

## Office of Texas High School Education

## **CRITICAL ISSUES REPORT #1**

A Planning Guide for Texas High Schools

Spring 2001

### **INTRODUCTION**

For the first time in the history of the State of Texas, the public schools will educate more than four million students in this school year. This record-setting fall enrollment comes on the heels of the Class of 2000, the largest graduation class in the state's history at 212,000 students. This is 23% more graduates than the Class of 1996. The Class of 2000 achieved the highest passing rate to date on the exit-level Texas Assessment of Academic Skills (TAAS) test (98%). addition, more than 5,000 more students tested for college admission over the Class of 1999 - yet, with these increased numbers, the results of students tested did not decrease. All this is to say that Texas is making progress in enrolling and graduating more students, in students taking more rigorous courses, and in more students testing for college admission than ever before. Great work . . . so why all the recent concern?

## **SENATE BILL 103 BACKGROUND**

On June 8, 1999, Senate Bill 103, which establishes the new state assessment program, was signed into law. The new assessment program (tentatively referred to as TAAS II) is based on the Texas Essential Knowledge and Skills (TEKS). This TEKS-based program will be more rigorous and comprehensive than the current TAAS tests that have been administered since 1994. The new state assessment program expands both the grades that are tested as well as the subject areas included on the test.

					103, as enro ion: 2003-2				
Grade 3	Grade 4	Grade 5	Grade 6		Grade 8	Grade 9	Grade 10	Grade 11	Grade 1
			EN	GLISH-VERS	ION ASSESSMI				
Reading	Reading	Reading	Reading	Reading	Reading	Reading	English Language Arts	English Language Arts	
	Writing			Writing				I	
Math	Math	Math	Math	Math	Math	Math	Math	Math	
		Science					Science	Science	
					Social		Social	Social	
					Studies		Studies	Studies	
			SP	ANISH-VERS	ION ASSESSM	ENT			
Reading	Reading	Reading	Reading						
	Writing								
Math	Math	Math	Math						
		Science							
		ENGL	SH PROFICE	ENCY TESTS	IN ENGLISH F	OR LEP STUD	ENTS		
RPTE	RPTE		RPTE			RPTE			
		ALTER	NATE ASSE.	SSMENT FOR	SPECIAL EDU	CATION STUD	ENTS		
Reading	Reading	Reading	Reading	Reading	Reading	Reading	English		
	Writing			Writing			Language Arts		
Math	Math	Math	Math	Math	Math	Math	Math		

The new exit-level exam required for graduation will be administered at the 11th grade. The new exit-level exam will impact the current 2000-2001 eighth-grade students when they are 11th graders in the 2003-2004 school year.

#### Implementation of Senate Bill 103 Transition from TAAS to New Assessment Program (TAAS II) Impact on Students Enrolled in Grade 8 and Grade 9 in 2000–2001

School Year	9th Graders (2000–2001)	8th Graders (2000–2001)
2000–2001	Grade 9—No Statewide Testing	Grade 8—TAAS
2001–2002	Grade 10—Exit Level TAAS	Grade 9—No Statewide Testing
2002–2003	Grade 11—TAAS Retest, if necessary First Administration of New Grade 11 Exit Level Assessment (TAAS II)— Not a Graduation Requirement	Grade 10—New Grade 10 Assessment (TAAS II)
2003–2004	Grade 12—TAAS Retest, if necessary Expected Graduation Year	Grade 11—New Exit Level Assessment (TAAS II)—Graduation Requirement
2004–2005		Grade 12—New Exit Level Assessment Retest (TAAS II), if necessary Expected Graduation Year

The new grade 11 exit-level assessment expands the subjects tested from two to four and includes mathematics (Algebra I and Geometry with the aid of technology), English language arts (English III and writing), social studies (including early American and U.S. History), and science (Biology and integrated chemistry and physics). Since the new exit-level assessment will include science and social studies, the current end-of-course testing program will be eliminated at the end of the spring 2002 semester.

## Senate Bill 103

#### **Exit Level Assessment**

- Grade 11 test required for Graduation
  - Mathematics including at least Algebra I and geometry with the aid of technology
  - English language arts including at least English III and writing
  - Social studies including early American and U.S. History
  - Science including at least biology and integrated chemistry and physics
- Will measure mastery of minimum skills necessary for high school and readiness to enroll in higher education
- Does not require a student to demonstrate readiness for higher education in order to graduate
- Allows certain performance to exempt a student from TASP
- Eliminates the end-of-course exams once new assessments are implemented

## Inside Issue

- **SENATE BILL 103 BACKGROUND**
- **STATEWIDE THINK TANK**
- **PLANNING GUIDES FOR:** 
  - MATHEMATICS
  - ENGLISH / LANGUAGE ARTS
  - SOCIAL STUDIES
  - SCIENCE
- **PLANNING GUIDE FOR PRINCIPALS**



#### CONCERN LOOMING ON THE HORIZON

As we look ahead to 2003 and the first implementation of the new assessment program, what might the initial results look like? Will the momentum that has been seen in steadily improving student performance continue with the 11th-grade assessment that is more rigorous and includes science and social studies?

In an effort to determine how today's students might perform on the new assessment in 2003, campuses should study and review the 2003 Early Indicator Reports, Part I, from the Texas Education Agency, which are the best predictors of student performance currently available. Using results from the state planning reports can provide analyzes that can be reproduced to yield local campus/district predictions. Once a local prediction result is determined, the results may cause many educators – especially at the high school level – to roll their sleeves up and refocus their efforts.

### **QUESTION:**

Now that we have our campus predictive data and know our 'level of urgency,' where do we begin? What should we be doing NOW at our high school campus in order to best prepare for all students to be successful?

## STATEWIDE THINK TANK COMMITTEE

As a starting point to answer that question, a statewide "think tank" committee was convened in Austin in late fall of 2000. The committee's purpose was to identify/develop the kinds of questions, issues, and possible concerns that would provide campuses the springboard for curriculum discussions. The committee members were primarily composed of teachers representing the core subject areas that will be included on the new assessment. Also participating on the committee were principals, counselors, and ESC representatives from the Texas High School Mentor Network. Immediate reactions like "what should we do to get ready for this new exit-level assessment" are already surfacing across the state as well as questions on areas such as scheduling and course placement by grade. While these topics may be a part of the solution for a campus or district, what are the larger issues that campuses should be addressing? What are some of the key points that every high school campus should be discussing as they plan for TAAS II? Responses to such questions led the committee to develop a "Critical Issues" Report that could provide technical assistance for campuses across the state.

# ORGANIZATION OF THE "CRITICAL ISSUES" REPORT

The statewide committee believed that high school campuses needed a beginning point for the kinds of issues that should be discussed by a staff as they plan for TAAS II. Since the new state assessment program as contained in SB 103 sets the anchor for test development at the 11th-grade exit-level, the Critical Issues Report focuses on discussion points and planning at the high school level. The report is divided into four planning guides that reflect the subject areas that will be tested on TAAS II. Each subject area planning guide identifies key questions and concerns that need to be addressed at the campus and district level, both by individual teachers and by entire departments. The discussion points also provide a K-12 framework for vertical dialogue with elementary, middle, and high school teachers by subject area. A resource section can be found at the end of each planning guide to assist with planning for and implementing the TEKS for each subject The fifth and final part of the report addresses administrative concerns as identified by principals. Key discussion points are listed in a sequence that can serve not only as a planning tool for principals, but also as a leader's guide that principals can follow in order to structure and facilitate the dialogue that must take place on each Texas high school campus.

The issues identified in the report are not all-inclusive and do not reflect any changes that may be made as a result of current legislative action. It is also recognized that many high schools across the state have implemented practices that address many of the issues and concerns identified by the report. It is the intent of the committee to put forth a publication that represents a <u>starting point</u> for each campus to have meaningful discussions related to what must be carefully considered as planning for the future accelerates. For additional assistance, campuses may contact their ESC, a Texas Mentor High School in their region, or the statewide high school office located at:

http://www.esc13.net/depts/state/highschool/high.html

## A PLANNING GUIDE FOR MATHEMATICS

A procedure to guide the instructional decisions of a campus or school district to facilitate meetings of elementary, middle, and high school math teachers to use the TEKS as the basis of curriculum and instruction.

#### **STARTING POINT A:**

Curriculum and the

Texas Essential Knowledge and Skills (TEKS)

Because of the close alignment between the Implementation of Senate Bill 103 (TAAS II) and the TEKS, each school district must begin to study the TEKS in depth. To assist with



the use of this guide, it may be beneficial to acquire the Mathematics TEKS abridged chart. To order, call 512-471-6190. Order forms are also available online at:

http://www.tenet.edu/teks/math

## Step 1

## Examine K-12 Mathematics TEKS by

## Discussing the Following Questions:

- \* How does the TEKS content build and connect across grade levels or courses?
- What changes occur from grade level to grade level or from course to course?
- \* What new concepts are introduced and previously taught ones dropped? Where does this occur?
- \* Does a skill or concept get more complex from grade level to grade level or from course to course? If so, in what manner?
- \* How does what is taught in high school depend on what is taught in the middle and elementary grades? Make a list of "big ideas" for each grade level or course.
- \* Where are the points in the curriculum that key concepts need to be reinforced and retaught?
- What benchmarks need to be in place to insure student learning?
  - Allow grade level teachers and course specific teachers to clarify the focus, and group the TEKS statements for instructional effectiveness.
  - Give groups of teachers and curriculum specialists the time to define a TEKS- based instructional sequence for grade level or specific courses.

## Step 2

## **Analyze TEKS Integration:**

- \* What evidence do we have that members of the math department understand and implement the TEKS, or is the textbook used as the standard?
- \* After studying the TEKS what are the instructional implications? How can we modify instruction to include an integration of review and retention of important concepts? Are we using disaggregated data from release tests to modify instruction?
- How can we schedule time throughout the year for vertical planning for elementary, middle, and high school math teachers?

#### Step 3

### Develop an Action Plan:

- ♦ What strategies can be utilized to aid teachers in understanding and implementing the TEKS?
- ❖ Is a common math vocabulary used and shared from K-12?

- If not, begin to develop the common vocabulary list and institute it in each grade level and course. (See also in department competencies)
- \* What practices can we de-emphasize or eliminate to find time to move toward TAAS II math proficiency?

### **STARTING POINT B:**

## **Teacher Competencies**

Competent teachers understand subject matter deeply and flexibly, see how ideas connect across fields and to everyday life, and engage students in learning. Teachers need the opportunity to develop greater self-reliance in improving their teaching performance. Teachers need the gift of time to experience collaboration, creativity, and self-reflection on the TEKS and their teaching.

## Step 1

#### **Individual Teacher Reflection:**

- ❖ What, if any, concepts in the math TEKS are unclear to me? Where do I go for help and clarification?
- \* What additional areas of professional development do I need to ensure that my teaching brings success for every student?

### Step 2

### **Department Competencies:**

- Are all math teachers certified to teach math courses? If not, what professional development strategies, if any, are already in place?
- What needs to be in our staff development plan to prepare us for TAAS II?
- \* Do we have a uniform math vocabulary across grade levels and does it match the testing format? How do we know?
- What can be de-emphasized to find time to move toward TASS II proficiency?
- ♦ How can we collaborate as a department to enhance individual teaching skills? Do we need team leaders for all math courses, especially Algebra I?
- How do we design a process for teachers to match instruction to the TEKS, and refine and monitor alignment throughout the year?
- \* As a department what strategies are used to locate and use sound <u>content-specific</u> professional development opportunities?
- How are we assessing the test readiness or school experience of out-of-state transfer students?
- ❖ What services do we need to provide transfer students to integrate them into our TEKS-based curriculum?



### **STARTING POINT C:**

## **Instructional Issues and Technology Concerns**

#### Step 1

## Discuss the Following Questions:

- \* As a department, have we developed and implemented policies that support sound mathematics instruction? What are the policies and where can they be found?
- ❖ As a department, are we utilizing time (class length and frequency) to maximize student success?
- \* As a department, have we examined our course scheduling and course entrance policies to determine if the policies allow all students access to advanced courses?
- ❖ Do all mathematics teachers have access to quality materials and resources to teach mathematics effectively?
- \* Do students understand the need to learn math concepts for use in post-secondary education and careers?
- Are we incorporating technology, as in graphing calculators, into the daily instruction and lesson activities as outlined in the TEKS for mathematics?
- \* Are graphing calculators readily available to all students to check out during the course and on the test?
- \* Are we using computer lab settings to maximize student practice and learning?
- When available, will course test questions be formatted to match the TAAS II question format?

#### Step 2

### **Discuss Content Specific Issues:**

- \* Where are the areas in the mathematics TEKS that other core foundation and enrichment content can be integrated, especially with science?
- ♦ Are we tracking the course taking patterns in the 11th/12th grade for students who took Algebra I in middle school? Are such students continuing to take math during their 11th/12th-grade years?
- Are we encouraging our students to take four years of mathematics in high school?
- \* What strategies do we have in place for the students who fail Algebra I? Would it be beneficial for a student who has failed Algebra I at least once to take Geometry concurrently with Algebra I to adequately prepare for TAAS II?
- ❖ What strategies do we have in place for students that fail the 10th-grade test?
- How are we addressing the need for remediation for students who are not successful on the eighth and eleventh grade mathematics TAAS II tests?

#### **RESOURCES FOR MATHEMATICS**

Mathematics Center for Educator Development provides resources for implementing the mathematics Texas Essential Knowledge and Skills (TEKS) and for improving mathematics programs in Texas. Located at: www.tea.state.tx.us/resources

Texas Association for Supervisors of Mathematics (TASM) Located at: www.tenet.edu/tasm

Mathematics Association of America (MAA) Located at: www.maa.org

Texas Council of Teachers of Mathematics (TCTM) Located at: http://edtech.ci.swt.edu/pub/tctm/index.htm

National Council of Teachers of Mathematics (NCTM) Located at: www.nctm.org

# A PLANNING GUIDE FOR ENGLISH/LANGUAGE ARTS

A procedure to guide the instructional decisions of a campus or school district to facilitate meetings of elementary, middle, and high school English/language arts teachers to use the TEKS as the basis of curriculum and instruction.

## STARTING POINT A: Curriculum and the Texas Essential Knowledge and Skills (TEKS)

Because of the close alignment between the Implementation of Senate Bill 103 (TAAS II) and the TEKS, each school district must begin to study the TEKS in depth. This activity will require that each teacher have a complete copy of the K-12 English/language arts TEKS which can be acquired using: http://www.texasreading.org/

### Step 1

## Examine K-12 English/Language Arts TEKS by Discussing the Following Questions:

- How does the TEKS content build and connect across grade levels or courses?
- What changes occur from grade level to grade level or from course to course?
- What new concepts are introduced and previously taught ones dropped? Where does this occur?
- Does a skill or concept get more complex from grade level to grade level or from course to course? If so, in what manner?
- How does what is taught in high school depend on what is taught in the middle and elementary grades? Make a list of



- "big ideas" for each grade level or course. Share data analysis of recent TAAS tests with middle and elementary English/language arts teachers.
- \* Where are the points in the curriculum that key concepts need to be reinforced and retaught?
- What benchmarks need to be in place to insure student learning?
  - Allow grade level teachers and course specific teachers to clarify the focus, and group the TEKS statements for instructional effectiveness.
  - Give groups of teachers and curriculum specialists the time to define a TEKS- based instructional sequence for grade level or specific courses.

## Step 2

## **Analyze TEKS Integration:**

- \* What evidence do we have that members of the English department understand and implement the TEKS, or is the textbook used as the standard?
- \* After studying the TEKS what are the instructional implications? How can we modify instruction to include an integration of review and retention of important concepts?
- \* How can we schedule time throughout the year for vertical planning for elementary, middle, and high school English teachers?

## Step 3

## Develop an Action Plan:

- ♦ What strategies can be utilized to aid teachers in understanding and implementing the TEKS?
- ♦ Is a common English vocabulary used and shared from K-12? If not, begin to develop the common vocabulary list and institute it in each grade level and course.
- ♦ What practices can we de-emphasize or eliminate to find time to move toward TAAS II English proficiency?
- \* How can students in alternative learning situations (summer school, dual credit, correspondence courses) be given the opportunity to learn or review what is needed for the test?

#### **STARTING POINT B:**

#### **Teacher Competencies**

Competent teachers understand subject matter deeply and flexibly, see how ideas connect across fields and to everyday life, and engage students in learning. Teachers need the opportunity to develop greater self-reliance in improving their teaching performance. Teachers need the gift of time to experience collaboration, creativity, and self-reflection on the TEKS and on their teaching.

## Step 1

## **Individual Teacher Reflection:**

What, if any, concepts in the English/language arts TEKS are unclear to me? Where do I go for help or clarification? What additional areas of professional development do I need to ensure that my teaching brings success for every student?

## Step 2

## **Department Competencies:**

- ♦ Do we have a stable, written and taught TEKS-based curriculum, instruction and assessment system in English/language arts?
- How can we build a strategy to locate and use sound content-specific professional development opportunities?
- ♦ What needs to be in our staff development plan to prepare us for TAAS II?
- What can be de-emphasized to find time to move toward TASS II proficiency?
- What mentoring or collaboration practices can we use to enhance individual teaching skills?
- How do we design a process for teachers to match instruction to the TEKS, and continue to refine and monitor alignment throughout the year?
- \* How can we build and organize a "bank" of activities that support TEKS-based instruction?
- \* How are we assessing the test readiness or school experience of out-of-state transfer students?
- \* What services do we need to provide transfer students to integrate them into our TEKS-based curriculum?

#### **STARTING POINT C:**

## **Instructional Issues and Technology Concerns**

#### Step 1

### Discuss the Following Questions:

- ❖ As a department, have we examined our course scheduling and course entrance policies to determine if the policies allow all students access to advanced courses? What are the policies and where can they be found?
- Are we incorporating technology into daily instruction and lesson activities?
- ❖ When available, will course test questions be formatted to match the TAAS II question format?
- Are instructional schedules aligned with the testing schedules?

## Step 2

## **Discuss Content Specific Issues:**

- ❖ Where are the areas in the English TEKS that other core classes and electives can be integrated?
- How can we align the teaching of American literature with American history?
- How are we addressing the need for remediation for students who are not successful on benchmark and TAAS tests?



- ♦ What kinds of courses with clear benchmarks go beyond ESOL for LEP students?
- ♦ How can we align the ESOL and regular language arts curriculum in K-12?
- Do we have ESOL endorsed teachers who are also English certified? If not, what professional development strategies are we planning?

#### **RESOURCES FOR ENGLISH**

National Council of Teachers of English

Located at: www.ncte.org/teach/

Texas Center for Reading and Language Arts

Located at: www.texasreading.org

Advanced Placement Programs – Texas Sponsored

AP Conferences

Located at: www.tea.state.tx.us/gted/cbtexasinvite.pdf

Humanities resource site with lesson plans for literature

Located at: www.edsitement.neh.gov

Comprehensive grammar site includes nearly

150 interactive puzzles

Located at: www.webster.commnet.edu/grammar/index

## A PLANNING GUIDE FOR SOCIAL STUDIES

A procedure to guide the instructional decisions of a campus or school district to facilitate meetings of elementary, middle, and high school social studies teachers to use the TEKS as the basis of curriculum and instruction.

## **STARTING POINT A:**

#### Curriculum and the

## Texas Essential Knowledge and Skills (TEKS)

Because of the close alignment between the Implementation of Senate Bill 103 (TAAS II) and the TEKS, each school district must begin to study the TEKS in depth. To assist with the use of this guide, it may be beneficial to acquire the Social Studies TEKS abridged chart. To order, call (936) 435-2118. Order forms are also available online at: http://socialstudies.tea.state.tx.us/

#### Step 1

# Examine K-12 Social Studies TEKS by Discussing the Following Questions:

- How does the TEKS content build and connect across grade levels or courses?
- What changes occur from grade level to grade level or from course to course?
- What new concepts are introduced and previously taught ones dropped? Where does this occur?

- ♦ Does a skill or concept get more complex from grade level to grade level or from course to course? If so, in what manner?
- \* How does what is taught in high school depend on what is taught in the middle and elementary grades? Make a list of "big ideas" for each grade level or course.
- Where are the points in the curriculum that key concepts need to be reinforced and retaught?
- What benchmarks need to be in place to insure student learning?
  - Allow grade level teachers and course specific teachers to clarify the focus, and group the TEKS statements for instructional effectiveness.
  - Give groups of teachers and curriculum specialists the time to define a TEKS- based instructional sequence for grade level or specific courses.

## Step 2

## **Analyze TEKS Integration:**

- \* What evidence do we have that members of the social studies department understand and implement the TEKS, or is the textbook used as the standard?
- ❖ After studying the TEKS what are the instructional implications? What changes, if any, will need to be made?
- \* How can we schedule time throughout the year for vertical planning for elementary, middle, and high school social studies teachers? Do we schedule time for horizontal planning for all teachers teaching the same course?
- ♦ Develop a cross-reference documentation system of the TEKS for grades 8-11.

## Step 3

## Develop an Action Plan:

- ♦ What strategies can be implemented to aid teachers in understanding and implementing the TEKS?
- ♦ Is a common social studies vocabulary used and shared from K-12? If not, begin to develop the common vocabulary list and institute it in each grade level and course.
- ❖ What sequence of courses will be most effective in preparing students for TAAS II?
- \* What practices can we de-emphasize or eliminate to find time to move toward TAAS II social studies proficiencies?

## **STARTING POINT B:**

## **Teacher Competencies**

Competent teachers understand subject matter deeply and flexibly, see how ideas connect across fields and to everyday life, and engage students in learning. Teachers need the opportunity to develop greater self-reliance in improving their teaching performance. Teachers need the gift of time to experience collaboration, creativity, and self-reflection on the TEKS and their teaching.



### Step 1

#### **Individual Teacher Reflection:**

- \* What, if any, concepts in the social studies TEKS are unclear to me? Where do I go for help or clarification?
- What additional areas of professional development do I need to ensure that my teaching brings success for every student?

#### Step 2

## **Department Competencies:**

- Are all social studies teachers certified to teach social studies courses? If not, what professional development strategies, if any, are already in place?
- \* With the turn-over of social studies teachers, how do we provide continued professional development for teachers and maintain the involvement with social studies teacher associations, i.e., TCSS, NCSS, TAGE, LRE, etc?
- ♦ What needs to be in our staff development plan to prepare for TAAS II?
- \* How can we collaborate as a department to enhance individual teaching skills?
- \* How do we design a process for teachers to base instruction on the TEKS, and refine and monitor alignment throughout the year? Does our department meet to analyze and study the TEKS, match TEKS to lesson plans, and learning units?
- As a department what strategies are used to locate and use sound <u>content-specific</u> professional development opportunities?
- ♦ How are we assessing the test readiness or school experience of out-of-state transfer students?
- \* What services do we need to provide transfer students to integrate them into our TEKS-based curriculum?

## **STARTING POINT C:**

## Instructional Issues and Technology Concerns

## Step 1

## Discuss the Following Questions:

- \* As a department, have we developed and implemented policies that support sound social studies instruction? What are the policies and where can they be found?
- \* As a department, are we utilizing time (class length and frequency) to maximize student success?
- \* As a department, have we examined our course scheduling and course entrance policies to determine if the policies allow all students access to advanced courses?
- \* Do all social studies teachers have access to quality materials and resources to teach social studies effectively?
- Do students understand the need to learn social studies concepts for use in post-secondary education and careers?
- \* Are we using appropriate technology in our daily instruction and lesson activities?

- ❖ Are we using computer lab settings to maximize student practice and learning?
- ❖ When available, will course test questions be formatted to match the TAAS II question format?

## Step 2

## **Discuss Content Specific Issues:**

- \* Where are the areas in the social studies TEKS that other core foundation and enrichment content can be integrated?
- \* Are we encouraging our students to take four years of social studies in high school?
- \* What strategies do we have in place for the students who fail the 10th-grade test?
- ♦ What remediation efforts do we need following the 10th-grade test?
- ♦ How are we addressing the need for remediation for students who are not successful on the eighth and eleventh grade social studies TAAS II tests?
- What strategies can we use to address ESOL to teach social studies in self-contained classrooms?

## RESOURCES FOR SOCIAL STUDIES

Social Studies Center for Educator Development (SSCED) provides resources for implementing the social studies Texas Essential Knowledge and Skills (TEKS) and for improving social studies programs in Texas.

Located at: http://socialstudies.tea.state.tx.us/

Texas Council for the Social Studies (TCSS)
Teacher Resources

Located at: http://rgfn.epcc.edu/users/tcss/

National Council of Teachers for the Social Studies (NCSS)

Teacher Resources

Located at: www.NCSS.org

History Alive: Teachers' Curriculum Institute

Located at: www.teachtci.com/default.asp

National Geographic's Expeditions

Located at: www.nationalgeographic.com/ngexpeditions/

Law Related Education (LRE)

Located at: www.abanet.org

Texas Alliance for Geographic Education (TAGE) Located at: www.geo.swt.edu/tage/homepage.htm



## A PLANNING GUIDE FOR SCIENCE

A procedure to guide the instructional decisions of a campus or school district to facilitate meetings of elementary, middle, and high school science teachers to use the TEKS as the basis of curriculum and instruction.

## **STARTING POINT A:**

#### Curriculum and the

## Texas Essential Knowledge and Skills (TEKS)

Because of the close alignment between the Implementation of Senate Bill 103 (TAAS II) and the TEKS, each school district must begin to study the TEKS in depth. To assist with the use of this guide, it may be beneficial to acquire the Science TEKS abridged chart. Order forms are available online at: http://www.tenet.edu/teks/science

## Step 1

## Examine K-12 Science TEKS by

## Discussing the Following Questions:

- How does the TEKS content build and connect across grade levels or courses?
- What changes occur from grade level to grade level or from course to course?
- What new concepts are introduced and previously taught ones dropped? Where does this occur?
- Does a skill or concept get more complex from grade level to grade level or from course to course? If so, in what manner?
- \* How does what is taught in high school depend on what is taught in the middle and elementary grades? Make a list of "big ideas" for each grade level or course.
- \* Where are the points in the curriculum that key concepts need to be reinforced and retaught?
- What benchmarks need to be in place to insure student learning?
  - Allow grade level teachers and course specific teachers to clarify the focus, and group the TEKS statements for instructional effectiveness.
  - Give groups of teachers and curriculum specialists the time to define a TEKS- based instructional sequence for grade level or specific courses.

#### Step 2

## **Analyze TEKS Integration:**

- \* What evidence do we have that members of the science department understand and implement the TEKS, or is the textbook used as the standard?
- \* After studying the TEKS what are the instructional implications? What changes, if any, will need to be made?
- How can we schedule time throughout the year for vertical planning for elementary, middle, and high school science teachers?

## Step 3

## Develop an Action Plan:

- \* What strategies can be utilized to aid teachers in understanding and implementing the TEKS?
- ❖ Is a common science vocabulary used and shared from K-12? If not, begin to develop the common vocabulary list and institute it in each grade level and course.
- ♦ What practices can we de-emphasize or eliminate to find time to move toward TAAS II science proficiencies?
- What sequence of courses will best prepare our students for success?

### **STARTING POINT B:**

## **Teacher Competencies**

Competent teachers understand subject matter deeply and flexibly, see how ideas connect across fields and to everyday life, and engage students in learning. Teachers need the opportunity to develop greater self-reliance in improving their teaching performance. Teachers need the gift of time to experience collaboration, creativity, and self-reflection on the TEKS and their teaching.

## Step 1

### **Individual Teacher Reflection:**

- \* What, if any, concepts in the science TEKS are unclear to me? Where do I go for help or clarification?
- What additional areas of professional development do I need to ensure that my teaching brings success for every student?

#### Step 2

### **Department Competencies:**

- Are all science teachers certified to teach science courses? If not, what professional development strategies, if any, are already in place?
- ❖ What needs to be in our staff development plan to prepare for TAAS II?
- ❖ What can be de-emphasized to find time to move toward TASS II proficiency?
- How can we collaborate as a department to enhance individual teaching skills?
- ♦ How do we design a process for teachers to match instruction to the TEKS, and refine and monitor alignment throughout the year?
- As a department what strategies are used to locate and use sound <u>content-specific</u> professional development opportunities?
- How are we assessing the test readiness or school experience of out-of-state transfer students?
- ❖ What services do we need to provide transfer students to integrate them into our TEKS-based curriculum?



#### STARTING POINT C:

**Instructional Issues and Technology Concerns** 

#### Step 1

## Discuss the Following Questions:

- \* As a department, have we developed and implemented policies that support sound science instruction? What are the policies and where can they be found?
- \* As a department, are we utilizing time (class length and frequency) to maximize student success?
- \* As a department, have we examined our course scheduling and course entrance policies to determine if the policies allow all students access to advanced courses?
- ❖ Do all science teachers have access to quality materials and resources to teach science effectively?
- \* Do students understand the need to learn science concepts for use in post-secondary education and careers?
- \* Are we using appropriate technology in our daily instruction and lesson activities?
- \* Are we using computer lab settings to maximize student practice and learning?
- ♦ When available, will course test questions be formatted to match the TAAS II question format?

#### Step 2

### **Discuss Content Specific Issues:**

- \* Where are the areas in the science TEKS that other core foundation and enrichment content can be integrated, especially in mathematics?
- \* Are we encouraging our students to take four years of science in high school?
- \* What strategies do we have in place for the students who fail the 10th-grade test?
- \* What remediation classes will be provided following the 10th-grade test? What other forms of remediation do we need following the 10th-grade test?
- \* How are we addressing the need for remediation for students who are not successful on the eighth and eleventh grade science TAAS II tests?
- ♦ Does each laboratory and field activity support the TEKS?
- ❖ Will students' laboratory skills translate to success on the TAAS II exam?
- \* How can mentoring programs (teacher to student, teacher to teacher, or grade level to grade level) help us move toward preparedness for the TAAS II? Consider developing high school/elementary mentoring partners.

#### **RESOURCES FOR SCIENCE**

## Texas Science Center for Professional Development in Curriculum and Assessment

Located at: www.texassciencecenter.org

Science Toolkit

Located at: www.tenet.edu/teks/science

## Texas Center for Reading and Language Arts

Located at: http://www.tenet.edu/teks/language\_arts/cgibin/start.cgi/newindex.html

**Texteams** (Texas Teachers Empowered for Achievement in Mathematics and Science)

Located at: www.utdanacenter.org/ssi/projects/texteams

National Science Teachers Association

Located at: www.nsta.org

Access Excellence Resource Center

Located at: http://www.accessexcellence.org/

## A PLANNING GUIDE FOR PRINCIPALS

### (A LEADER'S GUIDE FOR TAAS II PREPARATION)

## Special Message to the Principal regarding the Critical Issues Report #1:

Planning guides have been prepared for teachers in each of the four content areas and are organized around three 'starting points' to facilitate campus discussions. A Planning Guide for Principals has been developed as a fifth part to the overall Critical Issues Report #1. The purpose of this guide is to inform campus leaders about the necessity for immediate planning and the formulation of action steps that every high school should take in order to insure success for students in the upcoming new state assessment program in 2003. Sources for information in the Guide for Principals come primarily from the principals/counselors study group at the statewide think tank meeting, along with common items seen in each of the teacher planning guides that pertained to administrative planning and actions. Principals may consider "Starting Points A, B, and C" in the Guide for Principals as an outline for a Leader's Guide for TAAS II Preparation.

The ideas and suggestions included in the *Guide for Principals* are framed as questions for each principal to consider. It is recognized that each campus' journey in the change and planning process is unique to each school. It is also recognized that many high schools across the state already have a comprehensive planning process in place. In such instances, the Guide might be used as a checklist to supplement current campus and district efforts.



### **STARTING POINT A:**

"Principal/Campus Awareness": Enumerate changes required now in order to prepare for TAAS II. Step 1

Have I reviewed with the total staff the key differences between TAAS and TAAS II, especially regarding the new 11th-grade assessment? Consider the following:

- \* Have I provided a campus overview using the text and charts listed in the Critical Issues Report #1? Does staff understand the law as contained in SB 103? Is there an understanding of the changes that pertain particularly to high schools?
- \* Have I distributed the teacher planning guides by subject area to all teachers in each department or grade level? Have I provided clear direction for department/team leaders as to the use, expectations, and resulting action steps that should come from working through the planning guides?
- Have I worked with staff to reserve campus planning time in order to study and discuss TAAS II issues, including the teacher planning guides, as a starting point for dialogue?
- \* Has a campus planning calendar been established that coordinates the high school planning? Does it include time for vertical dialogue with middle and elementary staff?
- ♦ What will be the role of the counselors in the awareness phase of preparation for TAAS II?
- \* Have the results of initial campus awareness sessions been communicated to the district staff in order to secure support of campus efforts in terms of time, content-specific staff development, funding, and community awareness and involvement?

## Step 2

How will TAAS II awareness be communicated to parents, community, business partners, and other community stakeholders? What is the plan for communication? Consider the following:

- Will a team of high school staff lead communication efforts? Will you form a TAAS II presentation team composed of members of your staff and community?
- How has the community been informed of TAAS II dates and new rigors of the test?
  - City and community newspapers
  - Employers of teenagers
  - Parents (i.e., parent meetings, PTA presentations, meet the teacher night, etc.)
- How is the content and importance of the test communicated to the parents and community, especially the parents of new students to Texas?

#### **STARTING POINT B:**

"Process to Move Forward": Discuss and prioritize the responsibilities of the principal.

**Step 1:** How are you responsible for TAAS II between now and 2003?

- How have you utilized the teacher planning guides for science, social studies, mathematics, and English/language arts?
- \* As a result of subject area discussions initiated by questions in the planning guides, has an action plan been identified for each subject area? What are the barriers that have surfaced as a result of the discussions?
- ♦ How have the subject area discussions been communicated with the entire campus?
- ♦ Is there a whole-school infrastructure in place (as in a campus advisory committee) that is coordinating the action steps from each subject area discussion group into one overall plan of action?
- ♦ Is there a district level planning committee and, if so, have you provided input regarding the needs of the high school staff to plan with feeder schools?

Consider the following process outline:

- 1. What are the state requirements for the new assessment program?
- 2. What is the current status of my campus regarding the shift to TAAS II?
- 3. What are the short and long term planning goals to insure my campus is prepared for TAAS II?

#### Step 2

What barriers have been identified from the discussion groups that must be overcome? What is the plan to address identified barriers?

## **STARTING POINT C:**

"Action Plan": Processes and procedures that will facilitate the necessary modifications of current campus practice. Step 1

Carefully consider the following questions:

- ❖ What are non-core teachers implementing that is relative to the TAAS II objectives?
- Have the following options been considered in examining the use of time to schedule alignments that are necessary including:
  - Conference periods
  - Faculty meeting time
  - Staff development days
  - Waiver days
  - Early release



- \* Has our campus considered participating in or co-hosting high school in-region think tanks and share fairs in order to address the higher expectations of TAAS II? (Large districts may elect to arrange sessions within the district for all high school campuses.) At such conferences/workshops, how can we structure sessions that allow schools that are demographically similar to learn, share, and explore strategies and resources? Have we considered region and state-level resources (i.e., mentor high schools and the ESC in our region, etc.) to assist in planning and hosting of such events?
- \* How can I assist in the formulation of a district calendar for vertical, content-specific professional development for TEKS, TAAS II, and local curriculum correlation with specific dates and times? How can I encourage on-going training throughout the year in order for vital planning to not occur just at the beginning of the year?
- \* Do I have a plan for the campus to insure on-going professional development for teachers occurs throughout the year and is based on the discussions from the planning guides for teachers? Have I coordinated arrangements with staff for how and when the training opportunities will occur throughout the year?
- \* What is the plan for building level supervision to monitor campus-wide implementation of the TEKS?
- \* What is the plan to monitor cumulative classroom testing to insure that review and retention are included as part of an overall campus benchmarking plan?
- \* Does there need to be a plan to build in an integrated review within each of the courses in mathematics, English/language arts, social studies, and science to aid student retention of concepts/information learned?
- \* Has the entire staff acquired the skill level necessary for whole-campus disaggregation of test data for all grade levels on campus? If not, how soon will the training be provided?

## Step 2

## **Self-Reflection Considerations:**

- ❖ Are there portions of the new state assessment program about which I am unclear or need clarification?
- \* Do I have access to a cadre of other principals at the high school level that I can network with for ideas, help and assistance?

#### **RESOURCES FOR PRINCIPALS**

Texas Education Agency (TEA)

Located at: http://www.tea.state.tx.us/tea/admin.html

Office of Texas High School Education

Located at:

http://www.esc13.net/depts/state/highschool/high.html

**Education Service Centers Statewide** 

Located at: http://www.tea.state.tx.us/ESC

TEKS for Leaders, Algebra for Leaders, and Advanced Placement Equity Issues information and training Located at:

http://www.utdanacenter.org/products/products.html

State Board for Educator Certification

Located at: http://www.sbec.state.tx.us/

For more information related to high school education and to the Critical Issues Report #1, please contact the State Office of Texas High School Education in Austin, Texas, located at the following address:

Office of Texas High School Education Division of Statewide Initiatives Education Service Center Region XIII 5701 Springdale Road Austin, Texas 78723

or contact:

Dr. Tam Jones, State Coordinator
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(512) 919-5492

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