

# Curriculum Standards and Indicators

## PERFORMANCE INDICATORS AND STANDARDS OBJECTIVES AND CURRICULUM GUIDE SHEETS

### Academic Foundations for Careers

#### Occupational Communications

##### **A. Understand the importance of effective communication skills in the workplace.**

1. Use written communication skills in the workplace
  - A101 Describe the advantages a written message may have over a spoken one
  - A102 Comprehend written communications in the workplace
  - A103 Compare and contrast different forms of written business communication as utilized in the workplace
  - A104 Create print and non-print communications for various audiences and for a variety of purposes
  - A105 Demonstrate proficiency in writing standard English.
2. Use oral communication skills in the workplace
  - A201 Demonstrate listening strategies that improve understanding and performance on the job
  - A202 Comprehend and give oral instructions in a business like manner as related to the workplace
  - A203 Demonstrate proper business etiquette in placing/receiving telephone calls and recording telephone messages
  - A204 Participate in informal presentations and discussions.
  - A205 Demonstrate proficiency in speaking standard English.

#### Occupational Mathematical Computations

##### **B. Understand the importance of effective mathematical computation skills in the workplace.**

1. Perform appropriate mathematical calculations in work-related situations.
  - B101 Compute addition, subtraction, multiplication, and division problems as related to the workplace
  - B102 Compute addition, subtraction, multiplication, and division of decimal number problems as related to the workplace



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- B103 Interpret quantitative information from tables, charts, and graphs as related to the workplace
- B104 Compute ratios and percentages as related to the workplace
- B105 Calculate distance, weight, area, volume, and/or time problems as related to the workplace
- B106 Determine costs, time, and/or resources needed to complete a task within the workplace.

# Curriculum Standards and Indicators

## Academic Foundations for Careers – AFC A1

<b>Topic</b>	Occupational Communications
<b>Performance Indicator</b>	A. Understand the importance of effective communication skills in the workplace.
<b>Standard</b>	1. Use written communication skills in the workplace
<b>SCANS</b>	Information 7; Basic Skills 1, 2
<b>Show-Me Standards</b>	1.5; 2.1; 2.2; 2.5; 2.7; CA1, 3, 4, 5
<b>Objectives</b>	<p>A101 Describe the advantages a written message may have over a spoken one</p> <p>A102 Comprehend written communications in the workplace</p> <p>A103 Compare and contrast different forms of written business communication as utilized in the workplace</p> <p>A104 Create print and non-print communications for various audiences and for a variety of purposes</p> <p>A105 Demonstrate proficiency in writing standard English.</p>
<b>Sample Activities</b>	<p>With the permission of your supervisor or manager, bring to class a memo or other written communication generated at your workplace. Identify for the class the purpose of the written communication, why it was necessary to put the information in writing as opposed to oral communication, and what the communication requests.</p> <p>Write a set of operational policies for an aspect of your job. Submit the policies to your supervisor for review.</p> <p>Prepare a ten minute presentation for middle school students on your job. Include skills and education preparation required, benefits to you and the community, how the job can contribute to your career plans, and the benefits of cooperative education in preparing for a career.</p> <p>Identify four forms of written communication at your workplace. Discuss the purpose of the communication, why the particular form of written communication is appropriate, and how the communication could be improved.</p>

# Curriculum Standards and Indicators

## Academic Foundations for Careers – AFC A2

<b>Topic</b>	Occupational Communications
<b>Performance Indicator</b>	A. Understand the importance of effective communication skills in the workplace.
<b>Standard</b>	2. Use oral communication skills in the workplace
<b>SCANS</b>	Information 7; Basic Skills 5, 6
<b>Show-Me Standards</b>	1.7; 2.1; 2.3; 2.7; CA1, 6
<b>Objectives</b>	<p>A201 Demonstrate listening strategies that improve understanding and performance on the job</p> <p>A202 Comprehend and give oral instructions in a business like manner as related to the workplace</p> <p>A203 Demonstrate proper business etiquette in placing/receiving telephone calls and recording telephone messages</p> <p>A204 Participate in informal presentations and discussions.</p> <p>A205 Demonstrate proficiency in speaking standard English.</p>
<b>Sample Activities</b>	<p>Describe a complex geometric figure in enough detail so that a classmate can correctly reproduce the figure without looking at it.</p> <p>Train your teacher on your job duties during a coordination visit to your workplace.</p> <p>Locate any policies at your workplace regarding telephone etiquette/procedure and handling telephone messages. Compare these policies with those located by classmates.</p> <p>Practice handling difficult customers via telephone simulation exercises.</p> <p>Prepare and deliver a five-minute oral description of a career of your choice. Submit your outline to your teacher before presenting to the class.</p>

# Curriculum Standards and Indicators

## Academic Foundations for Careers – AFC B1

<b>Topic</b>	Occupational Mathematical Computations
<b>Performance Indicator</b>	B. Understand the importance of effective mathematical computation skills in the workplace.
<b>Standard</b>	1. Perform appropriate mathematical calculations in work-related situations.
<b>SCANS</b>	Resources 2; Basic Skills 3, 4; Thinking Skills 12
<b>Show-Me Standards</b>	1.10; 3.8; MA1, 3, 6
<b>Objectives</b>	<p>B101 Compute addition, subtraction, multiplication, and division problems as related to the workplace</p> <p>B102 Compute addition, subtraction, multiplication, and division of decimal number problems as related to the workplace</p> <p>B103 Interpret quantitative information from tables, charts, and graphs as related to the workplace</p> <p>B104 Compute ratios and percentages as related to the workplace</p> <p>B105 Calculate distance, weight, area, volume, and/or time problems as related to the workplace</p> <p>B106 Determine costs, time, and/or resources needed to complete a task within the workplace.</p>
<b>Sample Activities</b>	<p>Identify examples where basic arithmetic is used at your place of employment.</p> <p>Ask your manager or supervisor for an example of quantitative information presented in graphic form. Share with the class the interpretation of that information, how it is accumulated, and how the information is used in the business.</p> <p>Prepare a series of math problems related to your place of employment which include ratios, percentages, cost estimation, and distance or time problems. Have the class solve the problems and check their answers for accuracy.</p>

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## ACADEMIC FOUNDATIONS FOR CAREERS

### RESOURCES

21st Century Literacies (Reading, see Sensemaking)

<http://www.kn.sbc.com/wired/21stcent/sitemap.html#sensemaking>

Above links from “Virginia’s Workplace Readiness Skills”

Idea Book: Integrating Work Skills and Basic Skills

[http://cls.coe.utk.edu/pdf/Idea\\_Book\\_2000.pdf](http://cls.coe.utk.edu/pdf/Idea_Book_2000.pdf)

Academic Standards Resources – Indiana Department of Education.

<http://www.indianastandardsresources.org/completeResource.asp?Subject=eng&Grade=12&Standard=>

A Collection of Authentic Workplace Materials (Canadian resource for samples of workplace reading and writing, accessible by occupation or by type of material)

<http://www15.hrdc-drhc.gc.ca/awm/default.asp>

A Collection of Authentic Workplace Materials (Canadian resource for samples of workplace reading and writing, accessible by occupation or by type of material)

<http://www15.hrdc-drhc.gc.ca/awm/default.asp>

A Definition of Purpose

<http://www.mines.edu/Academic/lais/wc/tutorials/anatext/writtext/wcontext/pop1b.htm>

Audience, Purpose and Language Use in Electronic Messages (Lesson Plan)

[http://www.readwritethink.org/lessons/lesson\\_view.asp?id=159](http://www.readwritethink.org/lessons/lesson_view.asp?id=159)

Bang for Your Buck: Examining the Hidden Costs Behind Bargains and Quality Products

<http://www.nytimes.com/learning/teachers/lessons/20031106thursday.html>

Basic Algebra and Computer: Spreadsheets, Charts, and Simple Line Graphs (Lesson Plan)

[http://www.powertolearn.com/teachers/lesson\\_activities/math/CBV.72.S.M.R7.F.pdf](http://www.powertolearn.com/teachers/lesson_activities/math/CBV.72.S.M.R7.F.pdf)

Basic Math Calculator

[http://www.convertit.com/Go/ConvertIt/Calculators/Math/Basic\\_Math\\_Calc.ASP](http://www.convertit.com/Go/ConvertIt/Calculators/Math/Basic_Math_Calc.ASP)

Business Letter Writing: Putting Your Reader First

<http://www.business-letter-writing.com/writing-a-business-letter-examples/putting-your-reader-first.html>

Business Writing (Assessment items with scenarios)

[http://www.act.org/workkeys/assess/bus\\_writ/index.html](http://www.act.org/workkeys/assess/bus_writ/index.html)

Conversion Diversion

[http://faculty.cmsu.edu/iwe/Lesson\\_Plans/IET/ie0002.html](http://faculty.cmsu.edu/iwe/Lesson_Plans/IET/ie0002.html)

Carrying Out Math Calculations with Accuracy (rubric)

[http://www.tensigma.org/pdf/line4bak/2007\\_rubric.pdf](http://www.tensigma.org/pdf/line4bak/2007_rubric.pdf)

# Curriculum Standards and Indicators

Effective Email (Writing)

<http://www.mindtools.com/CommSkill/EmailCommunication.htm>

Effective Writing for the Workplace

<http://www.writerswrite.com/journal/cew1.htm>

Email Etiquette Workshop (PowerPoint)

<http://owl.english.purdue.edu/workshops/pp/emaillett.ppt>

English and Your Career

<http://www.bls.gov/opub/ooq/1999/summer/art03.pdf>

Engineers Edge: Formulas used in design, engineering, and manufacturing (see bottom half of page)

<http://www.engineersedge.com/>

Evaluating Web Information

<http://www.lib.vt.edu/help/instruct/evaluate/>

Exactly How Is Math Used in Technology?

<http://www.math.bcit.ca/examples/index.shtml>

Examining How Mathematics Is Used in the Workplace (Automobile Production, Nursing, Banking, Biology, Science)

[http://www.maa.org/t\\_and\\_l/sampler/rs\\_6.html](http://www.maa.org/t_and_l/sampler/rs_6.html)

Farese, L.S., Kimbrell, G., & Woloszyk, C.A. (2002). *Marketing essentials* (3<sup>rd</sup> ed.) Woodland Hills, CA: Glencoe/McGraw-Hill.

Field Research: Conducting an Interview (PowerPoint)

<http://owl.english.purdue.edu/workshops/pp/interviewing.ppt>

Finding Your Focus: The Writing Process (PowerPoint)

<http://owl.english.purdue.edu/workshops/pp/writproc.PPT>

Formulas for Consumers and Statistics

<http://www.brookdalecc.edu/fac/tlt/math/136/formulas.php>

Getting the Right Tone to Your Business Letter

<http://www.business-letter-writing.com/writing-a-business-letter-examples/getting-the-right-tone-to-your-business-letter.html>

Grammar, Punctuation, and Spelling (Instructional handouts)

<http://owl.english.purdue.edu/handouts/grammar/index.html>

High School Operations Research: Mathematics for Decision Making in Industry and Government

[http://www.hsor.org/case\\_studies.cfm](http://www.hsor.org/case_studies.cfm) (Case Studies)

<http://www.hsor.org/modules.cfm> (Modules)

How Much Roofing Do I Need?

[http://www.fieldshomeimprovement.com/ht\\_shingles.html](http://www.fieldshomeimprovement.com/ht_shingles.html)

# Curriculum Standards and Indicators

How to Write a Company Handbook

<http://www.profitguide.com/howto/article.jsp?content=843>

How to Write and Revise a Rough Draft

<http://www.utexas.edu/student/utlc/handouts/1234.html>

Improve Your Communication Skills (Writing)

<http://www.mindtools.com/CommSkill/WritingSkills.htm>

Information Skills (Emphasis on Reading)

[http://www.mindtools.com/pages/main/newMN\\_ISS.htm](http://www.mindtools.com/pages/main/newMN_ISS.htm)

Internet Research

<http://www.library.vcu.edu/help/internet.html>

Interest Calculation and Spreadsheets (Lesson Plan)

[http://www.powertolearn.com/teachers/lesson\\_activities/math/CBV.79.E.M.R6.D1.pdf](http://www.powertolearn.com/teachers/lesson_activities/math/CBV.79.E.M.R6.D1.pdf)

Interpreting Workplace Memos and Notices (Lesson Plan)

[http://slincs.coe.utk.edu/gtelab/learning\\_activities/11broc.html](http://slincs.coe.utk.edu/gtelab/learning_activities/11broc.html)

Introduction: Audience

<http://writing.colostate.edu/references/processes/audmod/>

Introduction: Development

<http://writing.colostate.edu/references/processes/develop/>

Introduction: Focus

<http://writing.colostate.edu/references/processes/focus/>

Introduction: Organization

<http://writing.colostate.edu/references/processes/organize/>

Introduction: Purpose

<http://writing.colostate.edu/references/processes/purpose/index.cfm>

Math and Your Career

<http://www.bls.gov/opub/ooq/1999/summer/art03.pdf>

Math To Build On (Mathematics for the Construction Industry)

<http://mathforum.org/%7esarah/hamilton/index.html>

Math, Timelines, and Data Management Case Studies

<http://www.apl.com/boomerangbox/casearch.htm#math>

Memo Writing

[http://owl.english.purdue.edu/handouts/print/pw/p\\_memo.html](http://owl.english.purdue.edu/handouts/print/pw/p_memo.html)

Online Plagiarism Tutorial

<http://www.lib.usm.edu/research/plag/plagiarismtutorial.php>



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Online Technical Writing: Examples, Cases, & Models  
<http://www.io.com/~hcexres/tcm1603/acchtml/models.html>

Online Technical Writing: Instructions  
<http://www.io.com/~hcexres/tcm1603/acchtml/instrux.html>

Online Technical Writing: Proposals  
<http://www.io.com/%7ehcexres/tcm1603/acchtml/props.html>

Outline  
<http://owl.english.purdue.edu/workshops/hypertext/ResearchW/outline.html>

Planning a Class Field Trip (Mathematics/Computers/Internet Lesson Plan)  
<http://www.lessonplanspage.com/SSMathCIPlanningClassFieldTrip312.htm>

Powerful & Practical: Writing the Impact Report (PowerPoint)  
<http://owl.english.purdue.edu/workshops/pp/ImpactReport.ppt>

Practice Exercises Index (Grammar, punctuation, spelling quizzes)  
<http://owl.english.purdue.edu/handouts/interact/index.html>

Press Release Writing Tips  
<http://www.press-release-writing.com/> (Use left-hand menu to access topics)

Pricing  
<http://ohioline.osu.edu/cd-fact/1326.html>

Progress Report Memo: Analytical Report (Assignment instructions)  
[http://www.enl.umassd.edu/InteractiveCourse/assistant/AssignArch\\_BusCommTechWrite.htm#progress](http://www.enl.umassd.edu/InteractiveCourse/assistant/AssignArch_BusCommTechWrite.htm#progress)

Proofread the Final Draft  
<http://www.factmonster.com/homework/t9xfinal.html>

Proofreading  
<http://owl.english.purdue.edu/workshops/hypertext/ResearchW/proofread.html>

Proofreading for Common Surface Errors: Spelling, Punctuation, and Grammar  
[http://www.indiana.edu/~wts/pamphlets/proofing\\_grammar.shtml](http://www.indiana.edu/~wts/pamphlets/proofing_grammar.shtml)

Purposes in Writing  
<http://web.umar.edu/~gdoty/classes/concepts-practices/purposes.html>

RAFT Organizer for Writing a Letter  
[http://its.guilford.k12.nc.us/act/grade6/gr6\\_files/Europe\\_DTP/Raft\\_Letter.doc](http://its.guilford.k12.nc.us/act/grade6/gr6_files/Europe_DTP/Raft_Letter.doc)

Reading and Interpreting Production Graphs  
[http://slincs.coe.utk.edu/gtelab/learning\\_activities/10broc.html](http://slincs.coe.utk.edu/gtelab/learning_activities/10broc.html)

Reading for Information (Assessment items with scenarios)  
<http://www.act.org/workkeys/assess/reading/>

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Revise the First Draft

<http://www.factmonster.com/homework/t9revise.html>

Revision

<http://owl.english.purdue.edu/workshops/hypertext/ResearchW/revise.html>

Seven Steps to Library Research

[http://www.lib.vt.edu/help/instruct/seven/library\\_research.html](http://www.lib.vt.edu/help/instruct/seven/library_research.html)

Spell Check: Appraising the Value of Good Spelling

<http://www.nytimes.com/learning/teachers/lessons/20040129thursday.html>

Statistics: Determining Mean, Range, Median, Mode, and Probability (Lesson Plan)

[http://slincs.coe.utk.edu/gtelab/learning\\_activities/09broc.html](http://slincs.coe.utk.edu/gtelab/learning_activities/09broc.html)

Stock Charting: Percentages and Profits (Lesson Plan)

[http://www.powertolearn.com/teachers/lesson\\_activities/math/CBV.73.S.M.R7.D1.pdf](http://www.powertolearn.com/teachers/lesson_activities/math/CBV.73.S.M.R7.D1.pdf)

Strategies for Developing Your Ideas

<http://writing.colostate.edu/references/processes/develop/list5.cfm>

Survey of Favorites (Lesson Plan)

[http://www.powertolearn.com/teachers/lesson\\_activities/math/CBV.75.E.M.R1.F.pdf](http://www.powertolearn.com/teachers/lesson_activities/math/CBV.75.E.M.R1.F.pdf)

Technical Reports

<http://www.io.com/~hcexres/tcm1603/acchtml/techreps.html>

Technical Writing: Model Documents

[http://longman.awl.com/englishpages/tech\\_model.htm](http://longman.awl.com/englishpages/tech_model.htm)

Tech Train: Excel Formulas and Functions

<http://www.techtrainteam.com/services/olt/office2000/xls-a3.html>

Tools for Reading the World

<http://www.noodletools.com/debbie/literacies/21c.html>

The Basic Business Letter: Parts of the Business Letter

[http://owl.english.purdue.edu/handouts/print/pw/p\\_basicbusletter.html](http://owl.english.purdue.edu/handouts/print/pw/p_basicbusletter.html)

Traveling in Time Zones (Lesson Plan)

<http://www.lessonplanspage.com/MathTravelingInTimeZonesIdea910.htm>

The Seven Cs of Business Letter Writing

<http://www.business-letter-writing.com/writing-a-business-letter-examples/7Cs-of-business-letter-writing.html>

Understanding Language Registers as a Means to More Effective Communication (Lesson Plan)

[http://slincs.coe.utk.edu/gtelab/learning\\_activities/30carc.html](http://slincs.coe.utk.edu/gtelab/learning_activities/30carc.html)

Using Math to Solve Problems & Communicate

<http://slincs.coe.utk.edu/gtelab/find.html#usemath>

# Curriculum Standards and Indicators

Using Math to Solve Problems and Communicate (Lesson Plans)

<http://slincs.coe.utk.edu/gtelab/find.html#usemath>

Where Do I Begin?

<http://info-skills.lib.vt.edu/>

Wisconsin Academic Standards Resources – IDEA – <http://www.ideas.wisconsin.edu/>

Workforce Readiness Credential Library

Center for Literacy Studies, University of Tennessee/Knoxville, ©2000

[http://eff.cls.utk.edu/work\\_readiness/eff\\_work\\_library\\_info.htm](http://eff.cls.utk.edu/work_readiness/eff_work_library_info.htm)

Write a First Draft

<http://www.factmonster.com/homework/t6roughdraft.html>

Writing a Job Pamphlet

[http://slincs.coe.utk.edu/gtelab/learning\\_activities/07a111.html](http://slincs.coe.utk.edu/gtelab/learning_activities/07a111.html)

Writing an Introduction

<http://owl.english.purdue.edu/workshops/hypertext/ResearchW/writeintro.html>

Writing Business Messages (PowerPoint)

<http://owl.english.purdue.edu/workshops/pp/audorg.ppt>

Writing for an Audience

<http://home.cogeco.ca/~rayser3/letter.txt>

Writing Guides for Different Types of Documents

[http://writing.colostate.edu/references/index.cfm?guides\\_active=documents](http://writing.colostate.edu/references/index.cfm?guides_active=documents)

Writing the Fire Investigation Report

[http://www.interfire.com/res\\_file/reports.asp](http://www.interfire.com/res_file/reports.asp)

MarkEd/Career Paths Resource Center

P.O. Box 12279

Columbus, OH 43212-0279

800-448-0398

Fax: 614-486-1819

Email: [service@mark-ed.com](mailto:service@mark-ed.com)

Web site: [www.mark-ed.com](http://www.mark-ed.com)