FUTUREKIDS®
Giving Educators Technology's Edge

Foundations in Teacher Technology Education

Futurekids Foundations in Teacher Technology Education offers a customized handbook on computer literacy for Teachers based on customer needs. The course is not designed to make participants experts on a specific software application, but rather to familiarize them with the basic concepts of operating systems, Internet, word processing, graphics, spreadsheets, desktop publishing, databases and multimedia.

The program's content is based on the ISTE standards for computer technology literacy. Its proprietary methods are focused on a combination of project-based thematic learning strategies, which address skill development in the authentic contexts of the participants while attending to the personal attitudes and perceptions associated with learning new technology skills.

Both the K-8 and the High School versions are activity-oriented, relevant to the appropriate grade levels of the teachers involved, individually responsive and fun. Professional tasks (keeping grade books, creating lesson plans and communicating with various educational groups) and classroom teaching (complementing the current curricula) are addressed. Basic skills, methodology and pedagogy are covered at theoretical and applied levels. The program's content is based on the ISTE standards for computer technology literacy. Its proprietary methods are focused on a combination of project-based thematic learning strategies, which address skill development in the authentic contexts of the participants while attending to the personal attitudes and perceptions associated with learning new technology skills.

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The course can be customized to meet the individual skill levels of participants, and the goals and objectives of the group. The course includes:

- Pre-assessment, embedded evaluation, post-assessment and electronic portfolio creation
- Templates
- Handbooks
- Comprehensive final report
- 3 Graduate credits or 4.5 CEUs

Topics Covered:

The program's content is based on the ISTE standards for computer technology literacy. The program focuses on project-based thematic learning strategies while keeping in mind the participants' personal attitudes and perceptions associated with learning new technology skills.

Computer Basics

- Discuss commonly held opinions about education technology
- Describe important events in the history of educational technology
- Understand the development of the personal computer
- Understand the development of software used in education
- Define common computer terms
- Demonstrate the proper use of a computer
- Demonstrate the proper handling of a CD-ROM
- Use the mouse to click, point and drag
- Launch and exit a software application
- Use menus, icons and buttons within a software application
- Locate information within a multimedia encyclopedia
- Print a document

Operating Systems

- Identify the components of a computer system
- Understand the relative storage capacity of a kilobyte, a megabyte and a gigabyte
- Understand read-only memory (ROM) and random-access memory (RAM)
- Identify input and output devices
- Launch the operating system and application software
- Introduce the components of the computer desktop
- Move and resize windows
- Minimize, restore and maximize windows
- Customize a computer desktop through the Control Panel
- Organize files and folders on a hard disk drive
- Create and use a shortcut to an application
- Open, edit and save a document
- Format a floppy disk
- Transfer files from the hard disk drive to a floppy disk
- Create, rename and delete files and folders
- Understand the importance of backing up files

Internet

- Define terms related to the Internet
- Describe the history of the Internet
- Create and send electronic mail
- Read messages posted on an Internet discussion group
- Use an education-related chat room on the Internet
- Enter an address to locate a specific Web site

- Explore various sites on the World Wide Web
- Use hyperlinks in Web pages
- View educational resources on the World Wide Web
- Use a search engine to locate information on the World Wide Web
- Describe good search techniques
- Examine educational Web sites
- Critically evaluate a Web site

Word Processing

- Create a document
- Open, print and save documents
- Change text font and size
- Enter and edit text
- Use the Find function
- Cut, copy, and paste text
- Modify the alignment and line spacing of text
- Bold, italicize and underline text
- Create headers and footers
- Insert footnotes
- Add bullets to a list
- Modify a document's margins
- Create a table
- Insert clipart images
- Use the Spell Check, Grammar and Thesaurus functions

Graphics

- Distinguish between bitmap graphics and object-oriented graphics
- Use graphics tools to create and modify images
- Create shapes and lines
- Change the colors of an image
- Create a gradient
- Modify the layers of objects
- Group and ungroup objects
- Select and erase a portion of a graphic
- Rotate and flip graphics
- Move and resize graphics
- Group and ungroup multiple graphics
- Create graphical text effects
- Duplicate images
- Insert and modify clipart

- Crop an image
- Create shadows and 3-D effects

Spreadsheets

- Identify the parts of a spreadsheet
- Locate a cell by its column and row position
- Select a cell and a range of cells
- Enter data into a cell
- Modify row heights and column widths
- Enter a formula into a cell
- Use a function within a formula
- Use the Fill function
- Insert rows and columns
- Select fonts and styles
- Modify the number format of a cell
- Graph spreadsheet data using a pie chart and a column chart
- Format a chart
- Add color and shading
- Print a spreadsheet
- Use absolute and relative cell references
- Enter an If…then statement into a spreadsheet
- Insert a header into a spreadsheet

Advanced Spreadsheets

- Modify the size and position of a chart
- Use multiple sheets within a spreadsheet file
- Change the scale of a chart
- Create a graph with two X axes or two Y axes
- Sort data within a spreadsheet
- Modify the colors and text of a chart
- Analyze, interpret and chart data
- Create formulas to calculate sums, differences and averages
- Create a bar, column and line chart

Educational Software Usage and Evaluation

- Discuss use of a computer lab versus the use of a classroom computer
- Identify categories of educational software
- Describe criteria for evaluating educational software
- Discuss different methods for evaluating software
- Critically evaluate an educational software application

Desktop Publishing

- Define terms related to desktop publishing
- Use a wizard to create a document
- Alter the zoom percentage of a document
- Create a text frame and enter text
- Insert clipart into a document
- Incorporate graphics from a multimedia encyclopedia
- Align objects within a document
- Layer objects
- Add a border to a page
- Modify font, font size and style
- Move between multiple pages within a document
- Link text frames
- Create and format a table
- Insert page numbers into a multi-page document
- Create and modify a picture frame
- Modify how text wraps around a graphic

Databases

- Define terms related to databases
- Create a database
- Move between records and fields
- Enter and edit information in a database
- Change a field's number format and data type
- Hide and reveal selected records and fields
- Locate records that match criteria
- Add fields and records
- Protect a database
- Insert and delete records
- Use appropriate database views
- Sort database records
- Find and replace data
- Merge information from a database into a word processing document

Advanced Databases

- Perform a multiple-field sort
- Add a graphic to a database form
- Create, format and print reports
- Change the row height and column width of a report

- Perform mathematical functions based on selected data
- Add borders and shading to a report
- Analyze and interpret data
- Perform advanced queries using and, or & not

Multimedia

- Create a linear multimedia presentation
- Insert sound and video
- Add clipart images to slides
- Animate text and objects
- Alter slide timings
- Add transitions between slides
- Create buttons and hot spots
- Modify the background of and change the order to slides
- Create a branching multimedia presentation
- Play a multimedia presentation

Integrated Unit Design

- Complete an "open-computer" technology examination
- Discuss classroom goals
- View a sample technology-infused unit
- Practice integrating technology into a sample unit
- Review and discuss the Integrated Unit project

Integrated Unit Creation

- Share ideas for the Integrated Unit project
- Integrate technology into a thematic unit
- Generate samples of student work by using word processing, spreadsheet, database, desktop publishing and graphics applications
- Create a multimedia presentation for the Integrated Unit project

Integrated Unit Presentation

- Finish the Integrated Unit project
- Present the completed integrated units to the class
- Assess technology skills acquired throughout the course