2006 Educator Externship Program

El Paso Area Business-Education Partnership

Sponsored by:
Greater El Paso Chamber of Commerce
Upper Rio Grande College Tech-Prep Youth Consortium at Education Service Center-Region 19

Package Materials:

* To receive you externship stipend and certificate you must return:

- **Externship Journal**
- **3 Completed Lesson Plans (*Relate these to your externship experience and SCANS.)***
- **Externship Evaluation Form**

To: James A. Valdez, Consortium Director
Upper Rio Grande College Tech-Prep Youth Consortium
at Education Service Center-Region 19
6611 Boeing Drive
El Paso, TX 79925
Tel. (915) 780-6501
Fax (915) 780-6507

Pre-Externship Meeting Agenda

I. Work Schedule

A. Dates of work:
B. Number of Hours: 40 hours
C. Arrival and Departure Times:
D. Breaks, Lunch Hour:

II. Job Responsibilities

III. Business Rules

IV. Dress Code

V. Business Mentor

A. Name, Job Description
B. Subject of Connection (Math, Science or English)

VI. Educator Requirements
A. Educator Externship Journal
B. 3 Completed Lesson Plans, Due Date: ______________________________
C Educator Externship Evaluation Form

VII. Company Requirement
A. Employer Evaluation Form; Follow-Up Meeting Date: __________________

I agree to the above Educator Externship Program requirements.

____ __________________
Teacher Signature Date

____ __________________
Company Representative Signature Date

____
Company Name/Address

Educator Externship Program

Tips to Make Your Teacher Externship Experience a Success

The externship has been designed to help you observe workplace skills and competencies identified in the SCANS report. You will need to relate these workplace activities to your classroom as you develop your five lesson plans using **CONTEXTUAL** teaching. The discussions with your mentor will help you to understand the importance of the abilities and competencies required within the workplace. The role of the business mentor is to provide opportunities for you to participate in real work experiences and to allow you to observe the skills necessary for high wage, high demand employment.

Pre-Externship Meeting

- Give a brief introduction of yourself, including your academic subject areas and years of experience.
- Your week of work will be set up at this meeting. We will discuss arrival and departure times, where to park and enter the building, and who to report to.
- Job responsibilities for your week of work will be identified. These will relate directly to your academic area.
- Relevant company rules and/or policies will be discussed (i.e. safety rules, work clothes, safety glasses, etc.)
- The company representative will discuss the dress code that is appropriate for your externship.
- Your Business Mentor will be identified. Contact information for your mentor will be provided. You will probably meet that employee.
- The business representative may provide you with information about the company (i.e. company history, number and diversity of employees, trends for future development)
- Allow an hour and a half for this meeting, in the event that a tour of the company is offered.

Ask your Mentor:

- What contact person and phone number should you give your family to use in case of an emergency during the externship experience?
- Who should you notify in case of tardiness or absence?

You May Have the Opportunity to Ask the Following Questions:

- Ask if you may attend or participate in any meetings or presentations during the week.
- What management style does the company use?
- What is the company Mission Statement?
- What are the main responsibilities of the employee to which you are assigned?
- How does the company communicate between employees?
- What interaction do company employees have with people outside the company?
- What jobs require collaborative teamwork?
- What are employee job requirements? (i.e. education, specific job training, skills proficiency)
- What criteria does the company use for recruiting and hiring new employees?
  (I.e. applications, references, background checks, drug screening, skills tests)
- What positions are recruited the most? (i.e. entry level or skilled, degreed, trained certified or trained on the job)
- Is job shadowing provided for students?
- What kind of apprenticeship or on the job training does the company provide for students?
- What types of summer hiring programs does the company offer?

- What kind of professional development training does the company offer to employees?
- What computer technology does the company rely on to operate their daily business?
- How does the company reward performance?

Look for the Following:

- Examples of the use of telecommunications technology (i.e. e-mail, voice mail, computer presentations)
- Examples of how technology is used in the workplace
- Examples of writing used in daily business (i.e. itineraries, schedules, proposals, reports, memos, reviews, evaluations)
- Examples of reports or presentations where statistics play an important role in illustrating or supporting ideas
- Examples of evaluation or assessment tools used in the company

Employee Interview Outline

About the Employee

- Job Title
- Length of time in this position
- Duties and responsibilities / job description

Educational / Training

- Training for this specific job – College, Trade School, On-the-Job Training
- Continuing education requirements to keep current position
- Education requirements to advance within the company
- Certification, Licenses, Degree needed for the position

Types of Skills Used

- Writing – technical, memos, notes
- Reading – technical
- Math – addition, subtraction, algebra, geometry
- Oral Communication – public speaking, training others
- Computer/technology Skills – word processing, graphics, data entry
- Interpersonal – teamwork, collaboration, cooperation
- Employability – organizational techniques, filing, manners
- Assessment – methods used to evaluate

Information for students entering your job field

- Advice / wisdom for students entering the field
- High school / college course(s) you would recommend
- How does your job fit into the company as a whole?
- What did it take to achieve your present position?

2006 Educator Externship Journal

Teacher Name: _______________________________ School/ISD: ____________________________

Directions: This learning journal is provided for you to reflect on your externship experience. Complete the background information section below and sections I, II, and III during your externship experience as time permits and when appropriate.

Part I: Background Information

Business/Company Name ____

Company Contact Person ____

Date(s) of Externship ____

Start/End Time ____

A. Product(s) manufactured/service(s) rendered _____________________________________

____

B. Number of Employees _______________________

C. Year Company Established ___________________

Part II: Externship Experience:

A. Describe the occupation(s) you observed.

Occupation Title:____

____

Occupation Title:____

____

B. What is the daily routine of this job? ____

____

____

C. Experience, licenses and schooling required for this job: ______________________________

____

____

D. Describe SCANS that are required on this job.

Thinking Skills: ____

____

Personal Qualities: ____

____

Use of Resources: ____

____

Interpersonal Skills: ____

____

Acquiring/Using Information: ____

____

Understanding Systems: ____

____

Use of Technology: ____

____

E. What work competencies and/or abilities did you observe that you could connect to your teaching?

____

____

____

F. Describe the working conditions associated with your externship experience (i.e. physical working conditions, amount of overtime required, stress levels, amount of responsibility, amount of travel required, etc.

G. Characteristics of a person good at this job:

Part III: Employee Information and Perceptions

A. What school subjects does the employee feel would be most helpful to prepare for this position?

B. What does the employee enjoy most about this position?

C. What does the employee find most difficult, stressful, etc. about his/her work?

D. In the employee’s opinion, what type of attitude, personality traits or personal characteristics is important in order to be successful in his/her career field?

E. What opportunities are there for advancement in this career field?

F. What are the starting salaries and educational requirements at this company for persons who hold a position similar to the one you observed?

G. What does this company do to encourage its employees to continue their education?

H. In what other occupations or careers could this employee use his/her education and training?

Lesson Plan Development

As a part of this program, you are required to submit three lesson plans in which information from the externship experience is incorporated into lesson planning to make school-to-work connections. This activity will introduce you to the effectiveness of contextual learning.

The contextual learning strategies are:

1. Relating – *learning in the context of one's life experiences or preexisting knowledge*
2. Experiencing – *learning by doing, or through exploration, discovery, and invention*
3. Applying – *learning by putting the concepts to use*
4. Cooperating – *learning in the context of sharing, responding, and communicating with other learners*
5. Transferring – *using knowledge in a new context of novel situation – one that has not been covered in class*

(From: *Teaching Contextually* by Michael Crawford, Ph.D.)

- Use Texas Essential Knowledge and Skills (TEKS) for all objectives. TEKS are located on the Texas Education Agency website at www.tea.state.tx.us/teks.
- Include all materials that are necessary to complete each lesson. Worksheets must be original work; do not print them from ancillary materials.
- Please **PRINT** or **TYPE** all information. Lesson plans can be generated on your computer, as long as all elements from the template are included.
- Include a team project, guest speaker or field trip where appropriate.

Stipends will not be paid until lesson plans are approved.

Stipend will be mailed to your home address from Region 19 ESC within 30 days after externship submissions have been approved.

2006 Educator Externship Program

LESSON PLAN #1

______________________________ ______________________________
Teacher School/ISD

______________________________ ______________________________
Subject Area Title

Lesson Objective(s): ______________________________

____

Activity (**explain**): ______________________________

____

____

____

Evaluation (**explain**): ______________________________

____

____

Extension/Modification (**explain**): ______________________________

____

SCAN Skills: ______________________________

____

Cooperative Learning Ideas: ______________________________

____

Team Project, Guest Speaker or Field Trip: ______________________________

____

____

____

Resources: (**be specific**: materials, supplies, name of text, etc.) ______________________________

____

____

2006 Educator Externship Program

LESSON PLAN #2

______________________________ ______________________________
Teacher School/ISD

______________________________ ______________________________
Subject Area Title

Lesson Objective(s): ______________________________

____

Activity (**explain**): ______________________________

____

____

____

Evaluation (**explain**): ______________________________

____

____

Extension/Modification (**explain**): ______________________________

____

SCAN Skills: ______________________________

____

Cooperative Learning Ideas: ______________________________

____

Team Project, Guest Speaker or Field Trip: ______________________________

____

____

____

Resources: (**be specific**: materials, supplies, name of text, etc.) ______________________________

____

____

2006 Educator Externship Program

LESSON PLAN #3

______________________________ ______________________________
Teacher School/ISD

______________________________ ______________________________
Subject Area Title

Lesson Objective(s): ______________________________

____

Activity (**explain**): ______________________________

____

____

____

Evaluation (**explain**): ______________________________

____

____

Extension/Modification (**explain**): ______________________________

____

SCAN Skills: ______________________________

____

Cooperative Learning Ideas: ______________________________

____

Team Project, Guest Speaker or Field Trip: ______________________________

____

____

____

Resources: (**be specific**: materials, supplies, name of text, etc.) ______________________________

____

____

Educator Externship Program
Academic Standards for Mathematics*

VISION All students will:

- Learn mathematics in the context of individual and group experiences, engaging assignments, and appropriate use of technology.
- Make connections between mathematical concepts and the life situations from which they arise or to which they apply.
- Make connections within mathematics and with other disciplines.
- Communicate effectively their knowledge of mathematics graphically, orally, and in writing.

By **Eighth Grade**, all students will:

1. Use methods of statistics and probability to plan and implement data collection in order to describe, analyze, evaluate, and make decisions and predictions about life problems.
2. Analyze and compare geometric figures and their component parts. Understand the concepts of transformations, similarity, and congruence. Apply right angle/triangle relationships to solve problems.
3. Use customary and metric measurement systems competently.
4. Understand the real number system and be able to choose an appropriate number representation for a given situation. Estimate and calculate with fractions, decimals, and percentages, using conventional and/or technological methods. Understand and use relationships among fractions, decimals, and percentages.
5. Solve life problems by applying mathematical concepts. Use algebraic analysis, construction of mathematical models, variables, expressions, equations, and inequalities, using technology as appropriate.
6. Analyze and describe relations, functions, and patterns arising or created from a wide variety of situations, using tables, graphs, technology, and descriptive methods.
7. Understand and describe the changes that occur in patterns and relationships due to the effects of time and other parameters.

By the **Twelfth Grade**, all students will:

1. Design and implement experiments in statistics and probability. Choose an optimal display format for the resulting data. Analyze the data using appropriate technology, draw conclusions and inferences, and communicate results.
2. Reach geometric conclusions from given assumptions using either synthetic arguments or, in an appropriately chosen coordinate system, analytic arguments. Visualize and communicate geometric spatial relationships and properties.
3. Measure and calculate lengths, areas, and volumes. Use basic trigonometric relationships to solve life problems.
4. Understand the real and complex number systems and be able to select the appropriate system to apply to a particular situation. Estimate and calculate with real numbers, using conventional and/or technological methods. Perform arithmetic operations with complex numbers.
5. Solve problems that require creation of a symbolic representation followed by algebraic manipulations to reach solutions. Demonstrate numerical, graphic, and symbolic understanding of and ability to apply polynomial, rational, exponential, trigonometric, and logarithmic functions and their interconnections, using technology where appropriate.
6. Understand the similarities and differences between the structures of the real number system and its various subsystems. Recognize patterns that occur in numerical, geometric, and visual structures. Be able to make and use the connections between relations, functions, and their graphs.
7. Understand and explain how changes in parameters affect a pattern or relationship; explore parameter changes as a dynamic process using the concepts of rate of change and limits.

*From El Paso Collaborative for Academic Excellence website, www.epcae.org/Mathematics.html

Educator Externship Program
Academic Standards for Science*

<u>VISION</u> All students will:

- **Understand science (its values, limitations, and applications) in order to make informed decisions in a world that is increasingly reliant on science.**
- **Learn that science, through exploration and investigation, is a continuous process.**
- **Make the connection that mathematics and technology is fundamental to the study of science.**
- **Understand that scientific principles are developed through the gathering and analyzing of data.**

By the **Eighth Grade**, all students will:

1. Demonstrate an understanding of scientific methods, including hypothesis development, and indicate how they differ from non-scientific approaches.
2. Develop and test a scientific hypothesis, draw conclusions using mathematical analysis as appropriate, and communicate the results.
3. Analyze the interdependence and importance of nutrient cycles and food chains.
4. Demonstrate an understanding of energy transformations in the environment and in living organisms.
5. Explain how characteristics are passed through generations and relate this phenomena to the basic principle of asexual and sexual reproduction.
6. Analyze the composition of matter and explain how different substances interact. Demonstrate understanding of the conservation of matter.
7. Describe the atomic composition of matter and explain how different substances interact. Demonstrate understanding of the relationship of the Periodic Table of Elements to atomic structure.
8. Know where to find and how to access information and resources to conduct scientific research.

By the **Twelfth Grade**, all students will:

1. Apply the scientific process to solve problems and to make decisions relating to life experiences.
2. Select and use laboratory material and equipment to acquire, record, organize, and analyze scientific data.
3. Draw conclusions, make inferences, and communicate data in both mathematical and non-mathematical forms.
4. Identify questions for scientific investigation. Design and conduct descriptive and/or experimental scientific investigations using mathematical and technological skills to address those questions.
5. Explain the central concepts, principles, and basic factual material of chemistry (atomic theory, gas law, elements, molecules); physics (Newton's laws, motion, energy, force); geology (plate tectonics, volcanism, uniformitarianism); and biology (cell theory, evolutionary theory, genetics).
6. Demonstrate understanding of the concepts of matter, energy, cycles, and structure function as they relate to physical, life, and geological sciences.
7. Use appropriate sources of information and technology for effective scientific research.

*From El Paso Collaborative for Academic Excellence website, www.epcae.org/Science.html

Educator Externship Program
Academic Standards for English/Language Arts*

<u>VISION</u> All students will:

- **Communicate effectively, both orally and in writing, to diverse audiences for a variety of purposes.**
- **Understand print and non-print communication.**
- **Access, synthesize, evaluate, and present information.**
- **Appreciate culturally diverse literary traditions.**
- **Develop critical-thinking skills, using analytical, creative, and problem-solving strategies.**

By the **Eighth Grade**, all students will:

1. Read and demonstrate comprehension of a wide variety of academic, technical, and literary materials from culturally diverse sources.
2. Use a range of strategies to generate and organize ideas, and to draft, revise, edit, and display work, adapting writing to communicate with different audiences and to serve different purposes.
3. Use independently the conventions of standard English.
4. Select and use reference materials, both traditional and electronic, such as a thesaurus, atlas, almanac, periodicals, and card catalog.
5. Regularly use effective listening strategies in a wide range of situations.
6. Speak effectively to a wide range of audiences and for a variety of purposes.
7. Evaluate and critique, with greater depth and level of understanding, written materials for style, literary merit, and adherence to conventions of standard English.

By the **Twelfth Grade,** all students will:

1. Read and demonstrate comprehension of an increasingly complex variety of academic, technical, and literary materials from culturally diverse sources.
2. Use a wide range of strategies to generate and organize ideas, and to draft, revise, edit, and display increasingly complex materials. Consistently adapt writing to communicate with a broad range of audiences and to serve many different purposes.
3. Use independently and consistently the conventions of standard English.
4. Use scholarly reference materials, such as professional journals, in both traditional and electronic formats.
5. Listen effectively and evaluate all forms of communication.
6. Speak effectively to a wide range of audiences for a variety of purposes. Be able to orally explain and debate researched topics.
7. Evaluate and critique increasingly complex and diverse literary and factual materials.

*From El Paso Collaborative for Academic Excellence website, www.epcae.org/English.html

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Educator Externship Evaluation Form

Name ______________________________ **Dates of Externship** ____________________

Business ____

Business Mentor ____

Department/Jobs ____

Please circle the most appropriate response: 1 indicating little opportunity and 5 indicating many opportunities.

1. Rotated between departments	1	2	3	4	5
2. Observed school related skills	1	2	3	4	5
3. Observed SCANS skills	1	2	3	4	5
4. Observed instructional techniques That can be transferred to my class	1	2	3	4	5
5. Will use observed skills in my class	1	2	3	4	5
6. Would recommend Job Externship Program to others	1	2	3	4	5
7. Benefited from this professional development	1	2	3	4	5

What did you consider the most profitable or successful event/aspect of this experience?

____

____

____

What did you consider the least successful event/aspect of this experience? ____________________

____

____

Comments: ____

____

____

2006 Educator Externship Program

The Secretary's Commission on Achieving Necessary Skills (SCANS)

THREE-PART FOUNDATION

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, and speaks.

A. Reading – Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
B. Writing – Communicates thoughts, ideas, information, and messages in writing; creates documents such as letters, directions, manuals, reports, graphs, and flowcharts.
C. Arithmetic/Mathematics – Performs Basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
D. Listening – Receives, attends to, interprets, and responds to verbal messages and other cues.
E. Speaking – Organizes ideas and communicates orally.

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn and reason.

A. Creative Thinking – Generates new ideas.
B. Decision Making – Specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.
C. Problem Solving – Recognizes problems and devices and implements plan of action.
D. Seeing Things in the Mind's Eye – Organizes and processes symbols, pictures, graphs, objects, and other information.
E. Knowing How to Learn – Uses efficient learning techniques to acquire and apply new knowledge and skills.
F. Reasoning – Discovers a rule or principle underlying the relationship between two or more objects and applies it in problem solving.

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty.

A. Responsibility – Exerts a high level of effort and perseverance towards attainment of a goal.
B. Self-Esteem – Believes in own self-worth and maintains a positive view of self.
C. Sociability – Demonstrates understanding, friendliness, adaptability, empathy, and politeness at group settings.
D. Self-Management – Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.
E. Integrity/Honesty – Chooses ethical courses of action.

From "What Work Requires of Schools: A SCANS Report for AMERICA 2000," a report by the Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor, June 1991.

SCANS: FIVE COMPETENCIES

Resources: Identifies, organizes, plans, and allocates resources.

A. Money – Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
B. Material and Facilities – Acquires, stores, allocates, and uses materials or space efficiently.
C. Human Resources - Assesses skills and distributes work accordingly, evaluates performance and provides feedback.
D. Time – Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.

Interpersonal: Works with others.

A. Teaches Others New Skills
B. Serves Clients/Customers – Works to satisfy customers' expectations.
C. Exercises Leadership – Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
D. Negotiates – Works toward agreements involving exchange of resources, resolves, divergent interests.
E. Works with Diversity – Works well with men and women from diverse backgrounds.
F. Participates as Member of a Team – Contributes to group effort.

Information: Acquires and uses information.

A. Acquires and Evaluates Information
B. Organizes and Maintains Information
C. Interprets and Communicates Information
D. Uses Computers to Process Information

Systems: Understands complex inter-relationships.

A. Understands Systems – Knows how social, organizational, and technological systems work and operates effectively with them.
B. Monitors and Corrects Performance – Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
C. Improves or Designs Systems – Suggests modifications to existing systems and develops new or alternative systems to improve performance.

Technology: Works with a variety of technologies.

A. Selects Technology – Chooses procedures, tools or equipment including computers and related technologies.
B. Applies Technology – Understands overall intent and proper procedures for setup and operation equipment.
C. Maintains and Troubleshoots Equipment – Prevents, identifies, or solves problems with equipment, including computers and other technology.

SCAN Skills	
Basic Skills	**Resources**
Reading	Time
Writing	Money
Mathematics	Materials
Listening	Human Resources
Speaking	
Thinking Skills	**Interpersonal Skills**
Creative Thinking	Teamwork
Decision Making	Teaches others new skills
Problem Solving	Exercises Leadership
Seeing things in the mind's eye	Negotiates
Knowing How to Learn	Works with diversity
Reasoning	
Personal Qualities	**Information**
Responsibility	Acquires and evaluates information
Self-Esteem	Organizes and maintains information
Sociability	Interprets and communicates information
Self-Management	Uses computer to process information
Integrity/Honesty	
	Systems
	Understands systems
	Monitors and corrects performance
	Improves and designs systems
	Technology
	Selects technology
	Applies technology
	Maintains and troubleshoots equipment

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Thank You Reminder

Each company that participates in the Educator Externship Program donates the time of one or more employees to insure that your experience in industry is successful. **Please follow up your externship experience with a brief note of thanks to your business mentor.**

Write a brief paragraph of at least three sentences. Here are some ideas:

- Show appreciation for their donation of time.
- Share an example of an academic connection you had in the work place.
- Share what you enjoyed most about the Educator Externship experience.
- Give an example of how your experience in industry will help you to make school-to-work connections with students.

Send your thank you note within ten days of your experience, so that the workweek is fresh in your mind, as well as in your business mentor's.

And finally, thank you for participating in our innovative workforce development activity.

-James A. Valdez, College Tech-Prep at Education Service Center-Region 19