



Pine Grove Area
SCHOOL DISTRICT

Technology Curriculum

**First Grade Business, Computer, and
Information Technology**

Board Approved August 2007

I. PHILOSOPHY

The First Grade Business, Computer, and Information Technology course of the Pine Grove Area School District has been structured to introduce the first grade students to a technology course that continues at the basic level. The course will allow for the accommodation of many learning styles, motivational levels, and academic abilities.

II. CORE CONCEPTS

1. Electronic Communication Methods - Understanding the various methods of electronic communication
2. Basic Computer Communications - Ability to communicate effectively at a basic level with the use of a computer
3. Software - Ability to manipulate through appropriate grade level software
4. Basic Computer Operations - Ability to perform appropriate hardware functions using subject-oriented terminology and technique
5. Image Manipulation - Ability to manipulate images on the computer to create a visually pleasing document
6. Word Processing - Ability to key text into a document

III. COURSE OF STUDY

A. Course Name: Business, Computer, and Information Technology

B. Grade Level: First Grade

C. Length of Course: Full Year

1. Frequency: 1 day every 5-day cycle

2. Duration: 30 minutes

D. Academic Level: First Grade

E. Credits: 0

F. Prerequisites: none

G. Course Description:

The BCIT First Grade Course will introduce the students to computer safety and ethics. Computers basics will include: parts of a computer, computer do's and don'ts, working with the mouse and keyboard, and opening and closing programs. Students will practice the proper hand positions for beginning keyboarding and will learn to use the home row and space bar. In the area of word processing, children will continue to practice entering text and numbers, use the space bar, and move to a new line and key in the alphabetic letters. They will use the paint and drawing features in various programs. The students will also be introduced through teacher demonstration the following applications: spreadsheet, database, desktop publishing, and the internet.

IV. CONTENT: Business, Computer, and Information Technology/ Grade 1

CORE CONCEPT 1: Electronic communication methods

MAJOR OBJECTIVE: Understanding the various methods of electronic communication

| CURRICULUM STANDARD: | | | |
|---|---|--|--|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| <p>PA STANDARD 3.6.B Know that informational technology involves encoding, transmitting, receiving, storing, retrieving and decoding.</p> <ul style="list-style-type: none"> Identify electronic communication methods that exist in the school and community (e.g., digital cameras, fax, scanner, telephone, internet, television, DVD, fiber optics) Identify graphic reproduction methods Describe appropriate image generating techniques (e.g., photography, video, digital imagery) Demonstrate the ability to communicate an idea by applying basic sketching and drawing techniques with digital tools | <p>Teacher will guide students to:</p> <ul style="list-style-type: none"> Utilize basic drawing tools to illustrate a graphic Identify digital cameras, telephone, fiber-optics, internet as ways to share information across the world Utilize a digital camera to take a picture | <p>Teacher evaluation of:</p> <ul style="list-style-type: none"> Partner projects Individual projects Class work Teacher observation Independent activities Cooperative activities Teacher demonstration and student observations Student demonstrations Oral presentations Oral questions and answers Worksheets | <ul style="list-style-type: none"> Instructor generated resources Software programs, including but not limited to Bailey’s Book House, Sammy’s Science House, Travel the World with Timmy, Trudy’s Time and Place House, Stanley’s Sticker Stories, Frippletown, Thinkin Things Collection 2, Kip Phonics, Kid Phonics 2, KidWorks Deluxe, Ultimate Writing and Creativity Center , Type to Learn 3, Type to Learn Jr, Kid Pix, Print Shop, Hyper Studio, Accelerated Reader, Compass Learning, MS Word Textbook resources On-line resources |

CONTENT: Business, Computer, and Information Technology/ Grade 1

CORE CONCEPT 2: Basic Computer Communications

MAJOR OBJECTIVE: Ability to communicate effectively at a basic level with the use of a computer

| CURRICULUM STANDARD: | | | |
|---|---|--|---|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| <p>PA STANDARD 3.7.E Identify basic computer communications systems.</p> <ul style="list-style-type: none"> • Apply a web browser • Apply basic electronic mail functions. • Use on-line searches to answer age appropriate questions | <p>Teacher will guide students to:</p> <p>Use menu options and commands (e.g. Stop, Print, Go, Open)</p> <p>Demonstrate and apply knowledge of the alphanumeric keys and special keys (e.g. escape key, space bar, delete/backspace, enter)</p> <p>Demonstrate and apply knowledge of how to open a browser and click on pre-selected links</p> | <p>Teacher evaluation of:</p> <ul style="list-style-type: none"> ▪ Partner projects ▪ Individual projects ▪ Class work ▪ Teacher observation ▪ Independent activities ▪ Cooperative activities ▪ Teacher demonstration and student observations ▪ Student demonstrations ▪ Oral presentations ▪ Oral questions and answers ▪ Worksheets | <ul style="list-style-type: none"> ▪ Instructor generated resources ▪ Software programs, including but not limited to Bailey’s Book House, Sammy’s Science House, Travel the World with Timmy, Trudy’s Time and Place House, Stanley’s Sticker Stories, Fripplertown, Thinkin Things Collection 2, Kip Phonics, Kid Phonics 2, KidWorks Deluxe, Ultimate Writing and Creativity Center , Type to Learn 3, Type to Learn Jr, Kid Pix, Print Shop, Hyper Studio, Accelerated Reader, Compass Learning, MS Word ▪ Textbook resources ▪ Internet Explorer |

CONTENT: Business, Computer, and Information Technology/ Grade 1

CORE CONCEPT 3: Software

MAJOR OBJECTIVE: Ability to manipulate through appropriate grade level software

| CURRICULUM STANDARD: | | | |
|---|--|--|--|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| <p>PA STANDARD 3.7.D Use basic computer software.</p> <ul style="list-style-type: none"> • Apply operating system skills to perform basic computer tasks • Apply basic word processing skills • Apply specific instructional software as directed by the teacher • Identify and utilize simple graphic materials generated by the computer | <p>Teacher will guide students to:</p> <p>Handle the CD software</p> <p>Insert the CD and open the program to start</p> <p>Maneuver through selected programs after introduction</p> <p>Utilize and demonstrate selected instructional software with adult guidance for academic support</p> <p>Demonstrates and translate knowledge of alphanumeric keys and special keys</p> | <p>Teacher evaluation of:</p> <ul style="list-style-type: none"> ▪ Teacher observation ▪ Independent activities ▪ Cooperative activities ▪ Teacher demonstration and student observations ▪ Student performance | <ul style="list-style-type: none"> ▪ Instructor generated resources ▪ Software programs, including but not limited to Bailey’s Book House, Sammy’s Science House, Travel the World with Timmy, Trudy’s Time and Place House, Stanley’s Sticker Stories, Frippletown, Thinkin Things Collection 2, Kip Phonics, Kid Phonics 2, KidWorks Deluxe, Ultimate Writing and Creativity Center , Type to Learn 3, Type to Learn Jr, Kid Pix, Print Shop, Hyper Studio, Accelerated Reader, Compass Learning, MS Word ▪ Internet Explorer ▪ Instructor's Webpage |

CONTENT: Business, Computer, and Information Technology/ Grade 1

CORE CONCEPT 4: Basic Computer Operations

MAJOR OBJECTIVE: Ability to perform appropriate hardware functions using subject-oriented terminology

| CURRICULUM STANDARD: | | | |
|---|--|---|---|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| <p>PA STANDARD 3.7.C Identify basic computer operations and concepts.</p> <ul style="list-style-type: none"> • Identify the major parts necessary for a computer to input and output data • Explain and demonstrate the basic use of input and output devices (e.g., keyboard, monitor, printer, mouse) • Explain and demonstrate the use of external and internal storage devices (e.g., disk drive, CD drive) | <p>Teacher will guide students to:</p> <p>Demonstrate and apply knowledge of basic computer hardware: e.g. keyboard and mouse, printer, monitor, CD's, case for the CPU (central processing unit)</p> <p>Handles CD's and other computer equipment with care</p> | <p>Teacher evaluation of:</p> <ul style="list-style-type: none"> ▪ Partner projects ▪ Individual projects ▪ Class work ▪ Teacher observation ▪ Independent activities ▪ Cooperative activities ▪ Teacher demonstration and student observations ▪ Student demonstrations ▪ Oral presentations ▪ Oral questions and answers ▪ Worksheets ▪ Classroom Discussions | <ul style="list-style-type: none"> ▪ Instructor generated resources ▪ Textbook resources ▪ Software programs, including but not limited to Bailey's Book House, Sammy's Science House, Travel the World with Timmy, Trudy's Time and Place House, Stanley's Sticker Stories, Fripptown, Thinkin Things Collection 2, Kip Phonics, Kid Phonics 2, KidWorks Deluxe, Ultimate Writing and Creativity Center , Type to Learn 3, Type to Learn Jr, Kid Pix, Print Shop, Hyper Studio, Accelerated Reader, Compass Learning, MS Word |

CONTENT: Business, Computer, and Information Technology/ Grade 1

CORE CONCEPT 5: Image manipulation

MAJOR OBJECTIVE: Ability to manipulate images on the computer to create a visually pleasing document

| CURRICULUM STANDARD: | | | |
|--|--|---|---|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| PA STANDARD 3.7.D Use basic computer software. <ul style="list-style-type: none">Utilize basic computer graphic generated software to create a specific curricular project | Teacher will guide students to: Manipulate graphics to re-size objects Move objects to other areas of presentation | Teacher evaluation of: <ul style="list-style-type: none">Individual projectsClass workTeacher observationTeacher demonstration and student observationsStudent demonstrations | <ul style="list-style-type: none">Instructor generated resourcesTextbook resourcesSoftware programs |

CONTENT: Business, Computer, and Information Technology/ Grade K
 CORE CONCEPT 6: Word Processing
 MAJOR OBJECTIVE: Ability to key text into a document

| CURRICULUM STANDARD: | | | |
|--|---|--|---|
| State Standard/Student Expectation | Specific Content | Assessments | Resources/Materials |
| <p>PA STANDARD 3.7.D Use basic computer software.</p> <ul style="list-style-type: none"> Apply basic word processing skills to practice letter recognition and letter association on the keyboard | <p>Teacher will guide students to:</p> <ul style="list-style-type: none"> Utilize color-coded keyboard to identify letters on keyboard Utilize keyboarding program Practice 1:1 correspondence Demonstrate proper posture while working at the computer station Type a complete sentence with a capital letter and ending punctuation Click “print” | <p>Teacher evaluation of:</p> <ul style="list-style-type: none"> Individual projects Class work Teacher observation Independent activities Teacher demonstration and student observations Student demonstrations Oral presentations Oral questions and answers | <ul style="list-style-type: none"> Instructor generated resources Textbook resources Software programs |

V. EXPECTED LEVELS OF ACHIEVEMENT

A. Students are expected to reach the first grade level of achievement in mathematics. These skills include all of those noted in the specific content area of this curriculum.

B. Grading system for all first grade technology classes is as follows:

| Grading Scale | |
|----------------------|----------------------|
| S | Satisfactory |
| N | Needs Improvement |
| O | Outstanding |

C. Each student's grade will be determined at the conclusion of each marking period.