.000		
Value Label Value Frequency Percent Percent	Valid cases 292	Missing cases	0		
Value Label Value Frequency Percent Percent					
Value Label Value Frequency Percent Percent					
Value Label Value Frequency Percent Percent	AUDDOOM CERVE ON CO		NEV		
Value Label Value Frequency Percent Percent Percent	CURRCOMT SERVE ON CO	THILIEE FOR CORK C			
Value Label Value Frequency Percent Percent Percent			Wald.	d Com	
NOT MARKED FOR CURR 0 134 45.9 45.9 45.9 MARKED FOR CURR DEV 1 158 54.1 54.1 100.0 Total 292 100.0 100.0 Mean 541 Std err .029 Median 1.000 Mode 1.000 Std dev .499 Variance .249 Kurtosis -1.986 S E Kurt .284 Skewness166 S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 158.000 Valid cases 292 Missing cases 0	Value Label	Value Fred	quency Percent Percen	nt Percent	
Total 292 100.0 100.0		0	134 45.9 45.9	9 45.9	
Mean .541 Std err .029 Median 1.000 Mode 1.000 Std dev .499 Variance .249 Kurtosis -1.986 S E Kurt .284 Skewness 166 S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 158.000 Valid cases 292 Missing cases 0	MARKED FOR CURR DEV	Fig. 865 (44.) 1 - 1 (54.)	158 54.1 54.	1 100.0	
Mean .541 Std err .029 Median 1.000 Mode 1.000 Std dev .499 Variance .249 Kurtosis -1.986 S E Kurt .284 Skewness 166 S E Skew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 158.000 Valid cases 292 Missing cases 0		Total	292 100.0 100.0	0	
Kurtosis -1.986 SE Kurt .284 Skewness -100 SE SKew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 158.000 Valid cases 292 Missing cases 0					
Kurtosis -1.986 SE Kurt .284 Skewness -100 SE SKew .143 Range 1.000 Minimum .000 Maximum 1.000 Sum 158.000 Valid cases 292 Missing cases 0	Mean .541	Std err	.029 Median .499 Variance	040	·
Valid cases 292 Missing cases 0	Kurtosis -1.986	S E Kurt	.284 Skewness	166	
Valid Cases 292 Missing cases 0	S E Skew .143	Range	1.000 Minimum	.000	
	Max1mum 1.000		33.000		
		Missins onco	0	•	
	Valid cases 292				
	The state of the s		Commence of the Commence of th		
			<u> </u>		
		· · · · · · · · · · · · · · · · · · ·	986		
			· · · · · · · · · · · · · · · · · · ·		사람들은 사람들이 함께 다른 사람들이 되었다.
					
"존문이 아버지에 대회에 바이어는 이 과장의 점에 있는 회사에게 되는 사이에 가장 한 방에서 되는 사이에 나가지, 항 되는 사이에 가장 하는 사이를 보는 것이다. 그리는 사이를 하는 그리는					



14:16:57	SFSS RELE	ASE 4.1 FOR 1			IBM 9121-52	21			
REVIEW W	AS CURR RE		IMPLEMENT?		•				
Value Label		 Value		Percent Per	11d Cum rcent Percen	1			:
YES REVIEWED NOT REVIEWED NOT MARKED F	BEFORE BEFORE FOR REVIE	1 2 0	76 19	26.0 2 6.5 Mis	72.2 72.2 27.8 100.0	- K			
		Total	292	100 0 10	00.0				
Mean Mode Kurtosis	1.278 1.000	Std err Std dev S E Kurt	.027 .449 .294	Median Variance Skewness	1.000 2.202 3.994				
S E Skew Maximum	.147 2.000	Range Sum	1.000 349.000	Minimum	1.000				•
Valid cases	273	Missing c	ases 19	resident, inter Marian Anna de la companya		• .			
				. .					
		' REVIEW CURRI							
Value Label		Value	Frequency	Percent Per	alid Cum rcent Percen	t			
NOT MARKED MARKED FOR	FOR INDIV	0	122 170	58.2	41.8 58.2 100.0		* * * * * * * * * * * * * * * * * * *		
	<u> </u>	Total	292		00.0				
Mean Mode	.582 1.000 -1.901	Std err Std dev	.029	Median Varianco Skewneso Minimum	1.000 244 5335				
Kurtosis S E Skew Maximum	-1,901 .143 1.000	S E Kurt Range Sum	.284 1.000 170.000	Skewnes: Minimum	.000	. :	<u> </u>		
Valid cases	292	Missing o	cases (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			 .	· ·					·
	·	· · · · · · · · · · · · · · · · · · ·	:						<u> </u>
:.								#	
	es.								···



¥, 3 ...

STUSKEV P	PRG STUDENTS R	REVIEW CURR	IIC:					
Value Label	L	Value	Frequency	Percent Pe	alid ercent	Percent		
NOT MARKED MARKED FOR	FOR INDIV	0	272 20	93.2 6.8	93.2 6.8	93.2 100.0		
		Total	292	100.0 1	00.0			
Mean	.068	Std err	.015	Median		.000		
Mode	.000	Std dev	.253	Varianc	e	· .064		
Kurtosis	9.862 143	S E Kurt	1.000	SKEWNES Minimum	iSi R	.000		
Max i mum	.068 .000 9.862 .143 1.000	Sum	20.000					
Valid cases	292	Missing o	ases : 0	<u> </u>	 .			
				en de la companya de La companya de la co				
<u> </u>								
HSCREV S	SCHOOL/COLLEGE	E REPS REVI	IEW CURRIC					
ili.								
				,	/alid	Cum	٠.	<u> </u>
Value Labe	i	Value	Frequency	Percent Pe	ercent	Percent		
NOT MARKEO	FOR INDIV	0	128	43.8	43.8	43.8		
MARKED FOR	FOR INDIV INDIVIO I	1.	164	56.2	56.2	100.0		
		Total	292	100.0	100.0			
Mean	562	Std err	.029	Median		1.000		
Mode	.562 1.000	Std dev	.497	Variand	ce	247		
Kurtosis	-1.951	S E Kurt	.284	Skewne: Minimum	5 S	250 .000		
S E SKEW	1.000 -1.951 .143 1.000	Sum	164.000		"			
							•	
	292		cases ()		<u> </u>	·	
	292	<u>Missing (</u>		<u> </u>		·		
	292	<u>Missing (</u>)				
	292	<u>Missing (</u>) 		<u>. </u>		
	292	<u>Missing (</u>		<u> </u>			· · · · · · · · · · · · · · · · · · ·	
	292	<u>Missing (</u>				· · · · · · · · · · · · · · · · · · ·		
	292	<u>Missing (</u>		<u> </u>				
	292	<u>Missing (</u>		<u> </u>				
	292	<u>Missing (</u>		<u> </u>				



	ESS/INDUSTRY	REPS RE	VIEW CURRI	C			•	
Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent		
NOT MARKED FOR MARKED FOR INDI	INDIV VID I	77 O	162 130	55.5 44.5	55.5 44.5	55.5 100.0		
		Total	292	100.0	100.0	·		<u></u>
Mean	.445 St	d err	.029		an	.000		
	.964 S .143 Ra	d dev E Kurt nge	.029 .498 .284 1.000	Sker	ance Iness	.248 .222 .000	•	
	.000 Su	m	130.000					
Valid cases	292 Mi	ssing ca	ses O			-	ess."	
							· -	
	REPS REVIEW							
				-	Valid	Cum	•	
Value Label			Frequency					
NOT MARKED FOR MARKED FOR INDI	(74K T	0	275 17	94.2 5.8	94.2 5.8	94.2 100.0		- Commission Commissio
PHILE HYM. MACHITA		 	. 74	5.8	5.8 100.0	100.0		
MARKED FOR INDI	.058 St	Total d err		5.8 100.0 Medi	5.8 100.0	.000		
Mean Mode Kurtosis 12 S E Skew	.058 St .000 St	Total d err d dev E Kurt	.014 .235	5.8 100.0 Medi Vari Sker	100.0	100.0		
Mean Mode Kurtosis 12 S E Sken Maximum 1	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt inge	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Sken Maximum 1	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew Maximum 1 Valid cases	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt inge im	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Sken Maximum 1	.058 St .000 St .471 Sa .000 Su 292 Mi	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew Maximum 1 Valid cases	.058 St .000 St .471 Sa .000 Su 292 Mi	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew Maximum 1 Valid cases	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew Maximum 1 Valid cases	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		
Mean Mode Kurtosis 12 S E Skew Maximum 1 Valid cases	.058 St .000 St .471 S .143 Ra .000 Su	Total d err d dev E Kurt nge m	292 .014 .235 .284 1.000 17.000	5.8 100.0 Medi Vari Skei Mini	100.0	.000 .055 3.793		

25-Ju1-96 SPSS RELEASE 4.1 FOR IBM OS/MVS

			•						
Value Label			Frequency	Percent	Valid Percent	Cum Percent			·
NOT MARKED FOR MARKED FOR IND	INDIV	0 1	265 27	90.8 9.2	90.8 9.2	90.8 100.0			
		Total	292	100.0	100.0		-		
Mean	.092	Std err	.017	Medi	an	.000		-	The Control of the Co
Kurtosis	6.040	S E Kurt	.284	Ske	iness	2.828			
Mean Mode Kurtosis S E Skeu Maximum	.143 1.000	Range Sum	27.000	<u>Mini</u>	mum	.000		*	<u> </u>
Valid cases	292	Missing c	ases ()					
		rsatidigita, ili. Talada		<u> </u>				•	
OTHERREV OTHE	R EXPERTS	REVIEW CIR	RIC						
Value Label	. LAI LAIG	NETZEN CON							
		<u> </u>			Valid	Cum			
NOT MARKED FOR IND	INDIV IVID I	0	275 17	94.2	94.2 5.8	94.2			
TORRES TOR THE		Total	292	100:0	100.0		;		
Mode	.000	Std dev	.235	Vari	ance	.000 .055			
Mean Mode Kurtosis 1 S E Skew Maximum	2.471	S E Kurt Range	.284 1.000	Sker Mini	iness . mum	3.793 .000	•		
Maximum	1.000	Sum	17.000						
Valid cases	292	Missing o	2505	1					
Valid Cases		THE STITE C			<u>. </u>	•			+
: <u> </u>	<u> 18 pril de</u>		<u> </u>					<u> </u>	
		 							
	<u> </u>	• <u>. </u>		·		<u> </u>			
			<u> </u>			_		_	
	<u> </u>		· ·	<u> </u>	· · ·	<u> </u>			
			•						
		2	10	••					



NOREVIEW NUMBER	NOIVID INVOL	VED CURRIC	REVIEW?	14.			4 5 4 4	
						<u> </u>	<u> </u>	
Value Label		lue Freque	ency Perc	Valid ent Percent	Cum Percent			
1 TO 5 IN GRP RE	VIEW	1 2	72 24	.7 34.4	34.4	17.67		
6 TO 10 IN GRP F 11 TO 15 IN GRP	REVIE	2	48 16 38 13	.4 23.0 .0 18.2	57.4 75.6			
16 TO 20 IN GRP.	REVI	4	23 /	.9 11.0	86.6			
MORE THAN 20 IN	GRP	5 0		.6 13.4 .4 Missing	100.0			
NOT MARKED NUM 1		 						
	To	otal 2	292 100	.0 100.0			<u> </u>	
	.459 Std (err		Median Variance	2.000 1.971			
	.000 Std (.969 SE)			Skewness	.563			
S E Skew	. 168 Range	4.	.000	Minimum	1.000			
Maximum 5.		514.	.000					
Valid cases	209 Miss	ing cases	83					
			17.14	 				t § . s s st
		lua .					· :	. 6.77 :
TOTAL CHILL THE TI								
IKTALKON MAS II	HERE A TRIAL R	JN?	· <u> </u>					
	HERE A IRIAL R		nou Pero	Valid	Cum		,	
Value Label	HERE A IRIAL K	nlue Freque	ency Perc	ent Percent	Percent		, Januar Shika Shika Sa	
Value Label	TO FA	lue Freque	29 9	ent Percent	Percent 10.7	1	Smile	
Value Label YES TRIAL RUN (TO NO TRIAL RUN (TO NOT MARKED FOR	TO FA O FAC TRIAL	1 2 0	29 9 243 83 20 6	ent Percent 0.9 10.7 1.2 89.3 1.8 Missing	10.7 100.0	11 14 14 14 14 14 14 14 14 14 14 14 14 1	Smile	
Value Label YES TRIAL RUN (' NO TRIAL RUN (T) NOT MARKED FOR	TO FA O FAC TRIAL	1 2 0	29 9 243 83 20 6	ent Parcent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0	10.7 100.0		Smile	
Value Label YES TRIAL RUN (TO TRIAL RUN (TO NOT MARKED FOR	TO FAC TRIAL	lue Freque	29 9 243 83 20 6 292 100	2.9 10.7 3.2 89.3 3.8 Missing 3.0 100.0	10.7 100.0	14 14 45 14 14 45		
Value Label YES TRIAL RUN (*) NO TRIAL RUN (TO NOT MARKED FOR *) Mean I Mode 2	TO FA O FAC TRIAL 10.893 Std	alue Freque 1 2 0 otal	29 9 243 83 20 6 292 100 .019	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance	10.7 100.0 2.000			
Value Label YES TRIAL RUN (TO NO TRIAL RUN (TO NOT MARKED FOR MEAN 1 Mode 2 Kurtosis 4	TO FA O FAC TRIAL To .893 Std .000 Std	1 2 0 cotal services	29 9 243 83 20 6 292 100 .019 .309	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	10.7 100.0			
Value Label YES TRIAL RUN (TO NO TRIAL RUN (TO NOT MARKED FOR MEAN 1 Mode 2 Kurtosis 4	TO FA O FAC TRIAL To .893 Std .000 Std	1 2 0 cotal services	29 9 243 83 20 6 292 100 .019 .309	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA D FAC TRIAL TO .893 Std .000 Std .605 SE .148 Rang .000 Sum	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (TO NOT MARKED FOR MEAN 1 Mode 2 Kurtosis 4	TO FA D FAC TRIAL TO .893 Std .000 Std .605 SE .148 Rang .000 Sum	1 2 0 cotal services	29 9 243 83 20 6 292 100 .019 .309	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL TRIAL 1.893 Std 0.000 Std 0.605 S E 1.148 Rang 1.000 Sum 272 Miss	alue Frequents 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA D FAC TRIAL TO .893 Std .000 Std .605 SE .148 Rang .000 Sum	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL TRIAL 1.893 Std 0.000 Std 0.605 S E 1.148 Rang 1.000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL TRIAL 1.893 Std 0.000 Std 0.605 S E 1.148 Rang 1.000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL To Std .000 Std .000 Std .005 S E .148 Rang .000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL To .893 Std .000 Std .605 S E .148 Rang .000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20 6 292 100 .019 .309 .294 .000	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL To .893 Std .000 Std .605 S E .148 Rang .000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			
Value Label YES TRIAL RUN (*) NO TRIAL RUN (*) NOT MARKED FOR Mean 1 Mode 2 Kurtosis 4 S E Skew Maximum 2	TO FA O FAC TRIAL To .893 Std .000 Std .605 S E .148 Rang .000 Sum 272 Miss	alue Freque 1 2 0 otal err dev Kurt e 1 515	29 9 243 83 20	ent Percent 1.9 10.7 1.2 89.3 1.8 Missing 1.0 100.0 Median Variance Skewness	2.000 .096 -2.563			



		ON TRIAL				:		
Value Label		Value	Frequency	Val Percent Perc	id Cum ent Percent			
NOT MARKED F MARKED FOR A	OR WHO W	0 1	260 32	11.0 11	.0 89.0 .0 100.0	: .:	:	
<u> </u>		Total		100.0 100	.0			
Mean	.110	Std err	.018	Median Variance	.000		 	
	4.343	Range	1.000	Skewness				
Maximum	1.000	Sum	32.000		•			
Valid cases:	292	Missing c	mses O		ma vis		Windows in the	
								_
STOTRIL PR	IG STDS HK O	N TRIAL RUN						
				Val				
Value Label		Value	Frequency	Percent Perc	ent Percent			<u></u>
NOT MARKED F	FOR WHO W	0_	269	92.1 92 7.9 7	.1 92.1			
MARKED FOR I	IHO WORK	1	23	7.9 7 100.0 100	.9 100.0	. : ::		
			292	100.0 100	.0			
Mean	.079 ,000	C+d day		Median Variance	.000			
Mode Kurtosis S E Skew	7.937 143		.284 1.000 23.000					
Maximum					_			
Maximum								
Maximum :		Missing c		1 July 11		<u> </u>		
Valid cases	141					<u> </u>		11.
Valid cases	141	Missing c		1 July 11				
Maximum Valid cases								
Maximum Valid cases								
Maximum Valid cases								
Maximum Valid cases								



14:16:57	SE 4.1 FOR IE	M OS/MVS	,	IBM	9121-521		•
CCTRIAL HS AND CC WK					· · · · · · · · · · · · · · · · · · ·		
Value Label		Frequency		Valid Percent	Cum Percent		
NOT MARKED FOR WHO W MARKED FOR WHO WORK	0 1	276 16	94.5 5.5		94.5 100.0		
	Total	292	100.0	100.0			
Mean .055 Mode .000 Kurtosis 13.560 S E Skew .143 Maximum 1.000	Std err Std dev S E Kurt Range Sum	.013 ,228 .284 1.000 16.000	Medi Vari Ske Mini	an ance iness mum	.000 .052 3,933 .000		
Valid cases 292	Missing c	ases (· · · · · ·				(1985) (81.44 (1985) (83.45)
BUSTRIAL BUSINESS/IND		TRAIL RUN	Parcent	Valid	Cum		
Value Label NOT MARKED FOR WHO W	O	282	96.6 3.4	96.6 3.4	96.6 100.0		The section of the se
MARKED FOR WHO WORK	Total	10 292	~	100.0	100.0		
Mean .034	Std err Std dev	.011 .182	Var Ske	ian iance iness	.000 .033 5.149		
77	Range Sum	1.000 10.000	mın.	i mum	.000	<u>.</u>	
Kurtosis 24.676 S E Skew 143 Maximum 1.000 Valid cases 292	Range Sum Missing c	1.000 10.000)	i mum	.000		
Kurtosis 24.676 S E Skew 143 Maximum 1.000 Valid cases 292	Range Sum Missing c	1.000 10.000)	1 m.cn	.000	·	
Kurtosis 24.676 S E Skew 143 Maximum 1.000	Range Sum Missing c	1.000 10.000)	i much	.000		
Kurtosis 24.676 S E Skew 143 Maximum 1.000	Range Sum	1.000 10.000)	n n an			



25-Jul-96 1 14:16:57 SPSS RELEASE 4.1 FOR IBM OS/MVS

		CON TRIAL RUN		· · · · · · · · · · · · · · · · · · ·		· .	:		
Value Label	ı	Value Fr	requency	Percent P	Valid ercent	Cum Percent			
NOT MARKED MARKED FOR	FOR WHO W	0	285 7	97.6 2.4	97.6 2.4				
		Total	292	100.0	100.0				
Mean	.024	Std err	.009	<u>Median</u> Varian		.000 .023			
node Kurtosis S E Skew	37.397	Std dev S E Kurt Range	.284	- Skewne	SS	6.256			
S E Skew Maximum	1.000	Range Sum	1.000 7.000	<u>Minimu</u>	m	.000		<u>_</u>	
Valid cases	292	Missing case	as O						
GOVERNAL (GOVT REPS LIK	ON TRAIL RUN						. 44 .	
		Value F	nom to no.	Poncont P	<u>Valid</u>	Cum		· · ·	
Value Labe		•	-						
NOT MARKED MARKED FOR	FOR WHO W	0 1	291 1	99.7 3	99.7 .3	99.7 100.0			14 9/2 L
,		Total	292	100.0	100.0				
						.000			
Mean Mode	.000	Std err Std dev		Varian	ce	<u>.003</u> .			
Kurtosis S E Skew	292.000 .143	S E Kurt Range Sum	1.000	Skewne Minimu	55] M	.000		÷	
Max i mum	1.000	Sum	1.000	·					·
Valid cases	292	Missing case	es O					•	
				;					
									<u> </u>
		 	•	• • • • •	-				
	1 194 1 1	*!							<u> </u>
							-		
· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	 					
		Tarin yaya is Safa yaya safa	i tuu. Maanaan		:	f.,			
		4411 - 1444 - 141 <u>441 - 1</u> 44 - 411	e tuli. Na la tata la	41%	:	f			
		<u> </u>	214	<u>eamer (iver)</u> v	:	4.			



EXPTRIAL EXPER								
Value Label				Valid Percent Percen	Cum t Percent			
NOT MARKED FOR	ино и		292	100.0 100.0	100.0			
		Total	292	100.0 100.0	<u> </u>			
Mean Mode	.000 .000	Std err Std dev	.000	Median Variance	.000			
M <u>ode</u> Range Sum	.000	Minimum	.000	Maximum	.000			
Valid cases	292	Missing c	ases C)	<u> </u>			<u> </u>
CLSTRIAL HUM C	OURSES IN	TRIAL RUN	- 	<u>.</u>			·	
Value Label		Value	Frequency	Valid Percent Percen	Cum t Percent			
2 COURSES IN TR	IAL R	2	16	2.1 14.6	53.7	<u>.</u>		
3 COURSES IN TH 4 COURSES IN TH 5 OR MORE COURS NOT MARKED FOR	IAL R IAL R ES IN	3 4 5	9 5 5 251	3.1 22.0 1.7 12.2 1.7 12.2	87.8 100.0			
NOT MARKED FOR	NUM C	Total		86.0 Missin	-			
Mean 2	.439		_		2.000			
Mean 2 Mode 1 Kurtosis -1 S E Skew Maximum E	.070 .369	S E Kurt Range Sum	.724 4.000 100.000	Skewness Minimum	1.000	· 		
Valid cases			asas 251					
	- <u>- 1944 .</u>	<u> </u>					·	<u></u>
							9 J	
		erra i j		:				
······································	· · · · · · · · · · · · · · · · · · ·							



14:16:57 STOTRIAL HUM STUDENTS IN TRIAL RUN Valid Percent Percent Frequency Percent Value Value Label 1 TO 25 STOS IN TRIA 26 TO 50 STOS IN TRI 51 TO 75 STOS IN TRI 76 TO 100 STOS IN TR MORE THAN 100 STOS I NOT MARKED FOR NUM S 25 8.6 56.8 10 3.4 22.7 79.5 6,8 2.3 86,4 11.4 1.7 100.0 248 84.9 <u>Missing</u> Target of the 100.0 100.0 292 Total. .201 Median 1.000 1.886 Std err Mean 1.333 .702 4.000 Variance 1.777 1.000 Std dev S E Kurt Mode 1.513 1.000 Skewness 1.095 Kurtosis S E Skew Minimum Range 83.000 5.000 Sum Maximum 👵 248 Missing cases Valid cases 26 PRG FAC PROVIDE FEEDBACK 32 Valid Cum Value Frequency **Percent** Percent Value Label 36 25.3 74.7 25.3 74.7 25.3 NOT MARKED FOR PROVI 218 100.0 MARKED THAT PROVIDED 1 292 100.0 100.0 Total .747 1.000 -.706 1.000 .190 .025 .436 .284 <u>Median</u> Variance Std err Std dev Mean · Mode Kurtosis S E Skew S E Kurt Skeuness .143 1.000 Range .000 Minimum .000

IBM 9121-521

SPSS RELEASE 4.1 FOR IBM DS/MVS

Sum

Missing cases

216

292

218.000

25-Ju1-96

16

16

17 10

19

28

22

51

33

35

37

58 59

48 41

42

45

44

47 48

Maximum

Valid cases



25-Ju1-96 SPSS RELE 14:16:57	EASE 4.1 FOR IBM OS/MVS	IB	M 9121-521	
STOINPUT PRG STO PRO	OVIDE FEEDBACK			
MOTHER TROUBLE		200		
		vaild	Cum	·
/alue Label	Value Frequen	cy Percent Percent	Percent	·
OT MARKED FOR PROVI	0 15		53.8	
ARKED THAT PROVIDED	1 13	5 46.2 46.2	100.0	
•	lotai 29	2 100.0 100.0		
tean .462	Std err0	29 <u>Median</u>	.000	
lode .000	Std dev .4	99 Variance 84 Skewness	.249	
(urtosis -1.991	Range 1.0	00 Minimum	.000	
Taximum 1.000	Std err .0 Std dev .4 S E Kurt .2 Range 1.0 Sum 135.0	ŎŎ		
Ja 11 d angus 202	Missing cases	0::		
Valid Cases 272	HE CONTRACTOR CONTRACTOR	- 		<u>.</u>
<u> </u>	 	 		
	LEGE PROVIDE FEEDBACK			
	Unline Engeron	Valid cy Percent Percent	Cum Percent	
Value Label	-	_		
NOT MARKED FOR PROVI	0 9	8 33.6 33.6	<u>33.6</u> 100.0	
HARRED THAT PROVIDED	<u> </u>	4 66.4 66.4		
	Total 29	2 100.0 100.0		
M 666	Std err .0 Std dev .4	28 Median	1.000	
	Std day .4	73 <u>Variance</u>	.224 700	
Mean .664 Mode 1.000				
Mode 1.000 Kurtosis -1.521	S E Kurt .2	84 Skewness 00 Minimum	.000	7 gass
Near 1.000	S E Kurt .2 Range 1.0 Sum 194.0	84 Skewness 000 Minimum 000		
Mode	S E Kurt .2 Ranga 1.0 Sum 194.0	84 Skewness 00 Minimum 000		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	000 Minimum 000		
Kurtosis -1.521 S E Skew .143 Maximum 1.000	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	000 Minimum 000		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Stewness 00 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Stewness 00 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	00 Minimum		
Kurtosis -1.521 S E Skew .143 Maximum 1.000	S E Kurt .2 Ranga 1.0 Sum 194.0 Missing cases	0 Stewness 00 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	00 Minimum		
Kurtosis -1.521 S E Skew .143 Maximum 1.000	S E Kurt .2 Ranga 1.0 Sum 194.0 Missing cases	00 Minimum		
Kurtosis -1.521 S E Skew .143 Maximum 1.000	S E Kurt .2 Ranga 1.0 Sum 194.0 Missing cases	0 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Ranga 1.0 Sum 194.0 Missing cases	00 Minimum		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Minimum 00		
Kurtosis -1.521 S E Skew .143 Maximum 1.000 Valid cases 292	S E Kurt .2 Range 1.0 Sum 194.0 Missing cases	0 Minimum 00		



BUSINPUT BUSINESS/INDU					 *, ,	
Value Label	Value	Frequency	Valid Percent Percent	Cum Percent	_	
NOT MARKED FOR PROVI MARKED THAT PROVIOED	0	160 132		54.8 100.0	 :	
	lotal	292	100.0 100.0			
Mean .452	Std err	.029 .499	Median Variance	.000	 	
Mean .452 Mode .000 Kurtosis -1.976 S E Skew .143	Sta dev S E Kurt Range	.284 1.000	Skewness Minimum	.194	<u> </u>	
Maximum 1.000	Sum	132.000				
Valid cases 292	Missing o	asas O	representation of Sections			
					 	<u> </u>
LBRINPUT LABOR REPS PR	OVIDE INPUT				 	
				: .		
Value Label	Value	Frequency	Valid Percent Percent	Cum Percent	 	
	0		94.2 94.2			
NOT MARKED FOR PROVI MARKED THAT PROVIDEO	i	17	5.8 5.8	100.0		
	Total	292	100.0 100.0	· · · · · · · · · · · · · · · · · · ·	 	- 4+ %
Mean .058 Mode .000	Std err Std dev _	235	Median Variance	.000 055	 	
Kurtosis 12.471 S E Skew .143 Maximum 1.000	S E Kurt Range Sum	.284 1.000 17.000	Skewness Minimum	3.793 .000		
•				,		
	Missing o	ases (<u>) </u>		 	
		:	•			<u> </u>
	<u> </u>		ı		 	
		 		.	 	A
				·	 	
					 	- · · · · · · · · · · · · · · · · · · ·
				· . ':		



	VIDE FEEDBACK		Valid	Cum	<u> </u>		·		
/alue Label	Value Frequ	ency Percent	Percent						
OT MARKED FOR PROVI MARKED THAT PROVIDED	1		90.8 9.2	90.8 100.0				ilili ş	
		292 100.0	100.0						
lean .092 lode .000 lurtosis 6.040 S E Skew .143 laximum 1.000	Std err Std dev S E Kurt Range 1	.017 Med .290 Var .284 Ske .000 Min	iance	.000 .084 2.828 .000	- H				
laximum 1.000	Sum 27	.000							
/alid cases 292	Missing cases	and the second second							
								-	
THINPUT EXPERTS PROVI	OE FEEDBACK	1.74° 2.7					_ -		
		**	Valid	Cum					
/alue Label	Value Frequ	ency Percent	Percent	Percent					
OT MARKED FOR PROVI	0	273 93.5 19 6.5	93.5 6.5	93.5 100.0			<u> </u>	#1.F1	
TARKED THAT PROVIDED	1	17 0.5		100.0					
								•	
1ean . 065 1ode 000	Std err Std dev	.014 med .247 Van	lian iance	.000 061					
Curtosis 10.640 S E Skew .143 Haximum 1.000	S E Kurt Ranga J Sum 19	.284 Ske .000 Min	inum 	3.545			· . :	F 1	<u>.</u>
/alid cases 292	Missing cases	0							
	*** 	•							
		*				·····			<u> </u>
	·								
									
		· · ·	:						
					•				
			· · · · · · · · · · · · · · · · · · ·						



IBM 9121-521

		APPROVAL					•		:		
Value Label			Frequency	Percent	Valid Percent	Cum				<u> </u>	
NOT MARKED FO MARKED FOR HE	R HELP LP W AP	0	127 165	43.5 56.5	43.5 56.5	43.5 100.0		• .			
		Total		100.0	100.0						•
Mean Mode Kurtosis	.565 1.000 -1.944 .143	Std err Std dev S E Kurt	. <u>029</u> .497 .284	Skew	ance ness	1.000 .247 264	*.				14.
S E Skew Maximum	1.000	Range Sum	1.000 165.000	Mini		.000	<u> </u>			<u> </u>	<u> </u>
Valid cases	292	Missing c	256 5 0						·,·		- 19 10 20 10 2009
STDAPPRL PRG											•
SIDAPPRL PRO	5.0	**			Valid	Cum				1	in A
Value Label		Value	Frequency	Percent							
NOT MARKED FO	R HELP	0	277	94.9	94.9	94.9 100.0				The state of	
MARKED FOR HE	LINA	- 한테랑의	15	9.1	2.1	100.0					, 1,4111.
		Total	292	100.0	100.0		·	<u> </u>			
Mean Mode	.051	Total	.013	100.0 Medi	an ance	.000	· , ·	····			
Mean	.051 .000	Total	292 .013	100.0 Medi	an ance ness	.000		· · · · · · · · · · · · · · · · · · ·			
Mean Mode Kurtosis	.051 .000	Total	292 .013 .221 .284 1.000 15.000	100.0 Medi Vari Skew Mini	an ance ness	.000 .049 4.086	· · · · · ·				
Mean Mode Kurtosis S E Skew Maximum	.051 .000 14.793 .143 1.000	Total Std err Std dev S E Kurt Range Sum	292 .013 .221 .284 1.000 15.000	100.0 Medi Vari Skew Mini	an ance ness	.000 .049 4.086					
Mean Mode Kurtosis S E Skew Maximum	.051 .000 14.793 .143 1.000	Std err Std dev S E Kurt Range Sum	292 .013 .221 .284 1.000 15.000	100.0 Medi Vari Skew Mini	an <u>ance</u> ness mum	.000 .049 4.086					
Mean Mode Kurtosis S E Skew Maximum	.051 .000 14.793 .143 1.000	Total Std err Std dev S E Kurt Range Sum Missing c	292 .013 .221 .284 1.000 15.000	100.0 Medi Vari Skew Mini	an <u>ance</u> ness mum	.000 .049 4.086					



25-Jul-96 14:16:57 SPSS RELEASE 4.1 FOR IBM OS/MVS IBM 9121-521 HSCAPPRL SCHOOL/COLLEGE HELP W APPROVAL Valid Cum Percent Frequency **Percent** Percent Value Label 22.9 77.1 22.9 77.1 NOT MARKED FOR HELP 22.9 100.0 MARKED FOR HELP W AP 225 292 100.0 100.0 Total 14 Std err Std dev S E Kurt Median Variance 1.000 .771 1,000 .025 Mean 15 .421 .284 Mode 16 17 -.329 -1,294 Skewness Kurtosis S E Skew Maximum .000 Range 1.000 Minimum 10 Sum 225.000 19 20 21 Missing cases 292 Ò. Valid cases 25 25 26 BUSINESS/INDUSTRY HELP W APPROVAL 27 20 29 Valid Cum 50 Frequency Value Percent Percent Percent Value Label 51 52 2<u>09</u> 83 NOT MARKED FOR HELP MARKED FOR HELP W AP 71.6 100.0 71.6 28.4 0 55 Willian. 100.0 100.0 292 Total 36 57 .284 .000 Std err .026 Median .000 50 Std dev S E Kurt .452 .284 .204 .962 Variance Mode 59 Kurtosis S E Skew -1,083 Skeuness 48 Range .000 1.000 Minimum: 41 .000 Sum: 83.000 Maximum 42 45 Valid cases 292 Missing cases 45 46 47 48 49 60 61 52 55 54 57 50 59 41 61 62 45 64 65



LBRAPPRL LABOR REPS I	HELP W APPROVAL		and the second of the second o
Value Label		Valid Cum cy Percent Percent Percent	
NOT MARKED FOR HELP MARKED FOR HELP W AP	1	5 94.2 94.2 94.2 7 5.8 5.8 100.0	
	Total 29	2 100.0 100.0	
Mean .058	Std err .0	14 Median .000 35 Variance .055	
Mean .058 Mode .000 Kurtosis 12.471 S E Skew .143 Maximum 1.000	S E Kurt .21 Range 1.00 Sum 17.00	14 Median .000 35 Variance .055 84 Skewness 3.793 90 Minimum .000	
A A TIME TO STATE OF THE STATE			
Valid cases 292	Missing cases	0	
			
GVTAPPRL GOVT REPS HI	ELP W APPROVAL	and the second of the second o	
	요즘 보다. 요. 프로틴		
Value Label	Value Frequen	Valid Cum cy Percent Percent	
NOT MARKED FOR HELP	0 25	9 88.7 88.7 <u>88.7</u>	
MARKED FOR HELP W AP		3 11.3 11.3 100.0	
		2 100.0 100.0	
Mean .113 Mode .000	Std err .0 Std dev .3	17 Variance .101	
Kurtosis 4.066 S E Skew .143 Meximum 1.000	S E Kurt .20 Range 1.00 Sum 33.00	84 Skewness 2.45/ 00 Minimum .000	
Valid cases 292	Missing cases		
	<u> 1900 - January January (j. 1</u>		
	<u> </u>		



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Ju1-96 IBM 9121-521 14:16:57 OTHAPPRU EXPERTS HELP W APPROVAL Valld Cum Percent **Percent Percent** Value Label Value Frequency 92.1 7.9 NOT MARKED FOR HELP MARKED FOR HELP W AP 92.1 7.9 92.1 269 23 100.0 11 12 292 100.0 100.0 Total 15 14 .016 .270 .284 1.000 23.000 .000 Std err Std dev Median_ Variance Mean 15 .073 3.144 Mode .000 16 7.937 Skewness Kurtosis S E Skew S E Kurt 17 000 Minimum Range 1.000 20 21 292 Missing cases Ò Valid cases 22 25 24 25 26 PRG FAC HELP W IMPROVE 27 20 29 Valid Cum Percent Value Label Value Frequency Percent Percent 51 52 NOT MARKED FOR HELP MARKED FOR HELP W IM 20.5 79.5 60 232 20.5 100.0 20.5 79.5 55 54 55 100.0 Total 292 100.0 56 57 1.000 .024 Median .795 Std err Mean 50 .164 -1.465 .40<u>5</u> .284 1.000 Std dev S E Kurt 1.000 Variance Mode 59 Skewness . 148 Kurtosis .143 Range Minimum .000 S E Skew 232.000 Maximum Sum 42 45 44 45 292 Missing cases Valid cases 46 47 48 49 50 51 52 65 54 55 56 57 50 59 60 61 62 64 65



W SID HELF	W IMPROVE					
	_		Val	id Cum		
OR HELP HELP W IM	0	187 105	64.0 66 36.0 36	.0 100.0		
<u> </u>	Total	292	100.0 100	.0		-
.360	Std err	.028	<u>Median</u>	.000		
.000 -1.665 .143	Std dev S E Kurt Range	.481 .284 1.000	Variance Skewness Minimum_	.231 .588 .000		
1.000	Sum	105.000				
292	Missing ca	ses O	L. T.		· ·	
			· ·			The second of th
CHOOL/COLLEG	E HELP W IM	PROVE				<u> </u>
			Va!	id Cum		
	Value	Frequency	Percent Perc	ent Percent		_
OR HELP	o o	68	23.3 2	3.3 23.3		
IELP W IN		224	76.7			
1.000	Std err Std dev	.025 .423	nedian <u>Variance</u>	1.000 .179		· · · · · · · · · · · · · · · · · · ·
388 .143 1.000	S E Kurt Range Sum	.284 1.000 224.000	Skewness Minimum	-1.271 .000		
272	missing C	1363 <u>V</u>			<u> </u>	
			-	-	· ·	<u></u>
			4			
		 		<u> </u>		
			**************************************	· · ·		
			<u>, 4.</u>			
	-767 1.000 -7.67 -7.000 -7.67 -7.000 -7.388 -7.000 -7.388 -7.000 -7.388 -7.000	Value FOR HELP 0 IELP W IM 1 Total .360 Std err .000 Std dev -1.665 S E Kurt .143 Range 1.000 Sum 292 Missing cannot be seen a see	Value Frequency FOR HELP 0 187 HELP W IM 1 105 Total 292 .360 Std err .028 .000 Std dev .481 -1.665 S E Kurt .284 .143 Range 1.000 1.000 Sum 105.000 292 Missing cases 0 CHOOL/COLLEGE HELP W IMPROVE Value Frequency FOR HELP 0 68 HELP W IM 1 224 Total 292 .767 Std err .025 1.000 Std dev .423 -388 S E Kurt .284 .143 Range 1.000 1.000 Sum 224.000	Value Frequency Percent Percen	. 360 Std err .028 Median .000 .000 Std dev .481 Variance .231 -1.665 S E Kurt .284 Skewness .588 .143 Range 1.000 Minimum .000 1.000 Sum 105.000 292 Missing cases 0 Valid Cum Value Frequency Percent Percent Percent	Value Frequency Parcent Parcent Parcent Parcent



25-Jul-96 14:16:57 SPSS RELEASE 4.1 FOR IBM OS/MVS IBM 9121-521 BUSIMPRV BUSINESS/INDUSTRY HELP W IMPROVE Valid Cum Percent Value Frequency Percent Percent Value Label 47.6 52.4 47.6 139 47.6 NOT MARKED FOR HELP 100.0 52.4 153 MARKED FOR HELP W IM 100.0 292 100.0 Total 15 Median Variance .524 1.000 Std err Std dev 029 1.000 Mean 15 .250 -,096 .500 Mode 16 -2,004 S E Kurt .284 Skewness Kuntosis 17 Range 1.000 Minimum .000 S E Skew Maximum 1.000 10 Sum 153.000 19 28 21 292 Missing cases 0 :: Valid cases 22 25 26 LBRIMPRV LABOR REPS HELP W IMPROVE 27 20 29 Valid Cum 50 Value Frequency Percent Percent Percent Value Label 51 52 88.7 11.3 NOT MARKED FOR HELP MARKED FOR HELP W IM 259 33 88.7 55 100.0 35 ga (M) in in i 292 100.0 100.0 Total 57 .113 .000 4.066 .019 Median .000 Std err Mean 50 Std dev S E Kurt .317 .284 .101 2.457 Variance Mode 59 Skewness Kurtosis Range .143 1.000 Minimum .000 S E Skew 41 33.000 1.000 Maximum 42 45 44 Valid cases Missing cases 292 46 47 40 49 68 51 52 53 54 55 54 57 59 68 61 62 65 44 65



	<u> 2014 -</u> 415 -	<u> </u>	·				<u> </u>	<u> </u>
/alue Label	Value	Frequency	Percent	Valid Percent				
NOT MARKED FOR HELP NARKED FOR HELP W IM	0	256 36	87.7 12.3		87.7 100.0		:	
<u> </u>	Total	292	100.0	100.0				
1ean .123	Std err	.019	Medi	an	.000			
Mode .000 Curtosis 3.329	Std dev	.329 .284	Vari	ance	108			
Curtosis 3.329	S E Kurt	.284	Skew	iness	2.304			
S E Skew <u>.143 </u>	<u>kange</u>	1.000 36.000	Mini	mum	.000			
Maximum 1.000	Sum	36.000						
Valid cases 292	Missing o	ases 0) ·	<u> </u>	·			
		Q 2 10 10 10 10	e see	.:	*	*	٠	en distanti
			· 					
OTHIMPRY EXPERTS HELP H			, Francisco					·
				Valid	. Cum			<u> </u>
Value Label	Value	Frequency	Percent	Percent	Percent			
NOT MARKED FOR HELP	0	282	96.6	96.6	96.6			
MARKED FOR HELP W IM	1 2		3.1	3.1	99.7 100.0			
	Total	292	100.0	100.0	· ·			
Mean .038 Mode .000 Kurtosis 39.254 S E Skew .143 Maximum 2.000					000			
Mode .038	Std dev	208	Var	ance	.043			
Kurtosis 39.254	S E Kurt	.284	Skei	iness	5.987			i
S E Skew .143	Range	2.000	<u> </u>	mum	000			<u></u>
Maximum 2.000	Sum	11.000						
Valid cases 292	Missing (<u> </u>			:
Valid Cases	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Valid Cases 272			• •					
		•	• • • • • • • • • • • • • • • • • • • •					
	e je s s				-			
	<i>3</i> .							
		<u> </u>						
이 그는 사람이 그리고 얼룩하다면?			4.					and the second



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Jul-96 14:16:57 IBM 9121-521 CURRREV HOW OFT REVIEW CURRIC? Valid Cum Value Frequency Percent Percent Percent Value Label AS NEEDED REVIEW CUR EVERY YR REVIEW CURR EVERY 2 YR REVIEW CU EVERY 3 YR REVIEW CU 61.6 97.0 167 96 57.2 61.6 32.9 2 35.4 1.8 98.9 100.0 12 1.0 7.2 15 21 NOT MARKED REVIEW CU 0 Missing 14 15 100.0 100.0 292 Total. 16 17 1.000 .349 1.383 .036 .591 .295 1.42<u>4</u> 1.000 Std err Std dev S E Kurt <u>Median</u> Variance Mean Mode 19 Skewness Kurtosis 2.529 20 3.000 Minimum 1.000 S E Skew 148 Range 21 386.000 4.000 Sum 22 25 24 21 Missing cases Valid cases 25 26 27 28 INCLUSION IN COURSE CATALOG 50 51 52 Valid Cum 55 Frequency Value Percent Percent Value Label 54 55 NOT MARKED AS INDICA MARKED AS INDICATOR <u>41.1</u> 58.9 41.1 100.0 41.1 58.9 56 57 58 100.0 100.0 292 Total 59 .589 .000 Std err Std dev S E Kurt .029 1.000 Median Mean 41 .49<u>3</u> .284 .24<u>3</u> -.364 Variance Mode 42 -i.88ī Skewness Kurtosis S E Skew 45 44 Range 1.000 Minimum .000 . 143 172.000 1.000 Sum 45 <u>Maximum</u> 46 47 292 Missing cases Valid cases 50 **6** 1 52 55 54 56 56 67 58 59 60 61 65 65



NEWSTAFF NEW STAFF ADDED ili sakili palipat ilikup eta e Valid Cum Percent Value Label Value Frequency Percent Percent 82.2 17.8 240 52 \$4.0 2.11 82.2 NOT MARKED AS INDICA MARKED AS INDICATOR 0 1 17.8 100.0 12 Total 292 100.0 100.0 15 14 <u>Median</u> Variance Std err Std dev 022 .000 .178 .000 Mean 16 .383 . 147 Mode 16 Kurtosis S E Skew .867 S E Kurt Skewness 1.692 1.000 52.000 1.000 Range .000 Minimum 19 Maximum 20 21 Missing cases 0 292 Valid cases 22 25 24 25 26 ADDITIONAL COURSE OFFERINGS 27 Conser Cum Valid Value Label Percent Percent 51 52 57.9 100.0 NOT MARKEO AS INDICA MARKED AS INDICATOR 169 123 55 36 292 100.0 100.0 <u>Total</u> 56 57 .421 .000 1.910 .029 Std err Median .000 50 Std dev S E Kurt .495 .284 1.000 .245 .321 Variance Mode

Minimum

IBM 9121-521

.000

SPSS RELEASE 4.1 FOR IBM OS/MVS

14:16:57

Kurtosis

Maximum

45 44

S E Skew ...

Valid cases

.143

292

Range

Missing cases

123.000



. <u>1. a. 1</u> # .	CREASED ENRO				- 	· ·	-	
Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent		
NOT MARKED AS MARKED AS INI	INDICA DICATOR	0 1	173 119	59.2 40.8	59.2 40.8	59.2 100.0		
	•	iotal	272	100.0	100.0			
Mean	.408 .000 -1.870	Std err	.029	Medi	an	.000		
Mode Kurtosis S E Skew	-1.870	S E Kurt	.284	Ske	iness	. 378		
S_E_Skew Maximum	1.000	Range Sum	119.000	<u>Mini</u>	mum .	.000	<u> </u>	
Valid cases	292	Missing c	ases (
			<u> </u>				_	<u> </u>
- 	QUATE/INCRE					·		
		-				_		
					Valid	Cum		<u> </u>
Value Label		Value	Frequency	Percent		Percent		
NOT MARKED A	INDICA		248 44	84.9 15.1	84.9 15.1	84.9 100.0		
MARKED AS IN				~~~~~		100.0		
		Total		100.0				
Mean Mode	.151 .000	Std err Std dev	.021 .358		ian iance	.000 .128		
Kurtosis	1.866	S E Kurt		Skei	iness	1.963		
S E Skew Maximum	1.000	Sum_	1.000 44.000					<u>-</u>
Valid cases	292	Missing o)				
AUTIO CURGE		insaniq C	<u> </u>		_			e e e e e e e e e e e e e e e e e e e
· <u>. </u>	<u> </u>		·					
 		·		_				
						•		<u></u>
								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
						·		
			4] 05159					



STATEOK ST	TATE APPROVAL	L OF PROGRA	M 111 1 <u>111 1</u> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		· 	·	<u></u>
Value Label		Valu e	Frequency	Valid Percent Percent	Cum Percent		
NOT MARKED / MARKED AS IN	S INDICA DICATOR	0	139 153	47.6 47.6 52.4 52.4	100.0		
<u> </u>		Total	292	100.0 100.0	-		
Mean	.524 1.000	Std err	.029	Median			
Mode Kurtosis	1.000 -2.004	Std dev S E Kurt	.500 .284	Variance Skewness	.250 096	•	
S E Skew Maximum	-2.004 .143 1.000	Range Sum	1.000 153.000	Minimum	.000		
Valid cases	292	· Missing c	-2404 · (la de la companya de			
AWIIG CREE							
							
	CREDITATION	11, 1, 11			<u> </u>		1.00
	<u> </u>	<u> </u>		Valid Percent Percent	Cum		
Value Label		Value	Frequency	Percent Percent	t Percent		
NOT MARKED	AS INDICA	. 0		79.5 79.5 20.5 20.5			1. 1.
HARKED AS II	WILKIOR	Total	292	20.5 20.5 100.0 100.0	-	:	
•	005	C4-1	026	Modden	.000	-	
Mode Kurtosis S E Skew Maximum	.148 .143 1.000	S E Kurt Range Sum	.284 1.000 60.000	Variance Skewness Minimum	1.465 .000		
Valid cases	292	Missing o	ases (D			
							
		<u> </u>					
		1.1	•				···



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Ju1-96 IBM 9121-521 14:16:57 LICAPPRL APPROVAL OF LICENSING AGENCY Valid Cum **Percent** Percent **Percent** Frequency Value Value Label 90.8 9.2 90.8 90.8 NOT MARKED AS INDICA MARKED AS INDICATOR 265 9.2 100.0 27 292 100.0 100.0 Total 15 .017 .290 .284 1.000 27.000 .000 14 Median Variance Std err Std dev Mean_ Mode 15 .084 .000 16 2.828 Skewness S E Kurt Kurtosis S E Skew 6.040 17 Minimum 1.000 .000 Range · 18 Maximum 19 28 Missing cases 0 Valid cases 292 22 25 24 25 26 ARTICULATION AGREEMENTS 27 28 29 Valid Cum 50 Value Parcent Percent Frequency Value Label 51 32.5 100.0 NOT MARKED AS INDICA MARKED AS INDICATOR 55 55 100.0 100.0 292 Total 56 57 1.000 .027 Median .675 Std err Mean .220 -.749 58 Std dev S E Kurt .469 .284 1.000 Variance 1.000 Mode Kurtosis 59 Skewness 1.448 48 .000 Minimum . S E Skew . 143 Range 197.000 Maximum : 1.000 Sum 45 44 292 Missing cases Valid cases 45 Tr. 15. 46 47 48 49 50 51 52 53 55 56 67 58 59 68 61 62 65 64 65



SPSS RELEASE 4.1. FOR IBM OS/MVS 25-Ju1-96 IBM 9121-521 14:16:57 OTHPERM OTHER INDICATORS PERMANENT Valid Cum Percent Percent Value Frequency Percent Value Label NOT MARKED AS INDICA MARKED AS INDICATOR 96.2 3.1 96.2 96.2 281 9 0 18 3.1 99.3 11 99.7 100.0 12 13 14 100.0 100.0 <u>Total</u> 15 16 .000 .048 Std err .016 Median Mean 17 Std dev S E Kurt .271 .073 7.132 000 <u>Variance</u> Mode 10 Kurtosis 60.872 Skewness 19 .000 3.000 S E Skew Range Minimum 28 3.000 14.000 Maximum 21 22 25 0 292 Missing cases Valid cases 24 25 26 27 TPCONTIN : WLD PRG CONTINUE IF TP FUNDS GONE? 29 58 51 Valid Cum 52 <u>Percent</u> <u>Percent</u> Value | Frequency Percent Value Label 55 54 STRONGLY AGREE HLD C AGREE HLD CONT IF FU DISAGREE HLD CONT IF STRONGLY DISAGREE HL 67 : 125 59 19 22.9 24.8 24.8 35 42.8 20.2 6.5 7.5 27.0 46.3 21.9 7.0 71.1 93.0 56 57 100.0 NOT MARKED PRG CONT Missing : : 48 Total 292 100.0 100.0 41 42 2.000 Std err .052 Median 2.111 Mean 45 .739 .457 1.000 Mode 2.000 Std dev .859 Variance 44 .295 3.000 -.380 .148 Kurtosis S E Skew Skewness Minimum S E Kurt 45 Range 46 570.000 Sum Maximum 4.000 47 48 49 270 Missing cases 22 58 Valid cases 51 62 55 54 55 56 57



film flat state fillbassa takkin		URSE				· 4.1		
Value Label			Valid Percent Percent					
NOT MARKED PARTIC IN MARKED PARTIC IN CUR	0 1	197 95	67.5 67.5 32.5 32.5	67.5 100.0				
	Total	292	100.0 100.0			_	<u> </u>	
Mean .325 Mode .000	Std err	.027	Median Variance	.000				
Kurtosis -1.448 S E Skew .143	S E Kurt	.469	Skewness	.749				
Maximum 1.000	Sum Sum	95.000	<u>Minimum</u>	.000	·			<u> </u>
Valid cases 292	. Missing c	ases 0	titus sa assassas sa assassas sa assassas sa assass				. N.	
						-		
EVALWSHP ATTENDED P	ROF DEV WRKSHP			. ,,,,				· · · · · · · · · · · · · · · · · · ·
			Valid	Cum				
Value Label	Value	Frequency	Percent Percent	Percent			<u> </u>	<u> </u>
NOT MARKED PARTIC IN	0	128	43.8 43.8	43.8				_
HARRED PARTIC IN CUR		164	56.2 56.2	100.0			•	
	Total.	_292	100.0 100.0	<u> </u>		_		
Mean .562 Mode 1.000	Std err Std dev	.029 .497	Median Variance	1.000 <u>.24</u> 7				
1.000		20%						
Kurtosis -1.951 S E Skew 143	S E Kurt Range	1.000	Skewness Minimum	250 .000	:		4	The Section 1999 A
Curtosis -1.951 S E Skew .143 1aximum 1.000	S E Kurt Range Sum	1.000 164.000	Skewness Minimum	250 .000	· · ·			
Curtosis -1,951 S E Skew 143 Haximum 1.000				250 .000		· ·		
(urtosis -1.951 S E Skew 1.43 Haximum 1.000	<u>Missing c</u>	ases 0		250	· · · · · · · · · · · · · · · · · · ·			
Curtosis -1.951 S E Skew	<u>Missing c</u>			250				
(urtosis -1.951 S E Skew 1.43 Haximum 1.000	<u>Missing c</u>	ases O		.000				
Curtosis -1.951 S E Skew .143 laximum 1.000 Valid cases 292	Missing c	ases 0		.000			***	
Curtosis -1.951 S E Skew .143 Haximum 1.000	Missing c	ases 0		.000				
Kurtosis -1.951 S E Skew .143 Maximum 1.000 Valid cases 292	Missing c	ases 0		.000			**************************************	
Kurtosis -1.951 S E Skew .143 Haximum 1.000 Valid cases 292	Missing c	ases 0		.000			*	
Kurtosis -1.951 S E Skew .143 Maximum 1.000 Valid cases 292	Missing c	ases O		.000			***	
Kurtosis -1.951 S E Skew .143 Maximum 1.000 Valid cases 292	Missing c	ases O		.000			*	
Kurtosis -1.951 S E Skew .143 Maximum 1.000 Valid cases 292	Missing c	ases O		.000			*	



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Ju1-96 IBM 9121-521 14:16:57 $(x_0, \dots, y_n)^*$ FACULTY EVAL EFFECTIVENESS FACEVAL Valid Cum Percent Value Frequency Percent Value Label 43.2 43.2 43.2 NOT MARKED THAT ASSE MARKED THAT ASSESSOR 126 56.8 100.0 56.8 1 166 11 12 292 100.0 100.0 Total 15 14 .029 .496 .284 1.000 .246 -.278 Median .568 1.000 Std err Std dev Mean 15 Variance Mode 16 S E Kurt Skewness Kurtosis S E Skew -1.936 17 .000 Minimum 000 Range 1.000 166.000 Sum 20 21 Missing cases Valid cases 292 22 25 24 25 26 EMPLOYER EVAL EFFECTIVENESS **EREVAL** 27 20 29 Cum Valid 50 Percent Percent Percent Frequency Value Value Label 51 59.6 40.4 59.6 100.0 52 59.6 174 118 NOT MARKED THAT ASSE MARKED THAT ASSESSOR 33 40.4 34 35 292 100.0 100.0 Tota1 56 57 Std err Std dev S E Kurt .000 .029 Median .404 .000 Mean 50 .492 .284 1.000 .242 .393 Variance Mode -1.858 Skewness Kurtosis .000 Minimum : radio de 1944. .143 Range S E Skew 41 1.000 Sum 118.000 Maximum 42 45 44 Missing cases 292 Valid cases 45 46 47 48 49 58 51 52 55 54 55 56 57 50 59 60 61 62 63 64 65



		FFECTIVENE			ente Distriction			٠.			•
/alue Label	<u> </u>		Frequency		Valid Percent	Cum Percent					
NOT MARKED THAT	THAT ASSE ASSESSOR	0	126 166	43.2 56.8	43.2 56.8	43.2 100.0					
	· <u> </u>	Total	292	100.0	100.0				<u> </u>		
1ean	.568	Std err	.029	Medi	an						
1ode Cuctosis	1.000 -1.936 .143	Std dev S E Kurt	.496 .284	Vari Skew	ance iness	.246 -,278					
	.143	Range	1.000	<u> </u>	mum	.000	<u> </u>			15.75	
1aximum	1.000	Sum									
/alid cases	292	Missing c	ases 0	: '		. *		-			
			<u> </u>		4 1					· · ·	
											
	MPLOYER EVAL	EFFECTIVEN	<u>IESS</u>		.						
		역. <u>역</u>		v	V=1 d d	Cum				a garage	
/alue Label		Value	Frequency	Percent	Percent	Percent					
NOT MARKED 1	THAT ASSE	0_	174	59.6	59.6	59.6					
TARKED THAT	ASSESSOR	1	118	40.4	40.4	100.0			•		
			·							•	
and the second		Total	292	100.0	100.0						
Mean	.404	Std err	.029	Medi Vari	ian	.000				<u></u>	:
1ean	.404	Std err	.029	Medi Vari	ian iance Iness	242 393					:
1ean	.404	Std err Std dev S E Kurt	.029	Medi Vari Skew Mini	ian iance	.242					· :
lean lode Kurtosis S E Skew laximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					· :
Mean Mode Curtosis S E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					· :
Mean Mode Curtosis S E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393				: · · · ·	· :
Mean Mode Curtosis S E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393				: · · · ·	
Mean Mode Curtosis E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393				: · · · ·	
Mean Mode (urtosis E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
Mean Mode (urtosis E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
Mean Mode (urtosis E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
Mean Mode (urtosis E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
lean lode (urtosis 6 E Skew laximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
Mean Mode (urtosis S E Skew Maximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					
lean lode (urtosis 6 E Skew laximum	.404 .000 -1.858 .143 1.000	Std err Std dev S E Kurt Range Sum	.029 .492 .284 1.000 118.000	Medi Vari Skek Mini	ian iance Iness	242 393					



HSSTOS HS STDS PAR	RTICPATING FOR	EFFECTIVEN	ESS			
Value Label		Frequency	Valid Percent Percent	Cum : Percent		
NOT MARKED THAT ASSE MARKED THAT ASSESSOR	0	117 175	40.1 40.1 59.9 59.9	40.1 100.0		
	Total	292	100.0 100.0			
Mean599	Std err	.029	Median	1.000		
Mode 1.000	Std dev	.491 284	Variance Skewness Minimum	.241 407 .000		
Maximum 1.000	Sum	175.000				
Valid cases 292	Missing o	:ases 0				
	<u> </u>	<u></u>	Valid	Cum	<u></u>	
Value Label NOT MARKED THAT ASSE MARKED THAT ASSESSOR	0 0.6609990.a.1.	196 96	67.1 67.1 32.9 32.9 100.0 100.0	67.1 100.0		
NOT MARKED THAT ASSE MARKED THAT ASSESSOR Mean .329	0 1 Total Std err	196 96 292	67.1 67.1 32.9 32.9 100.0 100.0 Median	67.1	to the terminal section of the	
MOT MARKED THAT ASSE MARKED THAT ASSESSOR Mean .329 Mode .000	Total Std err Std dev	196 96 292 .028 .471	67.1 67.1 32.9 32.9 100.0 100.0	67.1		
MOT MARKED THAT ASSE MARKED THAT ASSESSOR Mean .329 Mode .000	0 1 Total Std err Std dev S E Kurt	196 96 292 .028 .471 .284 1.000 96.000	67.1 67.1 32.9 32.9 100.0 100.0 Median Variance Skewness Minimum	.000 .221		
Mean .329 Mode .000 Kurtosis -1.473 S E Skew .143 Maximum 1.000	Total Std err Std dev S E Kurt Range Sum	196 96 292 .028 .471 .284 1.000 96.000	67.1 67.1 32.9 32.9 100.0 100.0 Median Variance Skewness Minimum	.000 .221		
Mean .329 Mode .000 Kurtosis -1.473 S E Skew .143 Haximum 1.000 Valid cases 292	Total Std err Std dev S E Kurt Range Sum	196 96 292 .028 .471 .284 1.000 96.000	67.1 67.1 32.9 32.9 100.0 100.0 Median Variance Skewness Minimum	.000 .221		



Value Lab e l		Value F			Valid Percent	cum		
NOT MARKED MARKED THAT	THAT ASSE	0 1 :	151 141	51.7 48.3	51.7 48.3	51.7 100.0		
	<u> 147 x 113 x 1144</u>	Total	292	100.0	100.0		·	
Mean	.483	Std err	.029	Medi	an	.000		
Mode Kurtosis	.000 -2.009	Std dev S E Kurt	.501 .284	Vari Ske	ance Iness	.251 .069		
S E Skew Maximum	1.000	Std err Std dev S E Kurt Range Sum	1,000 141.000	<u>Mini</u>	mum	.000		<u> </u>
		Missing cas				•		
			* •					
							4.	
	RTIC AGREE W	Value F	<u>ECTIVENES</u>	<u>.</u>				
			·		Valid	Cum		
Value Label		Value F	requency	Percent	Percent	rercent		
NOT MARKED MARKED THAT	THAT ASSE	0 1 · · · ·	2 <u>56</u> 36	87.7 12.3	87.7 12.3	100.0		
		Total	292	100.0	100.0			
Mean	.123	Std err Std dev S E Kurt Range Sum	.019	Medi	ian	.000		
Mode Kurtosis	.000 3.329	<u>Std dev</u> S E Kurt	.329	Vari Skei	iance Iness	.108 2.304	· · · · · - ·	
S E Skew	1.000	Range Sum	1.000 36.000	Mini	mum	.000		
Valid cas es	292	Missing cas		1	**			
Valid cas es	292	Missing cas		1				
Valid cases	292							
Valid cases	292	Missing cas				· · · · · · · · · · · · · · · · · · ·		
Valid cases	292	Missing cas	es C					
Valid cases	292	Missing cas	es C				``	FAR.
Valid cases	292	Missing cas	es C					FAR.
Valid cases	292	Missing cas	es C					
Valid cases	292	Missing cas	es C					
Valid cases	292	Missing cas	es C					



/alua Label	Value	Frequency	Percent	Valid Percent	Cum Percent		
NOT MARKED THAT ASSE NARKED THAT ASSESSOR	0 1	251 41	86.0 14.0	86.0 14.0	86.0 100.0		
· · _ <u>-</u>	Total	292	100.0	100.0			
1ean . 140	Std err	.020	Medi	an ance	.000		
<u>1ean .140</u> 1ode .000 Kurtosis 2.346	Std dev S E Kunt	.348	· vari Skew	ance iness	.121 2.081		
S E Skew .143	Range	1.000	Mini	mum	.000	<u> </u>	<u> </u>
Maximum 1.000	Sum	41.000					
Valid cases 292	Missing ca	ses 0			· : _		7 % V70,
		· · · · · · · · · · · · · · · · · · ·					
							
LICRATE LICENSURE RATI	E SHOW EFFEC	TIVENESS			<u> </u>		
					. —		
				<u>Valid</u>	Cum		
Value Label	Value	Frequency	Percent	Percent	Percent		
NOT MARKED THAT ASSE	<u> </u>	259 33	88.7	88.7 11.3	88.7 100.0		
MARKED THAT ASSESSOR	1						
	Total	292	100.0	100.0			<u> </u>
Mean .113 Mode .000	Std err	.019	Medi		.000 .101		
	Std dev S E Kurt	.317		ance	2.457	 -	
C F Skou 143	S E Kurt Range	1.000		mum	.000		
Maximum 1.000	Sum	33.000			_		
Valid cases 292	Missing ca	ses0)		<u>.</u>		
	(%)						in kont
	<u> </u>						
							
· ····································							
			i				
			ι	*			
<u> </u>			38	•			



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Ju1-96 14:16:57 IBM 9121-521 PLACEMT JOB PLACEMENT RATE SHOW EFFECTIVENESS Valid Cum Percent Percent Percent Value Frequency Value Label 68.5 68.5 NOT MARKED THAT ASSE MARKED THAT ASSESSOR 200 68.5 31.5 100.0 92 31.5 11 12 100.0 292 100.0 Total 15 .027 ,465 ,284 .00<u>0</u> 14 Median Variance Std err Std dev S E Kurt .315 .000 -1,369 Mean 15 Mode 16 Skewness .800 Kurtosis 17 .000 Minimum .000 S E Skew .143 1.000 Range Sum 92.000 Maximum 19 20 21 Valid cases 292 Missing cases 22 25 24 25 26 OTHER SHOW EFFECTIVENESS 27 7 27 20 29 <u>Valid</u> Cum 50 Percent Value Frequency Value Label 51 9<u>6.6</u> 100.0 52 96.6 3.4 NOT MARKED THAT ASSE MARKED THAT ASSESSOR 282 10 55 54 38 292 100.0 100.0 Total 56 .011 .182 .284 1,000 57 .000 Median Mean .034 Std err 50 .034 .000 24.676 .143 1.000 Variance Skewness .03<u>3</u> 5.149 Std dev S E Kurt Mode Kurtosis 59 Range Minimum .000 S E Skew-41 10.000 Sum Maximum: 42 45 44 Missing cases Valid cases 45 46 47 50 51 52 65 54 SS 56 57 50 59 61 65 64 65



25-Jul-96 14:16:57 SPSS RELEASE 4.1 FOR IBM OS/MVS

IBM 9121-521

			DERS		•	•	
Value Label			Frequency	Percent	Valid Percent	Cum Percent	·
NOT MARKED THA MARKED THAT TI	T THIS	0	244 48		83.6 16.4	83.6 100.0	
		Total	292	100.0	100.0		
Mean Mode Kurtosis S E Skeu Maximum	.164	Std err	.022 .371 .284 	Medi	an	.000	
node Kurtosis	1.323	S E Kurt	.3/1	Vari Sken	ance	.138 1.820	
S E Skew Maximum	.143 1.000	Range	1.000 48.000	Mini	mum		<u> </u>
	1.000	- Call	40.000				
Valid cases	292	Missing c	2505 0)			
varid Cases						•	
							
ANALYZNG ANA	YZING CUR	RIC DEV OPT	IONS	· · · · · · · · · · · · · · · · · · ·			
	ight (1865) Caing ight each						
Value Label			Frequency	Percent	<u>Valid</u> Percent	<u>Cum</u> Percent	
NOT MARKED TH		0	230		78.8	78.8	
MARKED THAT TI	its is	1	62	21.2	21.2	100.0	
		Total	292	100.0	100.0		
			.024	Medi		.000	
Mean Mode Kurtosis	.000				ance	168 	
S E Skew	.143	Range	.284 1.000 62.000	Mini		.000	
Maximum	1.000	Sum	62.000		<u>_</u>		
Valid cases	292	Missing c	ases O)		,	
	•						· · ·
	iterat <u>.</u>	thus the same of	<u>-, - ' ,</u>				
							
			•				• ,
	· · ·		- ·	•	_		
			24	0			
<u> </u>				evi.	<u>. :' , </u>	<u> </u>	
				••			
	 						



	SIGNING THE			<u> </u>	Valid	Cum		
Value Label		Value	Frequency	Percent	Percent	Percent		
NOT MARKED MARKED THAT	THAY THIS THIS IS	0	180 112	61.6 38.4	61.6	61.6		
		lotal	292	100.0	100.0		•	
Mean	.384	Std err	.029	Medi	an	.000		
Mode Kurtosis	-1.780	S E Kurt	. 284	Ske	4ness	.481		
S E Skew Maximum	.384 .000 -1.780 .143 1.000	Range Sum	112.000	Mini	i mum	.000	·	
Valid cases	292	Missing c	ases 0) ·				
<u> </u>								
REVIEWING RI	EVIEWING THE	CURRIC						_
	EVIEWING THE				Valid	Cum		8 <u>8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4</u>
Value Label		Value	Frequency	Percent	Percent	Percent		
NOT MARKED	THAT THIS	0	192	65.8	65.8 34.2	65.8 100.0		
FIARRED THAT	YHIS IS			~~~~~				10000000000000000000000000000000000000
Mean Mode	.342	Std err Std dev	.028 .475	Med Var	ian iance	.000 .226		
Kurtosis. S E Skew Maximum	-1.565 .143 1.000	S E Kurt Range Sum	.284 1.000 100.000	Skei Min	wness imum	.667		n esik Lina esikan karangan
Valid cases	292	Missing c	25 25 ()				
	272				:	· .		
					,			
	<u> 1 j. Agrae ja 1 j.</u>							
								*.
<u> </u>					. *			
		<u> </u>	<u> </u>					
			•		•			



IBM 9121-521

	ING OUT THE	CORKIC						•	
Value Label			Frequency	Percent	Valid Percent	Cum Percent			
NOT MARKED TH MARKED THAT T	AT THIS	0	215 77	73.6 26.4	73.6 26.4	73.6 100.0		antan alah seri Seri	The Administration of the Communication of the Comm
· <u> </u>	<u> </u>	Total	292	100.0	100.0				
Mean	.264	Std err	.026		<u>an</u>	.000			
Mode Kurtosis S E Skew	844	Std dev S E Kurt	.284	Skew	ance ness	1.078	•	•	
S E Skew Maximum	1.000	Range Sum	77.000	Mini	<u>mum</u>	- 000		<u> </u>	
Valid cases	292	Missing c	nses O		_			<u> </u>	
use for a left of				<u> </u>					
FEEDBACK OBT	AINING FEED	BACK ON THE	E CURRIC_						
					Valid	Cum			
Value Label	<u>rajist M</u>	Value	Frequency	Percent	Percent	Percent			
NOT MARKED TH	AT THIS	0	204_	69.9_	69.9	69.9			
MARKED THAT T	HIS IS	1	88		30.1	100.0		•	
		Total	292	100.0	100.0	_		<u> </u>	
Mean Mode	.301	Std err	.027 .460	Medi	an	.000			
Kuntosis	-1.251	S F Kurt	.460	Vari Skew	ance ness	.2 <u>11</u> .870			
S E Skew	1.000	Range	1.000 88.000	Mini	mum ·	.000			1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
T ROA T (IRANI				-					
	292	Missing c)					
Valid cases									
Valid cases									
Valid cases	476						·		
Valid cases			,						
							· 		
						.,	· · · · · · · · · · · · · · · · · · ·		
								:	



SPSS RELEASE 4.1 FOR IBM OS/MVS 25-Jul-96 IBM 9121-521 14:16:57 IMPROVING APPROVAL/IMPROVING THE CURRIC Cum **Valid** Percent Percent Value Frequency Percent Value Label 60.3 NOT MARKED THAY THIS MARKED THAT THIS IS 60.3 60.3 39.7 39.7 100.0 11 12 292 100.0 100.0 Total 15 14 .029 .490 .284 Median Variance 000 Mean Std err 16 .240 Std dev S E Kunt Range Mode .000 Skewness -1.834 .143 Kurtosis S E Skew 17 .000 000 Minimum 10 116.000 Sum 7.000 Max 1 mum 19 20 21 292 Missing cases Ō Valid cases 22 25 24 25 ENSURING CONTINUATION OF CURRIC 20 29 Valid Cum 50 Value Frequency Percent Percent Value Label 51 52 NOT MARKED THAT THIS MARKED THAT THIS IS 214 78 73.3 73.3 100.0 33 26.7 54 100.0 100.0 Total 292 57 . 267 . 000 Std err Std dev S E Kurt .026 .000 **Median** 50 . 196 .443 .284 Mode Variance 59 -.887 -.143 1.058 Kurtosis Skewness 48 41 Range 1.000 Minimum .000 S E Skew .000 Sum 78.000 Maximum_ 42 45 44 292 Missing cases Valid cases 46 46 47 49 60 61 52 65 54 55 56 67 51 68 61 62 65 64 65



25-Jul-96 14:16:57 SPSS RELEASE 4.1 FOR IBM OS/MVS IBM 9121-521 ASSESSING ASSESSING THE EFFECTIVENESS OF CURRIC Valid Cum Value Label Value Frequency Percent Percent Percent NOT MARKED THAT THIS MARKED THAT THIS IS 69.B 69.5 69.8 0 203 10 100.0 30.1 30.2 1 : 88 11 <u>Missing</u> 12 15 100.0 100.0 Total 292 14 15 Std err Std dev S E Kurt Range .000 .212 .865 .302 .027 Median 16 Mean .460 .285 1.000 Variance Mode 17 -1.261 .143 Kurtosis S E Skew Skewness Minimum 19 Max1 mum 1.000 Sum 88.000 20 21 22 1 . . 291 Missing cases Valid cases 25 24 25 26 27 20 29 50 51 52 55 54 55 56 57 50 59 41 42 45 44 45 46 47 48 49 50 \$1 52 55

244-



\$5 56 \$7

62 63

	ing task required .28 seconds CPU time; .85 seconds elapsed. O FINISH command lines read.	
0 0 1 3	errors detected. Harnings issued. Seconds CPU time. Seconds elapsed time. End of job.	
		1000 (100) (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (100) (1000 (100) (1000 (1000 (100) (1000 (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000) (1000 (100) (10
÷., •		
· · ·		
-		
		·
		<u>.</u>







U.S. Department of Education

Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT	IDENT	FICATION
-------------	-------	----------

Title: The Final Report on Effective Policies and Practice Selected Career Fields	es in
Author(s) Eds: Ronald D. Opp, Oliver D. Hensley, Gloria Stewar	t,Bethany Rivers
Corporate Source: Texas Tech University ,SPECAP Research	Publication Date: August 15, 1996
Lubbock, 1A	

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here For Level 1 Release:

Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND **DISSEMINATE THIS** MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here For Level 2 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

Level 1

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

*I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries. Printed Name/Position/Title: Signature

Sign here→ piease

Organization/Address:

Tech University (COE)

SPECAP Research Group

Box 41071

Lubbock, TX 79409-1071 Dr. Ronald D. Opp, Prjt. Dir.

Telephone:

edu

FAX:

806-742-2329 806-742-2179

E·Mail Address:

ceopp@ttacs.ttu

11/6/96

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:		
·		******************************
Address:		
Price:		***************************************
		;
	COPYRIGHT/REPRODUCTION RIGHTS HOL	
If the right to grant reproduction release is held		
If the right to grant reproduction release is held		
If the right to grant reproduction release is held Name:		
If the right to grant reproduction release is held Name:		
If the right to grant reproduction release is held Name:		ame and address:
If the right to grant reproduction release is held Name:		

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Acquisitions Coordinator
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

