

Kathy Belcher
University of North Texas

*Implementing Authentic Assessment
with STEM Curriculum*





What We Will Cover

- **UNT Educational Excellence Grants**
- **FREE resources for CTE teachers**
- **Authentic Assessment Tools - Rubrics and Portfolios**
- **How to develop rubrics and e-portfolios**



Educational Excellence Grants 1999-present



WWW.CTE.UNT.EDU

CTE.unt.edu

[Home](#) | [About CTE](#) | [Contacts](#) | [PSAs](#) | [Links](#) | [Blog](#) | [FAQ](#)

TEA CAREER AND TECHNICAL
TEXAS EDUCATION AGENCY EDUCATION



Classroom
Basics

Professional
Development

Teacher
Certification

Special
Populations

Administrator's
Corner

Search

Career Cluster Links



[Additional Clusters](#)

STEM



Classroom
Basics

Professional
Development

Teacher
Certification

Special
Populations

Administrator's
Corner



Science, Technology, Engineering & Mathematics

Cluster Links

Cluster Home

Achieve Texas

Industry Certification

TEA Course Guide

Best Practices

Facilities Guide

TEKS

Scope & Sequence
2010

Resources

Curriculum

FAQ/Listserv Sign-up

Positions Available



[Curriculum Home](#)

Electronics

Overview

Expectations



[Presentation](#)



[Lesson/supporting docs](#)

Researching Careers in Electronics



[Presentation](#)



[Lesson/supporting docs](#)

Safety, It's for All of Us



[Presentation](#)



[Lesson/supporting docs](#)

Writing About Research



[Lesson/supporting docs](#)



STEM Courses - 2010

Recommended for Grades 7-8:

- Career Portals

Grades 9-10:

- Concepts of Engineering and Technology

Grades 9-12:

- Biotechnology

Grades 10-12:

- Engineering Design and Presentation
- Electronics
- Principles of Technology – Science credit



STEM Courses - 2010

Recommended for Grades 11-12:

- ❑ Advanced Biotechnology – (4th Science credit)
- ❑ Advanced Engineering Design and Presentation
- ❑ Engineering Mathematics – (4th Math credit)
- ❑ Advanced Electronics
- ❑ Robotics and Automation
- ❑ Scientific Research and Design (Science credit)
- ❑ Engineering Design and Problem Solving – (4th Science credit)

Grade 12:

- ❑ Practicum in STEM

Engineering Design Pathway



Engineering and Technology

Cluster Overview: Planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

Career Goal (O*NET Code): Mechanical Engineers (17-2141), Aerospace Engineers (17-2011), Mechanical Engineering Technicians (17-3027), Engineering Managers (11-9041), Electronics Engineering Technicians (17-3023), Mapping Technicians (17-3031), Civil Engineering Technicians (17-3022).

Student Name: _____

Grade: _____

School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

Middle School	8th	HS Courses:	(Local districts may list high school credit courses here)	Curricular Experiences:	Extracurricular Experiences:
High School	9th	Core Courses:	English I Algebra I Biology World Geography Languages other than English I Physical Education	BEST Robotics, Inc. FIRST Robotics Competition Project Lead the Way Skills USA Technology Student Association	Destination ImagiNation High School Students United with International Bridge Building Competition Marine Advanced Technology Institute National Engineering Design Competition UIL Academic Competitions VEX Robotics Competition
		Career-Related Electives:	Concepts of Engineering and Technology		
	10th	Core Courses:	English II Geometry Chemistry World History Languages other than English II	Career Learning Experiences: Career Preparation Job Shadowing Internship	Service Learning Experiences: Campus Service Organizations Community Service Volunteer Peer Mentoring/Peer Tutoring
		Career-Related Electives:	Engineering Design and Presentation		
	11th	Core Courses:	English III Algebra II Physics or Principles of Technology United States History Professional Communications		
		Career-Related Electives:	Advanced Engineering Design and Presentation or Languages other than English III		
			English IV Government/Economics	Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technological Education Center (ATEC) courses, etc.	

COLLEGE CREDIT OPPORTUNITIES – High School

Posted at CTE.unt.edu



Scope and Sequence

Cluster: Science, Technology, Engineering, Mathematics
Course Name: Concepts of Engineering and Technology (One-Half to One Credit)
Course Description: Concepts of Engineering and Technology provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.
Course Requirements: This course is recommended for students in Grades 9-10.
Required equipment: computer, CAD software (Solidworks, Inventor, etc.), printer, measuring equipment (caliper, scale, etc.) internet, word processor, PowerPoint, spreadsheet, presentation software, engineering notebook, multimeter, overhead projector

Units of Study	Knowledge and Skills	Student Expectations	Resources
1. Development of Engineering	(1) The student investigates the components of engineering and technology systems.	(A) Investigate and report on the history of engineering science; (B) Identify the inputs, processes, and outputs associated with technological systems; (C) describe the difference between open and closed systems;	EYF Chapters 1-6, EDAI Chapter 1 EYF Chapter 10, EDAI Chapter 2 EYF Chapters 1-6, EDAI Chapter 13
2. Society and Ethics	4) The student describes the factors that affect the progression of technology and the potential intended and unintended consequences of technological advances.	(A) describe how technology has affected individuals, societies, cultures, economies, and environments; (B) describe how the development and use of technology influenced past events; (C) describe how and why technology progresses; (D) predict possible changes caused by the advances of technology.	EYF Chapter 12, EDAI Chapter 1 EYF Chapters 1 and 2, EDAI Chapter 1 EYF Chapter 1, EDAI Chapter 1 EYF Chapters 1 and 2, EDAI Chapter 1 and 2



Concepts of Engineering and Technology



Photo Courtesy of Gary Payne/Denton Record-Chronicle

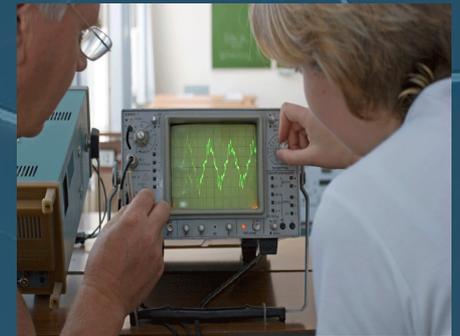


Photo Courtesy of Steve Van Meter, VideoRay



Concepts of Engineering and Technology

Electronics

Development of Engineering

Society and Ethics

Teamwork

Technical Communication

Engineering Systems

Problem Solving, Design and Modeling

Biotechnology

Team Project

Safety in the Workplace



Lesson Plan



Lesson Plan

Course Title: Concepts of Engineering and Technology

Session Title: Passport to Your Future – Technical Communication: The Resume

Performance Objective: After completing this lesson, students will be able to recognize and define the elements of a Skills Resume by creating a Skills Resume (i.e., technical communication document) that includes all of the elements requested in the Assignment: Elements of Skills Resume.

Specific Objectives:

- Recall opportunities and careers they have studied in fields related to physical and mechanical systems in preparation to learn what is included in a resume.
- Differentiate types of resumes.
- Recognize and define elements of Skills Resume.
- Apply strategies for resume writing.
- Create a Skills Resume.
- Reflect on why it's important to document their education and career success over a period of time.

Preparation

TEKS Correlations:

This lesson, as published, correlates to the following TEKS. Any changes/alterations to the activities may result in the elimination of any or all of the TEKS listed.

Concepts of Engineering and Technology:

- **130.362 (c)(9)(A)(B)(C)(D)**
 - ...describe the applications of physical and mechanical systems;
 - ...describe career opportunities in physical and mechanical systems;
 - ...apply design concepts to problems in physical and mechanical systems;
 - ...identify emerging issues in physical and mechanical systems.
- **130.362 (c)(2)(D)**
 - ...maintain a portfolio

(Portfolio)



Interdisciplinary Correlations

Interdisciplinary Correlations:

English:

- **110.44 (b)(6)(A)(B)**
...expand vocabulary through wide reading, listening and discussing;
...rely on context to determine meanings of words and phrases such as figurative language, connotation and denotation of words, analogies, idioms, and technical vocabulary.
- **110.44 (b)(7)(H)**
...use study strategies such as note taking, outlining, and using study-guide questions to better understand texts;

Desktop Publishing:

- **126.24 (c)(2)(A)(B)**
...demonstrate proficiency in the use of a variety of input devices such as mouse, keyboard, disk/disc, modem, scanner, voice/sound recorder, or digital camera by appropriately incorporating such components into the product; and
...use digital keyboarding standards in word processing such as one space after punctuation, the use of em/en dashes, and smart quotation marks.
- **126.24 (c)(3)(B)**
...demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet;
- **126.24 (c)(7)(C)(D)(E)**
...use electronic productivity tools such as the word processor to edit text including move, copy, cut and paste, and spell check;
...select and use the categories of type, font, size, style, and alignment appropriate for the task;
...apply the basic elements of page design including text, graphics, headlines, and white space;
- **126.24 (c)(8)(A)(B)**
...develop technical documentation related to desktop publishing;
...demonstrate the use of technology to participate in self-directed and practical

Accommodations

Accommodations for Learning Differences

- Lesson Plan/Curriculum Accommodations
- Guidelines and Procedures for Adapting Instruction
- Instructor Format for Curriculum Customization
- Sample Curriculum Customization for Learning Differences

Teacher Preparation:

References

Lesson Plan/Curriculum Accommodations Check

Learning Objectives

_____ Wo
 _____ Wo
 _____ Pa

INSTRUCTOR TEMPLATE FOR CURRICULUM CUSTOMIZATION FOR LEARNERS FROM SPECIAL POPULATIONS	
Task:	Font Types used in Graphic Publications
Performance Objectives:	When given the "feel" of a publication, select appropriate fonts to convey the feeling to the specified audience.
Criterion Reference Measure:	Using various publishing software applications, select appropriate fonts for publications.
Student Learning Needs:	Suzie: Visual impairment/blindness. John: Difficulties with visual skills in perception, reading, and comprehension

GUIDELINES

Visual Perception Behavior

Visual Perception Spelling, Comprehension, Reading, Preparation

Visual Perception

Visual Skills in Spelling, Memorization, Computation

Visual Perception Spelling, Handwriting, Reading, Comprehension, C

Learning Activities (Steps in Lesson)	Group Instruction Plans	Accommodations for Suzie	Accommodations for John
<ol style="list-style-type: none"> Identify major classes of font types (serif, sans serif, script). Match font types with specified document "feel" (formal, casual, playful, serious, professional, informal, etc.). Compare/contrast applications of various font types across a publication to determine appropriateness. Classify fonts by type and "feel". Complete quiz. Apply fonts to various graphic publications. 	<ol style="list-style-type: none"> Use overhead/LCD projector to display vocabulary, notes, and examples relative to lesson; also use computers to display actual fonts. Use overhead/LCD projector to compare/contrast applications of various font types across a publication using prepared slides. Show various fonts to students and have them classify according to type and "feel". Have students complete a computer-based quiz. Assign various graphic design projects to students to evaluate application of knowledge. 	<ol style="list-style-type: none"> Visual modification: Instructor or other person creates a set of 3-D flashcards for major fonts/font types (lettering should be the actual font name; i.e., serif examples could be "Times New Roman", "Bookman Old Style", "Courier New", etc.; sans serif examples could be "Arial", "Tahoma", "Impact", etc.; and script examples could be "Hanging", "Ornate", etc.) This will allow a blind student to identify and classify fonts by touch. 	<ol style="list-style-type: none"> Instructor creates notes/enlarged flashcards from slides (printed in format vs. notes handout format). Instructor highlights key terms/concepts another color. Using highlighting have related instructions (teacher aide, peer tutor, special education teacher, reading teacher) assist student in reading notes.
Materials and Resources	Resources for Suzie	Resources for John	
<ol style="list-style-type: none"> Overhead/LCD projector PowerPoint transparencies/slide show Computers Computer-based quiz Graphic design projects – problem statements, solution criteria/requirements, deadline/timeline statements, and grading rubrics 	<ol style="list-style-type: none"> 3-D flashcards Career and Technology instructor 	<ol style="list-style-type: none"> Formatted notes Career and Technology instructor Related instructor (teacher aide, peer tutor, special education teacher, reading teacher) 	
Group Evaluation Procedure/Techniques	Evaluation for Suzie	Evaluation for John	
<ol style="list-style-type: none"> Written quiz on font types (computer-based) Apply fonts to graphic publications 	Student uses flashcards to complete quiz and as a reference set for application activities.	Print hard copy of quiz with an enlarged font. Have related instructor (teacher aide, special education teacher, reading teacher) assist student in reading notes.	

Modify Vocabulary

Introduction and Outline

Introduction

Introduction (LSI Quadrant I):

SAY: Today we will reflect on what you have studied about the opportunities and careers in fields related to physical and mechanical systems; and then you will have a chance to prepare a Skills Resume for a job that you would like to have in one of these fields.

ASK: Who can name a career from one of the fields of physical and mechanical systems?

SAY: Engineering

SAY: A resume is one of the most important technical communication documents you will ever create as an engineer. The resume is the passport to an engineer's future.

ASK: What is a resume?

SHOW: Maggie Magopoulos' skills resume.

SAY: In this lesson you will create a skills resume.

ASK: Has anyone created a resume before?

SHOW: The Passport to Your Future PowerPoint.

Outline

Outline (LSI Quadrant II):

Instructors can use the PowerPoint presentation, slides, handouts, and note pages in conjunction with the following outline.

MI	Outline	Notes to Instructor
	I. Technical communication A. Technical terms & definition	Begin Microsoft PowerPoint
		Slides 1-9 Teacher will discuss the technical terms and definitions with students.
	II. What is a resume?	See Microsoft PowerPoint
		Slide 10 Teacher proceeds

	Intelligence	Description
	Verbal/ Linguistic	Communicates through language; by reading, writing, listening, and speaking
	Logical/ Mathematical	Understands logical reasoning and problems solving
	Visual/ Spatial	Understands spatial relationships; perceives and creates images based on form, line, color, and texture
	Musical/ Rhythmic	Comprehends and creates meaningful sound and recognizes patterns; uses tone, rhythm, and pitch
	Bodily/ Kinesthetic	Uses entire body skillfully to express ideas and take in knowledge; balance, coordination, dexterity, and strength
	Intrapersonal	Knows self and understands one's own behavior and feelings
	Interpersonal	Knows and understands others, is sensitive to others' feelings, moods, and motivations
	Naturalist	Understands features of the environment and makes distinctions in the natural world
	Existentialist	Relates to the entire cosmos and the "big picture" and one's place within that structure

Howard Gardner



Application and Review

Application

Guided Practice (LSI Quadrant III): Open Microsoft Word on your computer. Open the Assignment: Elements of Skills Resume document. Review the document with your students.

Independent Practice (LSI Quadrant III): Students will create a Skills Resume using Microsoft Word. Students will complete quiz puzzle The Resume: Passport to Your Future.

Summary

Review (LSI Quadrants I and IV):

Question: What is the difference between a Skills Resume and an Experience Resume?
Answer: The **Skills Resume** is for people who have not yet completed significant work experience. The **Experience Resume** highlights prior work experience related to the job for which a person is applying.

Question: What are the elements of a **Skills Resume**?

Answer: Heading, Objective, Education, Work Experience (if any), Computer Skills, Honors/Activities, References

Evaluation

Informal Assessment (LSI Quadrant III): Teacher observes as students are using Microsoft Word to create their Skills Resume. Students complete The Resume: Passport to Your Future crossword puzzle.

Formal Assessment (LSI Quadrant III, IV): Students will complete the Assignment: Elements of Skills Résumé document and answer the reflection question "It is important to be a well-rounded student with good grades, honors and awards, community service, and extracurricular activities. How important do you think it is to document this information over time?" and be assessed with the Elements of Skills Resume Rubric.

Extension

Extension/Enrichment (LSI Quadrant IV): Students will present/discuss their Skills Resume in



Assessment and Extension

Summary

Review (LSI Quadrants I and IV):

Question: What is the difference between a Skills Resume and an Experience Resume?

Answer: The **Skills Resume** is for people who have not yet completed significant work experience. The **Experience Resume** highlights prior work experience related to the job for which a person is applying.

Question: What are the elements of a **Skills Resume**?

Answer: Heading, Objective, Education, Work Experience (if any), Computer Skills, Honors/Activities, References

Evaluation

Informal Assessment (LSI Quadrant III): Teacher observes as students are using Microsoft Word to create their Skills Resume. Students complete The Resume: Passport to Your Future crossword puzzle.

Formal Assessment (LSI Quadrant III, IV): Students will complete the Assignment: Elements of Skills Résumé document and answer the reflection question "It is important to be a well-rounded student with good grades, honors and awards, community service, and extracurricular activities. How important do you think it is to document this information over time?" and be assessed with the Elements of Skills Resume Rubric.

Extension

Extension/Enrichment (LSI Quadrant IV): Students will present/discuss their Skills Resume in class.

Elements of Skills Resume Rubric



What is a Rubric?

- A set of scoring guidelines for judging student work of performance-based tasks.

Answers the question:

“What does proficiency (and varying degrees of proficiency) at a task look like?”



About Rubrics

- **Authentic Assessment Tool**
- Evaluates **process** and **content**.
- Defines range of **acceptable** and **unacceptable** performance.
- Describes each level of performance
 - **Excellent**
 - **Proficient**
 - **Unacceptable**



Advantages of Rubrics

- Helps teachers and raters to be accurate, **unbiased** and **consistent** in scoring.
- **Communicates** to students how to achieve excellence and evaluate their own work.
- Clearly shows students how work will be evaluated and **what is expected**.
- Helps students **accept responsibility** for their own learning.



Multiple Assessors

To review and critique work done according to designated standards for:

- Self-assessment
- Peer assessment
- Teacher assessment
- Other

Rubric

How Biotechnology Has Affected My Life Presentation Rubric

Task Statement: Design a PowerPoint presentation on how biotechnology has influenced someone's life and make a 3-5 minute presentation.

Task Assignment: Student teams will research how biotechnology has influenced someone's life and design a PowerPoint presentation with a cover slide, objective slide, reference slide, and pictures and make a 3-5 minute team presentation.

Criteria - Concepts/Skills to be Assessed	Criteria Categories (Novice to Exemplary)				Points Earned
	Novice 1	Developing 2	Accomplished 3	Exemplary 4	
Team research and discussion of how biotechnology has affected someone's life (Possible 25 points)	Contributes to the research and discussion 10% of the time and listens to team members (1-5 points)	Contributes to the research and discussion 25% of the time and listens to team members (6-15 points)	Contributes to the research and discussion 50% of the time and listens to team members (16-20 points)	Contributes to the research and discussion 100% of the time and listens to team members (21-25 points)	
Designs PowerPoint presentation (Possible 25 points)	Cover slide, objective slide, pictures to communicate ideas, reference slide were included in the PPT (1-5 points)	Cover slide, objective slide, pictures to communicate ideas, reference slide were included in the PPT with attention to design (6-15 points)	Cover slide, objective slide, pictures to communicate ideas, reference slide were included in the PPT with attention to design and color (16-20 points)	Cover slide, objective slide, pictures to communicate ideas, reference slide were included in the PPT, with attention to design, color, and sound (21-25 points)	
Effectiveness of the idea (how clearly presentation demonstrates safety point) (Possible 25 points)	Demonstrates effectively 1 point on affects of biotechnology (1-5 points)	Demonstrates effectively 2 points on affects of biotechnology (6-15 points)	Demonstrates effectively 3 points on affects of biotechnology (16-20 points)	Demonstrates effectively 4 points on affects of biotechnology (21-25 points)	
Team presentation and delivery (3-5 minutes) (Possible 25 points)	Makes presentation for less than 3 minutes (1-5 points)	All team members share in making 3-5 minute presentation (6-15 points)	All team members share in making 3-5 minute presentation and class (16-20 points)	All team members share equally in making 3-5 minute presentation and class applauds the effort (21-25 points)	

A = 84-100 points; B = 64-80 points; C = 24-60 points; D = 4-20 points

Total Points: _____



Portfolio and the TEKS

§130.362. Concepts of Engineering and Technology:

(2) The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:

(D) **maintain a portfolio.**



Portfolio and the TEKS

§130.374. Practicum in Science, Technology, Engineering, and Mathematics

(6) The student documents technical knowledge and skills. The student is expected to:

- (A) update a **professional portfolio** to include:
- (B) present the portfolio to all interested stakeholders such as in a poster presentation.



Student Portfolio Defined

A purposeful, organized collection of student work to show effort, progress, or degree of proficiency.



Student Portfolio

- *Assesses active learning and performance*
- *Showcases work and growth over periods of time*
- *Reflects the quality of work that students are expected to produce*
- *Reveals strengths and weaknesses through self-evaluation by the student*



The portfolio may contain...

- *Creative Cover*
- *Letter to the Reader*
- *Table of Contents*
- *Goal-Setting Page*
- *Student "Artifacts"*
- *Weekly Journals*
- *Reflections on Samples of Work*
- *Assessment – Self-Evaluation*



Teaching Aid: “Collect, Select, Reflect”

To access a teaching aid on student portfolio development , go to www.cte.unt.edu and click on the STEM icon.

Then, click on “Collect, Select, Reflect: 10 Steps for Developing Your Portfolio”



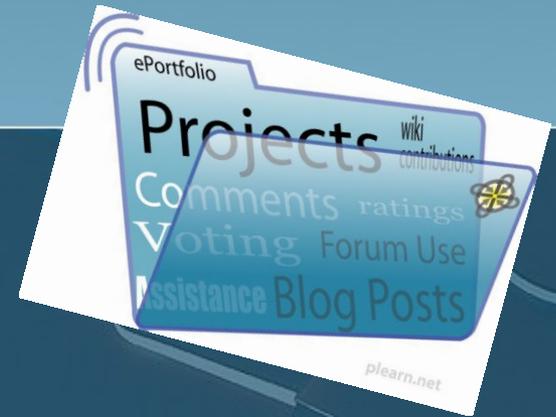
Electronic/Digital Portfolio

A portfolio that includes the use of electronic technologies that allow the portfolio developer to collect and organize artifacts in many formats (audio, video, graphics, and text).

NOT *a haphazard collection of artifacts*



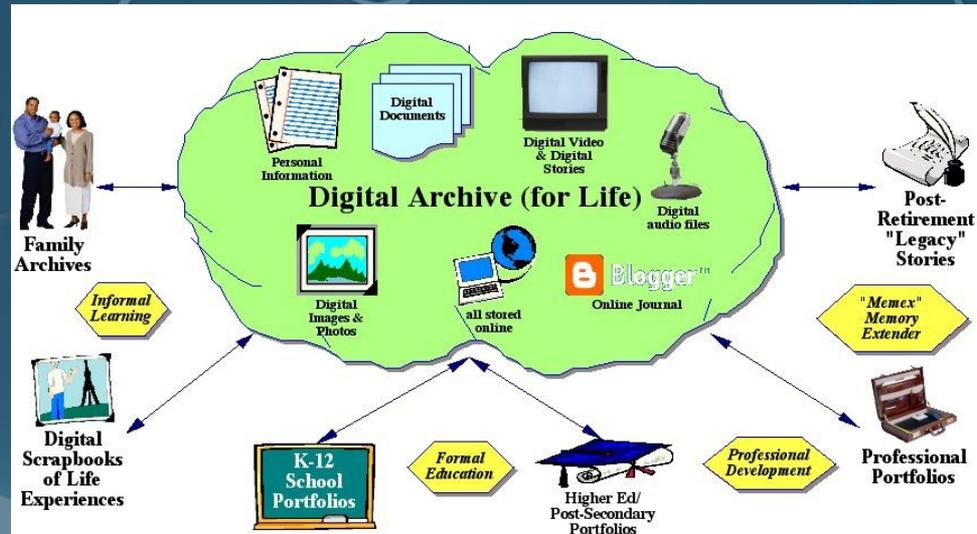
Electronic Portfolio



- Collect, Select, Reflect...
- **Project/Direct** – review reflections on learning, look ahead, set goals for future
- **Connect** – create hypertext links and publish portfolio to enable feedback from others

Most Common Types

- Working
- Display
- Assessment
- Personal/professional





Benefits

- “New generation of the 3-ring binder”
- Assessment tool
- Collaborate and assemble project work
- Portable and shareable anywhere with computer and/or internet access
- Media-rich content
- Text for narratives
- Interactive
- Expandable





Consider Before You Start

- Format to fit purpose and audience
- Basic equipment
- Select multi-media software or web authoring program
- HTML format
- Web-based program subscriptions:
<http://www.careercruising.com/> and
www.bridges.com
- Record for presentation and storage



Software Types

- Relational databases
- Hypermedia “card”
- Multimedia authoring
- World Wide Web HTML pages
- Adobe Acrobat (PDF files)
- Multimedia slideshows
- Video (digital and analog)



Defining Context and Goals

Stage 1

- Identify **purpose** and primary **audience**
- Identify **standards** or **goals**
- Identify assessment context
- Decide on software or web-based application



The Working Portfolio

Stage 2

- **Collect** digital artifacts that represent effort and achievement
- Consider **design** using graphics and layout from chosen software to show vision and style



The Reflective Portfolio

Stage 3

- **Select** digital artifacts for formal or presentation portfolio
- Include written **reflective statements** and learning goals



The Connected Portfolio

Stage 4

- Documents are converted into a format that allows **hyperlinks**
- Insert multimedia artifacts into document
- You are ready to **share** with others



The Presentation Portfolio

Stage 5

How will you record portfolio to presentation and storage medium?

- **Working Portfolio** – videotape, computer hard drive, flash drive, Zip disk, network server
- **Formal Portfolio** – CD-Recordable disc, Web server, videotape



Web Pages – HTML format

Adobe PageMill, Claris Home Page,
Microsoft FrontPage, Netscape Composer

Advantages – multimedia, cross-platform, and Web capabilities. Viewer needs ONLY Internet access and a web browser.

Disadvantage – learning curve is steep.



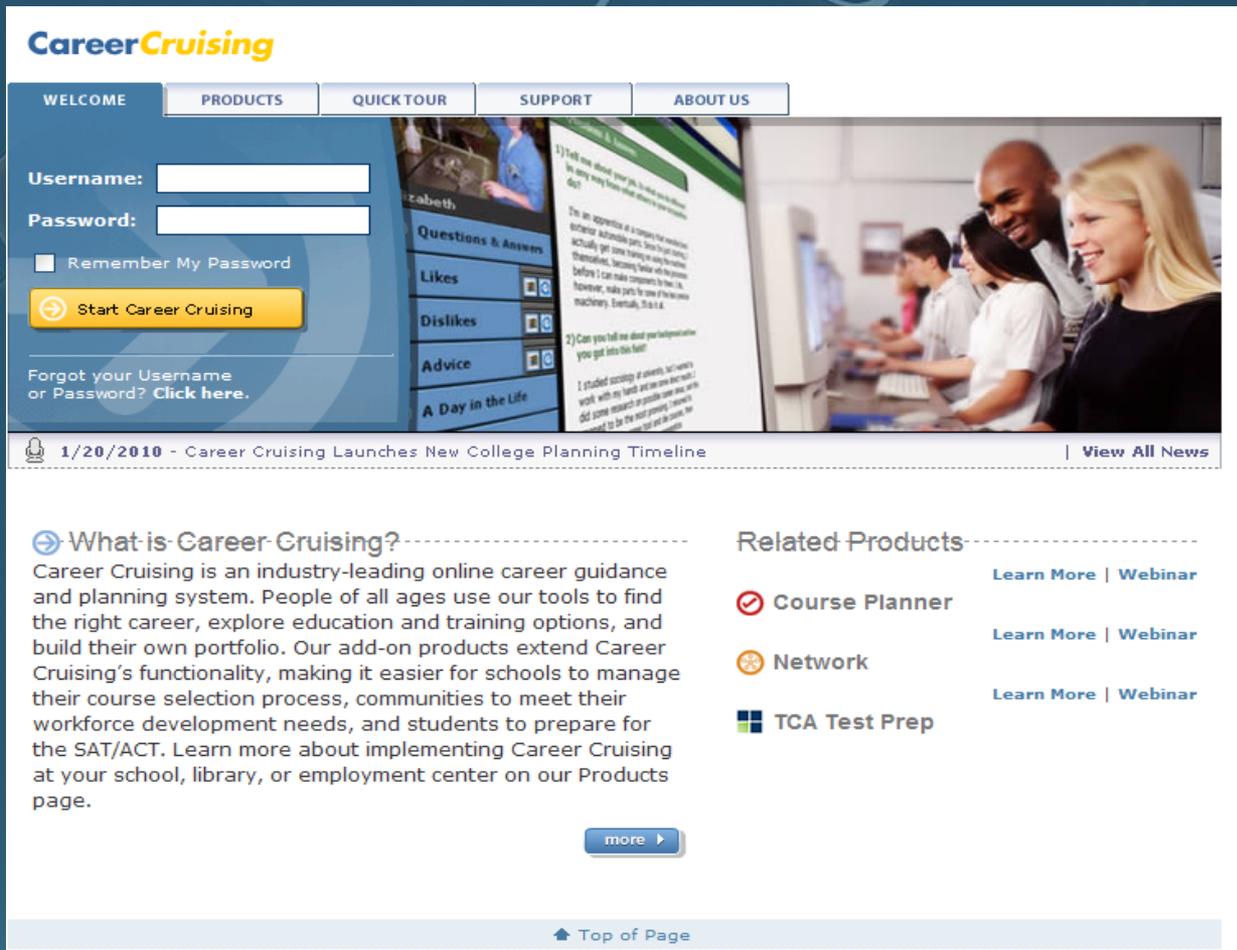
Web-based Resource

<http://www.bridges.com/us/prodnserv/index.html>

The image shows a screenshot of the Bridges website and a Career Futures application interface. The website header includes the Bridges logo with the tagline "Explore • Plan • Achieve" and navigation links for Home, Products, Services, Support, Company, and Contact Us. A search bar is located in the top right. The main content area features a banner for "Winner of District Administration Readers' Choice top 100 products 2007-08" for the "Choices PLANNER". A "LOGIN" button is present for existing customers. Below the banner are three main sections: "Education & Career Planning", "Test Prep", and "Professional Development". The "Education & Career Planning" section includes links for High School, Middle School, Elementary School, College & Career Agencies, and States and Districts. The "Test Prep" section includes links for College Entrance Exams and State & High School Exit Exams. The "Professional Development" section includes a link for Professional. The Career Futures application interface is overlaid on the right side, featuring a compass and a globe background. It has a title "Career Futures" and a sub-header "Options". The options include "Looking at Me", "Looking at Occupations", and "My Portfolio". The Bridges logo is also visible in the bottom left of the application interface.

Web-based Resource

<http://www.careercruising.com/>



The screenshot shows the CareerCruising website. At the top left is the logo "CareerCruising". Below it is a navigation menu with tabs for "WELCOME", "PRODUCTS", "QUICK TOUR", "SUPPORT", and "ABOUT US". On the left side, there is a login section with fields for "Username:" and "Password:", a "Remember My Password" checkbox, and a yellow "Start Career Cruising" button. Below the login section is a link for "Forgot your Username or Password? Click here." The main content area features a sidebar with "Questions & Answers", "Likes", "Dislikes", "Advice", and "A Day in the Life". The main content area displays a news item dated "1/20/2010" titled "Career Cruising Launches New College Planning Timeline" with a "View All News" link. Below the news item is a section titled "What is Career Cruising?" with a paragraph of text and a "more" button. To the right of this section is a "Related Products" section listing "Course Planner", "Network", and "TCA Test Prep", each with a "Learn More | Webinar" link.

CareerCruising

WELCOME PRODUCTS QUICK TOUR SUPPORT ABOUT US

Username:

Password:

Remember My Password

[Start Career Cruising](#)

Elizabeth

Questions & Answers

Likes

Dislikes

Advice

A Day in the Life

1/20/2010 - Career Cruising Launches New College Planning Timeline [View All News](#)

[What is Career Cruising?](#)

Career Cruising is an industry-leading online career guidance and planning system. People of all ages use our tools to find the right career, explore education and training options, and build their own portfolio. Our add-on products extend Career Cruising's functionality, making it easier for schools to manage their course selection process, communities to meet their workforce development needs, and students to prepare for the SAT/ACT. Learn more about implementing Career Cruising at your school, library, or employment center on our Products page.

[more](#)

Related Products

- [Course Planner](#) [Learn More | Webinar](#)
- [Network](#) [Learn More | Webinar](#)
- [TCA Test Prep](#) [Learn More | Webinar](#)

[Top of Page](#)



PDF Documents

PDF – Adobe Portable Document Format

- Created with PDF Writer or Distiller program
- Require only FREE Acrobat reader software to be read by variety of computer platforms



e-Portfolio Workshop

Adobe Acrobat 9 Pro, Photoshop,
Premiere Elements, Soundbooth

Tutorial series by Christopher Boldon:
2010 Atomic Learning, Inc.

[http://www.atomiclearning.com/k12/epor
tfolio?from_legacy=1](http://www.atomiclearning.com/k12/epor
tfolio?from_legacy=1)



Adobe Acrobat 9 Pro PDF Portfolio

4 Tools

Washington DC
June 28 - July 1, 2009

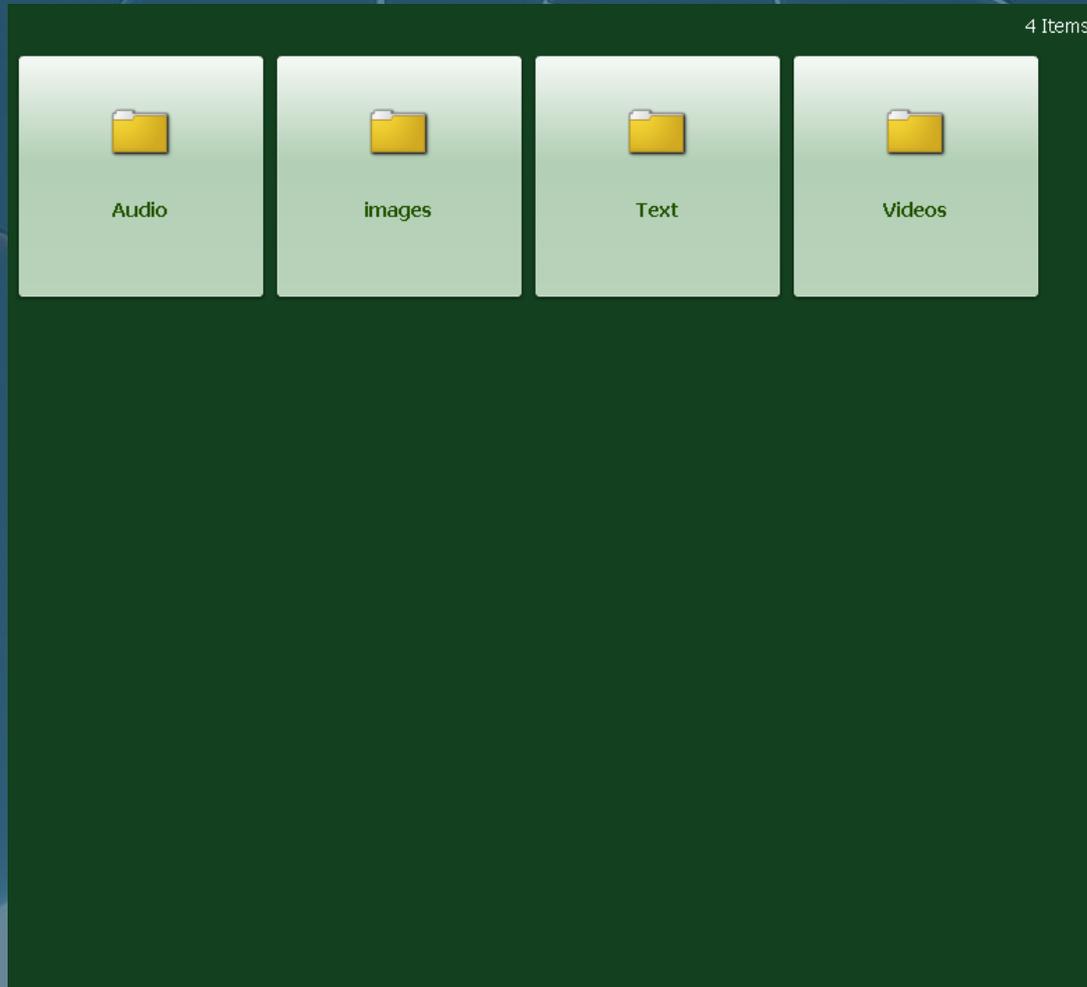
Audio Images Text Videos



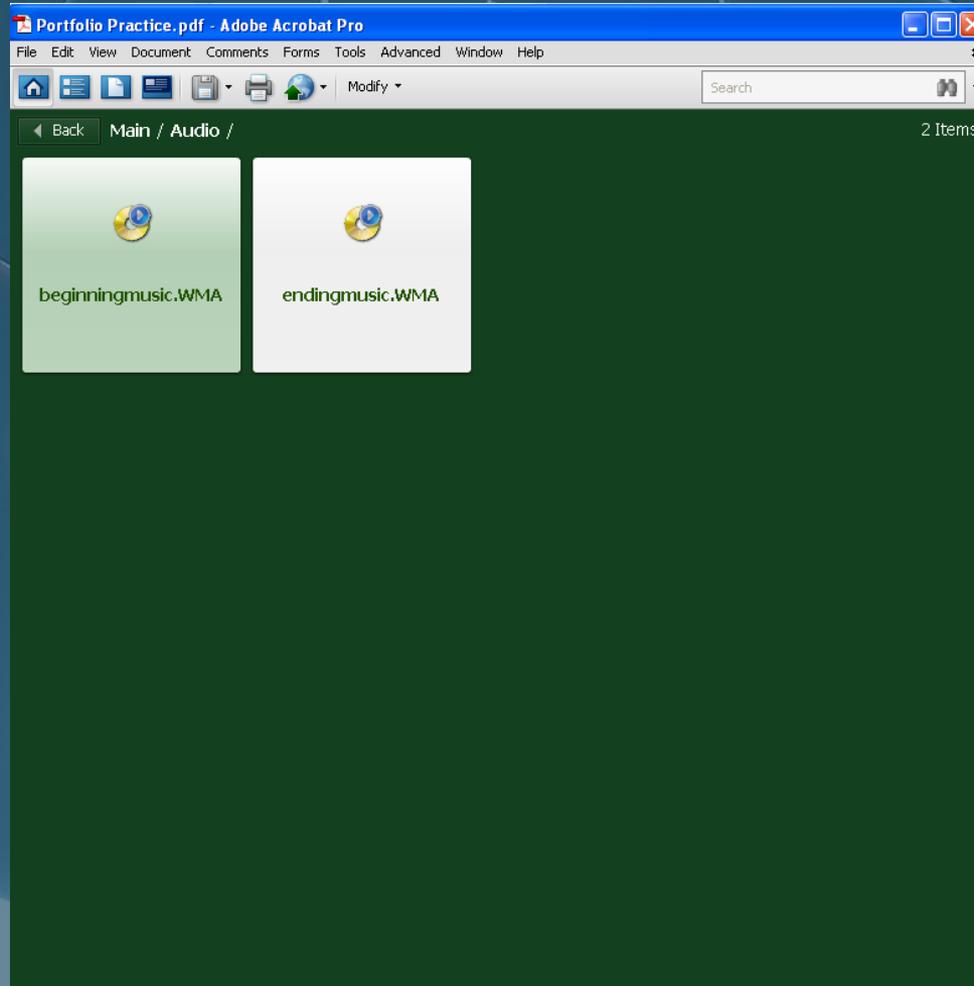
Don't show Welcome Page again



Folders for PDF files



Audio





Images

Portfolio Practice.pdf - Adobe Acrobat Pro

File Edit View Document Comments Forms Tools Advanced Window Help

Home List Save Print Refresh Modify Search

Back Main / images / 5 Items

- 
Changing of the Guard.JPG
- 
Flag Presentation1.ppt
- 
Lincoln Memorial.JPG
- 
White House 2.JPG
- 
WWII Memorial Atlantic.JPG

Text

Portfolio Practice.pdf - Adobe Acrobat Pro

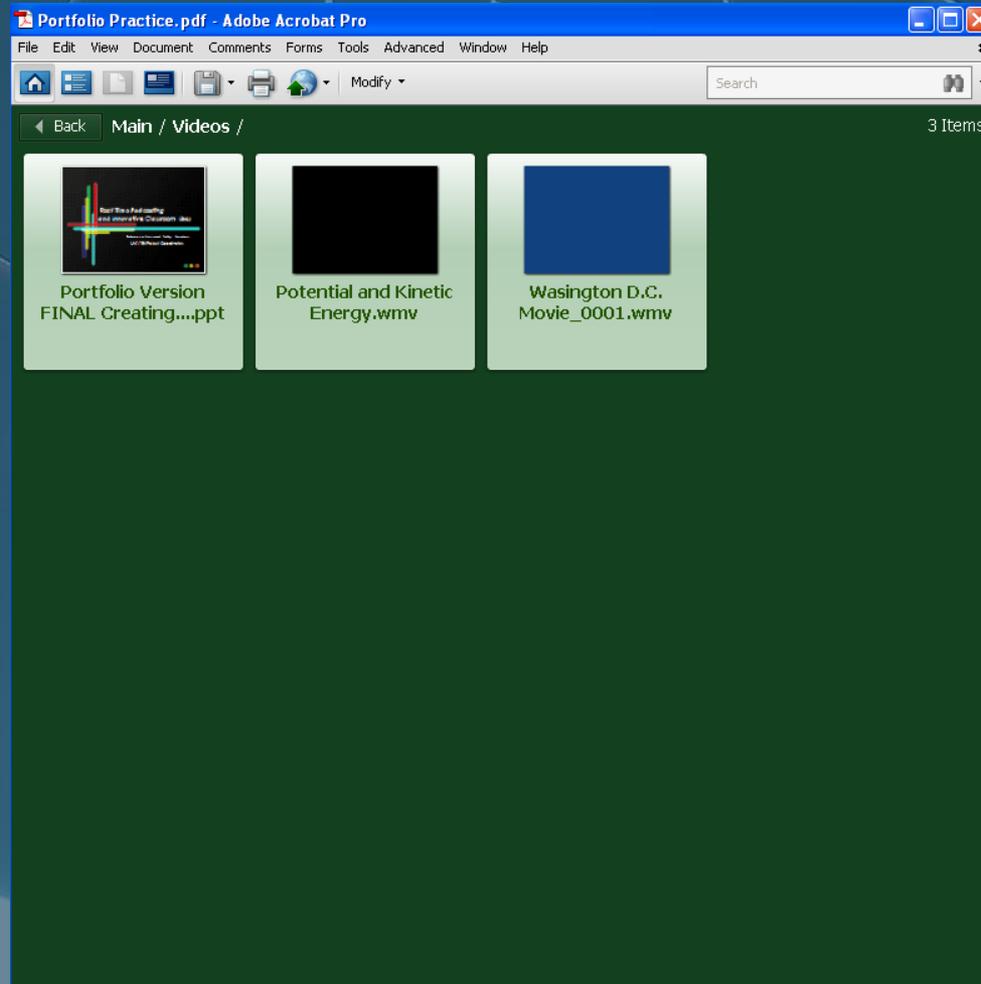
File Edit View Document Comments Forms Tools Advanced Window Help

Home Previous Next Previous Next Modify Search

Back Main / Text / 6 Items

- Classroom uses.pdf
- Podcast planning guide.pdf
- Podcast Script.pdf
- Rubric for Podcast.pdf
- Using Audacity.pdf
- Using Movie Maker.pdf

Video



Student Portfolio

Ian Vance – DISD Advanced Technology Complex

<http://www.dentonisd.org/62920619132744603/site/default.asp> x

1
2 MY PROJECTS
3
4 DESIGN BRIEF
5
6
7
8
9
10
11
12
13 TOMBSTONE
14 CONSTRAINTS
15 Visual Design Principles
16 Balance
17 Rhythm
18 Emphasis
19 Proportion and scale
20 Unity
21 Final Project
22
23



Final Project

For our final project we had to redesign an existing invention with new innovative ideas. To accomplish this we had 10 people take surveys about our product.

For my final project I chose to create a new type of compound bow release. The survey results concluded that most people preferred

- dual caliper release
- Forearm strap
- Four finger grip
- Metal grip
- Thumb button release
- People would be willing to pay as much as \$110.00 for this product



Book

*Digital Portfolios:
Powerful Tools for Promoting Professional
Growth and Reflection*

2nd edition, Corwin Press, A SAGE Publications
Company (2007) by Elizabeth Hartnell-Young.
Maureen Morriss, Foreword by Barbara Cambridge



Portfolio References

- DeFina, A. (1992). Portfolio assessment: Getting started. New York: Scholastic Professional Books.
- Boldon, C. (2010). *ePortfolio Workshop*. Retrieved February 3, 2010, from Atomic Learning, Inc. Website: http://www.atomiclearning.com/k12/eportfolio?from_legacy=1
- Barrett, H. (2000). *Create Your Own Electronic Portfolio: Using Off-the-Shelf Software to Showcase Your Own or Student Work*. Published in *Learning & Leading with Technology*. Retrieved February 4, 2010, Website: <http://electronicportfolios.com/portfolios/iste2k.html>



Rubric References

- Health Science Technology Education Assessment Tools. CD-ROM. 2006
- Rubistar: <http://rubistar.4teachers.org>
- iRubric: <http://www.rcampus.com>
- My Teacher Tools: <http://myteachertools.com>
- Rubrics4teachers: <http://www.rubrics4teachers.com>



Free Rubric Builder Sites

- Rubistar: <http://rubistar.4teachers.org>
- iRubric: <http://www.rcampus.com>
- My Teacher Tools:
<http://myteachertools.com>
- Rubrics4teachers:
<http://www.rubrics4teachers.com>

CTE Community Forum

<http://forum.cte.unt.edu/>

CTE Community Forum

USER INFO

Welcome, **Guest**. Please [login](#) or [register](#).
January 28, 2010, 03:48:18 PM

Forever

Login with username, password and session length

NEWS BOX

Welcome to the CTE Forum! Grab a cup of coffee and meet your new friends!

KEY STATS

138 Posts in **101 Topics** by **29 Members**
Latest Member: **Dr. Mickey Wirzenski**

Search: [Advanced search](#)

[HOME](#) [HELP](#) [LOGIN](#) [REGISTER](#)

CTE Community Forum

SUPPORT

- Announcements**
Forum Announcements Go Here! (Read Only)
- Information and Technical Support**
Post your questions...the experts will be here soon!
- Frequently Asked Questions (Read Only)**

General Category

- General Discussion**
Feel free to talk about anything and everything in this board.... don't embarrass grandma.
- Blogs**
Discuss the blogs at <http://cte.unt.edu/home/blog.html>
- Gallery**
Show us your pictures!

CTE Community Forum

USER INFO

Hey, **Kathy Becker**, you have 1 message, 0 are new.
Total time logged in: 2 hours and 37 minutes.
How many posts have you made?
Show new replies to your posts.
January 28, 2010, 04:21:04 PM

[Advanced search](#)

[HOME](#) [HELP](#) [LOGIN](#) [REGISTER](#)

CTE Community Forum

February 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Events: TTEC-Bus/Transportation Expo TTEC-Transportation Expo TTEC-Health Science Expo	2 Events: TTEC-STEM Expo	3 Events: TTEC-Finance Expo TTEC-IT Expo	4 Events: TTEC-IT Expo TTEC-STEM Expo TTEC-Health Science Expo	5 Events: TTEC-IT Expo	6
7 Events: Skills USA Week	8 Events: Education Open Source Conference TTEC-Conference Skills USA Week	9 Events: Education Open Source Conference TTEC-Conference Healthcare Expo Skills USA Week	10 Events: Education Open Source Conference TTEC-Conference Skills USA Week	11 Events: TTEC-Conference Skills USA Week	12 Events: TTEC-Conference Skills USA Week	13 Events: Skills USA Week
14	15 Events: National Business Week TTEC-Health Science Expo TTEC-Finance Expo TTEC-IT Expo TTEC-Health Science Expo	16 Events: National Business Week TTEC-Health Science Expo TTEC-Finance Expo TTEC-IT Expo	17 Events: National Business Week TTEC-Health Science Expo	18 Events: National Business Week TTEC-Health Science Expo TTEC-Finance Expo TTEC-IT Expo TTEC-Health Science Expo	19 Events: ATTE Conference National Business Week TTEC-Health Science Expo	20 Events: ATTE Conference National Business Week TTEC-Health Science Expo

one

58

University of North Texas Learning Technologies



Kathy Belcher
belcher@unt.edu