

**SECONDARY CURRICULUM**

**COURSE SYLLABUS**

# **Computer-Based Projects - 9180**

**Curriculum & Professional Development Division**

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Las Vegas, NV 89121

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Developed 1995, Revised May 2009  
CPD-CTE-S9180

## PREFACE

The course syllabus reflects the philosophical position stated in the Elements of Quality and the Course of Study approved as policy by the Clark County Board of School Trustees. The purpose of the syllabus is to establish minimum basic concepts for each course. **Teachers will use this syllabus in all Computer-Based Projects - 9180 classes.**

The **course scope and goals** are statements of broad direction and should facilitate the designing of a program that will meet the needs of students.

The **benchmarks** provide a correlation of the syllabus objectives to Nevada State Content and Performance Standards. They also provide the scope and instructional timeline for each quarter of the school year.

The **course structure** is an overview of the general concepts to be included in the major areas of emphasis. The numbers to the right of the structure refer to the performance objectives in the body of the syllabus.

The **performance objectives** are the minimum expectations of the completed course. They are organized statements which will be used to measure student achievement. Each objective statement includes the Bloom's Taxonomy and the Nevada content standard(s) to which the objective relates.

**Suggestions** and **suggested resources** provide classroom methodology and offer additional approaches for translating the performance objectives into actual instructional activities.

The Curriculum and Professional Development Division, using a teacher task force, developed this syllabus. Syllabi are in continuous revision. Teachers should recommend additions or revisions to the appropriate department of the Curriculum and Professional Development Division.

<b>SYLLABUS KEY:</b>		
<b>Concept one</b>	<b>1.</b>	<b>DOCUMENT CREATION.</b>
<b>Concept one, Objective one</b>	<b>1.1</b>	<b>THE STUDENT WILL DISPLAY CORRECT KEYBOARDING POSITION AND TECHNIQUE.</b>
<b>Correlation to course goal and Nevada state standard</b>		<b>(1) [NS: BE13.3; CT2.0; IT5.1]</b>
<b>Concept one, Objective one, Suggestion A</b>	<b>1.1.A</b>	<b>SUGGESTION:</b> Have students practice keyboarding utilizing the position checklist.

## COMPONENTS OF AN EFFECTIVE LESSON

### INTRODUCTION

- Set the stage for the lesson. Examples of introductory activities may include note-taking, group activities, predicting, etc.

### DAILY REVIEWS

- Provide review for short-term memory of recently taught material.
  - Provide immediate and meaningful feedback when correcting homework.
  - Keep reviews and homework checks brief.

### DAILY OBJECTIVE

- State and post the objective(s) before introducing the lesson.
- Have students record the objective(s).

### CONCEPT AND SKILL DEVELOPMENT AND APPLICATION

- Teach the big concepts.
- Provide the “why” for rules.
- Link concepts to previously learned material and/or real-world experiences.
- Use a variety of techniques to address student needs, including oral recitation, note-taking, and activities.
- Hold students accountable for taking notes and keeping records.
- Use ongoing, formative assessment to make instructional decisions.

### GUIDED / INDEPENDENT / GROUP PRACTICE

- Conduct practice at different times throughout the lesson to help students process information.
- Use a variety of activities and groupings to address student learning needs.
- Structure classroom time for student reflection, inquiry, discovery, discussion, problem-solving, and analysis.

### HOMEWORK

- Assign homework that aligns with curriculum objectives and reinforces skills and concepts taught.
- Include a variety of activities and assessment items.

### CLOSURE

- Review the skills and/or concepts taught.
- Provide a variety of ways for students to explain what they have learned and how to apply the concepts.

### LONG-TERM REVIEW

- Integrate ongoing, periodic review into lessons to maintain student skills, address deficiencies, build conceptual understanding, and prepare for high stakes tests.

## TEACHER EXPECTANCIES

<b>Success on Success Model</b>	Teach students how to study effectively and efficiently. Determine if students are visual, auditory, or kinesthetic learners and use instructional strategies that support each of these learning styles.
<b>Student -Teacher Relationships</b>	Encourage students to learn and to stay in school by communicating positively with them.
<b>Use Simple Straight-Forward Examples</b>	Use simple, straight-forward examples in initial teaching which help students focus on the big idea.
<b>Assessment</b>	Assess the progress of students throughout the lesson, and adapt the lesson according to student performance. Assessment should be balanced.
<b>Note-Taking</b>	Require and accommodate student note-taking. Notes include vocabulary, notation, concept development (pictures), pattern development, explanations for “tricks,” as well as problems.
<b>Vocabulary</b>	Emphasize vocabulary, and require students to use appropriate vocabulary to describe their learning.
<b>Reading</b>	Assign reading for daily lessons, explicitly introduce vocabulary, preview reading, make connections, check for understanding, and provide correction as needed.
<b>Writing</b>	Assign writing that causes students to think, reflect, organize their thoughts, and be able to express their knowledge.
<b>Facts and Procedures</b>	Provide students the “why” for rules and procedures.
<b>Technology Implementation</b>	Demonstrate the use of technology, and require students to use technology to build on concepts and skills.
<b>Problem Solving Process</b>	Model and utilize a variety of problem solving techniques.
<b>Memory Aids</b>	Use devices such as mnemonics, oral classroom recitation, linking, and note-taking.
<b>Questioning Strategies</b>	Incorporate different types of questions into daily lessons that include higher level questioning techniques; require students to think and discuss their understanding. Use effective wait time for student responses.

## BLOOM'S TAXONOMY - ORIGINAL

<u>TAXONOMY LEVEL</u>	<u>OPERATIONAL DEFINITION</u>	<u>ILLUSTRATIVE BEHAVIORIAL TERMS</u>
KNOWLEDGE	<ul style="list-style-type: none"> <li>Refers to the ability to remember previously learned material</li> <li>Recalls a wide range of material, from specific facts to complete theories</li> <li>Brings to mind the appropriate information</li> <li>Represents the lower level of learning outcomes in cognitive domain</li> </ul>	Defines, describes, identifies, labels, lists, matches, names, reproduces, states
COMPREHENSION	<ul style="list-style-type: none"> <li>Refers to the ability to grasp the meaning of material</li> <li>Translates material from one form to another (words to numbers); interpret material (explain or summarize)</li> <li>Goes one step beyond simple recall</li> </ul>	Converts, explains, extends, generalizes, gives examples, infers, paraphrases, rewrites, summarizes
APPLICATION	<ul style="list-style-type: none"> <li>Refers to the ability to use learned material in new and concrete situations</li> <li>Includes the application of such things as rules, methods, concepts, principles, laws, and theories</li> <li>Requires a higher level of understanding than those under comprehension</li> </ul>	Changes, computes, demonstrates, discovers, manipulates, operates, prepares, produces, relates, shows, solves, uses
ANALYSIS	<ul style="list-style-type: none"> <li>Refers to the ability to break down material into its components so that organizational structures may be understood</li> <li>Includes identification of parts, analysis of relationships between parts, and recognition of organizational principles involved</li> <li>Represents a higher intellection level than comprehension and application because they require an understanding of both content and structural form of the material</li> </ul>	Breaks down, diagrams, differentiated, discriminates, distinguishes, outlines, points out, relates, selects, separates, sub-divides
SYNTHESIS	<ul style="list-style-type: none"> <li>Refers to the ability to put parts together to form a new whole</li> <li>Involves the production of a unique communication (theme of speech), a plan of operations (research proposal), or set of abstract relations (scheme for classifying information)</li> <li>Stresses creative behaviors, major emphasis on formulation of new patterns or structures</li> </ul>	Combines, compiles, composes, creates, devises, designs, generates, modifies, organizes, plans, rearranges, reconstructs, reorganizes, revises, rewrites, writes
EVALUATION	<ul style="list-style-type: none"> <li>Involves the ability to judge the value of the material (statement, novel, poem, research report) for a given purpose</li> <li>Bases judgments on definite criteria such as internal criteria (organization) or external criteria (relevant to the purpose); determines the criteria to be given</li> <li>Ranks highest in the cognitive hierarchy because they contain elements of all of the other categories, plus conscious value judgments based on clearly defined criteria</li> </ul>	Compares, concludes, contrasts, criticizes, describes, discriminates, explains, justifies, interprets, relates, summarizes: <u>All of the foregoing with supportive evidence</u>

## BLOOM'S TAXONOMY - 21<sup>ST</sup> CENTURY

<u>TAXONOMY LEVEL</u>	<u>OPERATIONAL DEFINITION</u>	<u>ILLUSTRATIVE BEHAVIORIAL TERMS</u>
<b>REMEMBER</b>	<ul style="list-style-type: none"> <li>• Refers to the ability to remember previously learned material</li> <li>• Recalls a wide range of material, from specific facts to complete theories</li> <li>• Brings to mind the appropriate information</li> <li>• Represents the lower level of learning outcomes in cognitive domain</li> </ul>	Defines, describes, identifies, labels, lists, matches, names, reproduces, states
<b>UNDERSTAND</b>	<ul style="list-style-type: none"> <li>• Refers to the ability to grasp the meaning of material</li> <li>• Translates material from one form to another (words to numbers); interpret material (explain or summarize)</li> <li>• Goes one step beyond simple recall</li> </ul>	Converts, explains, extends, generalizes, gives examples, infers, paraphrases, rewrites, summarizes
<b>APPLY</b>	<ul style="list-style-type: none"> <li>• Refers to the ability to use learned material in new and concrete situations</li> <li>• Includes the application of such things as rules, methods, concepts, principles, laws, and theories</li> <li>• Requires a higher level of understanding than those under comprehension</li> </ul>	Changes, computes, demonstrates, discovers, manipulates, operates, prepares, produces, relates, shows, solves, uses
<b>ANALYZE</b>	<ul style="list-style-type: none"> <li>• Refers to the ability to break down material into its components so that organizational structures may be understood</li> <li>• Includes identification of parts, analysis of relationships between parts, and recognition of organizational principles involved</li> <li>• Represents a higher intellection level than comprehension and application because they require an understanding of both content and structural form of the material</li> </ul>	Breaks down, diagrams, differentiated, discriminates, distinguishes, outlines, points out, relates, selects, separates, sub-divides
<b>EVALUATE</b>	<ul style="list-style-type: none"> <li>• Involves the ability to judge the value of the material (statement, novel, poem, research report) for a given purpose</li> <li>• Bases judgments on definite criteria such as internal criteria (organization) or external criteria (relevant to the purpose); determines the criteria to be given</li> <li>• Ranks highest in the cognitive hierarchy because they contain elements of all of the other categories, plus conscious value judgments based on clearly defined criteria</li> </ul>	Compares, concludes, contrasts, criticizes, describes, discriminates, explains, justifies, interprets, relates, summarizes: <u>All of the foregoing with supportive evidence</u>
<b>CREATE</b>	<ul style="list-style-type: none"> <li>• Refers to the ability to put parts together to form a new whole</li> <li>• Involves the production of a unique communication (theme of speech), a plan of operations (research proposal), or set of abstract relations (scheme for classifying information)</li> <li>• Stresses creative behaviors, major emphasis on formulation of new patterns or structures</li> </ul>	Combines, compiles, composes, creates, devises, designs, generates, modifies, organizes, plans, rearranges, reconstructs, reorganizes, revises, rewrites, writes

## REPRODUCTION OF COPYRIGHTED WORKS BY EDUCATORS

Administrators, teachers, librarians, and other District personnel must comply with the United States copyright laws and congressional guidelines. The following are select provisions from the United States Copyright Office *Circular 21, Reproduction of Copyrighted Works by Educators and Librarians*. [Library of Congress, Copyright Office] The internal numbering/sequence is taken directly from *Circular 21*. Administrators, teachers, and librarians should also review the entire text of *Circular 21* at <http://www.copyright.gov/circs/circ21.pdf>.

### **FAIR USE IN GENERAL**

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include –

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

### **BOOKS AND PERIODICALS**

#### **Guidelines**

#### **I. Single Copying for Teachers**

A single copy may be made of any of the following by or for a teacher at his or her individual request for his or her scholarly research or use in teaching or preparation to teach a class:

- A. A chapter from a book;
- B. An article from a periodical or newspaper;
- C. A short story, short essay or short poem, whether or not from a collective work;
- D. A chart, graph, diagram, drawing, cartoon or picture from a book, periodical, or newspaper;

#### **II. Multiple Copies for Classroom Use**

Multiple copies (not to exceed in any event more than one copy per pupil in a course) may be made by or for the teacher giving the course for classroom use or discussion; provided that:

- A. The copying meets the tests of brevity and spontaneity as defined below; and,
- B. Meets the cumulative effect test as defined below; and,
- C. Each copy includes a notice of copyright

## Definitions

### Brevity

- (i) Poetry: (a) A complete poem if less than 250 words and if printed on not more than two pages or, (b) from a longer poem, an excerpt of not more than 250 words.
- (ii) Prose: (a) Either a complete article, story or essay of less than 2,500 words, or (b) an excerpt from any prose work of not more than 1,000 words or 10% of the work, whichever is less, but in any event a minimum of 500 words.

[Each of the numerical limits stated in “i” and “ii” above may be expanded to permit the completion of an unfinished line of a poem or of an unfinished prose paragraph.]

- (iii) Illustration: One chart, graph, diagram, drawing, cartoon or picture per book or per periodical issue.
- (iv) “Special” works: Certain works in poetry, prose or in “poetic prose” which often combine language with illustrations and which are intended sometimes for children and at other times for a more general audience fall short of 2,500 words in their entirety. Paragraph “ii” above notwithstanding such “special works” may not be reproduced in their entirety; however, an excerpt comprising not more than two of the published pages of such special work and containing not more than 10% of the words found in the text thereof, may be reproduced.

### Spontaneity

- (i) The copying is at the instance and inspiration of the individual teacher, and
- (ii) The inspiration and decision to use the work and the moment of its use for maximum teaching effectiveness are so close in time that it would be unreasonable to expect a timely reply to a request for permission.

### Cumulative Effect

- (i) The copying of the material is for only one course in the school in which the copies are made.
- (ii) Not more than one short poem, article, story, essay or two excerpts may be copied from the same author, nor more than three from the same collective work or periodical volume during one class term.
- (iii) There shall not be more than nine instances of such multiple copying for one course during one class term.

[The limitations stated in “ii” and “iii” above shall not apply to current news periodicals and newspapers and current news sections of other periodicals.]

## III. Prohibitions as to I and II Above

Notwithstanding any of the above, the following shall be prohibited:

- (A) Copying shall not be used to create or to replace or substitute for anthologies, compilations or collective works. Such replacement or substitution may occur whether copies of various works or excerpts there from are accumulated or reproduced and used separately.
- (B) There shall be no copying of or from works intended to be “consumable” in the course of study or of teaching. These include workbooks, exercises, standardized tests and test booklets and answer sheets and like consumable material.
- (C) Copying shall not:
  - (a) substitute for the purchase of books, publishers’ reprints or periodicals;
  - (b) be directed by higher authority;
  - (c) be repeated with respect to the same item by the same teacher from term to term.

- (D) No charge shall be made to the student beyond the actual cost of the photocopying.

## **MUSIC**

### **A. Permissible Uses**

1. Emergency copying to replace purchased copies which for any reason are not available for an imminent performance provided purchased replacement copies shall be substituted in due course.
2. For academic purposes other than performance, single or multiple copies of excerpts of works may be made, provided that the excerpts do not comprise a part of the whole which would constitute a performable unit such as a section\*, movement or aria, but in no case more than 10 percent of the whole work. The number of copies shall not exceed one copy per pupil.\*\*
3. Printed copies which have been purchased may be edited or simplified provided that the fundamental character of the work is not distorted or the lyrics, if any, altered or lyrics added if none exist.
4. A single copy of recordings of performances by students may be made for evaluation or rehearsal purposes and may be retained by the educational institution or individual teacher.
5. A single copy of a sound recording (such as a tape, disc or cassette) of copyrighted music may be made from sound recordings owned by an educational institution or an individual teacher for the purpose of constructing aural exercises or examinations and may be retained by the educational institution or individual teacher. (This pertains only to the copyright of the music itself and not to any copyright which may exist in the sound recording.)

### **B. Prohibitions**

1. Copying to create or replace or substitute for anthologies, compilations or collective works.
2. Copying of or from works intended to be “consumable” in the course of study or of teaching such as workbooks, exercises, standardized tests and answer sheets and like material.
3. Copying for the purpose of performance, except as in A(1) above.
4. Copying for the purpose of substituting for the purchase of music, except as in A(1) and A(2) above.
5. Copying without inclusion of the copyright notice which appears on the printed copy.

## **BROADCAST PROGRAMMING**

- (1) The guidelines were developed to apply only to off-air recording by non-profit educational institutions.
- (2) A broadcast program may be recorded off-air simultaneously with broadcast transmission (including simultaneous cable transmission) and retained by a non-profit educational institution for a period not to exceed the first forty-five (45) consecutive calendar days after date of recording. Upon conclusion of such retention period, all off-air recordings must be erased or destroyed immediately. “Broadcast programs” are television programs transmitted by television stations for reception by the general public without charge.
- (3) Off-air recordings may be used once by individual teachers in the course of relevant teaching activities, and repeated once only when instructional reinforcement is necessary, in classrooms and similar places devoted to instruction within a single building, cluster, or campus, as well as in the homes of students receiving formalized home instruction, during the first ten (10) consecutive school days in the forty-five (45) day calendar day retention period. “School days” are school session days—not counting

- weekends, holidays, vacations, examination periods, or other scheduled interruptions—within the forty-five (45) calendar day retention period.
- (4) Off-air recordings may be made only at the request of, and used by, individual teachers, and may not be regularly recorded in anticipation of requests. No broadcast program may be recorded off-air more than once at the request of the same teacher, regardless of the number of times the program may be broadcast.
  - (5) A limited number of copies may be reproduced from each off-air recording to meet the legitimate needs of teachers under these guidelines. Each such additional copy shall be subject to all provisions governing the original recording.
  - (6) After the first ten (10) consecutive school days, off-air recording may be used up to the end of the forty-five (45) calendar day retention period only for teacher evaluation purposes, i.e., to determine whether or not to include the broadcast program in the teaching curriculum, and may not be used in the recording institution for student exhibition or any other non-evaluation purpose without authorization.
  - (7) Off-air recordings need not be used in their entirety, but the recorded programs may not be altered from their original content. Off-air recordings may not be physically or electronically combined or merged to constitute teaching anthologies or compilations.
  - (8) All copies of off-air recordings must include the copyright notice on the broadcast program as recorded.
  - (9) Educational institutions are expected to establish appropriate control procedures to maintain the integrity of these guidelines.

## GRADUATE PROFILE CORRELATIONS

### GOALS FOR CLARK COUNTY SCHOOL DISTRICT INSTRUCTION

The following goals represent learning outcomes expected in all courses for all Clark County School District students. These goals will be integrated in context with instruction within each content area in order for students to understand and apply the fundamentals of English, mathematics, science, civics and government, history, geography economics, arts, and health fitness.

#### 1. COMMUNICATION

##### READING

The student will locate, comprehend, and interpret written information. This will include, but not be limited to books, papers, manuals, graphs, and schedules.

##### WRITING

The student will organize, compose, proof, and edit written materials appropriate to the course.

##### SPEAKING

The student will organize, compose, and present material orally.

##### LISTENING

The student will receive, interpret, and respond to oral communications, taking into account both verbal and nonverbal cues.

#### 2. RESOURCES/INFORMATION

The student will acquire, organize, interpret, and process information to make the maximum use of time, money, material, and personnel resources.

#### 3. SYSTEMS/TECHNOLOGY

The student will use appropriate technology to function effectively in various organizational systems.

#### 4. INTERPERSONAL SKILLS

The student will demonstrate effective interpersonal skills by cooperating in team situations; asserting leadership when appropriate; negotiating differences and appreciating diversity; and being willing to share skills, knowledge, and material with peers.

#### 5. PROBLEM SOLVING

The student will use analytical, logical, and creative thinking skills to solve problems, make decisions, make reasonable judgments, and generate new ideas.

#### 6. PERSONAL INVENTORY

The student will evaluate career choices and long-term options based on personal criteria.

##### WHERE AM I?

The student will assess his/her existing interests, aptitudes, knowledge, and skills. Personal qualities such as self-confidence, responsibility, integrity, and honesty will be a part of the self-assessment.

##### WHERE DO I WANT TO GO?

The student will explore a wide array of career options at all levels to formulate long-term goals.

##### HOW DO I GET THERE?

The student will interrelate his/her present status with personal long-term goals to determine the best course of action to achieve the long-term goals

## GRADUATE PROFILE SYLLABUS CORRELATION

### COMPUTER-BASED PROJECTS - 9180

The following correlation shows a sampling of objectives that meet the various goals of the Graduate Profile.

1.	COMMUNICATION	1.6, 2.5, 5.2, 6.1
2.	RESOURCES/INFORMATION	2.6, 3.3, 4.4, 5.1, 11.1
3.	SYSTEMS/TECHNOLOGY	1.9, 2.1, 3.4, 6.2,
4.	INTERPERSONAL SKILLS	3.2, 4.1, 5.4, 7.1
5.	PROBLEM SOLVING	3.4, 4.1, 4.4, 7.4
6.	PERSONAL INVENTORY	4.2, 5.5, 8.2, 11.2

The above listing is not intended to be an exhaustive correlation for every objective within the syllabus. There are many other objectives within the syllabus that fulfill one or more of the Graduate Profile Goals. In addition to the specific objective correlations, the Graduate Profile Goals can be met through using a variety of teaching strategies that reinforce communication skills, encourage the gathering and utilization of resources and information, require the use of various systems and technologies, and enhance the development of interpersonal skills and problem-solving skills. Personal inventories should be an integral aspect of the teaching strategies regularly employed by the teacher.

## COMPUTER-BASED PROJECTS – 9180

### Course Scope:

This one-year course introduces students to the use of computer applications in the production of video, audio, graphic, and digital communication projects. Students utilize a variety of technologies including webcasting, virtual learning, document collaboration, web design, and digital portfolios within the project-based learning model. Instructional practices incorporate integration of diversity awareness including appreciation of all cultures and their contributions to society. This course fulfills the one-half computer credit and one half of an elective credit or one elective credit required for high school graduation.

### Course Goals:

1. To create word processing, spreadsheet, database, multimedia, and desktop publishing digital projects utilizing various hardware and software. [NS: BE 11.6; CT 2.12.5, 3.12.6, 4.12.2; IT 5.1]
2. To demonstrate skill using external devices to create digital computer projects. [NS: CT 4.12.1, 4.12.3, 5.12.3, 5.12.3]
3. To research information resources using the Internet and Intranet. [NS: CT 2.12.7, 3.12.1, 3.12.3, 4.12.3]
4. To analyze a variety of problem-solving approaches to address the ethical issues created by technology. [NS: CT 1.12.1, 3.12.6, 4.12.2, 5.12.1, 6.12.1, 6.12.2]
5. To develop skill using digital media and the Internet to publish student work. [NS: CT 2.12.7, 3.12.2, 3.12.4, 3.12.5, 6.12.3]
6. To practice the proper use of email and web authoring as communication tools. [NS: CT 2.12.1, 2.12.7, 4.12.1, 5.12.1, 5.12.3]
7. To model cooperation, responsibility, creativity, collaboration, and initiative while working with others to complete a project. [NS: CT 1.12.1, 3.12.4, 5.12.2, 6.12.3]
8. To critique peer and personal projects in a positive, constructive manner. [NS: CT 1.12.1, 3.12.7, 6.12.4]
9. To model ergonomic practices while using a computer. [NS: CT 2.0]
10. To refine editing and proofreading skills. [NS: BE 13.2]
11. To research career and educational opportunities related to the computer industry. [NS: BE 13.6]

It is recommended that nontraditional careers be encouraged and that gender-neutral teaching materials be utilized. The emphasis on hands-on activities allows for a wide range of ability levels. Equipment, tools, and machinery should be adapted for use by students with physical handicaps and the methods of their use should be adjusted to accommodate these special needs. Additionally, instructors are encouraged to use supplemental textbooks and audiovisuals illustrating special populations. NOTE: Before presenting lessons on controversial issues, teachers should become familiar with Clark County School District Regulation 6124.2 dealing with controversial issues.

BE = Business Education  
CT = Computer Technology  
IT = Information Technology

Approved 1995, revised May 2009.

**COURSE STRUCTURE**  
**COMPUTER-BASED PROJECTS - 9180**

<b>CONTENT TOPICS</b>	<b>OBJECTIVES</b>
1. DOCUMENT CREATION	1.1 - 1.12
2. DIGITAL PROJECT CREATION	2.1 - 2.7
3. INFORMATION RESEARCH	3.1 - 3.4
4. PROBLEM-SOLVING AND ETHICAL ISSUES	4.1 - 4.4
5. THE INTERNET AND DIGITAL MEDIA	5.1 - 5.5
6. EMAIL AND WEB AUTHORIZING	6.1 - 6.5
7. COLLABORATION AND WORKING AS A TEAM	7.1 - 7.4
8. TECHNIQUES OF PROJECT EVALUATION	8.1 - 8.3
9. ERGONOMIC COMPUTER PRACTICES	9.1 - 9.3
10. PROOFREADING AND EDITING	10.1 - 10.2
11. COMPUTER CAREER RESEARCH	11.1 - 11.5

APPENDIX A – MAJOR COMPUTER PARTS  
 APPENDIX B – PARTS OF A WINDOW  
 APPENDIX C – WORD PROCESSING TERMS  
 APPENDIX D – SPREADSHEET TERMS  
 APPENDIX E – DATABASE TERMS  
 APPENDIX F – MULTIMEDIA TERMS  
 APPENDIX G – GUIDELINES FOR CCSD TYPING CERTIFICATION  
 APPENDIX H – PROOFREADER'S MARKS  
 APPENDIX I – IMPROVING INTERNET SEARCHES

## COMPUTER-BASED PROJECTS - 9180 BENCHMARKS

### QUARTER ONE - DOCUMENT CREATION

Contents-Topic	Syllabus Objectives	State Standards	Teaching Resources
Ethics / AUP Network Access Netiquette Ergonomic Computer Practices Keyboarding Word Processing Spreadsheet Proofreading and Editing	7.2  3.1 9.1 - 9.3 1.1 - 1.2 1.3 - 1.7 1.8 10.1 - 10.2	BE 3, 11, 12 CT 2, 6 IT 5	CCSD AUP Booklet and Permission Form Appropriate Appendices MicroType™ or similar keyboarding software Teacher selected textbook Microsoft Office Word™, OpenOffice™, Google Docs™, SharePoint™, Microsoft Office Excel™, MicroType™ or similar software OPAC™ software

## COMPUTER-BASED PROJECTS - 9180 BENCHMARKS

### QUARTER TWO - Presentation Software, Database, Digital Projects

Contents—Topic	Syllabus Objectives	State Standards	Teaching Resources
Presentation Software Database Digital Project Creation	1.10 1.11 1.9, 1.12, 2.1 - 2.7	BE 3, 11, 12 CT 2, 3, 4 IT 3, 5, 7	Microsoft Office PowerPoint™, OpenOffice™, Microsoft Access™, Teacher-selected textbook Web Browser Student InterAct Account, Web - Based Email

## COMPUTER-BASED PROJECTS - 9180 BENCHMARKS

### QUARTER THREE - INFORMATION AND PROBLEM SOLVING

Contents-Topic	Syllabus Objectives	State Standards	Teaching Resources
Information Research Problem Solving Digital Media	3.1 - 3.4 4.1 - 4.4 5.1 - 5.5	BE 3, 11, 12 CT 1, 3, 4, 6 IT 3, 7	Teacher selected textbook Inspiration™, Mindomo™ Student InterAct Account Adobe CS4™ Web Browser Xilisoft Video Converter™, Zamzar™ Camtasia Studio 6™

## COMPUTER-BASED PROJECTS - 9180 BENCHMARKS

### QUARTER FOUR – EMAIL, COLLABORATION, EVALUATION, CAREERS

Contents-topic	Syllabus Objectives	State Standards	Teaching Resources
Email and Web Authoring Collaboration and Teamwork Project Evaluation Computer Career Research	6.1 - 6.3 7.1 - 7.4 8.1 - 8.3 11.1 - 11.5	BE 3, 11, 13 CT 2, 3, 6 IT 7, 8	Teacher selected textbook Student InterAct Account Web Browser Adobe CS4™ Core FTP™ Camtasia Studio 6™

## **1. DOCUMENT CREATION**

### **1.1 THE STUDENT WILL DISPLAY CORRECT KEYBOARDING POSITION AND TECHNIQUE. (1) [NS: BE 13.3; CT 2.0; IT 5.1]**

1.1.A SUGGESTION: Have students practice keyboarding utilizing the following position checklist:

- a. Feet flat on floor
- b. Forearms parallel to keyboard
- c. Wrists low but not touching keyboard or desktop
- d. Fingers curved over home row keys
- e. Copy positioned in comfortable position at left or right of keyboard

1.1.B SUGGESTION: Have students demonstrate the following keyboarding technique:

- a. Fingers slightly curved over home row keys
- b. Use correct fingers on letters of alphabet (touch typing)
- c. Fingers lightly depress keys
- d. Minimum movement of hands
- e. Hands placed straight on keyboard using “g” & “h” in center of body

### **1.2 THE STUDENT WILL OPERATE ALL KEYS BY TOUCH. (1) [NS: BE 13.3; CT 2.0; IT 5.1]**

1.2.A SUGGESTION: Have students pair up and grade each other on his/her use of the correct fingers on the appropriate keys.

1.2.B SUGGESTION: Have students display knowledge of touch keying through practice, drills, and timed writings.

- a. Practice begins with a maximum number of errors allowed, but, with each week, the number will decrease.
- b. Students will complete drill assignments with a maximum number of errors, and students will practice each drill assignment until able to do so.
- c. Timed writings will be given, and students will be evaluated on accuracy.
- d. Practice work will be done without the use of the backspace key until mastery of letters is achieved (2<sup>nd</sup> Semester).
- e. Students will key at a “*gross words a minute*” rate or “*net words a minute*” rate of 35 on a 5-minute timed writing by the end of the course.
- f. Students will begin with 1-minute timings and gradually advance to 5-minute timed writings.

### **1.3 THE STUDENT WILL DEMONSTRATE COMPETENCY USING WORD PROCESSING FEATURES TO CREATE DOCUMENTS. (1, 9) [NS: BE 13.3; CT 2.0; IT 5.1]**

1.3.A TECHNOLOGY SUGGESTION: Prepare an illustration of the word processing screen and have students make observations of where the various Tabs are located. Discuss Tabs, Categories, and Groups that make up the features of the word processing screen.

1.3.B TECHNOLOGY SUGGESTION: Have students become familiar with basic word processing terminology. (See Appendix C)

- 1.3.C TECHNOLOGY SUGGESTION: Have students become familiar with file structure for the operating system.
- a. Open/Close
  - b. Save/Save As
  - c. Create Network Folders
  - d. Print
  - e. Create New Folder
  - f. Copy/Move Files
  - g. Create New Document
  - h. Deleting Files
  - i. Using Help Menu as a Reference
- 1.3.D TECHNOLOGY SUGGESTION: Have students create documents using word processing features:
- a. Add Page Border
  - b. Save a New Version
  - c. Insert ClipArt/Picture
  - d. Page Layout
  - e. Page Setup:
    - i. Page Orientation
    - ii. Margins
    - iii. Layout
  - f. Auto Text
  - g. Auto Correct
  - h. Bulleted Lists and Indents
  - i. Graphics
    - i. Drawing Tools (align, distribute, rotate, text wrap)
    - ii. Alterations (crop, draw, fill, and text wrap)
    - iii. Watermarks
    - iv. WordArt
  - j. Insert
    - i. Page Numbers
    - ii. Header/Footer
    - iii. Page Break
  - k. Merge
    - i. Merge Components
    - ii. Primary Documents (e.g. letter, envelope)
    - iii. Secondary Documents (e.g. Word<sup>®</sup> Table, Excel<sup>®</sup>, Access<sup>®</sup>)
    - iv. Mail Merge Wizard
  - l. Sort List
  - m. Switch Between Documents
  - n. Tables
    - i. Format Tables – Center Table (horizontal/vertical)
    - ii. Format Options
    - iii. Calculations
    - iv. Convert Text to Table
    - v. Insert/Delete Row
    - vi. Sort Data
    - vii. Styles
    - viii. Draw Table
  - o. Templates
    - i. New Document
    - ii. Letter and Résumé Wizard

- 1.3.E TECHNOLOGY SUGGESTION: Have students create letters using word processing features.
- 1.3.F TECHNOLOGY SUGGESTION: Have students create reports using word processing features.
- 1.3.G TECHNOLOGY SUGGESTION: Have students create a project using a custom paper size.
- 1.4 THE STUDENT WILL CREATE A WORD DOCUMENT USING VOICE RECOGNITION SOFTWARE.  
(1, 9) [NS: BE 13.3; CT 2.0, 3.0; IT 5.1]**
- 1.4.A TECHNOLOGY SUGGESTION: Have students replicate a previously assigned, keyed document, using applicable voice recognition software or free downloadable software which can be found at <http://www.e-speaking.com/> or by using the newest version of Windows®. Have students compare the two documents.
- 1.5 THE STUDENT WILL CREATE A PROJECT USING AVAILABLE TEMPLATES IN THE WORD PROCESSING SOFTWARE.  
(1, 9) [NS: BE 13.3; CT 2.0; IT 3.1, 5.1]**
- 1.5.A TECHNOLOGY SUGGESTION: Prepare several illustrations of available templates for use in creating projects of various types such as:
- a. Award Certificates
  - b. Brochures
  - c. Business Cards
  - d. Calendars
  - e. Flyers
  - f. Greeting Cards
- 1.6 THE STUDENT WILL EVALUATE CAREER CHOICES AND LONG-TERM OPTIONS BASED ON PERSONAL CRITERIA TO CREATE A RÉSUMÉ.  
(1, 9, 11) [NS: BE 13.3, 13.6; CT 2.0; IT 5.1, 8.8]**
- 1.6.A TECHNOLOGY SUGGESTION: Gather examples of several résumés and discuss with students the various ways to create a résumé. Show examples of web-based résumés.
- a. The student will organize, compose, proof, and edit a *personal* résumé about his/her high school education.
  - b. The student will organize, compose, proof, and edit a *career* résumé describing the education, suggested schools, and internships for his/her program area.
- 1.7 THE STUDENT WILL COLLABORATE WITH OTHER STUDENTS IN THE CREATION OF A GROUP PROJECT UTILIZING WORD PROCESSING SOFTWARE.  
(1, 9) [NS: BE 13.3; CT 2.0; IT 5.1]**
- 1.7.A TECHNOLOGY SUGGESTION: The students will research, organize ideas, resolve issues, provide objectives, and cohesively work as a team to create a class project. Have each student in the group use a different aspect of the word processing software to create one project. Students should use word processing in a collaborative effort--tracking, comments, balloons, markups, and document protection.
- 1.8 THE STUDENT WILL DEMONSTRATE COMPETENCY USING SPREADSHEET FEATURES.  
(1, 9) [NS: BE 11.2, 13.3; CT 2.0; IT 5.1]**

- 1.8.A SUGGESTION: Have students become familiar with spreadsheet terminology.
- a. Provide the students with an illustration of the spreadsheet screen and make a list of observations and inferences shown in the illustration.
  - b. Discuss the various ways to set up a spreadsheet.
  - c. See Appendix D
- 1.8.B TECHNOLOGY SUGGESTION: Have students create documents using the following spreadsheet features:
- a. Charts and Diagrams
    - i. Merge and Center
    - ii. Organization Charts
    - iii. Header/Footer
  - b. Worksheets
    - i. New Worksheet
    - ii. Copy Worksheets
    - iii. Link Worksheet
  - c. Center Text Over Column
  - d. Change Page Orientation
  - e. Charts (Data, Labels, Fill Effects, Scale, and Series)
  - f. Format Cells
  - g. Graphs/Charts Wizard
  - h. Importing Pictures
  - i. Insert Page Break
  - j. Merge, Center Columns
  - i. Web Hyperlinking
- 1.8.C TECHNOLOGY SUGGESTION: Have students enter and manipulate data using the touch method on the 10-key pad.
- 1.8.D TECHNOLOGY SUGGESTION: Have students work with documents to change the appearance of a spreadsheet.
- 1.8.E TECHNOLOGY SUGGESTION: Have students utilize the functions to organize a spreadsheet.
- 1.8.F TECHNOLOGY SUGGESTION: Have students work with documents by inserting formulas to perform calculations.
- 1.8.G TECHNOLOGY SUGGESTION: Have students demonstrate understanding of function formulas:
- a. Enter SUM, AVERAGE, MAXIMUM, MINIMUM, and COUNT function formulas.
  - b. Enter data and time function formulas.
- 1.8.H TECHNOLOGY SUGGESTION: Have students create and insert pie, bar, and line graphs into a worksheet.
- 1.8.I TECHNOLOGY SUGGESTION: Have students create a document that utilizes headers, footers, and page numbering.
- 1.8.J TECHNOLOGY SUGGESTION: Have students link multiple worksheets.

**1.9 THE STUDENT WILL DEMONSTRATE THE ABILITY TO CREATE DATA IN ONE SOFTWARE PROGRAM AND INCORPORATE THAT DATA INTO ANOTHER SOFTWARE PROGRAM.**

**(1, 4, 9 ,10) [NS: BE 11.5, 13.3; CT2.0; IT 5.1]**

1.9.A TECHNOLOGY SUGGESTION: Have students create documents using the following features:

- a. Using a word processing program such as Word<sup>®</sup>, have students insert a worksheet and create a numeric table and a chart.
- b. Using a spreadsheet program such as Excel<sup>®</sup>, have students copy a table into that program.

1.9.B TECHNOLOGY SUGGESTION: Have students insert a spreadsheet object such as a chart into a word processing document.

**1.10 THE STUDENT WILL DEMONSTRATE COMPETENCY IN USING MULTIMEDIA FEATURES OF PRESENTATION SOFTWARE.**

**(1, 9) [NS: BE 13.3, CT 2.0; IT 5.1]**

1.10.A TECHNOLOGY SUGGESTION: Have students become familiar with multimedia technology.

1.10.B TECHNOLOGY SUGGESTION: Have students create and present multi-page multimedia projects utilizing all the presentation functions.

1.10.C TECHNOLOGY SUGGESTION: Have students create and present multi-page multimedia projects utilizing three or more of the presentation functions.

1.10.D TECHNOLOGY SUGGESTION: Have students create presentations using the following features:

- a. Rotate Object
- b. Change Object Border
- c. Stack Object
- d. Align Object
- e. Add Animation Effect
- f. Add Transition Effect
- g. Start Slide Show
- h. Navigate Slide Show
- i. End Slide Show
- j. Use Pack and Go Wizard
- k. Formatting
  - i. Add Buttons
  - ii. Add Digital Media (photo and/or video)
  - iii. Drawing Options
  - iv. AutoShapes/3D
- l. Sound Video
  - i. CD Sound Tracks
  - ii. Voice Recordings
- m. Images
  - i. Animate Graphics
  - ii. Animate Text
- n. Table and Graphics
  - i. Add Table
  - ii. Center Table Data
  - iii. Change Chart Appearance
  - iv. Organizational Chart

- o. Slide Design
    - i. Change Color Scheme
    - ii. Change View
    - iii. Delete Slide
    - iv. Templates
    - v. Master Slide
  - p. Hyperlink Files, Programs, and Web Pages
  - q. Presentation Options
  - r. Replace Text
  - s. Switch Between Presentations
  - t. Time Presentations
  - u. Transitions
- 1.10.E TECHNOLOGY SUGGESTION: Have students design a master slide by changing background, fonts, and bullets.
- 1.10.F TECHNOLOGY SUGGESTION: Have students insert a table into their presentation.
- 1.10.G TECHNOLOGY SUGGESTION: Have students create a slideshow presentation that links to other slides, other presentations, data from other software programs, and to the Internet.
- 1.10.H TECHNOLOGY SUGGESTION: Have students develop a multimedia presentation to present to the class.
- 1.10.I TECHNOLOGY SUGGESTION: Have students take images with a digital camera and download to the computer.
- 1.10.J TECHNOLOGY SUGGESTION: Have students record audio clips to include in their presentations.
- 1.10.K TECHNOLOGY SUGGESTION: Have students manipulate digital images (i.e., crop, resize, filter, alter effects, make color adjustments, etc.) and insert these images into their slideshow presentations.
- 1.10.L TECHNOLOGY SUGGESTION: Have students investigate free, web-based multimedia software such as Animoto™, MovieMaker™, and Glogster™.
- 1.11 THE STUDENT WILL USE DATABASE FEATURES.  
(1, 9) [NS: BE 13.3, CT 2.0; IT 5.1]**
- 1.11.A TECHNOLOGY SUGGESTION: Have students create documents using the following database features:
- a. Database Objects
    - i. Tables
    - ii. Queries
    - iii. Forms
    - iv. Reports
  - b. Database Views
    - i. Table View
    - ii. Switching Views
    - iii. Query View
    - iv. Forms View
    - v. Report View
    - vi. Database Wizard
  - c. Manipulating Data

- i. Sorting
  - ii. Queries
  - iii. Delete
  - iv. Filers
  - v. Find and Replace
  - vi. Sort
- d. Forms
  - i. Form Components
  - ii. Header and Footer
  - iii. Close and Save Form
  - iv. Create Form / Form Wizard / Auto Form
  - v. Formulas
- e. Reports
  - i. Auto Reports
  - ii. Header and Footer
  - iii. Format Reports (e.g. change font)
  - iv. Change Page Layout
  - v. Create Reports
  - vi. Preview Report
  - vii. Print Report
  - viii. Reports Wizard
- f. Setting Primary Key (Access)
- g. Tables
  - i. Field Properties (Caption, Decimal Places, Default Value, Field Size, Format, Input Mask)
  - ii. Web Hyperlinking

1.11.B SUGGESTION: Have students become familiar with database terminology (See Appendix E).

1.11.C TECHNOLOGY SUGGESTION: Have students create database tables from a blank database, existing tables, and previously created tables.

1.11.D TECHNOLOGY SUGGESTION: Have students identify field names, data type, and data descriptions. Optional: identify a primary key.

1.11.E TECHNOLOGY SUGGESTION: Have students analyze and manipulate data in a database table.

1.11.F TECHNOLOGY SUGGESTION: Have students sort data in ascending and descending order, apply primary and secondary sorts, and filter data by form or by selection.

1.11.G TECHNOLOGY SUGGESTION: Have students create queries using a variety of criteria for desired results.

1.11.H TECHNOLOGY SUGGESTION: Have students create forms and reports for database tables. Use of the design view and the wizard are suggested.

1.11.I TECHNOLOGY SUGGESTION: Have students create documents using the mail merge feature.

**1.12 THE STUDENT WILL INCORPORATE THE USE OF WORDPROCESSING, SPREADSHEET, AND DATABASE SOFTWARE INTO ONE PROJECT. (1, 9) [NS: BE 13.3, CT 2.0; IT 5.1]**

1.12.A TECHNOLOGY SUGGESTION: Utilize Project Based Learning methodology to have students answer the following driving or essential question:

- a. By what methods could the current state of the Nevada economy be presented to the public?

## **2. DIGITAL PROJECT CREATION**

### **2.1 THE STUDENT WILL USE TELECOMMUNICATIONS PERIPHERALS TO PRODUCE CONTENT-RICH PROJECTS.**

**(1, 2, 5) [NS: BE 3.6; CT 2.0; IT 7.0]**

2.1.A SUGGESTION: Provide instruction for the proper use of the following:

- a. Scanners
- b. Digital picture and movie cameras
- c. Uploading/downloading audio and video files
- d. Webcams
- e. MP3 / iPod device
- f. Audio and video features of cell telephones

### **2.2 THE STUDENT WILL RECORD, EDIT, AND SAVE SOUND FILES TO AN MP3 DEVICE.**

**(1, 2, 5) [NS: CT 2.0; IT 3.2]**

2.2.A TECHNOLOGY SUGGESTION: Have students capture audio files from the Internet or a CD, save them, edit them using sound editing software, then transfer them to an MP3 device.

2.2.B TECHNOLOGY SUGGESTION: Have students create a podcast using a type of audio software.

### **2.3 THE STUDENT WILL RECORD, EDIT, AND SAVE VIDEO FILES.**

**(1, 2, 5) [NS: CT 2.0; IT 3.3]**

2.3.A TECHNOLOGY SUGGESTION: Have students use a digital camera to capture images to be inserted into presentation software or a video podcast.

2.3.B TECHNOLOGY SUGGESTION: Have students use a digital video camera to capture movie clips to be edited and inserted into presentation software or a video podcast.

2.3.C TECHNOLOGY SUGGESTION: Have students create a slideshow presentation about careers that use computers. Then have the students video record employees working and insert the \*.MPEG into the presentation.

2.3.D TECHNOLOGY SUGGESTION: Have students use video and audio recording devices to record audio and video files to create a digital media project.

2.3.E TECHNOLOGY SUGGESTION: Have students create a video project to be uploaded to an application similar to School Tube™.

### **2.4 THE STUDENT WILL USE A SCANNER.**

**(1, 2, 5) [NS: CT 2.0; IT 8.4]**

2.4.A TECHNOLOGY SUGGESTION: Have students create a flyer using a scanned picture.

2.4.B TECHNOLOGY SUGGESTION: Have students scan a graphic into a word processing file or presentation.

2.4.C TECHNOLOGY SUGGESTION: Have students identify the differences among saving a file as:

- a. \*.bmp
- b. \*.tif
- c. \*.jpg

**2.5 THE STUDENT WILL CREATE AND PARTICIPATE IN A WEBINAR.  
(1, 2, 5) [NS: BE 13.3; CT 2.0; IT 8.4]**

- 2.5.A TECHNOLOGY SUGGESTION: Using a webcam and teleconferencing software such as SCOPIA and Skype, have the student create a webinar to present a project.
- 2.5.B CULTURAL CONNECTION SUGGESTION: Have students create a videoconference or a SecondLife™ conference with a school in another country.

**2.6 THE STUDENT WILL DEMONSTRATE HOW TO ATTACH A PROJECTION UNIT TO A LAPTOP OR A PERSONAL COMPUTER.  
[1, 2, 5) [NS: BE 13.3; CT 2.0; IT 8.4]**

- 2.6.A TECHNOLOGY SUGGESTION: Have students create a presentation that will be shown to the class using an LCD projector. Consider uploading the presentation to the web and showing it from that platform.
- 2.6.B TECHNOLOGY SUGGESTION: Have students demonstrate how to connect a projection unit to a computer.

**2.7 THE STUDENT WILL UTILIZE OTHER AVAILABLE PERIPHERALS.  
(2, 5) [NS: CT 2.0; IT 7.2]**

- 2.7.A TECHNOLOGY SUGGESTION: Have students utilize other available peripherals in presentations such as:
  - a. Speakers
  - b. Microphones and Headsets
  - c. PDA
  - d. Tablet PC
  - e. Smart Boards

**3. INFORMATION RESEARCH**

**3.1 STUDENTS WILL CONDUCT INFORMATION SEARCHES ON CCSD SPONSORED ELECTRONIC DATABASES.  
(3, 4, 5) [NS: BE 11.5; CT 3.0]**

- 3.1.A SUGGESTION: Have the school librarian give a presentation on available databases.

Examples:

- a) EBSCO
  - b) Gale Science
  - c) ABC-CLIO
  - d) Litfinder
  - e) Grolier Encyclopedia
- 3.1.B TECHNOLOGY SUGGESTION: Have students conduct research, using pre-defined parameters, utilizing CCSD databases.

**3.2 STUDENTS WILL UTILIZE THE RESOURCES AVAILABLE ON THE INTERACT PORTAL.  
(3, 4, 5) [NS: BE 11.5; CT 3.0]**

- 3.2.A SUGGESTION: Arrange for each student to have an Interact account.
- 3.2.B TECHNOLOGY SUGGESTION: Have students independently complete the SOLIA lessons to become familiar with the operation of CCSD's proprietary Intranet portal.
- 3.2.C TECHNOLOGY SUGGESTION: Have students utilize the File Storage and Conference functions of Interact to collaborate on an assignment.
- 3.2.D TECHNOLOGY SUGGESTION: Have students send Interact emails and instant messages to one another in order to communicate on the project in suggestion 3.2.C.

**3.3 THE STUDENT WILL ENGAGE IN A VIRTUAL LEARNING EXPERIENCE UTILIZING  
STRUCTURED INTERNET RESEARCH.  
(3, 4, 5) [NS: BE 11.5; CT 3.0]**

- 3.3.A TECHNOLOGY SUGGESTION: Have students explore current, popular search engines.
- 3.3.B TECHNOLOGY SUGGESTION: Have students compare search results from the various search engines. Results will differ depending on the search engine used.
- 3.3.C TECHNOLOGY SUGGESTION: Have students evaluate information on Internet web sites for research purposes (See Appendix I).
- 3.3.D TECHNOLOGY SUGGESTION: Have students utilize basic Internet search strategies.
- 3.3.E TECHNOLOGY SUGGESTION: Have students optimize and refine their Internet searches using keywords, phrases, natural language, and Boolean logic.
- 3.3.F TECHNOLOGY SUGGESTION: The student will practice using different search engines and queries of an approved research topic.

**3.4 THE STUDENT WILL EXPLORE NEW EDUCATIONAL TECHNOLOGY AND SOFTWARE  
APPLICATIONS.  
(3, 4, 5) [NS: BE 11.5; CT 3.0]**

- 3.4.A TECHNOLOGY SUGGESTION: Have students research emerging trends in educational technology for instruction. (Potential uses of MP3 technology, i.e. audio books and audio clips with content specific information, Wikis, mobile devices, podcasting, collaboration webs, and social networking).

**4. PROBLEM SOLVING AND ETHICAL ISSUES**

**4.1 THE STUDENT WILL ANALYZE A VARIETY OF PROBLEM-SOLVING APPROACHES.  
(3, 4, 5) [NS: BE 13.1; CT 1.0; IT 8.1, 8.2]**

- 4.1.A TECHNOLOGY SUGGESTION: Use thought organization software to brainstorm various approaches or common practices to problem solving.
- 4.1.B TECHNOLOGY SUGGESTION: Have students locate and read current articles about the basic characteristics of our nation's strongest leaders. Require that the students seek leaders from various segments of society, such as political, religious, financial, and educational segments.

- 4.1.C TECHNOLOGY SUGGESTION: Using presentation technology, have students present their findings from suggestion 4.1.B.
- 4.1.D SUGGESTION: Discuss the power of delegation of authority while critiquing how leaders break down their responsibilities and rely on the support of co-workers to get their job done.
- 4.1.E TECHNOLOGY SUGGESTION: Have students interview a teacher or school office staff member to identify how teamwork and synergy is important in the workplace. Document the responses as a class in a collaborative spreadsheet that clearly depicts teamwork.
- 4.2 THE STUDENTS WILL IDENTIFY ETHICAL ISSUES CREATED BY TECHNOLOGY.  
(3, 4, 5) [NS: BE 8.7, 12.1, 12.3; CT 6.0]**
- 4.2.A TECHNOLOGY SUGGESTION: Students will use the Internet and CCSD databases to find current articles related to technology and ethics.
- 4.2.B TECHNOLOGY SUGGESTION: Students will brainstorm a list of the most recent ethical issues facing high school students today and have the students create a presentation on their findings using software similar to Inspiration®.
- 4.2.C TECHNOLOGY SUGGESTION: Have students research and compile a slide show about various ethics of technology terms such as:
- a. computer security
  - b. computer viruses
  - c. software piracy
  - d. e-waste
  - e. privacy
  - f. regulation
  - g. social networking
  - h. electronic posting
  - i. safe websurfing
  - j. phishing
  - k. Internet predators
  - l. cyberbullying
- 4.2.D TECHNOLOGY SUGGESTION: Have students discuss their thoughts and ideas related to piracy of software and then have the class support and defend the concept of ripping CDs. The final analysis or summary might be presented in an electronic slideshow presentation or a poster project.
- 4.2.E TECHNOLOGY SUGGESTION: Have students maintain an e-diary of their daily online ethical choices.
- 4.3 THE STUDENTS WILL RESEARCH VARIOUS TYPES OF CITATIONS REQUIRED IN A PROFESSIONAL WORK ENVIRONMENT.  
(3, 4) [NS: BE 3.7, 11.5; CT 3.0]**
- 4.3.A SUGGESTION: Invite a local attorney to be a guest speaker and address intellectual property and copyright.
- 4.3.B SUGGESTION: Students will demonstrate understanding of current laws for violation of copyright as they relate to written reports and/or music and other downloads that students access online.

- 4.3.C SUGGESTION: Contact a local university or law office that might be able to share recent student violations of copyright and plagiarism to understand the importance of proper citations and documentation of resources when creating their slideshows, MLA reports, and other items in an educational setting.
- 4.3.D SUGGESTION: Challenge students to explore the ethical issues related to personal résumés and providing references that are sound and not exaggerated.
- 4.3.E TECHNOLOGY SUGGESTION: Students will demonstrate their ability to document all sources using an accepted standard citation format. Internet-based citations machines should be investigated.
- 4.3.F TECHNOLOGY SUGGESTION: Students will create a research report that documents progress made and the impact of new and improved products and services to improve quality of life for those in need.
- 4.3.G CULTURAL CONNECTIONS SUGGESTION: Students will use the Internet to research a holiday which is celebrated in another culture. Have students word process a brief summary of the findings and create a multimedia presentation with at least two links to the country as well as the cultural celebration for that particular holiday.
- 4.4 THE STUDENTS WILL INTERPRET THE WAYS TECHNOLOGICAL SYSTEMS HAVE EVOLVED AND WILL CONTINUE TO EVOLVE TO SATISFY HUMAN NEEDS AND DESIRES.  
(3, 4) [NS: BE 12.4; CT 1.0]**
- 4.4.A TECHNOLOGY SUGGESTION: Students will research and discover the latest in technologies which are being utilized on both personal and professional work environments.
- Examples of terminology to include:  
Web cams, social networking websites, telecommuting, videoconferencing, webinars, W3C, and Section 508 (Law requiring federal agencies to make websites accessible, regardless of abilities).
- 4.4.B TECHNOLOGY SUGGESTION: Divide the class into groups and have students research basic features and costs of webcams and teleconferencing software, assuming that their workplace would need this technology. Create an attractive spreadsheet to document the cost, installation, training, etc.
- 4.4.C SUGGESTION: Students will discuss and compose a list of reasonable policies to guide company employees as they have ready access to both personal and professional email, websites, and other digital media. Decision-making skills and workplace ethics will be put into practice as they compose the company policies.
- 4.4.C TECHNOLOGY SUGGESTION: Have students compare and contrast the pros and cons of at least five different websites available for online social networking. Students will be asked to support or defend the website they feel would be the most appropriate for a professional work environment.
- 4.4.D TECHNOLOGY SUGGESTION: Students will research, discover, and document the current progress of Section 508 as it relates to the workplace. Students will create a brief multimedia presentation which includes sound and graphics and detail the ethical implications and social responsibilities of this law.

4.5.E SUGGESTION: Students will analyze and consider how technology today promotes knowledge and citizenship while serving a greater number of students with diverse backgrounds and educational objectives.

## 5. THE INTERNET AND DIGITAL MEDIA

### 5.1 THE STUDENTS WILL UTILIZE VARIOUS DEVICES TO CREATE DIGITAL MEDIA PROJECTS. (3, 5, 6) [NS: BE 12.3; CT 3.0; IT 7.3]

5.1.A TECHNOLOGY SUGGESTION: Students will use print resources as well as online resources to promote an understanding of digital media as "the creative convergence of digital arts, science, technology, and business for human expression, communication, social interaction, and education."

5.1.B TECHNOLOGY SUGGESTION: Students will be assigned various types of digital media and create attractive projects using desktop publishing and presentation software to explain the basic components and use of these digital media types:

Examples of digital media that might be organized:

- a. PDA's and/or Cell phones
- b. Compact Disc
- c. Digital Video
- d. Digital Television
- e. E-books
- f. Internet
- g. Video Game
- h. E-Commerce
- i. Digital Art

### 5.2 THE STUDENTS WILL COMPARE AND CONTRAST VARIOUS TYPES OF CONNECTIVITY IN OUR SOCIETY. (3, 5, 6) [NS: BE 13.3; CT 2.0; IT 7.3]

5.2.A TECHNOLOGY SUGGESTION: Students will create a table or spreadsheet to categorize various aspects of connectivity in terms of speed, access, cost, and overall benefits.

5.2.B TECHNOLOGY SUGGESTION: Students will research their local school district for various types of online or distance learning opportunities which are available to them and their instructors. Direct students to Virtual High School at <http://ccsdde.net/> and VegasPBS Teacherline at <http://www.pbs.org/teacherline/>.

5.2.C TECHNOLOGY SUGGESTION: Students will create and set up a teleconference or videoconference with another Computer-Based Projects class, preferably from another high school, learning firsthand how the roles of cameras, speakers, and connectivity provide reliable forums for interaction and collaboration.

5.2.D TECHNOLOGY SUGGESTION: Students will explore the availability of distance education or online training to prepare for a chosen career field.

5.2.E TECHNOLOGY SUGGESTION: Have students investigate social bookmarking websites such as Delicious™.

**5.3 STUDENTS WILL DEMONSTRATE EXPERTISE IN IDENTIFYING RELIABLE ONLINE WEBPAGES WHICH HELP TO GUARANTEE AUTHENTICITY, RELIABILITY, AND ACCURACY.**

**(3, 5, 6) [NS: BE 13.3; CT 2.0; IT 7.3]**

5.3.A SUGGESTION: Students will create a rubric for grading a website based on various factors.

Factors for Consideration:

- a. Ease of navigation
- b. Website's domain name
- c. Links work and are useful
- d. Text easy to read with contrasting colors
- e. Website is current and has an author
- f. Information is accurate and unbiased

5.3.B TECHNOLOGY SUGGESTION: Students will complete a relevant WebQuest to explore the globe and find authentic links which promote reliability and authenticity.

5.3.C TECHNOLOGY SUGGESTION: Students will compile a list of the class's best websites and create a simple spreadsheet to keep track of basic features and overall ranking as determined by the class.

**5.4 STUDENTS WILL DEVELOP INTERNET SKILLS.**

**(3, 5, 6) [NS: BE 11.5; CT 2.0; IT 3.8]**

5.4.A CULTURAL CONNECTIONS SUGGESTION: Students will research a corporation with international presence and find out how the company maintains its website in different languages. A large corporation such as Coca-Cola will offer students a world-wide, multi-cultural experience.

5.4.B SUGGESTION: Students will gain knowledge of domain names and how a domain name is chosen and registered.

5.4.C SUGGESTION: Students will explore Cybersquatting and the ethical issues which surround this practice.

5.4.D SUGGESTION: Students will describe the types of digital media that are commonly used in large corporations and how that media improves collaboration with peers.

5.4.E CULTURAL CONNECTION SUGGESTION: With improved Internet skills and research of global corporations, the students will be able to explain common business practices of foreign customers. They will better understand the need to implement cultural awareness as a sense of politeness and good business practice.

5.4.F CULTURAL CONNECTION SUGGESTION: Students will dress in attire appropriate for a chosen country, perhaps one that represents their own cultural heritage, and the class will conduct a video conference utilizing SCOPIA, (CCSD provides this software), sharing the common attire and business practices of that particular culture.

**5.5 STUDENTS WILL CREATE A DIGITAL PORTFOLIO WHICH SHOWCASES THEIR DIGITAL CREATIONS, RÉSUMÉ, AND COMPUTER SKILLS.**

**(3, 5, 11) [NS: BE 13.6; CT 6.0; IT 8.3]**

- 5.5.A TECHNOLOGY SUGGESTION: Have students research sample electronic portfolios found at [http://www.hightechhigh.org/dc/Digital\\_Portfolios.php?show=students](http://www.hightechhigh.org/dc/Digital_Portfolios.php?show=students) and <http://www.richerpicture.com/samples.php>
- 5.5.B SUGGESTION: Have students brainstorm appropriate categories of information to include in a digital portfolio.
- 5.5.C SUGGESTION: Have students incorporate the résumé created in objective 1.6 into their digital portfolio.
- 5.5.D TECHNOLOGY SUGGESTION: Have students incorporate their “employer quality” digital media creations into their digital portfolio.
- 5.5.E TECHNOLOGY SUGGESTION: Have students compile an E-portfolio for their career plan, selecting various digital media and acquired computer skills to profile their competencies. Various forms of digital media such as sound, graphics, animation, and video should be included in this E-portfolio.

## **6. EMAIL AND WEB AUTHORING**

### **6.1 THE STUDENT WILL IDENTIFY VARIOUS ONLINE COMMUNICATION TOOLS. (5, 6) [NS: BE 3.2, 3.6; CT 2.0]**

- 6.1.A TECHNOLOGY SUGGESTION: Have students discuss various communication tools available in technology.
  - a. Interact email
  - b. Personal email
  - c. Social networking websites

- 6.1.B TECHNOLOGY SUGGESTION: Have students review when email is the appropriate communication tool.

### **6.2 THE STUDENT WILL ACCURATELY PROCESS EMAIL MESSAGES. (5, 6) [NS: BE 3.2, 3.6; CT 2.0]**

- 6.1.A SUGGESTION: Have students review the rules of email etiquette.
- 6.1.B TECHNOLOGY SUGGESTION: Have students demonstrate appropriate login procedures.
- 6.1.C TECHNOLOGY SUGGESTION: Have students create email messages using instruction on basic “how to” procedures.
- 6.1.D TECHNOLOGY SUGGESTION: Have students generate email messages from a template. Students will be given step-by-step instruction for creating an email message from a template.
- 6.1.E TECHNOLOGY SUGGESTION: Have students attach files--text, audio, and video--to an email.
- 6.1.F TECHNOLOGY SUGGESTION: Have students download an attachment from an email.
- 6.1.G TECHNOLOGY SUGGESTION: Have students create an address book.
- 6.1.H TECHNOLOGY SUGGESTION: Have students create a mailing list.

- 6.1.I TECHNOLOGY SUGGESTION: Have students use email to expedite communication and collaboration.
- 6.1.J TECHNOLOGY SUGGESTION: Have students demonstrate proper procedures for placing assignments into teacher drop box on Interact Portal.
- 6.2 THE STUDENT WILL DEMONSTRATE PROPER ONLINE ETIQUETTE.  
(5, 6) [NS: BE 3.2, 3.6; CT 2.0]**
- 6.2.A SUGGESTION: Have students discuss the pros and cons of e-mail, Internet, Internet safety, Cyber bullying, and Cyber ethics.
- 6.2.B SUGGESTION: Have students review proper use of networked resources.
- 6.2.C SUGGESTION: Have students review copyright and fair use laws related to using information from the Internet.
- 6.2.D SUGGESTION: Have students discuss the potential for invading the right to privacy.
- 6.2.E SUGGESTION: Have students discuss laws protecting data stored in computers.
- 6.2.F SUGGESTION: Have students discuss how the Internet has increased the prevalence of plagiarism.
- 6.3 THE STUDENT WILL IDENTIFY BUSINESS-RELATED AND PERSONAL, SOCIAL NETWORKING SITES.  
(5, 6) [NS: BE 3.2, 3.6; CT 2.0]**
- 6.3.A TECHNOLOGY SUGGESTION: Have students review various social networks.
- Networks that connect people who share similar interests
  - Networks that connect people who are interested in exploring new interests and activities
  - Networks that connect people who want to work collaboratively on projects
- 6.3.B TECHNOLOGY SUGGESTION: Students will research the problems associated with using social networks.
- 6.3.C TECHNOLOGY SUGGESTION: Have students create a social network utilizing the conference function on the Interact Portal.
- 6.4 THE STUDENT WILL IDENTIFY WEB AUTHORING TOOLS.  
(5, 6) [NS: BE 3.2, 3.6; CT 2.0]**
- 6.4.A TECHNOLOGY SUGGESTION: Have students use research to create an appropriate website.
- Web authoring software
  - Visual design
  - Sharing data
  - Testing the website
  - Simplicity of a website
  - Reinventing the wheel
  - Scalability of the website
- 6.4.B TECHNOLOGY SUGGESTION: Have students research and discuss common mistakes to avoid when designing a website.
- Having a plan

- b. Good content
- c. Website aesthetics
- d. Website standards
- e. Long-term sustainability

**6.5 THE STUDENT WILL CREATE A WEBSITE.  
(5, 6) [NS: BE 3.2, 3.6; CT 2.0]**

6.5.A TECHNOLOGY SUGGESTION: Using free website creation tools such as Weebly™, Microsoft™ Office Live™, Yahoo™, or Google™, have the students create a simple website project.

**7. COLLABORATION AND WORKING AS A TEAM**

**7.1 THE STUDENT WILL DEMONSTRATE THE IMPORTANCE OF GROUP COHESION AND DEVELOPMENT.  
(7, 8) [NS: BE 13.4; IT 8.5]**

7.1.A SUGGESTION: Have students practice working in a variety of group sizes to create various multimedia projects.

7.1.B SUGGESTION: Have students play team building and group dynamics games that can be found at this website: <http://wilderdom.com/games/InitiativeGames.html>

**7.2 THE STUDENTS WILL RESEARCH THE IMPORTANCE OF HONEST WORK HABITS.  
(7, 8) [NS: BE 8.7, 13.4; IT 8.5; CT 6.0]**

7.2.A TECHNOLOGY SUGGESTION: Have students create a multimedia project on the consequences of plagiarism.

7.2.B SUGGESTION: Have students discuss and complete Clark County School District Acceptable Use Policy form.

7.2.C SUGGESTION: Have students conduct Internet research on computer ethics.

**7.3 THE STUDENTS WILL EXPLAIN THE IMPORTANCE OF GOOD WORK HABITS AND TIME MANAGEMENT.  
(7, 8) [NS: BE 8.4, 13.4; IT 8.5]**

7.3.A SUGGESTION: Group students and give each group the same Internet research assignment. Record the amount of time it took each group to complete the assignment. Debrief the exercise to ferret out good and poor work habits and time management skills.

**7.4 THE STUDENTS WILL APPLY PRIOR KNOWLEDGE TO THINK CREATIVELY AND SOLVE PROBLEMS.  
(7, 8) [NS: BE 13.1; CT 1.0; IT 8.2]**

7.4.A SUGGESTION: In a group setting, give each group an electronic device (i.e. iPod, cell telephone, computer monitor, and headset) and have them brainstorm alternative uses of the device.

7.4.B TECHNOLOGY SUGGESTION: Have students collaboratively play online games that foster problem solving and creative thinking. These online games can be found at websites such as: <http://www.glencoe.com/sec/busadmin/entre/teacher/creative/index.htm>  
<http://www.creativity-portal.com/howto/creativity/puzzles.brain teasers.html>

## **8. TECHNIQUES OF PROJECT EVALUATION**

### **8.1 THE STUDENTS WILL IDENTIFY CRITICAL POINTS OF EMPHASIS IN THE CRITIQUING PROCESS.**

**(8) [NS: BE 3.5; CT 1.0, 3.0; IT 8.2]**

- 8.1.A SUGGESTION: Have students review critiquing guidelines for written assignments.
- 8.1.B SUGGESTION: Have students develop skills for giving critiques and receiving critiques for written assignments. The instructor will practice whole group modeling of the critiquing process. Students will work in large groups, small groups, and one-on-one sessions.
- 8.1.C SUGGESTION: Students will receive duplicated copies of errors found in written documents. Students will locate and correct the errors. The instructor will discuss with students the effects of such errors on their perceptions of the document or the author responsible for the errors.
- 8.1.D SUGGESTION: Students will engage in the peer editing process that incorporates justifications for the revisions by the editor.
- 8.1.E SUGGESTION: Have students develop the criteria for organizing, editing, and critiquing a presentation.
- 8.1.F TECHNOLOGY SUGGESTION: Have students utilize an online rubric creation website such as <http://rubistar.com/> to create their own rubric to critique a student presentation.

### **8.2 THE STUDENTS WILL BE ABLE TO REFLECT UPON AND EVALUATE THEIR OWN WORK AND THE WORK OF OTHERS.**

**(8) [NS: BE 3.5; CT 1.0, 3.0; IT 8.2]**

- 8.2.A SUGGESTION: In preparation for self-critiques and peer critiques, have students critique commercial writing and presentations from books, magazines, and online sources. Guide them in the evaluation process and have them follow the guidelines for comments and discussions.
- 8.2.B SUGGESTION: After reading or viewing each other's writings or presentations, have students develop their own criteria to assist in improving their work. Students will compare their finished product with those of their peers and use these comparisons to discover characteristics that distinguish successful writings and presentations.
- 8.2.C SUGGESTION: In small groups, have students examine models of well-developed presentations and poorly-developed presentations.
- 8.2.D SUGGESTION: Have students establish procedures to respond to the ideas, thoughts, writings, and presentations of their peers with honesty and respect.
- 8.2.E TECHNOLOGY SUGGESTION: Have students create presentations for audience, purpose, idea, organization, relevant detail, voice, and word choice.

### **8.3 STUDENTS WILL PARTICIPATE IN CRITIQUES TO CONSTRUCTIVELY DISCUSS THEIR OWN WORK AND THE WORK OF OTHERS.**

**(8) [NS: BE 3.5; CT 1.0, 3.0; IT 8.2]**

- 8.3.A SUGGESTION: Have students participate in a written critique by first writing about their own work within various categories, addressing such questions as what was their intent, how well did they achieve their goal, what do they feel is successful about the work, and what could have been improved. After they finish, have the students switch papers with a classmate or two who will add constructive opinions and suggestions within similar categories. Ask students to use common vocabulary terms used in class such as the terms for the elements and principles in their writing.
- 8.3.B SUGGESTION: Have students practice critiquing by discussing their work with each other. They can follow the rubric that has been used to guide the completion of the assignment. Monitor students so that they critique in a way that builds confidence and skill, recognizing strengths and giving constructive suggestions for improvement.
- 8.3.C SUGGESTION: Conduct student/teacher critiques using the same pre-determined rubric that has been used to guide their completion of the assignment. Give students a chance to discuss their own work by judging it themselves before the teacher evaluation is conducted. Make sure that successful aspects are recognized and that specific suggestions are given for future growth.
- 8.3.D SUGGESTION: Invite business professionals to the classroom to critique students' work. Make sure that guests are familiar with the intent of the assignment and with skill levels so that comments are valid. Have the guest professional talk about how business writing and presentations are constantly assessed and critiqued at many stages of completion. Familiarize the professional with the rubric.

## **9. ERGONOMIC PRACTICES**

### **9.1 THE STUDENT WILL DEFINE REPETITIVE STRESS INJURY (RSI) IN MULTIPLE DISCIPLINES IN GENERAL AND CARPAL TUNNEL SYNDROME (CTS) IN COMPUTER DISCIPLINES IN PARTICULAR. (9) [NS: CT 2.0]**

9.1.A SUGGESTION: Before mentioning computer ergonomics, discuss repetitive stress injuries (such as slipped disks resulting from lifting incorrectly) and then discuss healthy body positioning and movements as a way to avoid such potential RSI's.

9.1.B SUGGESTION: Students will define the following terms:

- a. Repetitive Stress Injury
- b. Ergonomics
- c. Cumulative Trauma Disorder
- d. Carpal Tunnel Syndrome

9.1.C SUGGESTION: Describe how Carpal Tunnel Syndrome happens. (Note that CTS can result from unhealthy, repetitive motion of the hands and fingers in any number of ways—not just computer use. There is also evidence of non-motion factors – i.e. genetics, diet, etc.).

### **9.2 THE STUDENT WILL DISCUSS WAYS IN WHICH COMPUTERS AND OTHER CURRENT-DAY CONVENIENCES HAVE CONTRIBUTED TO THESE INJURIES CAUSING CARPAL TUNNEL SYNDROME (CTS). (9) [NS: CT 2.0]**

9.2.A SUGGESTION: Invite a guest speaker to present information to the class detailing the health problems that are occurring with younger people because of the increased use of digital devices.

9.2.B TECHNOLOGY SUGGESTION: Have students use the Internet to research the health problems related to CTS and computer use and the use of digital devices.

**9.3 THE STUDENT WILL MODEL CORRECT POSTURE AND POSITION AT THE WORK STATION TO REDUCE THE RISK OF DEVELOPING A WORK-RELATED INJURY. (9) [NS: CT 2.0]**

9.3.A TECHNOLOGY SUGGESTION: Have students find resources on the Internet that describe healthy computer ergonomics.

9.3.B SUGGESTION: Inform students that, although there are several aspects of computer ergonomics, the teacher will be looking for only three of them: 1) feet flat on the floor; 2) lower back against the back of the chair; and 3) wrists elevated—wrists and forearms not touching any surface. Then, without announcing it, periodically grade these three aspects of ergonomics while students are working.

9.3.C SUGGESTION: Have students take short rest breaks to stretch necks, shoulders, wrists, and fingers before, during, and after class each day. Necks: have the students tuck their chins to their chests and stretch their heads to the back and to each side, one particular direction at a time (they should not roll their heads). Shoulders: have the students shrug hard and then relax. Wrists: have the students grab their thumbs (left thumb in left fist, right thumb in right fist) and stretch their fists to the side—pulling the thumbs. Fingers: have the students practice various finger gymnastics—similar to exercises for playing stringed instruments.

**10. EDITING AND PROOFREADING**

**10.1 THE STUDENT WILL IDENTIFY PROOFREADING MARKS. (10) [NS: BE 13.2]**

10.1.A SUGGESTION: Have students review proofreading marks and demonstrate their ability to use them correctly (see Appendix H). Distinguish between “Formatting Marks” and general “Proofreading Marks.”

Formatting Marks

- a. Close up (vertical)
- b. Add space (vertical)
- c. Lowercase
- d. Underline or italicize
- e. Capitalize
- f. Leave as is (ignore the correction)
- g. Move right
- h. Move left
- i. Move copy as indicated
- j. Single space
- k. Double space

General Proofreading Marks

- a. Insert copy
- b. Close up (horizontal)
- c. Add space (horizontal)
- d. Transpose
- e. Lowercase
- f. Delete
- g. Replace
- h. Insert period

- i. Underline or italicize
- j. Capitalize
- k. Spell out
- l. New paragraph
- m. No paragraph (run together)
- n. Leave as is (ignore the correction)
- o. Insert punctuation
- p. Insert apostrophe
- q. Insert quotation mark

10.1.B SUGGESTION: Quiz students on proofreading marks as if it is vocabulary and have students match the proofreading mark with its definition.

**10.2 THE STUDENT WILL FIND AND CORRECT ERRORS IN KEYED COPY USING PROOFREADING MARKS.  
(10) [NS: BE 13.2]**

10.2.A SUGGESTION: Have students place proofreading marks on a document that contains errors.

10.2.B TECHNOLOGY SUGGESTION: Have students correct a document that contains errors indicated by proofreading marks.

**11. RESEARCH COMPUTER-RELATED CAREERS**

**11.1 THE STUDENT WILL IDENTIFY COMMUNITY BUSINESSPEOPLE AND DESCRIBE CAREER OPPORTUNITIES IN THEIR PROFESSIONAL FIELDS.  
(11) [NS: BE 3.4, 8.4, 8.7, 13.5, 13.6; IT 8.3, 8.4, 8.6]**

11.1.A SUGGESTION: Invite local business people in various careers to speak to students and/or hold a career fair.

11.1.B SUGGESTION: Have students interview an employed adult and key a report that includes the following data: identification of his/her job/career; the training and education required for that position; career opportunities in that particular line of work; the security of that position in today's workforce; the likes and dislikes of his/her career; and future advancement opportunities.

**11.2 THE STUDENT WILL USE VARIOUS RESEARCH TOOLS IN THE CAREER EXPLORATION PROCESS (E.G., NEWSPAPERS, INTERNET, PROFESSIONAL AND TRADE JOURNALS, NEVADA CAREER INFORMATION SYSTEM, BRIDGES, ETC.).  
(3, 5, 11) [NS: BE 3.4, 8.4, 8.7, 13.5, 13.6; IT 8.3, 8.4, 8.6]**

11.2.A SUGGESTION: Have students research job openings using newspapers and the Internet and have students identify the recommended education and skills needed to qualify for the job.

**11.3 THE STUDENT WILL USE AVAILABLE RESOURCES FOR PROJECTING CAREER OPPORTUNITIES AND CAREER TRENDS.  
(3, 11) [NS: BE 3.4, 8.4, 8.7, 13.5, 13.6; IT 8.3, 8.4, 8.6]**

11.3.A TECHNOLOGY SUGGESTION: Have students create a slideshow to present information on career opportunities and career trends.

**11.4 THE STUDENT WILL EVALUATE SEVERAL CAREER INTERESTS BASED ON VARIOUS CRITERIA (E.G., EDUCATIONAL REQUIREMENTS, STARTING SALARIES, AND CAREER LADDER OPPORTUNITIES). (8, 11) [NS: BE 3.4, 8.4, 8.7, 13.5, 13.6; IT 8.3, 8.4, 8.6]**

11.4.A TECHNOLOGY SUGGESTION: Have students use NCIS (Nevada Career Information Systems) or bridges.com (Bridges Transitions, Inc.) to research career information.

**11.5 THE STUDENT WILL RESEARCH CAREERS IN COMPUTER TECHNOLOGY. (3, 11) [NS: BE 3.4, 8.4, 8.7, 13.5, 13.6]**

11.5.A SUGGESTION: Have students research careers in computer technology utilizing “All Aspects of Industry” as a basis for research.

Examples:

- a. Planning
- b. Management
- c. Technical/Production Skills
- d. Labor Issues
- e. Health, Safety, & Environment
- f. Community Issues

11.5.B SUGGESTION: Have students maintain a job search log.

11.5.C SUGGESTION: Have students compare and contrast careers in desktop publishing, website management, multimedia technologies, and applications.

## SUGGESTED RESOURCES

### CLARK COUNTY SCHOOL DISTRICT APPROVED TEXTBOOKS

Refer to current CCSD approved textbook list.

### CLARK COUNTY SCHOOL DISTRICT SUPPLEMENTAL MATERIALS

#### BOOKS

Lake, Susan E.L. and Bean. *Digital Multimedia 2E*, Thomson Publishing, ISBN #13 978-0-538-44527-6.  
*Century 21: Computer Applications and Keyboarding 8th Edition*. Thomson South-Western,

#### SOFTWARE

Microtype™  
Microsoft™ Office Suite  
OPAC™

#### OTHER

CCSD AUP Booklet and Permission Form  
*500 Computer Projects Basics*, Cengage  
*Activities for Input Technologies and Computer Applications*, Cengage  
*FBLA Formatting Guide*.

### INTERNET RESOURCES - Note: Links are current - please check before using.

#### OFFICE

[www.baycongroup.com/word2003](http://www.baycongroup.com/word2003)  
[www.baycongroup.com/excel2003](http://www.baycongroup.com/excel2003)  
<http://microsoft.com/education/PPT2003Tutorial.mspix>  
<http://www.iconbazaar.com/>  
<http://cooltext.com/>  
<http://www.a1freesoundeffects.com>  
<http://www.animationfactory.com/>  
<http://www.aresearchguide.com/>  
[www.microsoft.com/education/multimediastory.mspix](http://www.microsoft.com/education/multimediastory.mspix)  
[www.microsoft.com/education/interactivestory.mspix](http://www.microsoft.com/education/interactivestory.mspix)  
[www.microsoft.com/education/realdeal.mspix](http://www.microsoft.com/education/realdeal.mspix)  
[www.microsoft.com/education/OceansOfPossibility.mspix](http://www.microsoft.com/education/OceansOfPossibility.mspix)  
[www.microsoft.com/education/Literary.mspix](http://www.microsoft.com/education/Literary.mspix)  
[www.microsoft.com/education/DesigningWebpages.mspix](http://www.microsoft.com/education/DesigningWebpages.mspix)  
[www.microsoft.com/education/Studentwebmasters.mspix](http://www.microsoft.com/education/Studentwebmasters.mspix)  
[www.microsoft.com/education/Flowcharts.mspix](http://www.microsoft.com/education/Flowcharts.mspix)  
[www.microsoft.com/education/aboutme.mspix](http://www.microsoft.com/education/aboutme.mspix)  
[www.microsoft.com/education/totempole.mspix](http://www.microsoft.com/education/totempole.mspix)  
[www.microsoft.com/education/VocabBlast.mspix](http://www.microsoft.com/education/VocabBlast.mspix)  
[www.microsoft.com/education/Meteorologist.mspix](http://www.microsoft.com/education/Meteorologist.mspix)  
[www.microsoft.com/education/vctanimals.mspix](http://www.microsoft.com/education/vctanimals.mspix)  
[www.microsoft.com/education/Hero.mspix](http://www.microsoft.com/education/Hero.mspix)

### **Repetitive Stress Injury -> Carpal Tunnel Syndrome**

[http://kidshealth.org/teen/safety/first\\_aid/rsi.html](http://kidshealth.org/teen/safety/first_aid/rsi.html)

[http://kidshealth.org/parent/firstaid\\_safe/home/ergonomics.html](http://kidshealth.org/parent/firstaid_safe/home/ergonomics.html)

<http://familydoctor.org/online/famdocen/home/common/pain/disorders/023.html>

### **Computer Ergonomics**

[http://ergonomics.ucla.edu/Tips\\_Users.html](http://ergonomics.ucla.edu/Tips_Users.html)

<http://orosha.org/cergos/>

### **Proofreading Marks**

<http://www.merriam-webster.com/mw/table/proofrea.htm>

<http://webster.commnet.edu/writing/symbols.htm>

[http://wadsworth.com/english\\_d/templates/student\\_resources/1413001890\\_burnett/UsageHandbook/edit\\_marks.htm](http://wadsworth.com/english_d/templates/student_resources/1413001890_burnett/UsageHandbook/edit_marks.htm)

### **Netiquette**

<http://www.albion.com/netiquette/book/index.html>

<http://www.dtcc.edu/cs/rfc1855.html>

<http://www.enabling.org/ia/ceeliac/netiquett.html>

<http://homepages.ius.edu/dschwei2/email/rules.htm>

<http://www.netbros.com/emailnetiquette>

<http://owl.english.purdue.edu/owl/resource/636/01/>

<http://www.studygs.net/netiquette.htm>

### **Copyright**

<http://teachingtoday.glencoe.com/howtoarticles/copyrights-and-permissions-giving-online-credit-where-credit-is-due>

<http://teachingtoday.glencoe.com/howtoarticles/evaluating-web-sites-five-basic-criteria>

<http://teachingtoday.glencoe.com/howtoarticles/the-perils-and-pitfalls-of-wikipedia>

<http://www.virtualsalt.com/antiplag.htm>

### **Internet Research**

<http://www.bedfordstmartins.com/online/cite5.html>

<http://www.internet4classrooms.com/search.htm>

<http://www.lib.berkeley.edu/teachinglib/guides/internet/findinfo.html> (Web evaluation checklist)

<http://library.usm.maine.edu/research/researchguides/webeval.php?id=0>

[http://www.madison.k12.wi.us/tnl/detectives/eval\\_form.txt](http://www.madison.k12.wi.us/tnl/detectives/eval_form.txt) (Website Evaluation Form)

<http://www.mlb.ilstu.edu/ressubj/subject/intrnt/research.htm>

<http://www.monash.com/spidap.html>

<http://www.neutralbay-p.schools.nsw.edu.au/library/infoeval.htm>

<http://owl.english.purdue.edu/internet/search/index.html>

<http://owl.english.purdue.edu/owl/resource/558/01/>

<http://www.pace.edu/library/pages/instruct/internetresearch.html>

<http://www.sc.edu/beaufort/library/pages/bones/bones.shtml>

### **Downloads**

<http://teachingtoday.glencoe.com/downloads/topic/integrating-technology-in-the-classroom> (PDF-Internet Resource Evaluation Checklist, Internet Rules of Conduct, Citing Electronic Sources, Peer Review Feedback Form)

### **Peer Critiquing**

[http://www.allsands.com/literature/peercritique\\_bzq\\_gn.htm](http://www.allsands.com/literature/peercritique_bzq_gn.htm)

<http://dmc.umn.edu/activities/peer-review/>

<http://www.effectiveteachingsolutions.com/guidedwritingpdf.pdf>

<http://www.ehow.com/printarticle.html?id=2144391>

<http://www.engl.niu.edu/wac/developrc.html>

<http://www.ma.utexas.edu/users/mks/360m04/peercritique.html>  
[http://www.maupinhouse.com/pdf/teaching%20the%20story\\_peer%20editing.pdf](http://www.maupinhouse.com/pdf/teaching%20the%20story_peer%20editing.pdf)  
<http://pblmm.k12.ca.us/pblguide/activities/designreviews.html>  
[http://pulse.pharmacy.arizona.edu/9th\\_grade/from\\_global/language\\_arts/revision.html](http://pulse.pharmacy.arizona.edu/9th_grade/from_global/language_arts/revision.html)  
[http://www.readwritethink.org/lessons/lesson\\_view.asp?id=122](http://www.readwritethink.org/lessons/lesson_view.asp?id=122)  
<http://rickwalton.com/writers/critique.htm>  
<http://www.sfwa.org/writing/critiquing.html>  
[www.ssd.k12.ak.us/phs/teacherresources/peer\\_critique\\_protocols.doc](http://www.ssd.k12.ak.us/phs/teacherresources/peer_critique_protocols.doc)  
<http://www.utexas.edu/courses/svinicki/382l/critique.html>  
[http://www.wooster.edu/writing\\_center/peer5.html](http://www.wooster.edu/writing_center/peer5.html)  
<http://www.6ftferrets.com/critique-content.html>

### **Peer Editing Checklist**

<http://www.academic.marist.edu/alcuin/selfman/sark/peercritique.htm>  
<http://isucomm.iastate.edu/oralpeercrit> (Download PDF)  
<http://school.discoveryeducation.com/schrockguide/assess.html> (Rubrics)  
<http://www.lhup.edu/sschatz/composition/peer%20critique%20guidelines.doc>  
<http://www.plu.edu/~nelsoned/courses/grciv/grcivassignments/peercritique.html>  
[http://pulse.pharmacy.arizona.edu/9th\\_grade/from\\_global/language\\_arts/handouts/peer\\_checklist.doc](http://pulse.pharmacy.arizona.edu/9th_grade/from_global/language_arts/handouts/peer_checklist.doc)

### **Using a Scanner**

<http://www.pc.com/learn/everydayuse/tipsandtricks/howtouseascanner>  
<http://www.scantips.com/begin.html>

### **Video Conferencing**

<http://www.videoconf.ccsd.net/scopia/entry/index.jsp>  
<http://www.skype.com>

### **Other**

<http://www.kn.att.com/wired/21stcent/index.html>  
Lessons and ideas on how to best prepare students to be literate in this brave new world of information overload.

<http://school.discoveryeducation.com/schrockguide/eval.html>  
Resource list for sites and tools to evaluate web pages.

<http://validator.w3.org/>  
W3C Validation Service.

<http://owl.english.purdue.edu/>  
Citations, formatting, evaluation tools, etc.

<http://www.goodcharacter.com/NFS/SchoolToWork.html>  
Ethics in the workplace.

<http://www.w3schools.com/>  
Tutorials related to HTML, XHTML, sound formats, and more.

<http://library.usu.edu/instruct/eng2010/pbl.php>  
Problem Based Learning lesson plans.

<http://www.any-sound-recorder.com/sound-record/record-au-sound-files-dvd-screenshot.html>  
Audio and screenshot recorder.

<http://www.wikihow.com/Transfer-Cassette-Tape-to-Computer>  
Transferring cassette tapes to computer.

[http://www.thirteen.org/edonline/ntti/resources/workshops/digital\\_file/practice.html](http://www.thirteen.org/edonline/ntti/resources/workshops/digital_file/practice.html)  
Digital File Management.

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>  
Proper Search Techniques

## APPENDIX A

### MAJOR COMPUTER PARTS



**Computer** – A machine that collects, processes, stores, and produces information. The four jobs of a computer are: input, memory, storage, and output.



**Central Processing Unit (CPU)** – It is the main part of a computer system. It controls and processes the information. It is often called the “brains” of the computer.



**Keyboard** – An input device that allows a person to type information into the computer. A standard QWERTY set of keys is used.



**Monitor** – A device that displays computer output on a screen. It is an example of an output device. A “touch” monitor could be an example of an input device.



**Mouse** – An input device that has a light-emitting diode (optical) or a rolling ball (mechanical) on the bottom. It is used to move the cursor and select items on a computer screen.



**Trackball** – An input device that has the rolling ball on the top. It is used to move the cursor and select items on a computer screen.



**Disk Drive** – A device that reads data from and writes data onto a disk. It can be fixed or removable. Examples - hard disk, USB (flash or thumb) drive, DVD/CD, floppy. These are examples of input and output devices.



**DVD/CD Drive** – A device used for storing large amounts of data up to 4.7 GB. A DVD/CD can be an input and an output device.



**Scanner** - A device that captures images from photographic prints, posters, magazine pages, and similar sources for computer editing and display. This is an input device.



**Printer** – An output device that prints text or illustrations onto paper. There are various types of printers such as impact or dot matrix, ink or bubble jet, laser, plotters, and printers designed specifically for digital photographs.



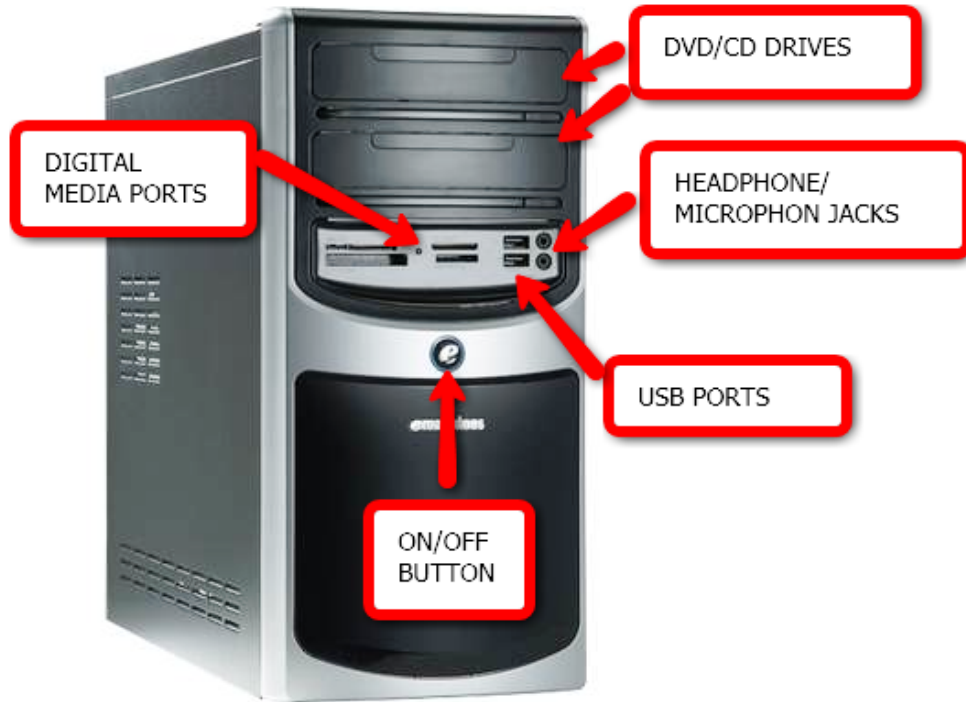
**Webcam** - A video capturing device connected to computers or computer networks, often using USB or, if they connect to networks, Ethernet or Wi-Fi.



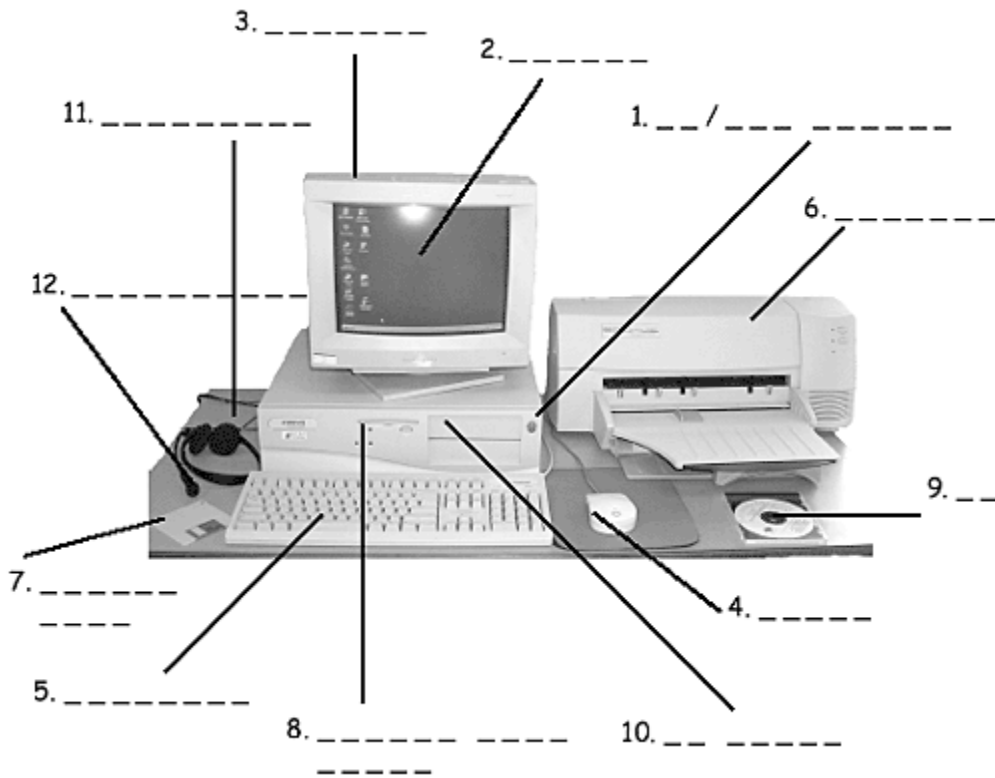
**Headset** - A device that combines a microphone with earphones. They provide hands-free functionality to listen and speak while performing keyboard and computer functions.

## IDENTIFY THE COMPUTER PARTS









## IDENTIFY THE COMPUTER PARTS



## APPENDIX B

### PARTS OF A WINDOW

1. **Pointing** – Moving the mouse so the arrow touches an object.
2. **Clicking** – Pressing and releasing the mouse.
3. **Dragging** – Moving objects around the screen.
4. **Selecting** – Pointing to an object and highlighting it.
5. **Folder** – This keeps similar things filed together.
6. **Menu** – A list of commands. Also called the Menu Bar and located at the top of the screen.
7. **Active Window** – The current viewing area on a computer screen.
8. **Minimize Box** – This makes the window collapse into the task bar (the start bar at the bottom). It is located in the upper right hand corner of a window. 
9. **Maximize Box and Restore Down Box** – The maximize box will increase the size of a window to its full size.  The restore down box will make a window smaller.  They are both located in the upper right corner of a window.
10. **Close Box** – Located in the upper right hand corner of a window and will close (exit) a window. 
11. **Up and Down Arrows** – Moves the contents of a window vertically.
12. **Left and Right Arrows** – Moves the contents of a window horizontally.
13. **Scroll Box** – This is faster to use than the scroll arrows.
14. **Desktop** – This is the on-screen background. It is the screen that is displayed when there are no programs active.
15. **Icon** – A small picture that represents a file or action.
16. **Cursor** – A marker on the screen that shows where current input or output is going to happen. It may appear as a blinking vertical line, a solid blinking box, an underline, or an arrow.
17. **Title Bar** – Located at the top of a window.
18. The name of a window is located on the title bar.
19. You can have as many windows open, as you want.
20. To move a window, click on the title bar and drag.

## APPENDIX C

### WORD PROCESSING TERMS

TERM	DESCRIPTION
<b>ALIGNMENT</b>	Position of text in a paragraph relative to the margins. Left, right, centered, or justified.
<b>BOLD</b>	Formatting in which text appears thicker and darker.
<b>BULLET</b>	A small graphic symbol, usually a round or square dot, used to identify items in a list.
<b>CENTERING</b>	Alignment format that positions text evenly between the left and right margins.
<b>CLIPART</b>	Graphics used in documents.
<b>CLIPBOARD</b>	A temporary storage area for cut or copied items that are available for pasting.
<b>COPY</b>	A command that copies a selected part of a document and places it on the Clipboard.
<b>CUT</b>	A command that removes a selected part of a document and places it on the Clipboard.
<b>DEFAULT</b>	The original setting, such as page margins or tab spacing, set by the program.
<b>DELETE</b>	To remove selected text or a graphic from a document.
<b>DRAG</b>	To hold down the mouse button while moving the mouse.
<b>EDIT</b>	To add, delete, or change text and graphics.
<b>FONT</b>	The typeface or design of a set of characters (letters, numerals, symbols, and punctuation marks).
<b>FONT SIZE</b>	The size of text, measured in points (pts). The larger the number of points, the bigger the font size.
<b>FOOTER</b>	Information that is printed at the bottom of each page.
<b>FORMAT</b>	The appearance of a document, including color, font, attributes, borders, and shading.
<b>HEADER</b>	Information that is printed at the top of each page.
<b>INDENT</b>	The distance between the beginning or end of a line of text and the page margins. A paragraph can have left, right, first-line, and hanging indents.
<b>ITALICS</b>	Formatting in which the text appears slanted.
<b>JUSTIFY</b>	A form of paragraph alignment in which both the left and right edges of a paragraph are flush with the margins.
<b>LINE SPACING</b>	The amount of space between lines of text, measured in lines or points.
<b>MARGIN</b>	The white region around the text on a page.
<b>NON-PRINTING CHARACTERS</b>	Marks displayed on the screen to indicate characters that do not print, such as tab characters or paragraph marks. You can control the display of special characters with the Show/Hide button on the Standard toolbar.
<b>PASTE</b>	A command that inserts cut or copied items into a document from the Clipboard.
<b>SPELL CHECK</b>	Software feature that indicates misspelled words and grammar errors.
<b>TAB</b>	A key you press to position text so that it is located at a specific horizontal position in a document.
<b>TABLE</b>	A grid of rows and columns divided by borders; commonly used to display text, numbers, or other items for quick reference and analysis.
<b>THESAURUS</b>	A collection of synonyms and antonyms.
<b>UNDERLINE</b>	Character format that puts a line under text. Used to emphasize text.
<b>VERTICAL ALIGNMENT</b>	The placement of text on a page or in a cell in relation to the top, bottom or center of the page or cell.
<b>WORDWRAP</b>	A feature that automatically moves the insertion point to the next line of a paragraph as you type.

## APPENDIX D

### SPREADSHEET TERMS

TERM	DESCRIPTION
<b>ABSOLUTE CELL REFERENCE</b>	Does not adjust to the new cell location when a formula is copied or moved.
<b>ACTIVE CELL</b>	A highlighted spreadsheet cell ready for data entry.
<b>ASCENDING SORT</b>	Sort that arranges items from A to Z or smallest to largest.
<b>AVERAGE FUNCTION</b>	Displays the average of the range(s) identified in the argument.
<b>BAR CHART</b>	Uses rectangles of varying heights to illustrate values in a spreadsheet.
<b>CELL</b>	Intersection of a row and a column in a spreadsheet. A cell is identified by the column letter and row number.
<b>CELL FORMATS</b>	Ways to display alphabetic and numeric data so it is more understandable to spreadsheet users.
<b>COLUMN CHART</b>	Like bar charts, column charts use rectangles of varying heights to illustrate values in a spreadsheet.
<b>COMPLEX FORMULA</b>	A spreadsheet formula that contains more than one operator.
<b>COUNT FUNCTION</b>	Displays the number of cells with numerical values in the argument range.
<b>CURRENCY FORMAT</b>	Displays numerical data in a spreadsheet preceded with a dollar sign.
<b>DESCENDING SORT</b>	Sort that arranges items from Z to A or largest to smallest.
<b>ENTRY</b>	Data entered into a field.
<b>TILLING</b>	Copying data from a source cell to an adjacent cell or multiple adjacent cells.
<b>FOOTER</b>	Text that is printed at the bottom of the page.
<b>FORMAT</b>	To change the appearance or layout of text. Also specifies how you want to display numbers, dates, times, and text.
<b>FORMATTING</b>	Arranging the shape, size, type, and general make-up of a document.
<b>FORMULA BAR</b>	In the spreadsheet window, it displays a formula when the selected cell contains a calculated value.
<b>FREEZING</b>	Keeps the row or column titles on the screen no matter where you scroll in the spreadsheet.
<b>FUNCTIONS</b>	Special spreadsheet formulas that do not use operators to calculate a result.
<b>GRIDS</b>	Lines in a spreadsheet that form cells.
<b>HEADER</b>	Text that is printed at the top of the page.
<b>HEADER AND FOOTER</b>	Terms used for text at the top or bottom of a document.
<b>HIGHLIGHT</b>	The dark border around a selected cell.
<b>LANDSCAPE ORIENTATION</b>	Page orientation in which the document is wider than it is long.
<b>LINE CHART</b>	Spreadsheet chart that is similar to a column chart except the columns are replaced by points connected by a line.
<b>MARGINS</b>	Blank spaces around the top, bottom, and sides of a page.
<b>MATHEMATICAL OPERATORS</b>	Symbols such as +, -, *, and / that indicate what to do with operands in a spreadsheet formula.
<b>MAXIMUM FUNCTION</b>	Displays the largest number contained in the range identified in the argument.
<b>MINIMUM FUNCTION</b>	Displays the smallest number contained in the range identified in the argument.

<b>TERM</b>	<b>DESCRIPTION</b>
<b>NOW FUNCTION</b>	Displays the current date or time based on the computer's clock.
<b>ORDER OF EVALUATION</b>	Sequence of calculation in a spreadsheet formula.
<b>PIE CHART</b>	Chart that shows the relationship of a part to a whole.
<b>PORTRAIT ORIENTATION</b>	Page orientation where the document is longer than it is wide.
<b>PRINT PREVIEW</b>	Allows you to view a document as it will appear when printed.
<b>RANGE</b>	A selected group of cells in a spreadsheet. A range is identified by the cell in the upper-left corner and the cell in the lower-right corner separated by a colon.
<b>RELATIVE CELL REFERENCE</b>	Worksheet cell reference that adjusts to a new location when copied or moved.
<b>SAVE</b>	Process of storing a file.
<b>SERIES</b>	Continuous sequence of data in a worksheet that may be reproduced in a row or column of contiguous cells. Series may be textual, such as January, February, and March.
<b>SPREADSHEET</b>	A grid of rows and columns that can hold numbers, text, or formulas.
<b>SUM FUNCTION</b>	Displays the sum of the values in the range identified in the argument.
<b>TOOLBAR</b>	Bar at the top or bottom of the screen that contains icons and menus that provide quick access to commonly used commands.
<b>WORKBOOK</b>	A collection of related worksheets.
<b>WORKSHEET</b>	Name for a computerized spreadsheet. A worksheet is identified by a tab at the bottom of the screen.

## APPENDIX E

### DATABASE TERMS

TERM	DESCRIPTION
<b>COLUMNAR LAYOUT</b>	Allows view of one record at a time on a form.
<b>DATABASE</b>	A computerized system that is used to organize and maintain a collection of related information for future use.
<b>DATA TYPE</b>	Identifies the kind of information to be put into a field.
<b>FIELD</b>	Contains a single piece of data in a record.
<b>FILTER</b>	Displays a subset of records according to given criteria.
<b>FORM</b>	Used for displaying information for a single record.
<b>MAIL MERGE</b>	Used to merge a word processing file with a database file.
<b>MULTIPLE SORT</b>	Method for arranging records in more than one order.
<b>PRIMARY KEY</b>	Used to identify each record with a unique number.
<b>PRIMARY SORT</b>	The order in which information is sorted first.
<b>QUERY</b>	Allows information to be retrieved from database tables.
<b>RECORD</b>	Contains all the data about one subject.
<b>REPORT</b>	Used for summarizing and presenting information.
<b>SEARCH CRITERIA</b>	Tells which information to be displayed in a query.
<b>SORT-ASCENDING</b>	Arranges records from A to Z or smallest to largest.
<b>SORT-DESCENDING</b>	Arranges records from Z to A or largest to smallest.
<b>SOURCE DOCUMENT</b>	Paper form from which data is keyed (hard copy of the data).
<b>TABLE</b>	Used for inputting and storing data.
<b>TABULAR LAYOUT</b>	Allows view of multiple records on the screen at the same time.
<b>WIZARD</b>	Creates forms and reports based upon answers given to predetermined questions.

## APPENDIX F

### MULTIMEDIA TERMS

TERM	DESCRIPTION
<b>ANALOG</b>	Traditional, non-digital video.
<b>ANIMATION</b>	The small change of one picture to the next to give the impression of movement.
<b>ANTI-ALIASING</b>	A feature of some software which smooths a graphic which doesn't ordinarily conform to a grid.
<b>APPEARANCE</b>	Settings for configuring the look of various components of a window or desktop.
<b>APPLET</b>	A Java code program (see Java). You can use small Java programs without having to know anything about their code.
<b>AUDIO</b>	Sound or relating to sound.
<b>AVI</b>	Stands for Audio Video Interleave, a Microsoft-supported video format.
<b>BITMAP</b>	Most common medium for images like photographs because they have subtle gradations. They are resolution dependent, meaning you cannot enlarge the image without a loss of quality.
<b>COMPRESSION</b>	Any method of condensing data so that it can be stored in less space. Many graphics/sound files are compressed so they can be downloaded faster.
<b>DIGITAL</b>	Visual or audio format based on computer data of 0's and 1's.
<b>DPI</b>	Dots per inch- this specifies the resolution of an output device (like a printer), usually from 300-1200 dpi.
<b>DVD</b>	Digital versatile disc.
<b>FLASH ANIMATION</b>	Animation program developed by Macromedia. Quickly becoming the standard for animation on the Web.
<b>FTP</b>	File transfer protocol - FTP software allows you to copy files from one computer to another over the Internet.
<b>HTML</b>	Hypertext markup language - the written programming code that is based on tags and that define how the various parts of a web page are displayed in a web browser.
<b>HYPERLINK</b>	Links include pictures, graphics, and text that a user clicks in order to go to a different location on a page or a different web page.
<b>HYPERTEXT</b>	Provides hyperlinks through <i>text</i> , not pictures or graphics, which a user may click and follow to a different web page location.
<b>JAVA</b>	An object oriented programming language which allows for multiplatform (windows, Macintosh, Linux, etc.) programs. A Java applet can be used to present a panoramic image without the need for a plug-in. (see Applet).
<b>JAVA SCRIPTING</b>	<u>Not</u> Java, but a scripting language similar to HTML. It can be used to enhance a web page by allowing a degree of interactivity. It can be used to integrate panoramic images into a web site.
<b>JPEG</b>	Joint Photographic Experts Group - a technology developed for the compression of images or video. JPEG is an image format which can be altered to take up less storage space. Some quality is sacrificed in order to get a higher rate of compression. JPEG images are good for photo quality.
<b>MEGA PIXEL</b>	One thousand pixels.
<b>MPEG – MP3</b>	Motion Pictures Expert Group - multiple standards for the compression of video and audio.
<b>MULTIMEDIA</b>	The combined use of several media, such as text, pictures, movies, slides, sound (music), and graphics, especially for the purpose of education or entertainment.
<b>PIXEL</b>	The smallest part of a picture that can be addressed or changed in a digital image.
<b>PLUG-IN</b>	Helper applications or software programs that extend the capability of the browser in a specific way such as enhancing audio, video, or animation.
<b>PNG</b>	Portable network graphics format. An image format used for lossless compression and can support images with millions of colors.

<b>TERM</b>	<b>DESCRIPTION</b>
<b>PROPERTIES</b>	Elements such as background, style of type, font, etc.; there are different types of properties: display, file and folder, system, taskbar, etc., each with elements that fit that particular computer function.
<b>RESOLUTION</b>	The quality of an image as measured by its height and width in pixels. The higher the resolution, the more pixels the image contains.
<b>RGB</b>	Red-Green-Blue - a description of the primary color in an image on a computer monitor.
<b>TRANSITION</b>	The change between two presentation slides or video clips.
<b>VECTORS</b>	Graphics made up of lines, curves and colors. Graphics created on higher end programs such as Corel Draw 10 are often Vectors.
<b>VIDEO</b>	Audio/visual playback and recording technology used in the television industry; also refers to computer display screens and computer terminals.
<b>WAV</b>	An uncompressed sound file format for PCs.

## APPENDIX G

# CLARK COUNTY SCHOOL DISTRICT

## Support Staff Personnel

### GUIDELINES FOR TYPING CERTIFICATION

The following guidelines are provided to employees and applicants when a typing test is required:

In order for your application or QSP request to be considered by the Clark County School District, certified test results must conform to the following criteria:

- must be on testing agency's official form or letterhead; **(School letterhead)**
- must be an original certification; **(Must be on original letterhead)**
- must be dated and cannot be more than six months old;
- must be proctored by authorized personnel; **(Business teacher is authorized)**
- must be signed by a person authorized to do such testing;
- must say that the duration of the test was five (5) minutes;
- must list the gross number of words typed per minute; and
- must list number of errors, no more than five (5) errors will be accepted.

The typing test may be administered on a typewriter or computer. To achieve net score, we multiply gross words by five, multiply errors by 2, subtract errors from the gross, and then divide by 5.

**Note: We will compute your net typing speed based on the certificate you provide. Our formula for determining net speed is not always the same as the testing agency's. The standard accepted test score is no more than five (5) errors on a five-minute test. The test submitted must list the number of gross words typed in order for us to compute using this formula.**

Most large employment agencies charge a fee, between \$5 and \$15, for administering the test; however, they service their own clients first, and testing may not be available when you need it if you wait until the last minute. The Clark County School District does not endorse any particular agency or school for testing purposes. Consult the telephone directory for agencies. **(If business teachers test students outside of school time, please submit an extra pay form for \$22 per hour paid through Carl Perkins funds.)**

Submit your typing certification to Support Staff Personnel along with your application or QSP form, before the closing date of the vacancy announcement.

Normal Hours of Operation: Monday through Friday, 7:00 A.M. to 5:00 P.M., excluding holidays

Summer Hours of Operation: Monday through Friday, 7:00 A.M. to 4:00 P.M., excluding holidays

Location: Edward Greer Education Building  
2832 East Flamingo Road  
Las Vegas, NV 89121

Information line: 702-799-5328 [www.ccsd.net/iobs](http://www.ccsd.net/iobs)

Typing guidelines as stated effective March 18, 2004

## APPENDIX H PROOFREADER'S MARKS

Symbol	Instruction	Example	Result
^	insert copy	<sup>h</sup> Te <sup>of</sup> proof <sub>^</sub> the	The proof of the
⊂	close up	The pr⊂oof	The proof
#	add space	The#proof	The proof
∩	transpose	The p <sup>of</sup> rof (the <sup>of</sup> )	The proof of the
lc or /	lowercase	The <sup>lc</sup> proof	The proof
↵	delete	The proof of the <sup>↵</sup>	The proof of the
/	replace	The p <sup>ro</sup> of <sup>of</sup> the	The proof of the
⊙	insert period	the proof⊙ However,	the proof. However,
—	underline or italicize	<u>The proof</u>	<u>The proof</u>
≡	capitalize	<u>the best</u> proof	The BEST proof
sp	spell out	sp-5 WR centers	five word processing centers
¶	new paragraph	proof.¶ However, the	proof. However, the
No ¶	no paragraph (run together)	proof.↗ No ¶ However, the	proof. However, the
.... or stet.	leave as is; ignore the correction	The <sup>stet.</sup> proof of the <sup>h</sup>	The proof of the
^ ^ ^ ? ?	insert punctuation	the proof, however, <sup>^</sup>	the proof; however,
—	insert hyphen	The age <sup>—</sup> old proof	The age-old proof
∨	insert apostrophe	The proof <sup>∨</sup> s effect	The proof's effect
∨ ∨	insert quotation mark	The <sup>∨</sup> proof <sup>∨</sup> of the	The "proof" of the
□	move right	<u>    </u> The proof	The proof
□	move left	<u>    </u> The proof	The proof
↻	move copy as indicated	The <sup>↻</sup> matter proof of the <sup>is</sup>	The proof of the matter is
SS	single space	SS< 600 Broad Street	600 Broad Street
DS	double space	DS> Mt. Pleasant, PA 15666	Mt. Pleasant, PA 15666
DS	double space	DS> Dear Mr. Sofranko	Dear Mr. Sofranko
QS	quadruple space	QS> THE PROOF The proof of the	THE PROOF  The proof of the

## APPENDIX I

### Can I Improve My Internet Searches?

- Your task is to evaluate four search engines, Google, Yahoo, and two other search engines. Look at <http://www.internet4classrooms.com/search.htm> for a list of search engines. Compare and contrast the sites for relevance of hits and user friendliness. Identify your favorite search engine and explain why.
- Find one dedicated search engine, look at <http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html>. Compare a search using a dedicated search engine with Yahoo or Google. What is the advantage of a dedicated search engine?
- Examine the Help files (if included) from one of the sites. What tips to they offer for better searches?
- Make a recommendation to the class for a search engine; be ready to defend your choice.
- Complete the worksheet and answer the questions below.

Internet Search Engine Rubric

Description	2	1	0	Score
Description of four search engines listing similarities and differences.	Did all four	Did three	Did two or less	
Worksheet completed.	All questions answered	More than half	Less than half answered	
Explanation of Boolean expressing.	Explained all Boolean expressions			
Explanation for searching for .pdf files only.				
Summary of search engine help and tip files				
Recommendation and defense of search engine.	Made a recommendation and defended the choice	Recommendation – no defense	Neither a recommendation or defense	

What are Boolean expressions and how are they used in Internet searches? \_\_\_\_\_  
 \_\_\_\_\_  
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How would you restrict your Internet search to just .pdf documents? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_

## Seven Steps toward Better Searching Worksheet

Query	# Matches	Reasons
+Atlantis	~118,000,000	The final search shows only what? and excludes what?
+Atlantis -shuttle		
+Atlantis -shuttle +continent		
+Atlantis -shuttle +continent -film -movie		
mushrooms		The second one has more hits because...
mushroom*		
surf*		The second one has fewer hits because...
surf* -surface*		
San Diego		These are the same because...
"San Diego"		
merits of laziness		These are different because...
"merits of laziness"		
Octopus		
octopus		
WebQuest		The search that finds the most sites is... because?
+webquest		
+webquest*		
link: http://www.clpgh.org/cmnh/tours/egypt/walton.html		
link: edweb.sdsu.edu/webquest/webquest.html		
frog*		The sites found in the second search are...
title: frog*		
webquest		The sites found in the second search are...
title: webquest		

Helpful site: <http://www.internet4classrooms.com/search.htm#searching>