Advanced Computer and Technology Applications

Course Description

This course, Advanced Computer and Technology Applications, instructs students in the following areas: acceptable use policies and safety with regard to technology; file management strategies; and computer graphics/desktop publishing. Students will be able to create and enhance slide presentations. Students will develop word processing skills, spreadsheet creation and manipulation, as well as the use of databases to create/edit a variety of documents. Students will learn how to do effective internet searches and synthesize this research as a part of various project-based performance tasks.

This course serves as an advanced, in-depth study of computer applications and provides the opportunity for students to integrate the various components that make up today’s most used educational/business related software.
## Pacing Guide
### Advanced Computer and Technology Applications

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Curriculum Scope and Sequence
### 8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

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<td>X</td>
<td></td>
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<tr>
<td>8.1.12.A.2 Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</td>
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<tr>
<td>8.1.12.A.3 Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.</td>
<td>X</td>
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<tr>
<td>8.1.12.A.4 Create a personalized digital portfolio that contains a résumé, exemplary projects, and activities, which together reflect personal and academic interests, achievements, and career aspirations.</td>
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<td>8.1.12.B.1 Design and pilot a digital learning game to demonstrate knowledge and skills related to one or more content areas or a real world situation.</td>
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<tr>
<td>8.1.12.C.1 Develop an innovative solution to a complex, local or global problem or issue in collaboration with peers and experts, and present ideas for feedback in an online community.</td>
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</tr>
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<thead>
<tr>
<th>D. Digital Citizenship</th>
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<tbody>
<tr>
<td>8.1.12.D.1 Evaluate policies on unauthorized electronic access (e.g., hacking) and disclosure and on dissemination of personal information.</td>
<td></td>
</tr>
<tr>
<td>8.1.12.D.2 Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines.</td>
<td>X</td>
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<tr>
<td>8.1.12.D.3 Compare and contrast international government policies on filters for censorship.</td>
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<tr>
<td>8.1.12.E.1 Develop a systematic plan of investigation with peers and experts from other countries to produce an innovative solution to a state, national, or worldwide problem or issue.</td>
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<tr>
<td>8.1.12.E.2 Predict the impact on society of unethical use of digital tools, based on research and working with peers and experts in the field.</td>
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<td>8.1.12.F.1 Select and use specialized databases for advanced research to solve real-world problems.</td>
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<td>8.1.12.F.2 Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs.</td>
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<tr>
<td>1. Creativity and Innovation - Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</td>
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<tr>
<td>a. Apply existing knowledge to generate new ideas, products, or processes</td>
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<tr>
<td>b. Create original works as a means of personal or group expression</td>
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<tr>
<td>c. Use models and simulations to explore complex systems and issues</td>
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<tr>
<td>d. Identify trends and forecast possibilities</td>
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| 2. Communication and Collaboration - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. | | | | |
|---|---|---|---|
| a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media | X | X | X | X |
| b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats | X | X | X | X |
| c. Develop cultural understanding and global awareness by engaging with learners of other cultures | | X | X | |
| d. Contribute to project teams to produce original works or solve problems | X | X | X | X |

| 3. Research and Information Fluency - Students apply digital tools to gather, evaluate, and use information. | | | | |
|---|---|---|---|
| a. Plan strategies to guide inquiry | | X | X | X |
| b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media | X | X | X | X |
| c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks | X | X | X | X |
| d. Process data and report results | | | | X |

| 4. Critical Thinking, Problem Solving, and Decision Making - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. | | | | |
|---|---|---|---|
| a. Identify and define authentic problems and significant questions for investigation | X | X | X | X |
| b. Plan and manage activities to develop a solution or complete a project | X | X | X | X |
| c. Collect and analyze data to identify solutions and/or make informed decisions | | | | X |
| d. Use multiple processes and diverse perspectives to explore alternative solutions | X | X | X | X |

| 5. Digital Citizenship - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. | | | | |
|---|---|---|---|
| a. Advocate and practice safe, legal, and responsible use of information and technology | X | X | X | X |
| b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity | X | X | X | X |
| c. Demonstrate personal responsibility for lifelong learning | X | X | X | X |
| d. Exhibit leadership for digital citizenship | X | X | X | X |

| 6. Technology Operations and Concepts - Students demonstrate a sound understanding of technology concepts, systems, and operations. | | | | |
|---|---|---|---|
| a. Understand and use technology systems | X | X | X | X |
| b. Select and use applications effectively and productively | X | X | X | X |
| c. Troubleshoot systems and applications | X | X | X | X |
| d. Transfer current knowledge to learning of new technologies | X | X | X | X |
Unit 1: Word Processing  
Content Area/Course: Advanced Computer and Technology Applications  
Pacing: 17

## Stage 1 - Desired Results

### Content Standards/CPI's Addressed in this Unit

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### C. Communication and Collaboration

| 8.1.12.C.1 Develop an innovative solution to a complex, local or global problem or issue in collaboration with peers and experts, and present ideas for feedback in an online community. |  |

### D. Digital Citizenship

| 8.1.12.D.2 Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines. |  |

### E. Research and Information Literacy

| 8.1.12.E.1 Develop a systematic plan of investigation with peers and experts from other countries to produce an innovative solution to a state, national, or worldwide problem or issue. |  |

### Big Idea: A word processor is a powerful tool that can be used to create all kinds of documents such as letters, brochures, invitations, resumes, calendars, newsletters, etc.

#### Essential Questions

- How can a word processor be used effectively in school, home and at work?
- How can a word processor be used to help people communicate better with each other?
- What other things can a word processor be used for, other than word processing?
- Why should a person learn how to use a word processor?
- How can learning to use a word processor help a person to excel in their lives?
- How can a person get training in word processing?

#### Enduring Understandings

Students will understand that:

- A word processor is a computer application used for the composition, editing, formatting, and printing of any sort of printable material.
- Word processing software allows the user to edit a document for spelling and grammatical errors.
- A word processor allows the user to personalize written documents by changing formats – font type, size and color, along with background style.
- The ability to use word processing software is now a prerequisite in all major fields.

### What key knowledge and skills will students acquire as a result of this unit?

#### Content:

Students will know:

- The uses for advanced lists and charts.
- The various uses of Microsoft Word and the advanced capabilities of the software such as, reusable content and markup tools and advanced tables and graphics.
- The various templates, designs, and layouts available to use in the production of Word documents.
- The advanced formatting to secure documents such as protecting documents and forms.
- The different Microsoft Online templates available to customize advanced word documents.
- The formatting of indexes, custom headers and footers, bookmarks and cross references.

#### Skills:

Students will be able to:

- Create advanced lists and charts.
- Insert a built-in building block and create a custom building block.
- Insert a field from Quick Parts and set field display options.
- Apply restore and delete a theme.
- Insert comments, track changes and customize revision marks.
- Create custom headers and footers, bookmarks and cross references.
- Format of indexes, custom headers and footers, bookmarks and cross references.
- Set restriction exceptions, apply password protection and encryption.
Stage 2- Assessment
Evidence that will be collected to determine whether or not desired results are achieved.

What evidence will show that students understand?

Suggested Performance Tasks:
- **My Thoughts** - Students will use creative thought to illustrate, construct and support their viewpoint on suggested topics. An online class flip book will be created and students will provide peer feedback.
- **Magazine** - Students choose group participants to research using the internet. A word processing document (magazine) will be credited, edited, published, and critiqued including advanced formatting strategies with graphics and text.
- **10 Wonders of Trenton** - Students will research and design a word processing document using advanced formatting skills such as hyperlinks/bookmarks, multilevel lists, and tables about Trenton, New Jersey.

Special Education Modification of Performance Tasks:
- Class Website and Blog Site
- Individual copy of written directions
- Graphic Organizers
- Flexible Grouping

What other evidence needs to be collected in light of Stage 1 Desired Results?

Other Evidence:
- Unit Test/Quizzes
- Presentations
- Project Based Assessment
- ePortfolio
- Class Blog
- Class Website
- Online Assessments
- Vision (observations)

Student Self-Assessment and Reflection:

Opportunities for self monitoring learning:

**Think-Pair-Share:** All students receive individual time to formulate an answer, pair up with a partner to discuss and then share out to class.

**Response Boards:** Students type their responses on the computer and share with a partner.

**Whip Around, Pass Option:** Teacher whips around the room until getting an oral answer/comment from each student. Students do have the option to pass the first time around.

**Reflection/Summary writing:** Students use electronic journals to independently reflect on the learning.

**Group Alerting:** After presenting material, teacher asks a question. Without calling on an individual, the teacher pauses to let the entire group formulate an answer. Students respond through instant message, email, blogging, ePortfolio.
The Computer Applications course is entirely technology-based. It involves the use of the following:

- Desktop/laptop computer with internet access
- LAN (Local Area Network)
- Current District Operating System
- Microsoft Office 2010 and other software/applications-WWW, email, Adobe, Java, WinZip, Antivirus

Suggested Strategies/Resources

- Learning Microsoft Office 2010 Advanced Skills (Pearson) Textbook, and data files
- Microsoft Word 2010 Application
- Laser Jet Printer
- Digital Camera
- Scanner
- Data Projector
- Vision Software
- Word 2010 Online Tutorials
- Word 2010 Videos - Video
- Integrated Technology Lessons - Hyperlinks to a variety of lessons that integrate technology
- Microsoft Office Templates - A variety of templates
- TALK - Literacy activities using MS Word
- Templates for Teachers - Create and customize read-only templates for students

Cross Curricular Connections

CCSS.ELA-Literacy.RST.11-12.7 - Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-Literacy.RST.11-12.9 - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CCSS.ELA-Literacy.RST.11-12.2 - Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

CCSS.ELA-Literacy.W.11-12.2a Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access manage, integrate, evaluate, and create information.
Stage 1: Desired Results

Content Standards/CPI’s Addressed in this Unit

A. Technology Operations and Concepts
- 8.1.12.A.1 Construct a spreadsheet, enter data, and use mathematical or logical functions to manipulate data, generate charts and graphs, and interpret the results.
- 8.1.12.A.2 Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.
- 8.1.12.A.4 Create a personalized digital portfolio that contains a résumé, exemplary projects, and activities, which together reflect personal and academic interests, achievements, and career aspirations.

B. Creativity and Innovation
- 8.1.12.B.1 Design and pilot a digital learning game to demonstrate knowledge and skills related to one or more content areas or a real world situation
- F. Critical Thinking, Problem Solving, and Decision-Making
- 8.1.12.F.1 Select and use specialized databases for advanced research to solve real-world problems.
- 8.1.12.F.2 Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs

Big Idea: The most basic purpose of a spreadsheet is to hold and store data electronically. Spreadsheets contain rows and columns for recording financial data and for use in comparative analysis.

Essential Questions
- When and why would a spreadsheet be used?
- How can a spreadsheet be a valuable tool for data organization?
- How is data entered, organized, and manipulated in a spreadsheet program?
- How can a spreadsheet provide structure and organization for data and make calculations?
- What are the types of reports that a spreadsheet program can create?
- In what fields would a spreadsheet program be most useful?

Enduring Understandings
- Students will understand that:
  - A spreadsheet is used to store various types of data.
  - A spreadsheet allows for users to enter and calculate numerical data.
  - Using a spreadsheet greatly increases productivity to manage receipts, create budgets, generate financial reports, track inventories and similar lists.
  - A spreadsheet combines the features of a general ledger with the flexibility of a powerful data analysis and reporting functions.

What key knowledge and skills will students acquire as a result of this unit?

Content:
- Students will know:
  - The way to enter data into a spreadsheet and manage large workbooks using advanced sorting and filtering
  - The process to present a spreadsheet and print reports.
  - The advanced charts, shapes and template features.
  - The use of data analysis scenario and worksheet auditing features.
  - The functions such as logical functions, absolute references and financial functions.
  - The of the advanced security features such as, track changes, secure and finalize a workbook and save for sending or sharing.

Skills:
- Students will be able to:
  - Use auto-filter to filter tables and custom criteria.
  - Remove an in place advanced filter.
  - Use SUM, AVG, and count in a filter table.
  - Present a spreadsheet and print reports.
  - Customize a workbook theme and create a custom style table using templates and shapes.
  - Analyze data scenarios and audit worksheets.
  - Input functions such as logical functions, absolute references and financial functions
  - Utilize security features such as, track changes, secure and finalize a workbook and save for sending or sharing.
Stage 2 - Assessment
Evidence that will be collected to determine whether or not desired results are achieved.

What evidence will show that students understand?

Suggested Performance Tasks:
Payroll Calculations - Students will become a payroll clerk and create an Excel spreadsheet to complete a weekly payroll.
Women and Children First - Students will view and research the Titanic and ponder if the rule of the sea, “women and children first,” was followed. Create an Excel worksheet and graph, then analyze the data to determine who was most likely to survive.
Cash Flow Projection - Students will make a presentation to potential investors (peers) for additional capital by developing a Cash Flow Projection to forecast his/her company’s future performance. Students will use raw data and comparison charts showing trends. Peers will evaluate presentation via online feedback and determine if they will invest in this company.

Special Education Modification of Performance Tasks:
- Class Website and Blog Site
- Individual copy of written directions
- Graphic Organizers
- Flexible Grouping
- Learning Logs
- Pre-teaching
- Re-teaching
- Vocabulary
- Vision (one/one)

What other evidence needs to be collected in light of Stage 1 Desired Results?

Other Evidence:
- (Unit Test/Quizzes
- Presentations
- Project Based Assessment
- ePortfolio
- Class Blog
- Class Website
- Online Assessments
- Vision (observations)

Student Self-Assessment and Reflection:

Opportunities for self monitoring learning:

Think-Pair-Share: All students receive individual time to formulate an answer, pair up with a partner to discuss and then share out to class.
Response Boards: Students type their responses on the computer and share with a partner.
Whip Around, Pass Option: Teacher whips around the room until getting an oral answer/comment from each student. Students do have the option to pass the first time around.
Reflection/Summary writing: Students use electronic journals to independently reflect on the learning.
Group Alerting: After presenting material, teacher asks a question. Without calling on an individual, the teacher pauses to let the entire group formulate an answer. Students respond through instant message, email, blogging, ePortfolio.
9.2.12.B.6 Design and utilize a simulated budget to monitor progress of financial plans.

9.2.4.C.4 Determine the relationships among income, expenses, and interest.

Cross Curricular Connections

Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access manage, integrate, evaluate, and create information

The Computer Applications course is entirely technology-based. It involves the use of the following:

- Desktop/laptop computer with internet access
- LAN (Local Area Network)
- Current District Operating System
- Microsoft Office 2010 and other software/applications-WWW, email, Adobe, Java, WinZip, Antivirus
- Other Hardware- Scanner, printer, burner, audio player, white board, projector, digital camera, etc.
- Web-based tools- Podcasts, blogs, project based activities, e Portfolio etc, class website

Suggested Strategies/Resources

Learning Microsoft Office 2010 Advanced Skills (Pearson) Textbook, and data files
Microsoft Excel 2010 Application
Laser Jet Printer
Data Projector
Vision Software

- ABC's of Excel Ideas integrating spreadsheets into curriculum with elementary students
- Excel Nexus Free Excel templates
- School Spreadsheet Safari Spreadsheet history and vocabulary; examples to use
- Excel Tabs Printable guide for the tabs used in Excel 2010
- The Excel Magician Excel tips and shortcuts
- Spreadsheet Resources Links to examples, activities, tutorials, data
Slide Presentations

Stage 1 - Desired Results

Content Standards/CPI's Addressed in this Unit

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B. Creativity and Innovation
8.1.12.B.1 Design and pilot a digital learning game to demonstrate knowledge and skills related to one or more content areas or a real world situation.

Big Idea: Slide presentations are used in almost every field of study to transmit information, in an electronic multimedia format.

Essential Questions
- What are the uses of a slide presentation?
- How do I create a presentation?
- How do I create and edit slides using presentation software?
- How do I incorporate text and move text within a slideshow?
- How do I vary the slide template throughout the presentation?
- How do I add video/sound to my presentation?
- How do I incorporate personal photos or images into my slide show?

Enduring Understandings
- Students will understand that:
  - Slide presentations are now the standard media for information transfer in most fields.
  - Information should be limited and brief in an effective presentation.
  - Using charts, graphs, animations, and other visuals adds an important dimension to a presentation.
  - Material must be organized in a way that lends itself to smooth transitions between slides.
  - Timing and rehearsing are important aspects of creating a slide presentation.

What key knowledge and skills will students acquire as a result of this unit?

Content:
- Students will know:
  - The advanced features of working with masters, comments, handouts and pictures.
  - To apply advanced graphic and media techniques such as photo album, advanced animation and working with actions.
  - That using advanced tables and charts are needed for informational presentations.
  - The uses for multimedia presentations using advanced multimedia features and formatting and features.
  - How to customize a presentation by fine tuning content placement and publishing for a variety of audiences.

Skills:
- Students will be able to:
  - Insert a new slide master and customize placeholders.
  - Use advanced notes and handout master formats.
  - Apply advanced graphic and media techniques such as photo album, advanced animation and working with actions.
  - use advanced tables and charts are needed for informational presentations.
  - Create multimedia presentations using advanced multimedia features and formatting and features.
  - Customize a presentation by fine tuning content placement and publishing for a variety of audiences.
Stage 2 - Assessment

Evidence that will be collected to determine whether or not desired results are achieved.

What evidence will show that students understand?

Suggested Performance Tasks:

**Kiosk Presentation** - Students will use advanced slide master features, and notes/handouts to create a presentation that can be used at local health fairs to give viewers information about the company’s home health care options.

**Tell Me a Story** - Students will create, edit, and publish a short children’s story using PowerPoint. Students will bring their story to life through audio recording, timing, and animation. Stories will be published on the website to share with elementary school students during their literacy block. Students will receive feedback via an online survey.

**Motivate Us** - Students will use advanced PowerPoint Skills to create a multimedia presentation that will motive, inspire, and call the audience to action. Presentations will be peer reviewed for Emmy Awards and school assembly.

Special Education Modification of Performance Tasks:

- Class Website and Blog Site
- Individual copy of written directions
- Graphic Organizers
- Flexible Grouping
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(Pearson) Textbook, and data files
Microsoft Power Point 2010 Application
Data Projector
Vision Software

PowerPoint Tips and Tricks Shows several helpful “ins and outs” of PowerPoint
Parade of Games Huge Collection of PowerPoint Games
Biology PowerPoints Pre-made presentations on cells, DNA etc.
Teacher PowerPoints Presentations created by teachers
Backgrounds 100 free backgrounds
Brainy Betty Templates and tutorials
Template Builder Free PowerPoint template builder

Cross Curricular Connections

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Unit 4: Multimedia & Digital Resources

Content Area/Course: Advanced Computer and Technology Applications

Stage 1- Desired Results

Content Standards/CPI's Addressed in this Unit

A. Technology Operations and Concepts
8.1.12.A.4 Create a personalized digital portfolio that contains a résumé, exemplary projects, and activities, which together reflect personal and academic interests, achievements, and career aspirations.

C. Communication and Collaboration
8.1.12.C.1 Develop an innovative solution to a complex, local or global problem or issue in collaboration with peers and experts, and present ideas for feedback in an online community.

D. Digital Citizenship
8.1.12.D.2 Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines.

E. Research and Information Literacy
8.1.12.E.2 Predict the impact on society of unethical use of digital tools, based on research and working with peers and experts in the field.

F. Critical Thinking, Problem Solving, and Decision-Making
8.1.12.F.2 Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs.

Big Idea: Digital movies enhance multimedia presentations.

Essential Questions

- How can people use this software to create original, innovative works, ideas, and solutions?
- What device do you prefer to use to film a digital movie?
- What digital movie-editing software do you use?
- What features do you think make a digital movie effective?

Enduring Understandings

- Digital movies enhance multimedia presentations.
- The student will design and create a digital movie.
- The student will capture and import pictures, video, and audio.

What key knowledge and skills will students acquire as a result of this unit?

<table>
<thead>
<tr>
<th>Content:</th>
<th>Skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will know:</td>
<td>Students will be able to:</td>
</tr>
<tr>
<td>- The advantages of utilizing a timeline in video production.</td>
<td>- Identify elements of the Movie Maker window.</td>
</tr>
<tr>
<td>- The incorporation effects and transitions enhances tone and audience engagement.</td>
<td>- Design and create a movie using Movie Maker.</td>
</tr>
<tr>
<td>- How to import music and sound effects.</td>
<td>- Capture and import pictures, video, and audio.</td>
</tr>
<tr>
<td>- The elements of the Movie Maker window.</td>
<td>- Utilize a timeline.</td>
</tr>
<tr>
<td>- The steps to design and create a movie using Movie Maker.</td>
<td>- Incorporate effects and transitions.</td>
</tr>
<tr>
<td>- How to capture and import pictures, video, and audio.</td>
<td>- Import music and sound effects.</td>
</tr>
</tbody>
</table>
Stage 2 - Assessment
Evidence that will be collected to determine whether or not desired results are achieved.

What evidence will show that students understand?

Suggested Performance Tasks:
- Let’s Make Movies - Students choose group participants to develop an original movie. Group will choose one of the presented themes and research to design a movie that informs the audience. Groups will explore ways to capture graphics, pictures, text, and audio to enhance message of theme. Published Movies will be presented for audience feedback and critique.
- Let’s get Personal - Students will design, edit, and produce an original movie based on personal events, family traditions/customs, and future goals. Students will use narration and music to link footage, create tone, and enhance quality of production. Published movies will be published online to share with family and friends. Viewer will provide feedback via an online survey.

Special Education Modification of Performance Tasks:
- Class Website and Blog Site
- Individual copy of written directions
- Graphic Organizers
- Flexible Grouping
- Learning Logs
- Pre-teaching
- Re-teaching
- Vocabulary
- Vision (one/one)

What other evidence needs to be collected in light of Stage 1 Desired Results?

Other Evidence:
- Unit Test/Quizzes
- Presentations
- Project Based Assessment
- ePortfolio
- Class Blog
- Class Website
- Online Assessments
- Vision (observations)

Student Self-Assessment and Reflection:

Opportunities for self monitoring learning:
Think-Pair-Share: All students receive individual time to formulate an answer, pair up with a partner to discuss and then share out to class.
Response Boards: Students type their responses on the computer and share with a partner.
Whip Around, Pass Option: Teacher whips around the room until getting an oral answer/comment from each student. Students do have the option to pass the first time around.
Reflection/Summary writing: Students use electronic journals to independently reflect on the learning.
Group Alerting: After presenting material, teacher asks a question. Without calling on an individual, the teacher pauses to let the entire group formulate an answer. Students respond through instant message, email, blogging, ePortfolio.
## Windows Movie Maker
Digital Camera
Scanner
Data Projector
Vision Software

### Virtual Web Cameras
Forty different subject areas

http://www.woostersch.org/MovieMakerLiveResources.html

Movie Maker Tutorials

http://www.woostersch.org/library/ videoresources.htm

Video and Audio Resources

http://www.papajohn.org/

Tips and Troubleshooting for Movie Maker

http://home.nwoca.org/Academy/MovieMaker/moviemake1.html#top

Editing Streaming Video

http://www.youtube.com/watch?v=JZXK68NS7gU

Video Editing

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## CCSS.ELA-Literacy.W.11-12.3
Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences

## CCSS.ELA-Literacy.W.11-12.3b
Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.

## CCSS.ELA-Literacy.W.11-12.3c
Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).

## CCSS.ELA-Literacy.W.11-12.3d
Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

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## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access manage, integrate, evaluate, and create information

The Computer Applications course is entirely technology-based. It involves the use of the following:

- Desktop/laptop computer with internet access
- LAN (Local Area Network)
- Current District Operating System
- Microsoft Office 2010 and other software/ applications- WWW, email, Adobe, Java, WinZip, Antivirus
- Other Hardware- Scanner, printer, burner, audio player, white board, projector, digital camera, etc.
- Web-based tools- Podcasts, blogs, project based activities, e Portfolio etc, class website
Glossary of Terms

**Basic technology terms for preschool**: Examples digital camera, battery, screen, computer, Internet, mouse, keyboard, and printer.

**Controversial issue**: For example, global warming, scarcity of water, alternative energy sources, election campaigns.

**Current and emerging technology resources**: For example, cell phones, GPS, online communities using wikis, blogs, vlogs, and/or Nings.

**Data-collection technology**: For example, probes, handheld devices, and geographic mapping systems.

**Developmentally appropriate**: Students’ developmental levels prescribe the learning environment and activities that are used.

**Digital learning game**: For example, Alice, Lively.

**Digital tools for grades 4, 8, and 12**: For example, computers, digital cameras, probing devices, software, cell phones, GPS, online communities, VOIP, and virtual conferences.

**Electronic authoring tools**: Software that facilitates online book development (e.g., multimedia electronic book).

**Mapping tools**: For example, Google earth, Yahoo maps, and Google maps.

**Media-rich**: Multiple forms of digital applications in one product (e.g., graphic design, word processing, and spreadsheet).

**Multimedia presentation**: For example, movie, podcast, vlog.

**Online discussion**: UNICEF, Oracle, i-Earn, blogs, wikis

**Online learning community**: For example, i-Earn, Ning, blogs, wikis, Second Life

**Operations and related applications**: For example, saving a word processing file to a network drive, printing a spreadsheet.

**Reverse engineer**: To isolate the components of a completed system.

**Shared hosted services**: For example, podcasts, videos, or vlogs.

**Technologies**: Medical, agricultural, and related biotechnologies, energy and power technologies, information and communications technologies, transportation technologies, manufacturing technologies, and construction technologies.

**Virtual environments**: For example, games, simulations, websites, blogs.

**Web-based publication**: For example, web pages, wikis, blogs, ezines.