

Rigor, Relevance, and Revisions

Changes in the Tennessee's Educational Standards

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"The first commandment is: Thou shalt not shoot the messenger."

The Tennessee Diploma Project



Aligned Expectations



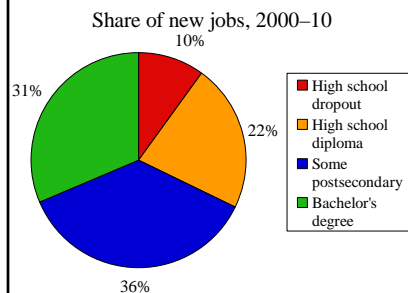
Tennessee's Student Pipeline

In 2002 for each 100 students in the 9th grade:

- 59 graduated high school on time
- 36 entered community college or university
- 25 were enrolled the sophomore year
- 15 graduated within 150% of time



Background



- **Jobs that require post-secondary education or training will make up more than two-thirds of new jobs.**

Source: Carnevale, Anthony P., and Donna M. Doerschner. Standards for What? The Economic Roots of K-16 Reform. Educational Testing Service, 2003.

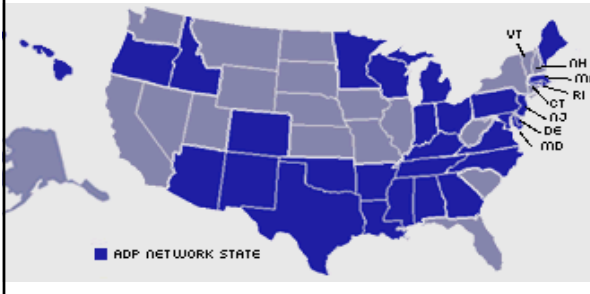
Achieve and the American Diploma Project



- Created by the NGA and business leaders in **1996**
- A bipartisan Not-For-Profit that helps states **raise academic standards**
- **Assessments** and **accountability** driven
- Prepare all young people for **postsecondary** education, work and citizenship

The ADP Network

TN was the most recent SE state to join the network in 2007.



American Diploma Project

30 States – 4 Specific Actions



1. **Align standards and assessments** with the knowledge and skills required beyond high school
2. Require all high school students to **take challenging courses** that actually prepare them for life after high school
3. **Build college and work-ready measures** into statewide accountability systems
4. **Hold schools accountable** for graduating students who are college and/or workforce ready, and **hold postsecondary accountable** for students' success once enrolled

American Diploma Project

The ADP network gives our state a blueprint for making our standards more rigorous and our graduation requirements more in line with the demands of college and work.

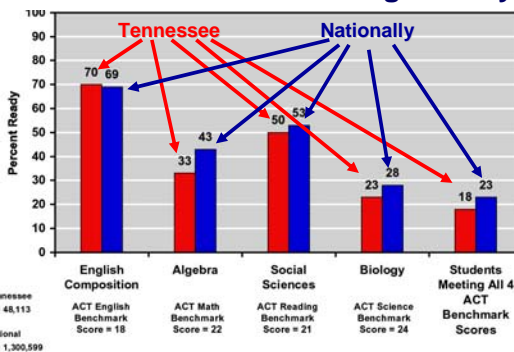


ADP Benchmarks



- Curriculum revisions in Math and English/Language Arts (K-12)
- "Side-by-Side" analysis by Achieve plus 2 Quality Reviews
- Keyed to NAEP, ACT, College Board/SAT

2007 Grads that tested College Ready



Examples of Revisions to Tennessee High School Standards: Algebra II

Current

- Model real-world phenomena using functions and graphs;

Revised

- Interpret graphs that depict real-world phenomena.

Current

- Select the graph that models a given real-world situation (i.e., linear and non-linear)

Revised

- Use mathematical models involving equations and systems of equations to represent, interpret and analyze quantitative relationships, change in various contexts, and other real-world phenomena.;

Examples of Revisions to Tennessee High School Standards: English III

Current

- Evaluate and revise writing to focus on purpose, organization, development and style.
- Practice various means of evaluation and revision

Revised

- Drawing on readers' comments on working drafts, revise documents to develop or support ideas more clearly, address potential objections, ensure effective transitions between paragraphs, and correct errors in logic.

Other ADP States

- **Georgia** adopts one path for all students graduating in 2012:
 - 23 credits required
 - 4 English, 4 math, and 4 science
 - Math through Algebra II and beyond
- **Ohio** commissioned a study to establish International Academic Benchmarks
 - First state to ask how its students stack up against the world

Tennessee Diploma Project



- Align our curriculum.
- Give students, parents and teachers a pathway to reach those high standards.
- Make sure that our tests and graduation requirements reflect that our kids really are prepared for workforce training or college.

Tennessee Diploma Project



The project is led by the **Tennessee Alignment Committee**, a panel of state and local government officials, and business, postsecondary and K-12 leaders from across the state.

Tennessee Diploma Project

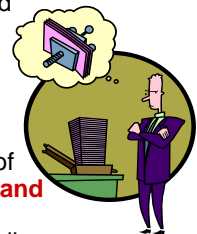
The goal is to **build public and stakeholder support** for raising education standards in a manner that rises above politics and partisanship.

Both **higher education and the business community** play key roles.



Tennessee Diploma Project

The Alignment Committee asked the **Tennessee Business Roundtable**, a statewide organization of CEOs to gather input from key business leaders across the state regarding their observations and expectations of **high school graduates' skills and knowledge**. The information is valuable in developing the overall plan for addressing ADP Network priorities.



Tennessee Diploma Project

The **Business Roundtable**, with financial support from the **Hyde Family Foundation** of Memphis, worked with major **chambers of commerce** to host regional roundtable discussions, or informal focus groups, in six local markets across the Volunteer State.



Roundtable discussions June 19 - August 7, 2007:

- ❖ Memphis
 - ❖ Jackson
 - ❖ Northeast Tennessee
 - ❖ Chattanooga
 - ❖ Knoxville
 - ❖ Nashville
- ❑ Meetings hosted by local chambers of commerce and led by Governor Bredesen
 - ❑ Participants included more than 130 senior executives representing 112 companies and organizations from across Tennessee
 - ❑ As a follow-up, surveys on essential college and work-force readiness skills (in math and English) were sent to both the CEOs and the HR directors of these 112 companies/organizations.



What They Told Us

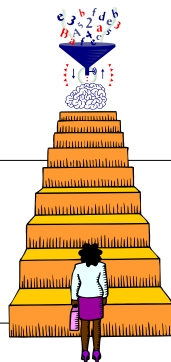
Graduates need:

- ❑ stronger **math and science skills**, but especially have mastered basic math; in addition, post-secondary school or work requires that students be able to think critically toward a focused solution
- ❑ stronger **communication skills**, including both verbal skills and writing skills
- ❑ to be **able to work in teams** to solve real world problems
- ❑ to be **able to think, apply, and use** what they know
- ❑ to have a **strong work ethic**; be at work regularly and be on time

Background

- ❑ ADP research found a **common core of knowledge & skills in math and English** that are necessary for success in postsecondary education and in "good jobs".
- ❑ ACT Study *Ready for College Ready for Work: Same or Different?*; **whether planning to enter college or workforce** training programs after graduation, high school students need to be educated to a comparable level of readiness in reading and mathematics.

The Challenge for Education



The top 10 jobs that will be in demand in 2010...

didn't exist in 2004.



We are preparing students for jobs that don't yet exist . . .



Jobs that will use technologies that haven't even been invented . . .



in order to solve problems we don't even know are problems yet.



What CEOs told us...in their own words...

"**Basic math** is a huge issue. I'm talking about fractions and decimals and **working without a calculator.**"

The challenge is "not just working the high-end, high-order equations. It's both basic skills and using higher math application strategies to **solve real-world problems.**"

In our company, to be a supervisor, the number one question is, 'Can you **communicate** with people in a normal, logical, reasonable way?' ... That skill is so hard to find."

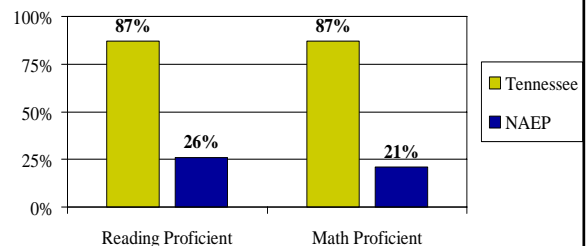
Are Tennessee Students Proficient?

Spring 2007... National Chamber of Commerce comparison report card of key education factors in all states:

Tennessee made an "**F**" in the category of **Truth in Advertising...comparing** Tennessee proficiency (our state assessments) to National proficiency (NAEP)

Is there a gap between achievement on state assessments and NAEP?

8th Grade Achievement on State Assessment v. NAEP (2005)



Timeline

- **November 2, 2007**
 - SBE approves curriculum standards on first reading in language arts, math, and science
 - SBE approves H S Transition policy and rule on first reading

Timeline

- **January 25, 2008**
 - SBE approves curriculum standards on second reading in language arts, math, and science
 - SBE approves H S Transition policy and rule on second reading

Timeline

- **January, 2008 - SDE**
 - RFP for new assessments in grades 3 – 8
 - RFP for new HS end-of-course assessments
 - Begin training on new curriculum standards (format and content changes)
 - Professional Development on new curriculum standards (both in **content** and **teaching strategies**)

Timeline

- **2008/2009 - SDE**
 - New curriculum standards integrated into current curriculum; Continue training and professional development
- **2009-2010 - SDE**
 - New standards in place; new assessments administered

HS Graduation Requirements

Changes to begin with the graduating class of 2013, this year's 7th graders, include:

- transition from Gateway to EOC as 25% of yearly grade
- increasing the credit requirements to 22
- aligning the curriculum with ACHIEVE's standards
- developing new assessments
- developing one diploma for all students
- requiring a capstone project



H S Graduation Requirements

English - 4 Credits:

- English I - 1 Credit
- English II - 1 Credit
- English III - 1 Credit
 - AP Language and Composition
- English IV - 1 Credit
 - AP English Literature or Composition
 - IB Language I
 - Communications for Life
 - **Bridge English**



H S Graduation Requirements

Math - **4 Credits:** (Students must take a math class each year)

- Algebra I - 1 Credit
- Geometry - 1 Credit
- **Algebra II** - **1 Credit**
- **Upper level Math:** - **1 Credit**
 - **Bridge Math** Students who have not earned a 19 on the mathematics component of the PLAN or the equivalent on the PSAT by the end of the junior year must complete the Bridge Math course.
 - **Capstone Math**
 - Adv. Algebra and Trigonometry.
 - STEM Math (Pre-Calculus, Calculus, or Statistics)

H S Graduation Requirements

Science - 3 Credits:

- Biology I - 1 Credit
- **Chemistry or Physics-** **1 Credit**
 - AP Physics (B or C)
 - Principles of Technology I and II
- Another Lab. Science - 1 Credit



H S Graduation Requirements

Social Studies – 3.5 Credits:

- W. History or W. Geography – 1 Credit
 - AP World History, Modern History, Ancient History, European History
- U.S. History – 1 Credit
 - AP U.S. History, IB History of the Americas HL (2 Years)
- Economics – .5 Credit
- Government – .5 Credit
 - AP U.S. Government, IB History of the Americas HL (2 Years), JROTC (3 Years), ABLS
- **Personal Finance** – **.5 Credit**

H S Graduation Requirements

P. E. and Wellness **1.5 Credits:**

- Wellness – 1 Credit
- **Physical Education** – **.5 Credit**
 - The physical education requirement may be met by substituting an equivalent time of physical activity in other areas including but not limited to marching band, JROTC, cheerleading, interscholastic athletics, and school sponsored intramural athletics.



H S Graduation Requirements

Fine Art, Foreign Lang., and **Elective Focus – 6 Credits:**

- Fine Art – 1 Credit
- Foreign Language – 2 Credits (Same)

The Fine Art and Foreign Language requirements may be waived for students who are sure they are not going to attend a University and be replaced with courses designed to enhance and expand the elective focus.

Capstone Project to Graduate

Students will complete a capstone experience such as, but not limited to:

- Senior project
- Virtual Enterprise
- Internship
- Externship
- Work-based learning
- Service learning (minimum of 40 hours)
- Community service (minimum of 40 hours)



Graduate with Honors

Students who score at or above all of the subject area readiness benchmarks on the ACT or equivalent score on the SAT will graduate with **honors**.

- English 18
- Math 22
- Social Studies 21
- Science 24



Graduate with Distinction

Students will be recognized as graduating with "distinction" by attaining a **B average** and completing at least one of the following:

- earn a nationally recognized **industry certification**
- participate in at least one of the **Governor's Schools**
- participate in one of the state's **All State musical organizations**
- be selected as a **National Merit Finalist of Semi-Finalist**
- attain a score of **31** or higher composite score on the **ACT**
- attain a score of **3** or higher on at least two **AP** exams
- successfully complete the **International Baccalaureate Diploma Programme**
- earn **12** or more semester hours of transcribed **college credits**

**High School Program of Study
supporting document
not approved by State Board
as policy or rule**

DRAFT--High School Program of Study

<i>Sample Graduation Plan- Fine Arts</i>	<i>Credits Planned</i>
English 1 credit - English Language Arts I 1 credit - English Language Arts II 1 credit - AP English Language and Composition 1 credit - AP English Lit. or Composition	4
Math - 4 credits 1 credit - Algebra I 1 credit - Geometry 1 credit - Algebra II 1 credit - Bridge Math	4
Science - 3 credits 1 credit - Physical Science 1 credit - Chemistry 1 credit - Biology	3
Social Studies - 3 credits 1 credit - AP World History 1 credit - AP U.S. History .5 credit - Economics .5 credit - AP U.S. Government .5 credit - Personal Finance	3.5
Wellness - 1 credit	1
Physical Education .5 credit	0.5
Fine Art - Art I, II, III, and IV	4
Foreign Language - Spanish - 2 Credits	2
Total	22

DRAFT - High School Program of Study

<i>Sample Graduation Plan- Math and Science and Fine Arts</i>	<i>Credits Planned</i>
English 1 credit - English Language Arts I 1 credit - English Language Arts II 1 credit - AP English Language and Composition 1 credit - AP English Lit. or Composition	4
Math 1 credit - Algebra I in the 8th Grade 1 credit - Geometry 1 credit - Algebra II 1 credit - AP Calculus 1 credit - AP Statistics (Elective Focus)	5
Science 1 credit - Physical Science 1 credit - Biology I (Elective Focus) 1 credit - Chemistry 1 credit - Biology II (Elective Focus) 1 credit - Physics (Elective Focus)	5
Social Studies 1 credit - AP World History 1 credit - AP U.S. History .5 credit - Economics .5 credit - AP U.S. Government .5 credit - Personal Finance	3.5
Wellness	1
Physical Education - Exempt	0
Fine Art - Marching Band I, II, III, and IV	4
Foreign Language - Spanish I & II	2
Total	24.5

High School Program of Study

<i>Sample Graduation Plan- AP Focused Electives</i>	<i>Credits Planned</i>
English 1 credit - English Language Arts I 1 credit - English Language Arts II 1 credit - AP English Language and Composition 1 credit - AP English Lit. or Composition	4
Math - 4 credits 1 credit - Algebra I in the 8th Grade 1 credit - Geometry 1 credit - Algebra II 1 credit - AP Calculus 1 credit - AP Statistics (Elective Focus)	5
Science - 3 credits 1 credit - Conceptual Physics 1 credit - Chemistry 1 credit - Biology 1 credit - AP Chemistry (Elective Focus) 1 credit - AP Physics (Elective Focus)	5
Social Studies - 3 credits 1 credit - AP World History 1 credit - AP U.S. History .5 credit - Economics .5 credit - AP U.S. Government .5 credit - Personal Finance	3.5
Wellness - 1 credit	1
Physical Education - Exempt	0
Fine Art - Marching Band - 4 Credits	4
Foreign Language - Spanish - 2 Credits	2
Total	24.5

Assessments and Accountability

- Achieve “**Truth-in-Advertising**” by aligning performance measures to be **NAEP**-like.
- Develop **new assessments for grades 3 through 8** for language arts, math, science, and reading.

Assessments and Accountability

- Assure **assessments for grades 3 through 8 have sufficient rigor** to reflect preparation for high school.
- We must make sure we do not aim low when it comes to our **expectations** for younger children and thus set them up to fail as they progress through their academic careers.

Assessments and Accountability

- Preparing students to be **college/workforce training ready** will require strong school leaders, rigorous coursework, and an emphasis on effective teaching.
- Transition away from the high school “Gateway Tests” to a sequence of **end-of-course examinations** through Algebra II and English III.

Assessments and Accountability

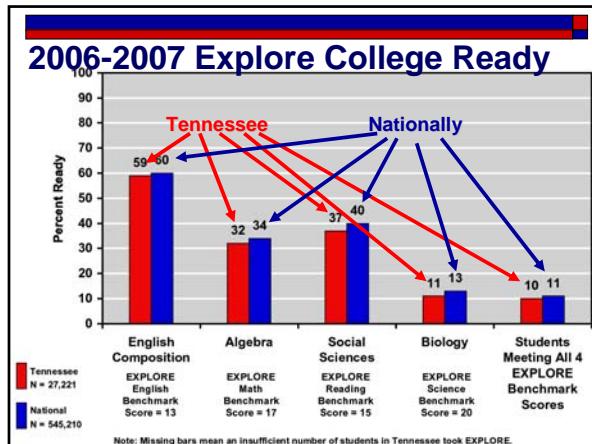
- **Hold students accountable** to pass the end-of-course test subjects while counting the test score **25% of yearly grade**.
- **Hold schools and teachers accountable** to insure student’s mastery level as measured by the end-of-course tests is reflected by the teacher assigned grades.

Assessments and Accountability

- Determine the feasibility of “off-the-shelf” tests such as **ACT’s “Quality Core”** vs contracting to develop a **Tennessee specific** end-of-course battery of exams.
- Work with Tennessee Board of Regents and UT to have the end-of-course exams use as one option for college placement.

Assessments and Accountability

- Provide **alternative performance** based assessments of identified core academic skills contained within a course for students whose **disability** adversely effects performance on the end-of-course examination.
- Add **additional points** to the end-of-course score when the alternative performance based assessment is positive.



Student Interventions Beginning in Grade 4

- Following a full administration of the Explore exam in 8th grade, projections for reaching **benchmark performance measures** will be developed beginning with 4th grade.
- Schools will be able to **identify at-risk students** who are behind and will need special help to catch up.
- Interventions should begin as early as possible to **avoid continued slippage** of academic development.

What the Research Says

- The ninth grade is a make-or-break year.**
- Nearly **90%** of freshmen in Chicago public schools who **missed less than a week** of school per semester **graduated** within four years.
- Missing **five to nine days** a semester was enough to drop to a **63% graduation rate**.
- There is much that educators can do to help students **transition** more successfully into high school.

What the Research Says

- More than **95 percent of students with a B average or better as freshmen** grade graduate.
- Freshmen who earn a **B average or better** have an **80%** chance of finishing high school with at least a **3.0 GPA**.
- Freshmen with **less than a C average** are more likely to **drop out** than graduate.

What Can We Encourage Parents to Do?

- Reinforce the importance of getting to **school on time and not cutting class**.
- Talk with their student's teachers about **how they can help their children succeed**.
- Make **academics the parent's top priority** for their child.

What Can We Encourage School Boards and Superintendents to Do?

- Provide strong **leadership** towards the common goal of ensuring that all students are college and work ready
- Believe that there is a sense of **urgency** as we work toward this goal
- Be **committed** for the long-term to seeing the agenda implemented
- More importantly, have **high expectations** for all students and provide the interventions and programs that help every student reach his/her full potential

What we know to be true...



In 2007-2010, the Governor and the legislature will expect:

1. **Higher standards** for proficiency and academic performance;
2. **True accountability** for students, teachers, and local school systems;
3. **Proficient = Proficient** whether a state assessment or a national assessment

State Board Actions January 2008

First Reading:

- Course Substitution of JROTC for Personal Finance
 - First reading allowing participation in **JROTC program to substitute for personal finance** requirement.

State Board Actions January 2008

Final Reading:

- Family & Consumer Sciences Curriculum Standards
- Agricultural Education Curriculum Standards
- Technology Engineering Education Curriculum Standards
- Science Curriculum Standards, 9-12

State Board Actions January 2008

Final Reading:

- Career and Technical Course Title Changes
- The addition of **Personal Finance** as a course may be substituted for the recently approved Personal Finance course and be **taught for career and technical education credit** in the areas of Family and Consumer Sciences and Business Education. The standards for the Personal Finance course are unchanged from the recently approved Personal Finance course with the exception of the addition of a standard which will align relevant career and technical student organization activities to the personal finance content.

State Board Actions January 2008

Final Reading:

- Education Leadership Redesign: Tennessee Instructional Leadership Standards
- Education Leadership Redesign: Professional Development for Instructional Leaders
- English Curriculum Standards, K-8
- English Curriculum Standards, 9-12
- Mathematics Curriculum Standards, K-8
- Mathematics Curriculum Standards, 9-12

State Board Actions January 2008

Final Reading:

- Algebra I Employment Standards, Rule "HQ - Algebra 1"
- This course may be taught by a licensed teacher with the appropriate 7-12 math endorsement (013, 413, 001) OR by a teacher with a professional license pursuant to State Board Rule 0520-2-4-.01(1)(c), an endorsement to teach through at least **grade 8**, a passing score on the **middle school math PRAXIS**, and attendance at the state-approved, **five-day training.**

State Board Actions January 2008

- *2007 Report on Student, Teacher, & School Performance: 4 Goals*
- 1. **Student Learning: Pre-kindergarten through Higher Education (P-16)** Align curriculum content, assessments, and **entry as well as exit** requirements, and improve learning across all levels of education.
- 2. **Student Access and Transition**
Establish **seamless transitions** and access for students across education levels.

State Board Actions January 2008

- *2007 Report on Student, Teacher, & School Performance*
- 3. **Supply and Retention of Teachers**
Ensure qualified, competent teachers in every classroom through targeted **recruitment**, development, and **retention** activities.
- 4. **Teacher Development**
Maximize teaching quality through **teacher preparation** and development aligned with instructional goals.

State Board Actions January 2008

Final Reading:

- *Pre-Participation Sports Physicals. Rule*
- (a) Every child **entering school** for the first time shall have a **physical** examination.
- (b) Every student participating in **interscholastic athletics** shall have an **annual physical** examination. Additionally, examinations of students in the 7th and 9th grades who participate in interscholastic athletics shall be reported using the “**Interscholastic Sports Examination Form**” developed by the Tennessee Department of Health.

High School Transition Policy, Rule (Final Reading)

Middle School: Task is to prepare students for rigorous high school studies.

- Encourage school districts to **award high school credit** for appropriate **courses taken in middle school**.
- Encourage school districts to move courses such as **career management success and keyboarding to the middle grades**.
- Encourage **transition programs** from grade level to grade level.

High School Transition Policy, Rule

Middle School: Task is to prepare students for rigorous high school studies.

- Ensure **middle grades math and science teachers** have thorough understanding of concepts being taught. Initiate intensive **capacity building** programs much like those utilized in preparation for the Gateway Examinations.
- Administer **EXPLORE** and develop individual **intervention plans** for students who are not on track to be successful. Use “at-risk” funding to support interventions.

High School Transition Policy, Rule

High School: Task is to prepare students to be ready for college and for workforce training.

- Provide **transition programs** to help 9th graders be successful, particularly in the first reporting period.
- Administer **PLAN** and develop individual **intervention plans** for students who are not on track to be successful. Use “at-risk” funding to support interventions.

High School Transition Policy, Rule

High School: Task is to prepare students to be ready for college and for workforce training.

- Require students who do not make a **19 on the math** component of the PLAN or equivalent SAT to take a course designed to prepare students to meet college readiness standards/benchmarks.
- Make the **senior year count** by requiring students to be enrolled in a full schedule of credit bearing courses the senior year.
- Encourage **dual credit** and **early enrollment** in college.

High School Transition Policy, Rule

High School: Task is to prepare students to be ready for college and for workforce training.

- Require a **capstone** experience such as, but not limited to:
 - (1) Senior Project
 - (2) Virtual Enterprise
 - (3) Internship
 - (4) Externship
 - (5) Work-based Learning
 - (6) Service Learning (Minimum of 40 hours)
 - (7) Community Service (minimum of 40 hours)

High School Transition Policy, Rule

High School: Task is to prepare students to be ready for college and for workforce training.

- Require students to take a **mathematics class each year** of high school.
- Add **personal finance** as a **required** course and develop an employment standard to teach it.
- Require all students to complete a **one path** “ready core” of academic requirements.
- Equate the standard for obtaining an “**honors**” diploma to achieving the **ACT benchmarks** for success in all subject areas.

High School Transition Policy, Rule

- **Students with disabilities** will be included in regular classes to the degree possible and with appropriate support and accommodations.
- To earn a regular high school diploma, students with disabilities **must earn the prescribed 22 credit** minimum.
- Students failing to earn a yearly grade of 70 in a course that has an end-of-course test and whose disability adversely affects performance in that test will be allowed, through an approved process, to add to their end-of-course assessment scores by demonstrating the state identified core knowledge and skills contained within that course through an **alternative performance-based assessment**.

High School Transition Policy, Rule

- A **transition certificate** may be awarded at the end of their fourth year of high school to students with disabilities who have
 - (1) taken classes toward a high school diploma (**22 units of credit**)
 - (2) have satisfactorily **completed** an individualized education program
 - (3) have satisfactory **records of attendance and conduct**. Students who obtain the transition certificate may continue to **work towards the high school diploma** through the end of the school year in which they turn **twenty-two years old**.

High School Transition Policy, Rule

- An **IEP certificate** will be awarded to students with disabilities who have
 - (1) satisfactorily completed an individualized education **program**
 - (2) successfully completed a **portfolio**
 - (3) have satisfactory records of **attendance and conduct**.

High School Transition Policy, Rule

- Students are required to complete four units of mathematics including Algebra I and II, Geometry or the equivalent, and another mathematics course beyond Algebra I. Students must be enrolled in a mathematics course each school year. The **Bridge Math** course is designed for students who have **not scored 19** or higher on the ACT by the beginning of the senior year.
- **Students with qualifying disabilities** in math as documented in the individualized education program shall be required to achieve at least **Algebra I and Geometry** (or the equivalent). The required number of credits in math will be achieved through strategies such as, but not limited to, increased time, appropriate methodologies, and accommodations as determined by the IEP team.

High School Transition Policy, Rule

- Students must complete **Biology I, Chemistry or Physics, and a third lab science**.
- **Students with qualifying disabilities** in reading and/or math as documented in the individualized education program shall be required to achieve at least **Biology I and two other lab science credits**. The required number of credits in science will be achieved through strategies such as, but not limited to, increased time, appropriate methodologies, and accommodations as determined by the IEP team.

High School Transition Policy, Rule

- The **social studies curriculum** will be consistent with **national goals** and with admissions requirements of Tennessee public institutions of higher education; will include the study of:
 - United States History
 - World History/World Geography
 - Economics and Government
 - and will incorporate a global perspective

High School Transition Policy, Rule

- Students must complete **½ credit in Personal Finance**.
- The health, physical fitness and **wellness** curriculum will integrate concepts from each of these areas and may be taught by a team of teachers from one or more teaching areas, including health, physical education, family and nutrition sciences, and health sciences education. **Participation in marching band and interscholastic athletics may not be substituted for this aspect of the core curriculum.** Credit earned in **two years of JROTC may be substituted** provided the local system has complied with requirements of the State Board of Education.

High School Transition Policy, Rule

- Students are required to complete an additional **½ credit in Physical Education**. This requirement **may be met** by substituting a documented and equivalent time of physical activity in **marching band, JROTC, cheerleading, interscholastic athletics, school sponsored intramural athletics**, and other areas approved by the local board of education.

High School Transition Policy, Rule

- Computer education is not specifically listed in the READY CORE curriculum. However, TCA 49-6-1010 requires **every candidate for graduation to have received a full year of computer education** at some time during the candidate's educational career.



High School Transition Policy, Rule

- Students will complete an **elective focus** of no less than **three credits**.
- The elective focus may be **CTE, science and math, humanities, fine arts, AP/IB**, or other areas approved by the local board of education.
- Students completing a **CTE elective focus** must complete **three units in the same CTE program area** or state approved program of study.

High School Transition Policy, Rule

- Students will be required to complete a total of **22 units**, including electives.
- Since most high schools offer the opportunity to take at least 6 units each year, for a total of **24 units**, students will actually have an opportunity to take a considerable number of electives.
- Students who attend high schools using block scheduling have the opportunity to take a total of **32 units**.

Graduating with HONORS

- Students who score at or above all of the subject area readiness **benchmarks on the ACT** or equivalent score on the **SAT** will **graduate with HONORS**.



Graduating with DISTINCTION

- Students will be recognized as graduating with "distinction" by attaining a **B average** and completing at least one of the following:
 - earn a nationally recognized industry **certification**
 - participate in at least one of the **Governor's Schools**
 - participate in one of the state's **All State musical organizations**
 - be selected as a **National Merit Finalist of Semi-Finalist**
 - attain a score of **31** or higher composite score on the **ACT**
 - attain a score of **3** or higher on at least **two AP exams**
 - successfully complete the **International Baccalaureate Diploma Programme**
 - earn **12** or more semester hours of transcribed **postsecondary credit**

Four-Year Plan

- Prior to the 9th grade, all students will develop an initial **four-year plan** of focused and purposeful high school study.
- The plan will be **reviewed annually** and will connect the student's academic and career goals to school.



ACTIVE LEARNING

- Schools will design curriculum and implement instruction in ways that invite **students to participate in their own learning**.
- In this teaching and learning environment the **teacher serves as facilitator**.
- In both academic and technical courses, teachers will emphasize **active learning strategies** such as **cooperative learning, peer tutoring, technology, and the application of knowledge to real life situations**.
- Students will focus on fewer topics within courses but will engage them in **greater depth**.

Work-Based Learning

- Students will have access to a system of structured **work-based learning experiences** that allows them to apply classroom theories to practical problems and to explore career options at the work site.
- Work-based learning experiences may include, but are not limited to, service learning, studios, laboratories, school based enterprises, internships including clinical experiences, cooperative education, youth apprenticeship, and registered apprenticeship.
- The State Department of Education will provide school systems with a **Work-Based Learning Guide**.

Integrated Curriculum

- Schools will strive to integrate the curriculum, especially during the **ninth and tenth grades**.
- Teachers are encouraged to **integrate the curriculum both within a subject and across subjects**.
- Teachers are encouraged to work in **teams** to plan and deliver instruction.

Extra Support to Meet Student Needs

- Teachers work together in teams to **personalize learning**, and students assume more **responsibility** for their own learning.
- **Extra help and extra time** will be provided for students needing such accommodations, and all students will be held to the same high standards.

Assessment of Learning

- Assessment will reflect the concept of teaching and learning as **collaboration** between teachers and students.
- Assessment will be an **integral part** of instruction.
- In addition to paper and pencil examination, assessment may include **portfolios of student's work, performances, and demonstrations**, as well as online assessments.
- Schools are encouraged to develop graduation requirements that include **demonstrations of competency**.

ACT's Education Planning Assessment System

- The **EXPLORE** test will be given to all **eighth grade** students in the **fall**. Schools will develop interventions for students who are not performing to the level needed to be on track to reach the ACT Readiness Benchmark.
- The **PLAN** test will be given to all **tenth grade** students in the **fall** as a mid-point assessment of progress toward meeting the ACT Readiness Benchmark scores. The intervention plans for students who have not progressed sufficiently will be adjusted to better assist students to reach the ACT Readiness Benchmark scores.
- The **ACT** test will be provided to all **eleventh grade** students. Schools should use the % of students meeting or exceeding each ACT Readiness Benchmark score as a measure of progress in their academic program.

End-of-Course Examinations

- End-of-course examinations will be given in English I, English II, English III, Algebra I, Geometry, Algebra II, U.S. History, Biology I, Chemistry and Physics.
 - Fall of 2009 and 2010 - **20%**
 - Fall of 2011 and 2012 - **25%**
 - Fall of 2013 and thereafter - **25%**

End-of-Course Examinations

- Further, the results of these examinations will be factored into the student's grade
 - The yearly grade will be calculated by counting the teacher assigned grades for the course 75% and counting the **end-of-course test grade 25%**. Before the first administration of the end of course tests the State Board of Education will develop and approve a schedule to allow for phasing up to the 25% weight for the test grade.
 - Students must achieve a passing score for the yearly grade in accordance with the State Board of Education's uniform grading policy.

SCHOOL-WIDE IMPROVEMENT

- Each high school will develop a shared mission and vision, school-wide goals, and a school improvement plan that is based on a needs assessment.
- The entire school staff will work together with parents and community members to develop an improvement plan.
- In working for continuous improvement, the school will collect and use student assessment information, program evaluation information and other appropriate data.

PROFESSIONAL DEVELOPMENT

- The school will be a learning community, with administrators, faculty, and students engaged in continuous learning.
- The faculty will have adequate support for **professional development** and time to work together to improve teaching and learning.
- Schools will provide **mentors** to all beginning faculty members and a planned program of induction that **extends through the early years of teaching**.

Academic Program

- **Automobile Driver Education**
- **Computer Technology**
 - 2.1. Computer Literacy
 - 2.2. BASIC
 - 2.3. Pascal
 - 2.4. FORTRAN
 - 2.5. C
 - 2.6. C++
 - 2.7. JAVA
 - 2.8. Advanced Placement Computer Science
 - 2.9. Computer Applications
 - 2.10. Interactive Multimedia Design
 - 2.11. Adventures in Computing

Academic Program

- **Visual and Performing Arts**
 - 3.1. General Music
 - 3.2. Instrumental Music I, II, III, IV
 - 3.3. Vocal/Choral Music I, II, III, IV
 - 3.4. Class Piano I, II, III, IV
 - 3.5. Music History
 - 3.6. Music Theory
 - 3.7. Visual Art I, II, III, IV
 - 3.8. Visual Art History
 - 3.9. Dance I, II, III, IV
 - 3.10. Theater I, II, III, IV
 - 3.11. Advanced Placement Music Theory
 - 3.12. Advanced Placement Art History
 - 3.13. Advanced Placement Studio Art

Academic Program

- **General Education Exploratory**
 - 4.1. General Agriculture
 - 4.2. General Home Economics
- **5. Health, Physical Education, and Wellness**
 - 5.1. Physical Education
 - 5.2. Health Education
 - 5.3. Wellness

Academic Program

- **Language Arts**
 - 6.1. English Language Arts I, II, III, IV
 - 6.2. English IV, Communication for Life*
 - 6.3. Advanced Placement English**
 - 6.4. Speech
 - 6.5. Journalism
 - 6.6. Competency English
 - 6.7. Creative Writing
 - 6.8. Latin I, II, III, IV
 - 6.9. French I, II, III, IV
 - 6.10. German I, II, III, IV
 - 6.11. Spanish I, II, III, IV
 - 6.12. Russian I, II, III, IV
 - 6.13. Japanese I, II, III, IV
 - 6.14. Other Languages I, II, III, IV
 - 6.15. English as a Second Language***

Academic Program

- **Mathematics**
 - 7.1. Traditional Mathematics Course Sequence *
 - 7.1.1. Foundations I, II**
 - 7.1.2. Technical Math**
 - 7.1.3. Algebra I***
 - 7.1.4. Technical Algebra***
 - 7.1.5. Algebra II****, *****
 - 7.1.6. Geometry****, *****
 - 7.1.7. Technical Geometry****
 - 7.1.8. Advanced Algebra and Trigonometry
 - 7.1.9. Statistics
 - 7.1.10. Discrete Mathematics with Statistics & Probability
 - 7.1.11. PreCalculus

Academic Program

- **Integrated Mathematics Course Sequence**
 - 7.2.1. Foundations I, II**
 - 7.2.2. Technical Math**
 - 7.2.3. Integrated Mathematics I***
 - 7.2.4. Integrated Mathematics II****, *****
 - 7.2.5. Integrated Mathematics III****, *****
 - 7.2.6. Advanced Algebra and Trigonometry
 - 7.2.7. Statistics
 - 7.2.8. Discrete Mathematics with Statistics & Probability
 - 7.2.9. PreCalculus
 - 7.2.10. Calculus

Academic Program

- **JROTC Military Science* * Two credits of JROTC may be substituted for one credit of wellness required for graduation, provided that the local board of education has complied with the requirements of the State Board of Education.**
- * Three credits of JROTC may be substituted for one-half unit of United States Government required for graduation.

Academic Program

- **Science**
 - 9.1. Life Science
 - 9.2. Physical Science
 - 9.3. Biology I, II
 - 9.4. Human Anatomy and Physiology
 - 9.5. Chemistry I, II
 - 9.6. Earth Science
 - 9.7. Geology
 - 9.8. Environmental Science
 - 9.9. Ecology
 - 9.10. Physics
 - 9.11. Scientific Research
 - 9.12. Advanced Placement Biology
 - 9.13. Advanced Placement Chemistry
 - 9.14. Advanced Placement Physics B, C
 - 9.15. Advanced Placement Environmental Science

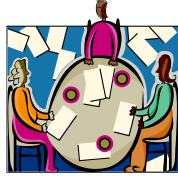
Academic Program

- **Social Studies**
 - 10.1. United States History
 - 10.2. Economics*
 - 10.3. United States Government**
 - 10.4. Psychology
 - 10.5. World Geography
 - 10.6. World History
 - 10.7. Contemporary Issues
 - 10.8. Modern History
 - 10.9. Ancient History
 - 10.10. African-American History
 - 10.11. Advanced Placement United States History
 - 10.12. Advanced Placement European History
 - 10.13. Advanced Placement World History
 - 10.14. Advanced Placement Economics
 - 10.15. Advanced Placement Government and Politics
 - 10.16. Advanced Placement Human Geography
 - 10.17. International Baccalaureate, History of the Americas HL***

Academic Program

□ Service Learning

- 11.1. Success Skills for Service Learning



Academic Program

□ Agricultural Education*

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| <ul style="list-style-type: none"> ■ 12.1. Agriscience** ■ 12.2. Fundamentals of Agriculture ■ 12.3. Advanced Principles of Agriculture ■ 12.4. Greenhouse Management ■ 12.5. Turfgrass Management ■ 12.6. Nursery Production ■ 12.7. Floral Design ■ 12.8. Exterior/Interior Landscaping ■ 12.9. Hydroponics ■ 12.10. Aquaculture ■ 12.11. Horticulture Technology ■ 12.12. Horse Science ■ 12.13. Small Animal Care | <ul style="list-style-type: none"> ■ 12.14. Livestock Management ■ 12.15. Principles of Veterinary Science ■ 12.16. Forestry ■ 12.17. Wildlife Management ■ 12.18. Soil and Land Management ■ 12.19. Crop Science ■ 12.20. Agricultural Power and Equipment ■ 12.21. Agricultural Mechanics and Maintenance ■ 12.22. Principles of Agricultural Engineering ■ 12.23. Leadership ■ 12.24. Agricultural Sales and Service ■ 12.25. Agricultural Business/Economics |
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Academic Program

□ Health Sciences Education

- 13.1. Health Science Education
- 13.2. Health Science Anatomy and Physiology*
- 13.3. Medical Therapeutics
- 13.4. Nursing Education
- 13.5. Rehabilitative Therapy
- 13.6. Emergency Medical Services
- 13.7. Health Informatics
- 13.8. Support Services
- 13.9. Diagnostic Medicine
- 13.10. Forensic Science
- 13.11. Biomedical Applications
- 13.12. Clinical Internship

Academic Program

■ 14.1. Family and Consumer Sciences

- 14.1.1. Teen Living*
- 14.1.2. Family and Consumer Sciences
- 14.1.3. Adult Living
- 14.1.4. Family and Parenting Education
- 14.1.5. Child Development
- 14.1.6. Nutrition and Foods
- 14.1.7. Nutrition Science**
- 14.1.8. Textiles and Apparel
- 14.1.9. Housing and Interior Design
- 14.1.10. Consumer Economics***
- 14.1.11. Interpersonal Communications
- 14.1.12. Career Connections

Academic Program

□ Occupational Education

- 14.2.1. Foundations of the Hospitality Industry
- 14.2.2. Culinary Arts I, II, and III
- 14.2.3. Early Childhood Education Careers I, II, and III

Academic Program

□ Marketing Education

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ 15.1. Marketing & Management I – Principles* ■ 15.2. Marketing & Management II – Advanced Strategies ■ 15.3. Financial Services Marketing* ■ 15.4. Entrepreneurship* ■ 15.5. Services Marketing* ■ 15.6. Marketing Research & Analysis ■ 15.7. Retail Operations* ■ 15.8. Technical Marketing | <ul style="list-style-type: none"> 15.9. Advertising & Public Relations 15.10. Organizational Leadership 15.11. Sales Management 15.12. Sports and Entertainment Marketing 15.13. Wholesale-Logistics Operations* 15.14. International Business & Marketing* 15.15. Exploration of Marketing & Management 15.16. Travel & Tourism 15.17. Hospitality Management 15.18. Foundations of Hospitality 15.19. Virtual Enterprise International* |
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Academic Program

- **Business Technology**
 - 16.1. Computer Applications
 - 16.2. Accounting I
 - 16.3. Accounting II
 - 16.4. American Business Legal Systems*
 - 16.5. Business Principles
 - 16.6. Financial Planning
 - 16.7. Business Economics**
 - 16.8. BASIC Programming
 - 16.9. C++ Programming
 - 16.10. JAVA Programming
 - 16.11. Keyboarding
 - 16.12. International Business/Marketing**
 - 16.13. eBusiness Communications
 - 16.14. Business Management
 - 16.15. Keyboarding/Document Formatting
 - 16.16. Keyboarding/Document Layout & Design
 - 16.17. Spreadsheet Applications
 - 16.18. Integrated Input Technologies
 - 16.19. Database Design/Management
 - 16.20. Administrative Management
 - 16.21. Desktop Publishing
 - 16.22. Computer Operating Systems
 - 16.23. Career Connections
 - 16.24. Computer Literacy
 - 16.25. Banking & Finance

Academic Program

- **Business Technology**
 - 16.26. Interactive Multimedia Presentations
 - 16.27. Virtual Enterprise International**
 - 16.28. Web Site - Foundations
 - 16.29. Web Page Design - Site Designer
 - 16.30. Web Page Design - eCommerce
 - 16.31. Networking Essentials
 - 16.32. Networking
 - 16.33. Information Technology Foundations

Academic Program

- **Technology Engineering Education**
 - 17.1. Foundations of Technology*
 - 17.2. Innovations and Inventions
 - 17.3. Technological Systems
 - 17.4. Engineering Processes
 - 17.5. Problems and Solutions in Technology

Academic Program

- **Contextual Academics**
 - 18.1. Principles of Technology I*
 - 18.2. Principles of Technology II**
 - 18.3. Biology for Technology***
 - 18.4. Technical Mathematics****
 - 18.5. Technical Algebra*****
 - 18.6. Technical Geometry*****
 - 18.7. English IV, Communication for Life*****

Academic Program

- **Trade and Industrial Education**
 - 19.1. Career Management Success
 - 19.2. Transportation Service Technology
 - 19.2.1. Transportation Core
 - 19.2.2. Aviation Maintenance I and II
 - 19.2.3. Introduction to Aerospace
 - 19.2.4. Theory of Flight
 - 19.2.5. Automotive: Brake Systems
 - 19.2.6. Automotive: Electrical/Electronic Systems
 - 19.2.7. Automotive: Suspension and Steering
 - 19.2.8. Automotive: Engine Performance
 - 19.2.9. Collision Repair: Non-Structural

Academic Program

- **Trade and Industrial Education**
 - 19.1. Career Management Success
 - 19.2. Transportation Service Technology
 - 19.2.10. Collision Repair: Structural
 - 19.2.11. Collision Repair: Painting and Refinishing
 - 19.2.12. Diesel: Brake Systems
 - 19.2.13. Diesel: Preventive Maintenance
 - 19.2.14. Diesel: Suspension and Steering
 - 19.2.15. Diesel: Electrical/Electronics
 - 19.2.16. Diesel: Engine
 - 19.2.17. Leisure Craft/Small Engine Technology: Engine Performance
 - 19.2.18. Leisure Craft/Small Engine Technology: Systems

Academic Program

- **Construction Technology**
 - 19.3.1. Construction Core
 - 19.3.2. Computer-Aided Drafting
 - 19.3.3. Advanced Computer-Aided Drafting
 - 19.3.4. Carpentry I and II
 - 19.3.5. Concrete I and II
 - 19.3.6. Masonry I and II
 - 19.3.7. Electrical I and II
 - 19.3.8. Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R) I and II
 - 19.3.9. Plumbing I and II
 - 19.3.10. Basic Principles of Welding
 - 19.3.11. Advanced Welding Applications

Academic Program

- **Arts and Communication Technology**
 - 19.4.1. Visual Communications
 - 19.4.2. Graphic Communications I
 - 19.4.3. Graphic Communications II
 - 19.4.4. Digital Design and Imaging
 - 19.4.5. Media Concepts
 - 19.4.6. Electronic Media Production
 - 19.4.7. Electronic Media Management and Operations
 - 19.4.8. Information Technology Foundations
 - 19.4.9. Computer Operating Systems & Hardware
 - 19.4.10. Networking
 - 19.4.11. Cabling Technology
 - 19.4.12. Web Site I – Foundations
 - 19.4.13. Web Page Design II – Site Designer
 - 19.4.14. Web Page Design III – eCommerce

Academic Program

- **Manufacturing Technology**
 - 19.5.1. Programming and Logic
 - 19.5.2. Principles of Manufacturing
 - 19.5.3. Principles of Machining and Manufacturing
 - 19.5.4. Manufacturing Applications
 - 19.5.5. Digital Electronics
 - 19.5.6. Computer-Aided Drafting
 - 19.5.7. Advanced Computer-Aided Drafting
 - 19.5.8. Principles of Engineering
 - 19.5.9. Basic Principles of Welding
 - 19.5.10. Advanced Welding Applications

Academic Program

- **Human Services**
 - 19.6.1. Principles of Cosmetology
 - 19.6.2. Design Principles of Cosmetology
 - 19.6.3. Chemistry of Cosmetology
 - 19.6.4. Criminal Justice I, II, and III
 - 19.7. Hospitality and Tourism
 - 19.7.1. Foundations of the Hospitality Industry
 - 19.7.2. Culinary Arts I, II, and III

0520-1-3-.06 GRADUATION, REQUIREMENT E.

- Graduation Requirements - Effective with the 9 grade class of 2009-2010 and thereafter.
 - (a) High School Diploma and Special Education Diploma.
 - The high school diploma will be awarded to students who (1) earn the specified 22 units of credit, and (2) have satisfactory records of attendance and conduct.

0520-1-3-.06 GRADUATION, REQUIREMENT E.

- The following 22 units shall be required for graduation for students who enter the 9th grade in 2009-10 and thereafter.

<u>Ready Core Curriculum Units</u>	
■ English Language Arts.....	4
■ Mathematics*.....	4
■ Science**.....	3
■ Social Studies***.....	3
■ Wellness.....	1
■ Physical Education.....	0.5
■ Personal Finance.....	0.5
■ Foreign Language****.....	2
■ Fine Arts****.....	1
■ Electives Focus.....	3
■ Total.....	22

9th Grade

- Students who enter **9th grade in 2009-10** and thereafter shall be required to achieve, by the time they graduate, at least the following: **Algebra I, Geometry, and Algebra II** (or the equivalents) **plus one additional mathematics** course beyond Algebra I.
- All students will be enrolled in a **math class each year**.
- **Students with qualifying disabilities** in math as documented in the individualized education program shall be required to achieve at least **Algebra I and Geometry** (or the equivalent). The required number of credits in math will be achieved through strategies such as, but not limited to, increased time, appropriate methodologies, and accommodations as determined by the IEP team.

9th Grade

- Students who enter **9th grade in 2009-10** and thereafter shall be required to achieve, by the time they graduate, at least **Biology I and either Chemistry or Physics** plus another laboratory science.
- Students with qualifying **disabilities** in reading and/or math as documented in the individualized education program shall be required to achieve at least **Biology I and two other lab science credits**. The required number of credits in science will be achieved through strategies such as, but not limited to, increased time, appropriate methodologies, and accommodations as determined by the IEP team.

State Board Actions January 2008

- **NEXT State Board MEETING: April 25, 2008**

