

# ICT Assessment of Entering Preservice Teachers

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## Context

- Bowling Green State University
  - Largest producer of teachers in OH
  - 4,500 education students
  - 700 teachers graduate per year
- Four teacher education programs
  - Early Childhood, Middle Childhood, AYA, Special Education

## Need

- Integrating more technology in teacher preparation courses (PT3)
  - Faculty expressed difficulty having students use technology to complete assignments;
  - Extreme range of technology skills among students;
  - Required lab time to provide hands-on time;
  - Ed tech courses developed basic skills.

## Assessment of Technology Competencies

- Students possess skills necessary to complete technology-related assignments in education courses
- More advanced levels of tech integration across TE programs
- Ed tech courses to focus more on pedagogy of instruction and tech use
- Skilled teachers effectively use technology

## Targeted Student Group

- EDHD 201--Intro to Education
  - 600 student per semester
  - Taken in freshmen or sophomore year
  - Required of all education students
- Passing ATC is equivalent to a letter grade in course
- Piloted in 03-04 with 1150 students
- Fully implemented 04-05

## Development

- Skills defined
  - Current computer classes
  - OH SchoolNet criteria
  - ISTE Standards
- Exam Construction
  - Three sections
  - Scoring checklists
- Assessment Piloted
  - EDTL 302 & 367 (Fall, 2002), n=66
  - EDHD 201 (Spring, 2003), n=185
  - EDHD 201 (Fall, 2003), n=592
  - EDHD 201 (Spring, 2004), n=506

### Format [Copy of assessment](#)

- Three sections apply 4 skill areas: Word-Processing, Spreadsheet, Presentation, & Illustration

### Evaluation ([copy of rubric](#))

- Checklist developed
  - Required elements for passing
  - Points assigned to skills
  - Point minimum required for passing
- Model products included to guide evaluation

### Process

- Presented assessment, checklist, and process in EDHD 201
- Students sign up for testing session→Online registration system
- Sessions outside of class time and proctored
- Students prepare through available support
- Blackboard shell created to communicate with students

### Support for ATC Preparation

- Student Tech: Tutoring, Online Tutorials, & Workshops
- [Video Tutorials](#)
- Study Groups

### ATC Reporting

- Midterm distribution
- Scores reported via Blackboard
- Rubrics returned in EDHD 201 class
- Students retake only failed portions

### Comparison of Results

	Fall 2003	Spring 2004	Fall 2004	Spring 2005
Students in EDHD 201	633	568	697	512
Average score on ATC	33.3	34.9	30.9	32.4
% passing	71%	74%	60%	63%
% not attempting ATC	8%	10%	10%	9%
% opting not to retake	9%	4%	16%	2%

### Issues

- Personnel issues
- Attachment to course
- Requirement of passing
- What constitutes passing?
- What are essential skills?
- Support systems for failure

Access copies of ATC and rubric at: <http://edhd.bgsu.edu/atc/info>

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# EDHD Assessment of Technology Competencies

This assessment is performance-based in that you will use technology to create three products that demonstrate your technology competency. These three products are:

- **Word Document** that utilizes: a 2-column format; a picture (located during a web search); text formatted with two fonts, two sizes, and two styles; spell-check; paint/draw tools; an imported chart
- **Excel Spreadsheet** that applies several formulas, number formats, and creation of charts.
- **PowerPoint Presentation** of two slides that applies layout template, Clip Art image, paint/draw tools, transition, and animation.


This assessment is open book. You may use any books, handouts, notes, or other material you choose. You may NOT consult with or look at others' work as you complete the exam. You may not use previously created documents—all products must be created in the Technology Resource Center during your assessment timeslot. For each product/file created, it is essential that you save the files exactly as specified. There is no need to print the files, but you will forward them to the specified server location at the conclusion of the assessment period.

To begin the assessment, you should open/launch the following applications:

- An Internet browser of your choice (*Netscape* or *Explorer*).
- *Microsoft Word*.
- *PowerPoint*.
- *Excel*.

## Product #1: Word Document

**DIRECTIONS:** Read each step first. Then complete each task in order. The disk icon is a reminder to save your work at that point. Raise your hands if you have a question.

1. In *Word*, you will create a two column document that is similar to a newsletter format. Create the file and save the document as  *username*word.doc, where *username* is YOUR BGNET USERNAME (for example, sbanistword.doc).

2. At the top of the page, include a large title across both columns using **WordArt** that reads "Animal Facts".
3. Using the drawing tools, draw a **horizontal line** across both columns separating the title from the text of the document. Change the thickness of the line to 3 points and the color of the line to blue.
4. Format the remainder of the page as a **2 column** document.
5. In the left hand column, write one or two paragraphs describing your favorite animal. Be sure to include characteristics of its look, habitat, and food. **"Justify"** the text of your article be sure to spell-check!

6. Create a **title** for your article, include your name beneath it. Place it above your article text in the left-hand column.
7. **Format** the article text and title so that you use 2 font types, 2 font sizes, and 2 font styles.
8. Go to your Internet browser, search for a picture that depicts your favorite animal. Insert this picture **below** your article, in the left hand column. You may need to resize the picture. You must include the web site address showing where the picture originated in the left hand column of your Word document below your picture.

9. In the right hand column, insert the title "Semester Grades".
10. Save this document now.
11. Keep this document open, as you will need to add a chart in the right hand column soon.

## Product #2: Excel Spreadsheet

**DIRECTIONS:** Read each step first. Then complete each task in order. Raise your hands if you have a question. Remember to save often!

1. Within Excel, create a new file and save this file as *username*excel.xls, where *username* is YOUR BGNET USERNAME (for example, sbanistexcel.xls). Input the following data to construct a basic grade book.

	HW1	HW2	Test 1	Test 2	Paper	Exam	Total
Jane Doe	81	78	74	78	88	87	***
Mary Lou Johnson	95	83	91	85	92	90	***
John Smith	89	80	77	75	72	78	***
Class Average	###	###	###	###	###	###	###

2. Use a **bold font** for column headers. (ex. **Name**, **HW1**, **HW2**)
3. Adjust the width of the first column so that each name fits on one line.
4. You will need to create formulas for any cells that have ###, \*\*\*.
  - a. For **Class Average**, use the average function in the selected cells. (###)
  - b. For **Total**, use the sum function in the selected cells. (\*\*\*)
5. Format class average cells (###) to **two decimal places**.
6. Create a chart depicting Jane Doe's grades for the semester, **excluding** her total points.
  - a. Choose a columnar (vertical bar) chart format.
  - b. Title the chart, "**Jane Doe's Semester Grades**".

Save  
Often

- c. Title the categories on the x-axis, indicating assignment types. (HW 1, HW 2, Test 1, Test 2, Paper, Exam)

Save  
Often

7. Save the spreadsheet and chart now.
8. Paste chart into the right hand column of your word document. You may need to **resize** your chart **BEFORE** copying and pasting into the Word document. However, it is also possible to format the chart after it is in Word. Save word document again.

## Product 3: PowerPoint Presentation

**DIRECTIONS:** Read each step first. Then complete each task in order. Raise your hands if you have a question. Remember to save often!

1. Create a new file in PowerPoint select a slide design from the format menu *and* choose a layout. Save this file as *username* pres.ppt where *username* is YOUR BGNET USERNAME( for example, sbanistpres.ppt).
2. Type in the following text on the first slide. Center text.



**Tutoring in Technology for BGSU Students**  
**Student Tech**  
**(Your First Name and Last Name)**  
**(Today's Date)**


3. On the first slide, insert an image of your choice from Clip Art (in Insert pull-down menu).
4. In the upper right hand corner of slide one, insert a textbox that reads "Located in SaddleMire"
5. Type in the text below on the second slide, with title and bullets.



**Tutoring offered to students in:**

- **PowerPoint**
- **Digital Video**
- **Photoshop**
- **Web Page Design**
- **Much more!**

**Walk-in or by appointment!**

6. Create a Transition of your choice to the second slide, **slow speed**.
7. On the second slide, Insert the "heart" **autoshape**  from the drawing tools. Color the heart using a fill color.
8. Create a preset "Flash Once" animation for the bullet points on the second slide.



9. Save your presentation now.

## EDHD Assessment of Technology Competencies Scoring Checklists

Student Name \_\_\_\_\_

Section # \_\_\_\_\_

### Part 1: Word Processing

Header in Word Art	pass	0
Two columns in document	pass	fail
Horizontal blue line	pass	fail
Horizontal line is 3 point thickness	pass	0
LH column		
• Title of article and name placed before text	pass	0
• Two font types used	pass	0
• Justified text	pass	0
• Two font styles used	pass	0
• Two font sizes used	pass	0
• Spell check used (no spelling errors)	pass	0
• Graphic inserted	pass	0
• Web site address of graphic noted	pass	fail
RH column		
• Chart from Excel	pass	fail
File saved correctly	pass	0
File transmitted successfully	pass	fail

# Animal Facts

Dogs Are GREAT!!!  
Written by Jane Doe

Of all the animals in the world, my favorite is the dog. Mind you, this is not just any dog. Some dogs have long hair, some have short but I really, really love fuzzy cute dogs. Most dogs like to eat dog food, a favorite being Purina Dog Chow. Dogs also like the occasional dog treat or perhaps a scrap of "human" food. Overall, I think that it is safe to assume that all dogs like to sleep in the evening and play during the day. **I LOVE DOGS!!**



© © ©  
My: <http://www.k9web.com/cgi-bin/boards/charities.html>

### SEMESTER GRADES



**Note:**

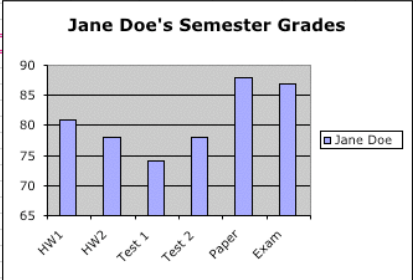
"Fail" on any item is failure for Part 1 only.

### Part 2: Spreadsheet

Numerical data in columns displayed according to instructions	pass	0
Bold font is used for column headers	pass	0
First column size is adjusted	pass	0
Formulas entered correctly		
• Class average (###)	pass	fail
• Total (***)	pass	fail
Numbers formatted per instructions (2 decimal places)	pass	0
Columnar chart shown		
• Appropriate columnar chart used per instructions	pass	0
• Appropriate data shown in chart	pass	fail
• Title for chart included	pass	0
• Categories labeled properly on x-axis	pass	0
Spreadsheet saved correctly	pass	0
Spreadsheet transmitted electronically	pass	fail

	HW1	HW2	Test 1	Test 2	Paper	Exam	Total
Jane Doe	81	78	74	78	88	87	486.0
Mary Lou Johnson	95	83	91	85	92	90	536.0
John Smith	89	80	77	75	72	78	471.0
Class Average	88.33	80.33	80.67	79.33	84.00	85.00	497.67

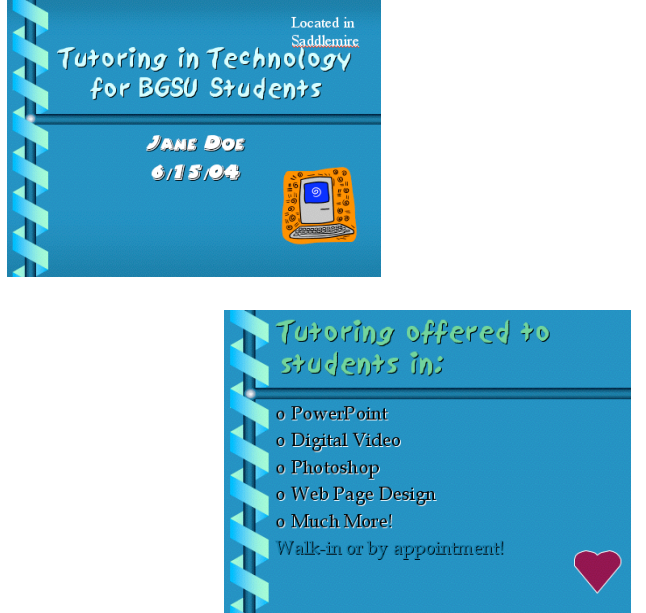
### Jane Doe's Semester Grades



**Note:**

"Fail" on any item is failure for Part 2 only.

**Part 3: Presentation Software**

Project consists of 2 slides	pass	0	
Title Slide			
• Used slide design and layout	pass	fail	
• Information on slide accurate	pass	0	
• Text centered	pass	0	
• Clip Art inserted correctly and sized	pass	0	
• Text box in right corner that reads "Located in SaddleMire"	pass	0	
Content slide			
• Title on slide per instructions	pass	0	
• Bullet points use "flash once" animation	pass	0	
• Uses heart autoshape	pass	fail	
• Fill color used	pass	0	
Transition between slides	pass	fail	
Presentation saved per instructions	pass	0	
Presentation transmitted electronically	pass	fail	

**Note:**

"Fail" on any item is failure for Part 3 only.