

# **Arrowhead High School**

## **Standards (Work in Progress)**

**2007-2008**

### **Introduction**

Staff at Arrowhead High School has been working the past few years to identify essential knowledge and skills (power standards) that students should achieve by the end of grade 10. These power standards are being shared with parents, students and the community as a means of communication to indicate what is essential for students to learn and be able to do in order to be successful upon graduation.

The power standards are developed from Wisconsin's 501 Model Academic Standards, national standards and teacher expertise. The power standards are purposefully selected within and across the areas so that teachers can focus on the most critical targets for student learning; those, which are essential for students to understand deeply. Power standards emphasize the "big ideas" and higher order thinking. Individual standards are aligned with the power standards and guide the teaching and learning for students. They are intended to reflect the mission, values and purpose of Arrowhead High School.

It is the intent of the teachers at Arrowhead High School to hold students accountable for the power standards through common assessments that are administered at the end of the course. In some cases, the power standards will be achieved at various end points in a course. The process for creating common assessments is a collaborative one as teachers create final assessments that reflect the power standards and which build in reading, writing, higher level thinking and essential knowledge and skills. Some of the format for the common assessments is designed to mirror the format used in standardized tests such as the WKCE, ACT, and PSAT.

This is work in progress as teachers refine the power standards and develop common assessments for core courses over time.

## **MISSION STATEMENT**

### **ARROWHEAD HIGH SCHOOL A SOURCE OF COMMUNITY PRIDE**

The mission of The Arrowhead High School is to provide a comprehensive public education that challenges individuals to reach their full potential. Students, school, parents, and community share the responsibility to provide an 'Arrowhead Experience' that will enable students to become responsible adults who can succeed in the future. With students as the focus of all that we do, we are committed to establishing and achieving high expectations with measurable goals that promote excellence.

July 20, 1994

## **VALUES**

The success of the Arrowhead District is dependent upon these basic values:

**People:** Students, school, parents, and the community establish a foundation based on communication, respect, trust, honesty, tolerance, and accountability, which is the source of our strength.

**Learning:** Challenging students to develop to their potential in a positive, safe, student-focused environment are the core of the 'Arrowhead Experience'. Learning within a comprehensive curriculum is accomplished through instruction, competition, cooperation, creativity, diversity, personal responsibility, and independent thinking.

**Excellence:** Through high expectations and established goals, students and staff strive to achieve first time quality.

July 20, 1994

## **Broad-Based Student Exit Goals**

Demonstrates a knowledge base and skills that are essential for success upon graduation

Uses critical thinking skills in every aspect of one's life and work

Demonstrates positive human relations and effective communication skills

Demonstrates technology literacy skills

Assumes responsibility for personal growth

Demonstrates effective citizenship skills

Makes and carries out effective post-high school plans

## **Power Standards**

Essential knowledge and skills in each of the content areas that students should possess by the end of grade 10 are listed below:

### **Language Arts**

- Use effective reading strategies to achieve their purposes in reading.
- Create or produce writing to communicate with different audiences for a variety of purposes.
- Prepare and deliver formal oral presentations appropriate to specific purposes and audiences.
- Develop their vocabulary and ability to use words, phrases, idioms, and various grammatical structures as a means of improving communication.
- Use computers to acquire, organize, analyze, and communicate information.
- Conduct research and inquiry on self-selected or assigned topics, issues, or problems and use an appropriate form to communicate their findings.

### **Mathematics**

#### **Algebra**

- Recognize, comprehend, analyze, write, solve, and apply linear algebraic expressions and sentences in real world applications
- Recognize, comprehend, analyze, write, solve, and apply quadratic expressions and sentences in real world applications
- Collect, analyze and represent data using linear, quadratic and statistical graphs and tables
- Recognize exponential situations, understand and apply their operations to real life
- Recognize polynomials, understand and apply their operations to real world situations
- Understand, calculate and apply fundamental statistical concepts

#### **Geometry**

- Understand and apply computational relationships between pairs of angles formed by transversals and intersecting lines.
- Understand and apply the relationships between pre-image and image figures under transformations.
- Understand and apply the concepts of mathematical proof using direct/indirect reasoning
- Understand and apply the algebraic relationship between order pairs and ordered triples in the coordinate plane
- Understand, calculate and apply basic right triangle trig concepts

- Understand the properties associated with 1D/2D/3D figures and perform their associated calculations
- Understand and apply the relationships between angles and arcs formed when segments and lines intersect a circle
- Understand and apply the properties associated with polygons

### **Advanced Algebra**

- Recognize, describe, and analyze functional relationships
- Identify and related the graphs of functions/relations to real world situations including linear, quadratic, exponential, variation, logarithmic, trigonometric, absolute value, piecewise linear, and conics
- Recognize and understand the solutions to equations, systems, and inequalities, algebraically, graphically, and numerically as they apply to real world applications. This includes linear, quadratic, absolute value, exponential, polynomial, trigonometric, and logarithmic functions
- Apply, understand, and explain properties, uses and representations for powers and radicals
- Identify and demonstrate an understanding of trigonometric and circular functions (sine, cosine, tangent) as they apply to real world

## **Science**

### **Science 9**

- Be able to correctly use scientific processes to design and perform investigations that lead to real world systems
- Demonstrate an understanding of the fundamental concepts of the laws of physical, earth, and space science through a dynamic evolving knowledge base
- Connect the concepts and processes of science to past, present and future real world scenarios

### **Biology**

- Communicate scientific design, results, analysis and conclusions in a variety of formats
- Understand cells, genetics, cell processes, structure and function
- Understand and be able to discuss the scientific methods of inquiry and unifying themes of organization with respect to classification/evolution/taxonomy
- Interpret and appraise the relationships in ecosystems-interactions between organisms and between organisms and the environment
- Interpret and design models for complex systems

## **Social Studies**

### **Social Studies 9**

- Identify the sources, evaluate the justification, and analyze the implications of certain rights and responsibilities of citizens
- Identify and analyze significant political benefits, problems, and solutions to problems related to federalism and the separation of powers. Emphasis on state and local government(s)
- Locate, organize, analyze and use information from various sources to understand an issue of public concern, take a position, and communicate the position
- Identify ways people may participate effectively in community affairs and the political process
- Describe how present American political parties have gained or lost influence on political decision-making and voting behavior
- Describe how past and present political parties and interest groups have gained or lost influence on political decision-making and voting behavior
- Currently – we incorporate a study Tribal Government in WI but this does not fit neatly into curriculum – could become part of US History
- Study and analyze various government and political documents of the United States

### **Geography**

- Identify the commonly accepted regions of Asia and Africa and list and explain physical, cultural, economic, and political features or attributes salient to each region
- Use maps and other geographic representations, tools to acquire, process, and report information
- Analyze the short-term and long-term effects that major changes in population in various parts of the world have had or might have on the environment
- Explain the importance of religion as a determining factor in a place's culture, people's movement, and regional impact
- Apply geographic concepts of physical features, culture, politics, and economics to interpret the present and plan for the future

### **Western Civilization**

- Explain how early humans developed physically, socially, politically, and economically into the established early civilizations
- Describe the growth of civilization as Mesopotamia and Egypt expanded and flourished
- Describe the development of the Greek culture during the different parts of its culture and history (Ancient period, Dark Ages, and Classical Period).

This includes an understanding of the key components of cultural growth; economics politics, art, science, philosophy, religion, social order)

- Explain the importance of the Roman civilization with special note of its political, religious, economic, technological, and cultural achievements, as well as important figures.
- Describe the changes during the Medieval period, including key historical figures, events, achievements, and changes in general culture
- Explain the cultural changes that brought about the Renaissance period, with emphasis on artistic, social, religious, and political changes
- Demonstrate an understanding of the social, political, and religious changes that brought about the Age of Monarchs, and explain the continued changes that lead to the rise of nationalism
- Explain the significance of the Age of Enlightenment, how it had an impact on the developments that led to the Industrial Revolution and Scientific Revolution, who the key figures and leaders were, and what new systems of technology, thought, and commerce were utilized during each period
- Appreciate and explain the political, social, economic, and religious changes that lead up to and were carried through, the revolutionary period of European history
- Identify important figures, events, and cultural changes that carried Europe through the last monarchies and into World War I.

### **United States History**

- Demonstrate critical thinking skills in analysis of controversial issues through debates and writing activities.
- Read, analyze and interpret primary and secondary sources to draw conclusions about events/people in history. (Maps, photographs, letters, diaries, essays, periodicals, websites)
- Identify and assess the variety of ethnic groups and cultures that combined to form the United States.
- Be able to show or identify the causes and effects of various military conflicts in our Nation's history and draw conclusions about the impact those conflicts had on various generations of Americans.
- Recall, select and analyze significant historical periods and the relationships among them (including political, social, and economic movements).
- Identify significant changes caused by technology, industrialization, urbanization, and population growth, and analyze the effects of these changes in the United States.

### **Economics**

- Explain the fundamental concepts of scarcity, opportunity cost, and choice
- Describe the four phases of the business cycle and determine the appropriate monetary and fiscal policy to follow during each phase

- Analyze the role that supply and demand, prices, incentives and profits play in determining what is produced and distributed in a competitive market system
- Explain how the scarcity of productive resources (human, capital, technological, material) requires the development of economic systems to make decisions about how goods and services are to be produced and distributed.
- Analyze the emergence of a global economy and the impact of free trade on the American economy.
- Describe the relationship between various economic concepts, such as inflation and unemployment, or fiscal and monetary policy.
- Explain the effect of interest rates on borrowing money and the advantage and disadvantage of using credit, as well as explain the role of interest in building wealth.

## Foreign Language

### LEVEL I

#### Listening

- Comprehend spoken language on familiar topics and respond appropriately. Understands classroom commands and directions.

#### Writing.

- Compose paragraphs in the present tense correctly using subject/verb and noun/adjective agreement (German – nominative, accusative), along with appropriate word order and sentence structure. Students are held accountable for correct spelling (including accent marks) and, in German, for capitalization of nouns.

#### Speaking

- Answer prepared oral questions in complete sentences.

#### Reading

- Read and understand directions / instructions in the target language. Recognize cognate words and find contextual clues in order to get the general idea of a reading. Answer selected response type questions concerning specific content.

#### Culture

- Demonstrate knowledge of culture as presented in Level I.

## **LEVEL II**

### Listening

- Understand spoken language that incorporates cognates, and familiar vocabulary and structures. Comprehend the main idea and some supporting ideas of selected materials.

### Writing

- Write short compositions or letters in the present / past tenses.

### Speaking and Pronunciation

- Orally, in complete sentences, to prompts in the present / past tenses, approximating native speech. .

### Reading

- Read and understand directions / instructions in the target language. Recognize cognate words and find contextual clues in order to get the general idea of a reading. Vocabulary incorporates past tense. Answer questions concerning main and supporting ideas.

### Culture

- Demonstrate knowledge of culture as presented in Level II

## **LEVEL III**

### Listening

- Understand spoken language on a variety of topics which may include some advanced structures / expressions, and differentiate between present, past, and future. Comprehend the main idea and some supporting ideas of selected materials.

### Writing

- Write compositions or letters with description and detail, incorporating a variety of verb tenses.

### Speaking and Pronunciation

- Speak using a variety of tenses and level-appropriate vocabulary, approximating native speech.

### Reading

- Read and understand intermediate level written materials of varying topics and formats. Students comprehend the main idea and key supporting ideas of selected authentic materials, and begin to make inferences.

### Culture

- Demonstrate knowledge of culture as presented in Level III.

## **Art**

- Use art as a basic way of thinking and communicating about the world
- Use ongoing reflective strategies to assess and better understand one's work and that of others during the creative process
- Assume personal responsibility for their learning and the creative process
- Communicate ideas by producing sophisticated studio art forms, such as drawings, paintings, prints, sculpture, jewelry, fibers, and ceramics
- Use visual images as tools for thinking and communicating
- Work independently, collaboratively, and with deep concentration when creating

## **Business Education**

### **Software Applications**

- Proficient at touch typing at 35 wpm for 3 minutes with no more than 3 errors on straight copy
- Proficient at document formatting to apply at school or in the business world by producing a mailable document (letters, memos, lists/outlines, reports, newsletters, excel, access) incorporating graphics and tables.
- Proficient at creating and using presentation software for school or business world use
- Proficient at manipulating the operating system (windows)

### **Internet/Multimedia**

- Proficient at understanding and creating a web page
- Proficient at creating different types of professional publications to apply at school or in the business world
- Proficient at creating, editing and manipulating images
- Proficient at creating and editing their own movies

### **World of Business X and Y**

- Incorporate money management skills to integrate at school, personally or in the business world by maintaining a budget, managing a checking account, wise stock investment decisions, understanding and preparing taxes, identify different types of insurance coverage, and understanding credit.
- Assess and choose career opportunities.

- Develop business documents necessary for obtaining employment in the business industry.
- Identify and discover the different elements necessary to become a successful entrepreneur.

### **Superwrite**

- Master an alphabetic note taking system enabling students to double their writing speed.
- Analyze reading passages and develop strategies for improved comprehension.
- Incorporate critical thinking activities to improve study and organizational skills

### **Medical Terminology and Business Practices**

- Interpret and translate 350 medical elements which combined create more than 11,000 complex medical terms.
- Assess and support the proper use of entry level office skills including, but not limited to, proper use of medical documents; proper telephone techniques used to schedule patient appointments; proper procedures used to schedule patients in person; records management; and medical communications.
- Students will be able to assess and support the preparation and organization of patients' charts. In addition, students will judge which health insurance options will support patient care and payments.
- Compare and contrast career opportunities in the healthcare industry.

### **Accounting 1 and 2**

- Develop knowledge and understanding of accounting principles and concepts.
- Demonstrate the skills of recording, reporting, analyzing and interpreting of financial information
- Generate the financial statements of a business and interpret the statements to be able to make business decisions based on the financial data.

### **Family and Consumer**

#### **Food and Nutrition**

- Demonstrate practices that strengthen the well-being of individuals and families
- Demonstrate practices that optimize nutrition and wellness for individuals and families

- Demonstrate management of resources to meet the needs of the individual and family
- Use critical and creative thinking skills to address problems in individual, family, community and work environments
- Integrate multiple life roles and responsibilities in family, work and community settings

### **Advanced Food**

- Demonstrate abilities to acquire, handle, use, and adapt foods to meet nutrition and wellness needs of individuals and families
- Evaluate factors that affect the food supply
- Analyze factors that influence nutrition and wellness practices of individuals and families
- Evaluate the impact of science and technology on food supply
- Examine legislation and regulation related to nutrition and wellness issues

### **World of Children**

- Determine trends and issues in early childhood and advocate policies that support children and their families
- Demonstrate practices, including resource management processes that promote the long term well being and development of children and families
- Evaluate developmentally appropriate practices to enhance child growth and development
- Analyze career paths within early childhood, education, and services
- Evaluate factors affecting children and families with a variety of disadvantages conditions

### **Design and Clothing**

- Analyze and interpret written technical directions found on pattern instruction sheets
- Demonstrate operational procedures and proper use of equipment required for construction textile projects
- Implement the design principles and elements
- Create products by applying knowledge and design skills

### **Developing Relationships**

- Demonstrate communication skills that contribute to positive relationships
- Apply verbal and nonverbal behaviors and attitudes that contribute to effective communication
- Determine factors that contribute to healthy and unhealthy relationships

- Examine the effect of self-esteem and self-image on relationships and life choices
- Explain how positive and negative attitudes behavior and contribute to mental health

## **Technical Education**

### **Introduction to Technology**

- Acquire measuring skills through an applied format
- Gain machine safety skills through an applied format
- Integrate tools and machinery to simulate industrial practices
- Conceive, design, and produce a final product
- Introduced and given choices to career and educational opportunities available in industry
- Develop skills required to work individually and in team settings as the process dictates relating to industrial applications.

## **Physical and Health Education**

### **Physical Education (Department)**

- Demonstrate positive sportsmanship/citizenship behaviors as they demonstrate understanding and respect for differences among all people in physical-activity settings.
- Acquire the knowledge to attain or maintain a healthy active lifestyle
- Acquire proficient skill level to participate in a variety of physical activities

### **Health**

- Acquire the knowledge to attain health literacy.
- Analyze and interpret valid health information and services using various resources.
- Maintain health-enhancing behaviors and reduce health risks.

## **Instrumental Music (Department)**

- Develop an understanding of his or her instruments ideal tone quality and will incorporate the necessary concepts to their daily performance habits.
- Translate common rhythmic figures into a counting system and determine how music is broken down mathematically.
- Develop music literacy and technical physical skills at a class B (CB I & II) or class A (Symphonic & W.E.) including scales, articulation, phrases, dynamics, advanced techniques and style.
- Critique music on a regular basis including their own individual performance as well as other members of the ensemble

- Assess conducting gestures and interpret music based on nonverbal communication from the conductor.

## **Vocal Music**

### **Treble Choir/Baritone Choir**

- Actively participate in group singing using unison and harmony.
- Participate in an introduction to sight reading using numbers and solfege
- Analyze and describe recorded music and student performances in class.
- Relate music in an historical framework through performance and listening
- Demonstrate appropriate concert etiquette as both a performer and audience member
- Demonstrate appropriate concert etiquette as both a performer and audience member

### **South Select**

- Actively participate in group singing using unison and harmony. Sing one on a part using musical styles through performance.
- Participate in advanced work in sight reading concentrating on actual literature.
- Critique music and music performances using musical terms.
- Relate music in an historical framework through performance and listening

## **Guidance**

### **Educational**

- Decide on at least three options for education beyond high school including apprenticeships, military, on-the-job training, technical college, and 4-year college. Predict personal outcome based on current grades, coursework, and activities. Electronically document the results to assist in long-range goal setting.
- Interpret educational support service options available for increasing academic success, including the testing center, peer tutoring, web based assistance, teacher tutoring, and the writing lab, and conclude personal value for accessing these resources.

### **Career Development**

- Design and construct an electronic portfolio, utilizing informed decision making skills in relationship to course selection each year of high school to discover potential career direction. Students will use a combination of personal skills assessments, strengths and weaknesses analysis, prior school experiences, and parent/teacher/peer input to make appropriate conclusions.

**Personal/Social Health**

- Verify the requirements necessary for at least one school and/or community club, sport, group or organization that interests you. Decide, based on your information, on an appropriate area to become involved in.
- Interpret the benefits and drawback to become involved in a Reconstruct one or more situations encountered in the last six months relating to peer groups and teachers involving you personally or that your directly observed. Reconstruct the situation and hypothesize various outcomes using appropriate communication skills.

**Assessment**

- Judge the results of at least one official assessment (Wisconsin Knowledge and Concepts Exam, PLAN, and/or EXPLORE) and determine two areas of academic strengths and target two areas for academic improvement.

**Library Media /Information Literacy**

- Access information and ideas to meet curricular and personal needs.
- Engage in a formal information-seeking process.
- Communicate information and ideas in a variety of forms and formats
- Demonstrate selectivity when choosing resources for classroom assignments and personal use.

Summer 2007