DOCUMENT RESUME

ED 463 728   IR 021 147

AUTHOR   Rafaill, William S.; Peach, Andrea C.
TITLE   Are Your Students Ready for College? Technology Literacy at
                Georgetown College.
PUB DATE   2001-04-28
NOTE   22p.; In: Proceedings of the Annual Mid-South Instructional
                Technology Conference (6th, Murfreesboro, TN, April 8-10,
                2001); see IR 021 138.
AVAILABLE FROM For full text: http://www.mtsu.edu/~itconf/proceed01/27.pdf.
PUB TYPE   Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   *Computer Uses in Education; Higher Education; *Information
                Literacy; *Information Technology; School Surveys; *Student
                Evaluation; Tables (Data); *Technological Literacy

ABSTRACT
        In 1999, Georgetown College (Kentucky) established the
Information Technology Literacy Program that requires new students to
demonstrate basic proficiencies in the use of information-technology
resources in several proficiency areas (i.e., Internet, library Web-based
databases and online catalogs, e-mail, word processing, spreadsheets,
databases, and presentations) as a requirement for graduation. Students are
given a task-based technology assessment test within the first 3 weeks of
their first semester. The test results are then used as an advising tool to
determine if the student needs additional technology skills. A summary of the
first 2 years of this testing data as well as specific trends are discussed.
A list of schools surveyed for comparative purposes and the assessment test
tasks are appended. (Contains 13 references.) (Author/MES)

Are Your Students Ready for College?
Technology Literacy at Georgetown College

Dr. William S. Rafaill
Coordinator, Technology Literacy Program
Georgetown College
Georgetown College, Georgetown, Kentucky 40324
wrafail0@georgetowncollege.edu

\&

Dr. Andrea C. Peach
Assistant Professor of Education and Instructional Technology Coordinator
Georgetown College
Georgetown College, Georgetown, Kentucky 40324
apeach0@georgetowncollege.edu

March 28, 2001

2

Abstract

College students need to understand how technology is used to gather, manipulate, and communicate data and knowledge. In 1999, Georgetown College established the *Information Technology Literacy Program* that requires new students to demonstrate basic proficiencies in the use of information-technology resources as a requirement for graduation. Students are given a task-based technology assessment test within the first three weeks of their first semester. The test results are then used as an advising tool to determine if the student needs additional technology skills. A summary of the first two years of this testing data as well as specific trends are discussed.

Terms Used in This Report

Although it could be argued that there is a distinction between the terms "concept", "proficiency", and "skill", for the purposes of this report, no distinction is made between them, they are treated as being synonymous.

The term "Internet" is used in its proper sense to include the World Wide Web, email, gophers, FTP, library research databases, and so forth.

The term "Intranet" is used to refer to the Georgetown College campus information network.

The terms "computer literacy", "information literacy", and "digital literacy" are often used synonymously. The authors feel that the latter two are more appropriate terms as each suggests a broader set of tools and skills than "computer literacy".

Georgetown College — Technology Literacy

Background

During 1997-98, the Executive Vice President and Provost of Georgetown College, requested a recommendation concerning what constitutes computer literacy. The issue was based upon the Southern Association of Colleges and Schools (SACS) requirements. SACS states, in section 4.2.2, *Undergraduate Completion Requirements*, that "The institution must demonstrate that its graduates are competent in ... the basic use of computers".

The Process

To address the issue of the SACS requirement, faculty, staff and upper-class students across a variety of academic disciplines were interviewed. Each interview began with two questions: (1) *What technology proficiencies (or skills or concepts) are necessary, and should be required, of every graduate of Georgetown College?* and (2) *When is it most appropriate that we ensure that our students develop these skills?*

Lastly, information was gathered from a number of other liberal arts colleges (Appendix A) to see how these schools addressed this issue. This information was obtained by reviewing academic catalogs as well as academic information posted online at the web sites of these institutions. If clarifying information was needed, an appropriate person was contacted by email or telephone.

Recommendation for An Information Technology Program

Information Literacy is ... The Theme

At the heart of every discussion concerning information literacy is the point that all students, college or otherwise, need to understand how technology is used to gather, manipulate, and communicate data and knowledge. Students must be empowered to become knowledge gatherers by using technology along with, not instead of, more traditional tools. After all, technology is just another tool to be added to the process of gathering information.

According to Paul Gilster (1997), "Digital literacy is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers". We believe that definition must be extended to include the ability to **create** information in multiple formats using a variety of computer tools and to then **present** that information via a computer and some output device such as a printer or projection system.

In addition, students need to learn that a certain body of programs, for example word processing programs, all essentially operate in a similar manner regardless of platform. Thus the process of building literacy is one of empowering students to have the confidence that, if and when they are confronted with a new application or a different platform, they will have the self-assurance to proceed.

It became clear that if Georgetown College was to fully educate its students, then the College must ensure that its students were digitally literate. Georgetown students must not only acquire the skills of being information gatherers in an increasingly digital world, but they must also acquire the skills to be information creators. It is equally important, in both the case of being a "gatherer" and a "creator", that Georgetown students be able to discover and evaluate content before deciding how to put it to use. In short, the College must remember that information literacy is achieved not by mastering keystrokes but by understanding the impact of ideas.

To ensure that Georgetown College students become technologically literate, the College instituted the Information Technology Literacy Program in the fall of 1999.

When are the Skills Needed?

Even though the SACS requirement is a graduation requirement, it was agreed that students must acquire these skills as soon as possible after matriculation, preferably prior

to the beginning of their sophomore year. All of the skills are vital to the success of college students. Consequently, allowing students to postpone the development of these skills would be doing a disservice to the students.

The Information Technology Literacy Program

Requirements for Undergraduate Degree Catalog Statement

Information technology proficiency is a requirement for graduation. Students must demonstrate basic proficiencies in the use of computers and related information-technology resources. Students may satisfy this requirement by passing a proficiency examination administered during the student's first semester at Georgetown College. If proficiency is not demonstrated students may take the necessary technology workshops and then retake the examination, or successfully complete CSC120. Students are encouraged to satisfy the technology proficiency requirement during their first year at Georgetown College.

Proficiency Areas

- Internet (search engines, etc.)

- Library Web-Based Databases, Online Catalogs (Proquest, EBSCO, etc.)

- Email

- Word processing

- Spreadsheets

- Databases

- Presentations

Testing Methodology, Procedures

What Happens During Orientation?

The Technology Literacy Program Coordinator meets with new students during orientation to explain the purpose of the assessment test and the options they will have depending upon their test scores. In addition, the students receive assigned test times.

The Test – Logistics and Consequences

Students are tested in groups of ~40 at a time over the first two to three weeks of the new semester. All testing is done in the two computer labs in the College's Learning Resource Center. Testing is done in the early evening, Sunday through Thursday. The test is not

timed. Students are allowed to leave at any time after they complete the test. The average time it takes to complete the test is ~3.5 hours; some students complete all parts in less than two hours, while others take longer than five.

The assessment test covers the seven proficiency areas as noted previously; each area is tested separately with its own "sub-test". The passing score for each "sub-test" is at 50%. Students must achieve a passing score in five or more areas out of the seven to be deemed "technology proficient". Since the assessment test is rather rigorous, and since all seven of the "sub-tests" must be completed in a single sitting, it was felt that the minimum passing score for the assessment test should be less than the minimum passing grade (60%) for a class covering technology skills. In a technology skills class, the student has the opportunity to collaborate with a partner, to get help from fellow students, and to get help from the instructor. On the other hand, during the assessment test, the student is "on his (or her) own". Lastly, the assessment test is viewed as setting the minimum baseline of technology skills for technology proficiency, not as setting the standard for technology proficiency.

The student is given the following options based upon his/her assessment test scores:

- If the student passes 5, 6, or 7 out of 7, the student is deemed "technology proficient" and no further technology work required of the student
- If the student passes fewer than 5 areas, then the student is deemed "not technology proficient". To become "technology proficient", the student has several options
- she/he may take Application Software (CSC120)
- at the conclusion of each section of the course, the appropriate module of the assessment test is given.
- the student must pass this course with a "C" or better to be deemed "technology proficient"; the student's grade is based upon homework exercises and performance on the assessment test.
- or s/he attend leader-directed, hands-on workshops and/or use online, self-paced tutorials.

In either case, the student must retake "failed" portions of the assessment test; there is no limit on the number of times the student can retake the test.

The Test

The assessment test that covers word processing, spreadsheets, databases, and presentations is an "online" test using SAM 2000™ from Course Technology/Thomson Learning <http://www.course.com/>. SAM is a real-time, task-based assessment as the student is presented with a variety of tasks in Microsoft Office 2000 while working live with Word, Excel, PowerPoint and Access (see Appendix B). Currently, the assessment test for Internet searching, the use of research databases, and email skills is done as a written test (see Appendix B). This test simply measures the student's ability to recall information. Starting with next fall's test, the plan is to use Blackboard™ from

6

Blackboard, Inc. <http://www.blackboard.com/> to develop a task-based, online test for these areas.

The Information Technology Literacy Program Web Site

The Information Literacy Program Web Site, <http://spider.georgetowncollege.edu/tlc>, was developed to serve as a central location for all of the information that the student needs regarding this program. Included at the site is a program description, workshop options and schedules, how to contact the Student Technology Mentors for assistance, assessment test study guides, the Technology Literacy Course Matrix, and so forth.

The Information Technology Literacy Course Matrix and Advising

Although the process described above would deem that a student that passed five areas but failed two to be "technology proficient", it is possible for such a student to be deficient in essential skills. For example, suppose that an intended business major passes all areas *except* presentations and spreadsheets. This hypothetical student would be deficient in essential skills required of business majors. Consequently, it was determined that students need to be advised as to the technology skills required in both their major courses as well as other courses. If we are going to designate students as being "technology proficient" based upon the results of an assessment test, we need to also ensure that they develop the correct skill set for their major.

To aid the advising process, a matrix showing the necessary technological skills for all courses offered was produced. This matrix represents a snapshot of what technology skills are utilized in the courses currently taught at Georgetown. The course matrix is updated on an annual basis. The courses were rated so that the student would know which technology skills were required for student success in the course and which were desired but not required for student success.

Results

The Typical Georgetown College Student

Tables 1, 2 and 3 statistically describe first-time Georgetown College freshmen.

Table 1
Georgetown College — First-Time Freshmen Statistics

	2000	1999	1998	1997	1996
ACT Average					
Male	23.98	24.03	23.76	24.07	23.69
Female	24.39	23.86	23.80	24.47	24.24
ACT Average (mix/match1 [1])	25.00	24.77	24.61	24.95	24.30
HS GPA	3.52	3.53	3.46	3.48	3.39
Male	3.40	3.42	3.31	3.32	3.17
Female	3.61	3.60	3.58	3.59	3.53
Governor's Scholars	19	19	29	19	18
Valedictorians	25	33	31	16	19
Salutatorians	11	14	15	17	12
Foreign Countries	4	1	0	0	1
Out-of-State	18%	17%	14%	19%	13%
Male	42.9%	39.4%	45.1%	39.3%	40.0%

Table 2
First-Time Freshmen High School Class Rank

	2000	1999	1998	1997	1996
Top 10%	38%	38%	35%	40%	34%
11-20%	21%	20%	20%	18%	18%
21-30%	14%	14%	16%	16%	15%
31-40%	10%	11%	12%	12%	10%
41-50%	6%	8%	7%	5%	6%
51-60%	6%	2&	5%	4%	6%
61-70%	4%	2%	3%	3%	5%
71-80%	2%	2%	2%	2%	4%
81-90%	0%	2%	0%	0%	1%
Lowest 10%	0%	1%	0%	0%	1%

1[1] Mix/Match average is arrived at by taking the highest subscore from multiple test sessions and recalculating the ACT composite. RAP (restricted admits) students have been removed.

Table 3
First-Time Freshmen by Ethnic Breakdown

	2000	1999	1998	1997	1996
American Indian	0	1	0	0	0
Asian/Pacific Is.	2	0	0	0	0
Black	3	4	11	6	7
Hispanic	3	1	1	3	1
Non-Res Alien	5	1	0	0	1
White	318	333	396	385	317

Assessment Test Results

To date, the class of 2003 (entered Fall of 1999) and the class of 2004 (entered Fall of 2000) have taken the Technology Assessment Test. In each of the first two years of testing, less than 50% of the students that took the assessment test actually passed (see Tables 4, 5, and 6).

Table 4

Assessment Test — Overall Results*

Class Entered	# Pass	% Pass	# Fail	% Fail	No Take
1999	151	68%	70	32%	56
2000	121	47%	135	53%	83

* These results include students that took the assessment test during orientation, students that returned to retake failed "sub-tests", and students that passed CSC120 with the grade of "C" or better. Students who are no longer at Georgetown are not included even if they originally took the test.

Table 5

Assessment Test — Results by Sub-Test

Word Processing

Class Entered	# Pass	% Pass	High Score	# Fail	% Fail	Low Score	Mean Score
1999	191	94	94	13	6	3	55
2000	188	73	98	68	27	0	58

Spreadsheets

Class Entered	# Pass	% Pass	High Score	# Fail	% Fail	Low Score	Mean Score
1999	113	55	90	94	45	0	58
2000	79	31	90	177	69	0	34

Data Bases

Class Entered	# Pass	% Pass	High Score	# Fail	% Fail	Low Score	Mean Score
1999	130	64	90	74	36	0	58
2000	60	23	92	196	77	0	29

Presentations

Class Entered	# Pass	% Pass	High Score	# Fail	% Fail	Low Score	Mean Score
1999	140	69	90	63	31	0	60
2000	102	40	90	154	60	0	36

Internet, Email, Research Databases

Class Entered	# Pass	% Pass	High Score	# Fail	% Fail	Low Score	Mean Score
1999	199	92	92	18	8	32	72
2000	204	80	96	52	20	0	60

Discussion

In spite of all of the emphasis (and money spent) on technology in the K-12 arena2[2], why are a significant number of incoming Georgetown College students not "technology proficient", at least based upon our assessment test? Why is the initial passing rate less than 50%? The low scores seem to indicate that the program is a needed and potentially valuable asset to the student's success in college coursework.

2[2] see "National Educational Technology Standards for Students. An International Society for Technology in Education (ISTE) initiative" and "Kentucky's Learning Goals And Academic Expectations. Kentucky Department of Education" for examples of student technology standards. See "Kentucky Education Technology System 99/2000 Student & Teacher Workstation Ratios" as one form of evidence of technology expenditures in Kentucky K12 schools.

The Technology Literacy Program is designed to ensure that all new Georgetown College students begin their academic study at the same baseline with regard to technology. The assessment test administered when they arrive will ensure that all students will have the opportunity to achieve this baseline immediately should they be found deficient. The technology course matrix when used as part of the advising process will ensure that all students will know what technology skills are part of each course and the student, if necessary, can develop these skills using online tutorials or by taking a workshop. Furthermore, by removing the instruction of baseline technology skills from the academic classroom, instructors are now freed from having to do this instruction. Instead of taking vital class time to teach students how to do word processing, English instructors can instead concentrate on writing. Or, instead of taking vital class time to teach students how to make a spreadsheet, Accounting and Marketing instructors can instead concentrate on "what if" analysis.

Several problems still need to be addressed, however. First is the length of the test. Many students seem to 'give up' before the testing is complete. A further analysis of the test questions may point out ways of shortening the test. Second, many students are not showing up for their testing appointment. Even though the test is required, students are putting it off beyond the freshman year. This defeats the primary purpose of the test and, for some faculty, creates a doubt as to the technology competency of all students. Third, students need continuing assistance on problem areas in technology. Some students that do not pass given portions of the test either do not choose to take the technology course. Others need additional support beyond what is taught in class or by tutorials. The college is working to address this problem by training students to act as technology trainers and help desk support.

Furthermore, the assumption is that within the next five years or so, a requirement for a single, specified course will no longer be needed; workshops and online tutorials will still be needed but the bar that sets the baseline of skills will most likely be raised. Without exception, other schools found that initiating a required course and also initiating a concomitant faculty development program was a good **first step**. However, the second step after the program had time to work (in most cases, five years or less) was to drop the required course simply because it was **no longer needed as a required course** for all students. The reason was twofold: one, new students arrived on campus with more skills than those of previous students; two, as the skills of the faculty increased, more technology was integrated into the curriculum. As a consequence, the goals of the program were now being achieved not by offering a single course but by using the technology tools throughout the four-year curriculum in several courses in all departments. In either case, whether there is a required course or "technology across the curriculum" is a reality, the goals are still the same: one, to ensure that students acquire the skills of being both information gatherers and information creators; and, two, to be able to discover and evaluate content before deciding how to put it to use.

References

Author Unknown. (1998). An evaluation of the microcomputer standard at Colby College, subcommittee report of the information technology committee. [Online]. Available: http://www.colby.edu/committees/itc/micro/final_report/index.htm

Author Unknown. (1998). National Educational Technology Standards for Students. An International Society for Technology in Education (ISTE) initiative. [Online]. Available: http://cnets.iste.org/ .

Author Unknown. (1999). Kentucky's Learning Goals And Academic Expectations. Kentucky Department of Education. [Online]. Available: http://www.kde.state.ky.us/oapd/curric/Publications/transformations/acadexp.html .

Bardo, John W. (1998). Mandate for megabytes. Trusteeship, 6(5), 6-10.

Bierman, Scott and Cathy Smith. 1995. Academic computing services: more than a utility. [Online]. Available: http://www.carleton.edu/campus/ACNS/CAUSE/

Cole, Shannon. 2000, November. Technology has Found Its Way into Our Schools …Now What?. TechTrends, 44(6), 23-27.

Cooley, Donald H. and Jianping Zhang. 1998. Computer-based teaching and assessment of computer and information literacy. Journal of Technology and Teacher Education, 6(1), 11-22.

Gilster, Paul. 1997. Digital Literacy. New York: Wiley Computer Publishing.

Sherer, Michael. 1997. Equipping Ourselves to Thrive in the Information Era. [Online]. Available: http://www.goshen.edu/~msherer/convo.html

Sorge, Dennis, James Russell, Susan Mandell, and Brandon Sorge. 1997. Implementing technology in education. Purdue Research Foundation. [Online]. Available: http://www.math.purdue.edu/highSchool/technology/

Umbach, Kenneth W. Teachers and a new educational technology, a fable of sorts (without talking animals). [Online]. Available: http://home.inreach.com/kumbach/CBT.HTML

Valenza, Joyce Kasman. 1998. Information literacy is more than computer literacy. Philadelphia Online's Schools Crossings. [Online]. Available: http://crossings.phillynews.com/archive/k12/infolit4_16.htm

Wyrick, Jim. 1999. Kentucky Education Technology System 99/2000 Student & Teacher Workstation Ratios. [Online}. Available: http://www.kde.state.ky.us/oet/planning/techplans/profile.asp .

Appendix A — List of Schools Surveyed for This Study

The following schools were used for comparative purposes in this study. Dr. Garvel Kindrick, Director of Institutional Research, provided a list of the Georgetown College's "benchmark" schools with data indicating how these BA1 Institutions were selected as benchmarks. Using that information, plus information about other liberal arts colleges that WSR was aware of, the following schools were selected. The **Benchmark?** column is coded as follows:

-• "CIRP" schools are those that answered YES to all four questions of the CIRP research survey

-• "NCHEMS" are those additional schools not answering YES to all four questions on the CIRP survey but added by Georgetown College to its benchmark list because of proximity and/or overlap of applications

-• "WSR" are those additional schools selected by William Rafaill for this project for comparative purposes either because of their geographic proximity and/or their reputation for technology

NOTE: This list was compiled during the 1997-98 academic year. The categorization of these schools may have changed since that time.

Institution	State	Web Address	Benchmark?
Agnes Scott College	GA	http://web.agnesscott.edu/	WSR
Albion College	MI	http://www.albion.edu	CIRP
Alma College	MI	http://www.alma.edu/	NCHEMS
Augustana College	IL	http://www.augustana.edu/	WSR
Berea College	KY	http://www.berea.edu/	NCHEMS
Berry College	GA	http://www.berry.edu/main.html	WSR
Bethune-Cookman College	FL	http://www.bethune.cookman.edu/	WSR
Carleton College	MN	http://www.carleton.edu/	WSR
Carson-Newman College	TN	http://www.cn.edu/	WSR
Central College	IA	http://www.central.edu/	NCHEMS
Centre College	KY	http://www.centre.edu/	CIRP
Coe College	IA	http://www.coe.edu/	NCHEMS
Colby College	ME	http://www.colby.edu/	WSR
Covenant College	GA	http://www.covenant.edu/	WSR
Davidson College	NC	http://www.davidson.edu/	CIRP
Eckerd College	FL	http://www.eckerd.edu/	WSR

Elmhurst College	IL	http://www.elmhurst.edu/	WSR
Erskine College	SC	http://www.erskine.edu/	CIRP
Flagler College	FL	http://www.flagler.edu/	WSR
Franklin College	IN	http://www.franklincoll.edu/	NCHEMS
Furman University	SC	http://www.furman.edu/	NCHEMS
Goshen College	IN	http://www.goshen.edu/	CIRP
Guilford College	NC	http://www.guilford.edu/	NCHEMS
Hanover College	NC	http://www.hanover.edu/	CIRP
Hastings College	NE	http://www.hastings.edu/	NCHEMS
Hope College	MI	http://www.hope.edu/	NCHEMS
Houghton College	NY	http://www.houghton.edu/	NCHEMS
Huntingdon College	AL	http://www.huntingdon.edu/	CIRP
Illinois College	IL	http://www.ic.edu/	NCHEMS
Knox College	IL	http://www.knox.edu/	WSR
LaGrange College	GA	http://www.lgc.peachnet.edu/	WSR
Millsaps College	MS	http://www.millsaps.edu/	NCHEMS
Morehouse College	GA	http://www.morehouse.edu/	WSR
Olivet Nazarene University	IL	http://www.olivet.edu/	WSR
Presbyterian College	SC	http://www.presby.edu/	NCHEMS
St. John's University	MN	http://www.csbsju.edu/	CIRP
St. Leo College	FL	http://www.saintleo.edu/	WSR
St. Olaf College	MN	http://www.stolaf.edu/	WSR
Transylvania University	KY	http://www.transy.edu/	NCHEMS
University of the South	TN	http://www.sewanee.edu/	CIRP
Wartburg College	IA	http://www.wartburg.edu/	NCHEMS
Wesleyan College	GA	http://www.wesleyan.peachnet.edu/	WSR
Westminster College	PA	http://www.westminster.edu/	NCHEMS
Wheaton College	IL	http://www.wheaton.edu/	WSR
William Jewell College	MO	http://www.jewell.edu/	CIRP

Appendix B— The Assessment Test Tasks

Each SAM test requires the student to perform a variety of tasks while using Microsoft Access, Excel, PowerPoint and Excel. The tasks for each of these tests is listed here.

Access Tasks

1. Create a table with specified fields types and formats.

2. Use the Office Assistant to find information on changing a field's data type.

3. Open a specified table from the Database window and leave it open. Open a specified table from the Database window and print it.

4. Select specified record and print it.

5. Open a specified table, navigate to the last record in the table, and enter data in a specified field.

6. Open a specified form, move to the last record. Change the data in a specified

7. Use a Database Wizard to create a new database.

8. Create a database in the Design . Use the Table Wizard to create a new table as specified. Use the Form Wizard to create a new for form

9. In a specified table, set a primary key for sorting.

10. In a specified table, change the specified field from one data type to another.

11. In a specified table, move the specified field to a new position.

12. In a specified table, delete a field.

13. Use the Form Wizard to create a new form based on a specified table.

14. In a specified form, change the format of a field as directed

15. Switch to design view in the specified table.

16. In a specified table, enter new record information

17. In the specified form, add a new record using the data given.

18. In a specified table, delete the last record.

19. In a specified table, use the Find command to locate a specified.

20. In a specified table, sort records in ascending order by title.

21. Print Preview a specified report. Do not print the report.

22. 22.   In a specified report, select all the labels in the Page Header section and format them as specified.

23. 23.   In a specified report, change the caption of the label as directed.

24. 24.   In a specified form, insert a clip art graphic as directed.

Excel Tasks

1. 1.   Delete contents of the specified cell. Undo the last action performed in this spreadsheet.

2. 2.   Enter the given label in the specified cell.

3. 3.   Enter the given date in the specified cell.

4. 4.   Cut the contents of the specified data range and then Paste the data into a different, specified data range.

5. 5.   Copy the specified cell and then use Paste Special to Paste the values only in different, specified cell.

6. 6.   Clear all formatting in the specified cells.

7. 7.   Auto Fill the specified cells with the months "Oct" through "Mar".

8. 8.   Change the color of the font of a specified word in a cell to Red.

9. 9.   Apply the Currency number format to the data in a specified data range using a specified currency format.

10. 10.   Apply a Date number format to the specified cell A4 using a specified date format.

11. 11.   Change the Width of the specified columns to a specified width.

12. 12.   Center the contents of the specified cells.

13. 13.   Use the Format Painter command to apply the format of one specified cell to a specified range of cells.

14. 14.   Add the specified border style to the specified cells.

15. 15.   Apply the specified cell shading to the specified cells.

16. 16.   Merge and Center the specified cells.

17. 17. Print the current worksheet.

18. 18. Create a Custom Header with the specified text.

19. 19. Insert a new row after the specified row.

20. 20. Delete the specified column.

21. 21. Freeze all rows at the specified location.

22. 22. Insert a new worksheet at the specified location.

23. 23. Move the specified worksheet to the specified position in the workbook.

24. 24. Insert a 3D reference to consolidate and link the specified data in three different worksheets into the specified cell of the fourth, consolidation worksheet.

25. 25. Replace the specified cell reference in the formula found in a specified cell with the specified data range by dragging to select the appropriate cells.

26. 26. Using the formula bar, enter a formula in the specified cell to perform the given calculation.

27. 27. Change the formula in the specified cell to use Relative References (column and row) to the values in the specified cells.

28. 28. Use AutoSum in the specified cell to calculate the total of a given data range.

29. 29. Use Paste Function to Insert a function in the specified cell to perform the specified calculation.

30. 30. Enter a formula in the specified cell that calculates the average of the values in a specified data range.

31. 31. Use the DATE function to enter a specified date into the specified cell.

32. 32. Insert an IF function in a specified cell to perform the specified logical actions. Then copy the formula from specified cell to a range of cells as specified.

33. 33. Print Preview the specified chart

34. 34. Create a Column chart using the specified data. The chart will not have a legend but will include a chart title and X and Y axis labels.

35. 35. Paste a link from a specified cell of the specified worksheet to a specified cell of a different, specified worksheet so that its value is displayed in both places.

36. 36.   Apply to the specified cells the Accounting number format using the specified Accounting style.

37. 37.   Create a Custom number format for the specified range of cells as directed.

38. 38.   Sort the data list given using a single key sort as directed.

39. 39.   Sort the data list given using a multiple key sort as directed.

40. 40.   Insert the specified comment in a specified cell

PowerPoint Tasks

1. 1.   Delete the specified slide from the presentation.

2. 2.   Insert a new slide at a specified point using a specified AutoLayout.

3. 3.   Change the title of a slide as specified; then save the presentation with the specified, new filename in a specified folder.

4. 4.   Insert a footer with the "Date and time" option set (updated automatically) on every slide except the title slide.

5. 5.   In Slide Sorter view, move the specified slide to the end of the presentation.

6. 6.   Automatically replace every occurrence of the specified name with a different, specified name.

7. 7.   Change the layout of a specified slide to the "Title Slide" layout.

8. 8.   On the Slide Master, change the font size of the Master title style to 54 pt.

9. 9.   In Outline view, move a specified slide to a new, specified location.

10. 10.   Apply a specified design template to the presentation.

11. 11.   Use the Spelling dialog box to spell-check the entire presentation.

12. 12.   In Normal view enter the specified text as the last bulleted item on the final slide in the presentation using the Outline pane or the Slide pane.

13. 13.   Center-align the specified bulleted items.

14. 14.   Use the Format Painter to apply the format of the first bulleted item on the specified slide to the remaining bulleted items

15. 15.   On the specified slide, promote the specified text so that it becomes a slide title for a new slide.

16. 16.   Insert a specified clip art image on the current slide, at a specified location. Make sure the art does not overlap the text on the slide.

17. 17.   Apply the a specified Slide Transition effect to the entire presentation.

18. 18.   Add the a specified animation effect to the slide text (the bulleted list).

19. 19.   Preview the presentation in greyscale.

20. 20.   Print the entire presentation as handouts containing six slides to a page.

21. 21.   Set up the slide show to begin with Slide 4.

22. 22.   Insert the specified text in the specified line, and then save the presentation.

23. 23.   Save the presentation under a new, specified name in a specified folder.

24. 24.   Insert a hyperlink on a slide to a specified web address.

25. 25.   On a specified slide, animate the chart object so that chart elements appear by category.

26. 26.   Insert the specified gif file at a specified location on a slide.

27. 27.   Insert a table from Microsoft Word on the current slide with two columns and two rows.

28. 28.   Insert the specified Microsoft Excel chart on the last slide in the presentation.

29. 29.   Add a specified sound file at a specified location on the current slide.

30. 30.   Create a column chart on the current slide using the specified column headings and data.

Word Tasks

1. 1.   Use the Undo command to remove the last formatting applied in the document.

2. 2.   Apply Italic formatting to the specified text.

3. 3.   Underline the specified text.

4.   4.   Check the document for spelling errors using the tools in the Spelling and Grammar dialog box.

5.   5.   Highlight the specified text with Red highlighting.

6.   6.   Insert a specified word the end of a specified paragraph.

7.   7.   Move a specified sentence to a new, specified location.

8.   8.   Cut the specified text and paste to a new, specified location.

9.   9.   Use the Format Painter to copy the formatting of the specified heading to a different, specified heading.

10.   10.   Change the Font of the specified text to a different, specified font.

11.   11.   Change the Font Size of the specified text to a different, specified font size.

12.   12.   Automatically replace every occurrence of the specified text with a different, specified text.

13.   13.   Insert today's date at the specified location using the specified date format. Set the date to Update automatically.

14.   14.   Insert the specified symbol at the specified location.

15.   15.   Center-align the specified line of text.

16.   16.   Add Bullets to the five lines of specified text beginning using the specified bullet style.

17.   17.   Add a Shadow border around the items in the specified bulleted list.

18.   18.   Apply a 0.5" Left indent to the specified paragraph.

19.   19.   Add a 0.3" First Line indent to the specified paragraph.

20.   20.   Change the Left tab at the specified location to a Decimal tab.

21.   21.   Format the specified Left tab to include a dashed leader line.

22.   22.   View the specified document in the Print Preview screen.

23.   23.   Insert page numbers in the default style at the bottom right corner of every page in the specified document.

24. 24.   Change the Left and Right margins to 1" in the specified document.

25. 25.   Change the format of the page numbers in the specified document to the specified format.

26. 26.   Insert a footer in the specified document that reads "All applicant information is kept confidential".

27. 27.   Save the current document with the same filename to a specified location.

28. 28.   Save the current document with the new, specified filename to a specified location.

29. 29.   Using the Save As command, create a new folder with a specified name to a specified location. Now save the current document into the new folder without changing the file name.

30. 30.   Insert an autonumbered footnote that reads "Required" at the specified location.

Internet, Email & Research Data Base Questions

1. 1.   What does the term "Internet" encompass? How would you define this term?

2. 2.   What does each part of an email address represent? Which part is the "user name"? Which part is the "domain name"? Which part is the "top-domain name"? What does the @ symbol represent?

3. 3.   What does each part of a web address represent? Which part represents the protocol? Which part is the name of the server? Which part is the directory or folder on the server? Which part is the file being accessed? What does the / symbol represent?

4. 4.   Why are Internet addresses of any type (web, email, etc.) always written in lowercase and always enclosed in angle brackets when included in text?

5. 5.   How would you describe the "TO:" portion of an email address? the "FROM:" portion? the "CC:" portion? the "BCC:" portion?

6. 6.   How would you describe the "SUBJECT:" portion of an email address? What does it mean when the subject is preceded with "RE:"? with "FW:"?

7. 7.   What is an "Email Attachment"? How and when would you use an email attachment? What must you do to open an email attachment?

8. 8. What does the acronym "TCP/IP" stand for and why is it important?

9. 9. What are "COMPUTER PROTOCOLS" and why are they important?

10. 10. What does the acronym "HTTP" stand for and why is it important?

11. 11. What does the acronym "FAQ" stand for and why is it important?

12. 12. What does the acronym "URL" stand for and why is it important?

13. 13. What does the acronym "HTML" stand for and why is it important?

14. 14. What is the difference between a "WEB SERVER", a "WEB SITE", a "WEB PAGE", and a "HOME PAGE"?

15. 15. What is a "SEARCH ENGINE"? a "META SEARCH ENGINE"? a "SUBJECT DIRECTORY"? How are they related, what are their similarities and differences?

16. 16. What are "BOOLEAN OPERATORS"? How are they used in searches? Compare the operators and give examples of the use of each.

17. 17. What are "WEB-BASED INFORMATION SERVICES" (aka "RESEARCH DATABASES")? What kind of information would you find using these databases that you would not find using a search engine or a subject directory?

18. 18. How does the citing of sources found electronically differ from sources found via traditional library research work? In other words, how would the bibliographic reference for an article or book found electronically differ from the bibliographic reference for an article or book actually on the shelf in the library? What would be the same about both references?

ER**I**C ™
Educational Resources Information Center

NOTICE

REPRODUCTION BASIS

☒ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (9/97)