ACAP

Austin Competency Analysis Profile

Medical Transcriptionist

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Preface

Austin Community College would like to express our sincere appreciation to our business, industry, labor, and community partners who donated their time and expertise toward the identification and validation of competencies in the following Austin Competency Analysis Profile.

Introduction

The ACAP (Austin Competency Analysis Profile) initiative comes out of the Instructional Development Services of Instructional Resources and Technology at Austin Community College. This initiative is ACC's primary source for Competency-Based Curriculum development, providing a connection between our academic and workforce programs and the needs of business and industry.

The ACAP is a process for analyzing an occupation to develop curriculum. The product is a competency list, employability skills, and academic skill levels that have been developed and validated by subject matter experts who perform the occupation. This list will be used to develop programs that address the needs of business and industry by equipping our students with the entry skills required in a workplace environment.

ACAP Process Overview

What are Austin Competency Analysis Profiles (ACAPs)?

Austin Competency Analysis Profiles (ACAPs) are competency lists for academic and workforce programs verified by expert workers, or Subject Matter Experts. These lists evolve from a well-established job analysis process involving business, industry, labor, and community agency representatives from throughout the Austin area.

How is an Austin Competency Analysis Profile used?

Each ACAP identifies the occupational, academic, and employability skills (or competencies) needed to enter a given occupation or occupational area. The ACAP not only lists the competencies but also clusters those competencies into broader units and details the knowledge, skills, and attitudes (competency builders) needed to perform each competency.

Within the competency list are two levels of items: core and advancing. Core items, which are essential for entry-level employment, are required to be taught—the concept of advancing items will only be introduced to students. Advancing items are those needed beyond entry level in a given occupation, and are designated as "Advanced." If core competencies or competency builders are present in an "Advanced" unit, then they are designated as "Core."

Educational institutions may add as many units, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees are actively involved in the identification and verification of additional items. Faculty members formulate their courses of study using the varied contents of the ACAP. Faculty also monitor gains using many forms of assessment.

Target Job Titles

ACAP: Medical Transcriptionist

Medical Transcriptionist

Certified Medical Transcriptionist

Occupational Competencies

The following Occupational Competencies have been identified and verified by a panel of subject matter experts currently employed in the field of Medical Transcriptionist. This panel of experts has determined that these skills will adequately prepare students for *entry level* positions in this field. The *Competencies* are grouped into units. *Competency Builders* are included to help identify the knowledge, skills and attitudes students need to perform each competency. These *Competencies* and *Competency Builders* are designed to be the basis for curriculum development to ensure business and industry input that is relative and meaningful to the workplace. These *Competencies* are intended to include all basic, necessary skills for this occupational area, but may be supplemented with additional competencies as faculty and advisory committee members see the need to do so.

Key Terms:

Competency–an observable and measurable behavior that has a definite beginning and end; can be performed within a limited amount of time; consists of two or more competency builders; and leads to a product, service, or decision.

Competency Builders–the skills, knowledge, and attitudes (written in measurable terms) needed to perform a given competency.

Entry Level–position of employment that requires no previous experience, but may require some training and/or specific skills, knowledge, or attitudes.

ACAP: Medical Transcriptionist

Unit 1	English Language
Unit 2	Medical Language
Unit 3	Technology
Unit 4	Anatomy and Physiology
Unit 5	Healthcare Records and Medicolegal Issues
Unit 6	Transcription
Unit 7	Professional Development

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Occupational Competencies
ACAP: Medical Transcriptionist

Unit 1 English Language

Competency 1.1 Apply standard English in transcribing documents

Competency Builders:
1.1.1 Use proper grammar
1.1.2 Use proper punctuation
1.1.3 Use proper spelling

Competency 1.2 Proof as necessary for clarity and grammar

Competency Builders:
1.2.1 Review the document for errors
1.2.2 Refer to references on spelling and mechanics
1.2.3 Correct the document applying rules of grammar and spelling

Unit 2 Medical Language

Competency 2.1 Define the knowledge, skills, abilities and responsibilities of the medical transcriptionist with regard to proper terminology usage as it applies to final documents

Competency Builders:
2.1.1 List the skills required of a transcriptionist
2.1.2 Determine limits of responsibility of the transcriptionist as it applies to the dictated document
2.1.3 Follow policies and procedures unique to the customers' requirements
2.1.4 Edit dictated documents with accuracy without changing the meaning or intent of the document

Competency 2.2 Apply proper medical terminology to dictated documents

Competency Builders:
2.2.1 Distinguish between homonyms as it applies to anatomy and physiology
2.2.2 Listen for slight difference in pronunciation
2.2.3 Recognize inconsistencies and mistakes in medical terms using dictionaries, drug references and other sources on anatomy, physiology, pharmacology, and basic laboratory values
2.2.4 Spell the medical terms correctly in addition to the abbreviations from memory or by using a dictionary/reference book
2.2.5 Identify appropriate weights and measures for a given situation
2.2.6 Identify chemical symbols

2.2.7 Pronounce, spell and define difficult medical terms and phrases correctly
2.2.8 Identify medical dosing measurements as they apply to the medication
2.2.9 Proof and edit your work as you transcribe and upon completion

Competency 2.3 Translate medical jargon and abbreviations into their expanded forms (if meaning is understood and verified in document content) to ensure the accuracy of patient and healthcare facility records

Competency Builders:
2.3.1 Define the medical terms and abbreviations either by memory or using dictionary/reference book
2.3.2 Determine how the term is used in the transcription
2.3.3 Identify other uses of the term
2.3.4 List the acceptable abbreviations of medical terms according to customers' requirements
2.3.5 Choose the appropriate resource references for each situation

Competency 2.4 Define the prefixes, combining forms and suffixes presented

Competency Builders:
2.4.1 Explain the relationship of a prefix to the word
2.4.2 Define appropriate prefixes
2.4.3 Identify methods of combining forms
2.4.4 Explain the relationship of the suffix to the word meaning
2.4.5 Define given suffixes
2.4.6 Recognize slight differences in pronunciation to discern articles from prefixes

Unit 3 Technology

Competency 3.1 Apply common technology

Competency Builders:
3.1.1 Transcribe documents using a word processing program and basic keyboarding skills
3.1.2 Make conference calls
3.1.3 Return calls or follow up on recorded messages using proper etiquette
3.1.4 Send document via fax machine with appropriate confidentiality statement
3.1.5 Transmit documents via internet using appropriate security
3.1.6 Send and receive e-mail with attachment
3.1.7 Maintain records of contact information (agencies, physicians, phone numbers, e-mail addresses, etc.)

Competency 3.2 Apply technology unique to Medical Transcription

Competency Builders:
3.2.1 Choose an appropriate software
3.2.2 Apply software tutorials to learn new applications
3.2.3 Use headset with foot pedal

3.2.4 Update software at appropriate intervals
3.2.5 Subscribe to software update alerts
3.2.6 Maintain security on transcription computers

Competency 3.3 Research new technologies

Competency Builders:
3.3.1 Identify new and evolving technology that may affect the field of Medical Transcription
3.3.2 Explain the use of voice activated devices
3.3.3 Identify resources regarding new and evolving technology

Unit 4 Anatomy and Physiology

Competency 4.1 Apply medical knowledge in transcription of medical documents

Competency Builders:
4.1.1 List the systems in the body
4.1.2 Associate the parts to the whole of the system
4.1.3 Associate diseases and symptoms with the appropriate system
4.1.4 Identify medication, physical therapy, etc., that is applied to a given situation
4.1.5 Identify aspects of physiology as it relates to the anatomy of the body in the dictated document
4.1.6 Compare the description of the diagnosis to the physiology referred to in the document
4.1.7 Compare the recommended treatment to the physiology of the diagnosis

Competency 4.2 Identify dictated patient information that indicates an inconsistency with knowledge of anatomy and physiology

Competency Builders:
4.2.1 Look for key words
4.2.2 Relate terms to conditions and recommendations
4.2.3 Use appropriate resources to do additional research
4.2.4 Review documents to determine accuracy

Unit 5 Healthcare Records and Medicolegal Issues

Competency 5.1 Describe the content and purpose of the medical reports

Competency Builders:
5.1.1 Identify the aspects of an acute care document (history and physical, operative report, discharge summary and consultation, ER notes, pathology, radiology, oncology, etc.)
5.1.2 Identify the aspects of the doctors office/clinic/physical therapy/rehabilitation center, i.e., HPIP (history, physical, impression, plan), SOAP (subjective, objective, assessment and plan)

Competency 5.2 **Describe the importance of the confidential nature of medical reports as outlined by HIPPA**

Competency Builders:
5.2.1 Identify laws regulating confidentiality
5.2.2 List specific areas of patient records that fall under confidentiality laws
5.2.3 Explain when exceptions to confidentiality practices may apply

Competency 5.3 **Adhere to the standards and regulations related to healthcare documentation as set by such bodies as the American Medical Association and American Association for Medical Transcription**

Competency Builders:
5.3.1 Identify appropriate healthcare documentation
5.3.2 Identify appropriate healthcare professional groups
5.3.3 Apply the appropriate resources to make choices regarding standards and regulations
5.3.4 Direct questions regarding medical case to the appropriate party

Competency 5.4 **Comply with specific standards that apply to storing and transmitting documents as it relates to keeping patient information confidential and the requirements of individual customers**

Competency Builders:
5.4.1 Store documents in secured files
5.4.2 Transmit documents in a secure manner
5.4.3 Maintain confidentiality during transcription

Unit 6 Transcription

Competency 6.1 **Transcribe medical reports using correct report format/template and mechanics**

Competency Builders:
6.1.1 Transcribe medical reports using correct capitalization, numbering, punctuation, abbreviation, symbols and metric measurement rules
6.1.2 Spell words correctly by memory or by using a dictionary/reference book/spell check
6.1.3 Design appropriate templates
6.1.4 Identify parts of a report

Competency 6.2 **Convert dictated materials or rough notes to written form for a variety of medical documents**

Competency Builders:
6.2.1 Listen to dictated recordings made by physicians and other healthcare professions on a headset, using a foot pedal
6.2.2 Determine the type of template that will be appropriate for the transcription

6.2.3 Determine background, expletives, or other inappropriate information that should not be included in the document
6.2.4 Determine appropriate use of terms with multiple meanings
6.2.5 Correctly transcribe patient assessments and treatments as dictated
6.2.6 Evaluate inconsistencies, discrepancies and inaccuracies in healthcare dictation while transcribing, without altering the meaning of the dictation or changing the author's style
6.2.7 Identify mistakes in reports and check with healthcare personnel to obtain the correct information
6.2.8 Check for consistency and possible medical errors
6.2.9 Implement speech recognition to electronically translate sound into text and create drafts
6.2.10 Format and edit electronically translated drafts

Competency 6.3 Proofread transcribed documents

Competency Builders:
6.3.1 Check for spelling, punctuation, syntax and standard grammar mistakes
6.3.2 Review documents to determine the accuracy of the patient information as it applies to the situation
6.3.3 Consult with healthcare professional or QA supervisor for clarification and/or additional dictation when dictated healthcare data is conflicting or ambiguous
6.3.4 Use appropriate resources to do additional research
6.3.5 Revise documents as needed
6.3.6 Return documents to originator for review and corrections
6.3.7 Make final corrections if appropriate to occupational situation

Competency 6.4 Maintain records and communications related to transcriptions

Competency Builders:
6.4.1 Set up and maintain medical files and databases as needed
6.4.2 Return transcribed documents to the physicians or other healthcare professionals through secure channels
6.4.3 Receive dictation to be transcribed through secure methods
6.4.4 Maintain patient records
6.4.5 Handle outgoing mail in a timely fashion
6.4.6 Maintain statistical and administrative information

Competency 6.5 Maintain personal health

Competency Builders:
6.5.1 Apply proper ergonomic positioning to avoid carpal tunnel and other injuries typical of this type of work
6.5.2 Develop stress management techniques (exercise, good nutrition, etc.)
6.5.3 Establish a work schedule that allows for movement
6.5.4 Establish a work schedule that allows for eye rest

Competency 6.6 Establish a routine for telecommuting

Competency Builders:

6.6.1 Determine best hours to work
6.6.2 Put a proper work space together allowing room for required equipment and some privacy
6.6.3 Plan for some disruption in work flow and compensation
6.6.4 Develop an alternative plan that includes contact information to report changes in work schedule

Competency 6.7 Consider timeliness as it applies to transcription

Competency Builders:

6.7.1 Identify common recommendations for quotas
6.7.2 Work within a prescribed schedule
6.7.3 Identify common methods of counting transcription lines/words/minutes
6.7.4 List common guidelines for compensation

Unit 7 Professional Development

Competency 7.1 Maintain professional credentials

Competency Builders:

7.1.1 Obtain CMT certification
7.1.2 Earn continuing education credits to be recertified
7.1.3 Update skills on a regular basis

Competency 7.2 Maintain professional skills

Competency Builders:

7.2.1 Join professional associations
7.2.2 Attend conferences on a regular basis
7.2.3 Read professional journals
7.2.4 Research current technology and advances in the field of transcription
7.2.5 Read medical journals to stay current on medical terminology, physiology, anatomy, medicine and treatments

Employability Competencies

Employability Competencies are underlying skills, including work habits and ethics, essential to the workplace and personal growth. SCANS (Secretary's Commission on Achieving Necessary Skills) are the basis for these competencies and are included in all programs based on an ACAP (Austin Competency Analysis Profile). These skills are taught with the intention of providing the student with a well-rounded understanding of workplace expectations in areas not specific to a particular occupation, in an attempt to develop a valuable employee.

ACAP: Medical Transcriptionist

Unit 1:	Resources
Unit 2:	Interpersonal
Unit 3:	Information
Unit 4:	Systems
Unit 5:	Technology
Unit 6:	Basic Skills
Unit 7:	Thinking Skills
Unit 8:	Personal Qualities

Unit 1: Resources

Competency 1.1 Manage time effectively

Competency Builders:

1.1.1 Select relevant, goal-related activities
1.1.2 Rank activities in order of importance
1.1.3 Allocate time to activities
1.1.4 Identify tasks to be completed
1.1.5 Develop and follow an effective, workable schedule based on accurate estimates of such things as importance of tasks, time to complete tasks, time available for completion, and task deadlines, without wasting time
1.1.6 Identify possible impact of schedules on other activities
1.1.7 Evaluate and adjust a schedule

Competency 1.2 Manage money effectively

Competency Builders:

1.2.1 Prepare or use budgets including making cost and revenue forecasts
1.2.2 Record details to track budget performance
1.2.3 Adjust budget appropriately when needed
1.2.4 Allocate money to include accurately preparing and using a budget according to a consistent and orderly accounting method
1.2.5 Calculate future budgetary needs based on projected costs and revenues
1.2.6 Track the extent to which actual costs and revenues differ from the estimated budget, and take appropriate and effective action

Competency 1.3 Manage material and facility resources effectively

Competency Builders:

1.3.1 Store resources such as materials, supplies, parts, equipment, space or final products in an order that makes the best use of them
1.3.2 Allocate materials and facility resources to include carefully planning the steps involved in the acquisition, storage, and distribution of resources
1.3.3 Acquire, transport, and store material and facility resources safely and efficiently
1.3.4 Maintain material and facility resources in good condition
1.3.5 Distribute material and resources to the end user

Competency 1.4 Manage human resources efficiently

Competency Builders:

1.4.1 Assess people's knowledge, skills and potential
1.4.2 Identify present and future work load
1.4.3 Match individual talents and workload effectively
1.4.4 Monitor performance and provide feedback actively

Unit 2: Interpersonal Skills

Competency 2.1 Participate as a member of a team

Competency Builders:

2.1.1 Work cooperatively with others
2.1.2 Contribute to group with ideas, suggestions, and efforts
2.1.3 Complete personal share of tasks necessary to complete a project
2.1.4 Encourage team members by listening and responding appropriately to their contributions
2.1.5 Build on individual team members' strengths
2.1.6 Resolve differences for the benefit of the team
2.1.7 Take personal responsibility for accomplishing goals
2.1.8 Challenge existing procedures, policies, or authorities responsibly

Competency 2.2 Teach others

Competency Builders:

2.2.1 Coach or otherwise teach others to apply related concepts and theories to tasks
2.2.2 Convey job information to allow others to see its applicability and relevance to tasks
2.2.3 Identify training needs of others
2.2.4 Assess performance of others
2.2.3 Provide feedback on others' performance in a constructive manner
2.2.4 Provide solutions to observed problems

Competency 2.3 Serve clients/customers

Competency Builders:

2.3.1 Identify customers/clients expectations through surveys, questions, body language, or expressions
2.3.2 Communicate and work with clients/customers to satisfy their expectations
2.3.3 Listen actively to customers to avoid misunderstanding and to identify needs
2.3.4 Provide alternatives to clients/customers to satisfy their expectations
2.3.5 Provide services and goods in a timely, positive manner
2.3.6 Obtain additional resources to satisfy client needs efficiently

Competency 2.4 Exercise leadership

Competency Builders:

2.4.1 Communicate thoughts, feelings, and ideas to justify a position
2.4.2 Motivate and/or convince individuals or groups through encouragement or persuasion
2.4.3 Challenge existing procedures, policies or authorities responsibly
2.4.4 Use rules/values followed by others
2.4.5 Justify a position logically and appropriately
2.4.6 Consider minority viewpoints in making decisions or taking action

Competency 2.5 Negotiate to arrive at a decision

Competency Builders:

2.5.1 Achieve agreement through exchanging specific resources or resolving divergent interests
2.5.2 Research opposition and the history of the conflict
2.5.3 Set realistic, obtainable goals
2.5.4 Present facts and arguments
2.5.5 Listen to and reflect upon what has been said
2.5.6 Clarify problems and resolve conflicts
2.5.7 Propose and examine possible options
2.5.8 Make reasonable compromises

Competency 2.6 Work with cultural diversity

Competency Builders:

2.6.1 Work with men and women, and a variety of ethnic, social and educational backgrounds
2.6.2 Compare one's own culture and that of others
2.6.3 Respect the rights of others while helping them make cultural adjustments when necessary
2.6.4 Base impression upon individual performance, not stereotypes
2.6.5 Understand concerns of members of other ethnic and gender groups

Unit 3: Information

Competency 3.1 Acquire and evaluate information

Competency Builders:

3.1.1 Pose analytic questions to determine specific information needs
3.1.2 Select appropriate information sources
3.1.3 Determine when new information must be created and do so
3.1.4 Evaluate data for relevance and accuracy

Competency 3.2 Organize and maintain information

Competency Builders:

3.2.1 Organize a variety of information forms or sources in a systemic fashion
3.2.2 Maintain written or other forms of information to keep up-to-date information available in a systemic fashion
3.2.3 Organize information from computer, visual, oral and physical sources in readily accessible formats, such as computerized data bases, spreadsheets, microfiche, video disks, paper files, etc.
3.2.4 Transform data into different formats in order to organize them by the application of various methods such as sorting, classifying, or more formal methods

Competency 3.3 Interpret and communicate information

Competency Builders:

3.3.1 Select information to be communicated
3.3.2 Identify best methods to present information (e.g., overheads, handouts, etc.)
3.3.3 Communicate results to others in desired format
3.3.4 Convey information to others through a variety of means including oral, written, graphic, pictorial or multi-media methods

Competency 3.4 Process information using computer

Competency Builders:

3.4.1 Acquire information from the internet and other computer based resources
3.4.2 Organize information, using spreadsheets, word processor, and data bases effectively
3.4.3 Analyze information to identify trends, make projections, etc.
3.4.4 Enter, modify, retrieve, store and verify data and other information in a computer
3.4.5 Choose format for display (e.g., line graphs, bar graphs, tables, pie charts, narrative)
3.4.6 Convey information into the chosen format
3.4.7 Communicate information using e-mail, list serves, word processor, or other computer based communication functions

Unit 4: Systems

Competency 4.1 Apply appropriate techniques to function within social, organizational, and technological systems to attain goals effectively and ethically

Competency Builders:

4.1.1 Identify dynamics and components of social, organizational and technological systems
4.1.2 Recognize acceptable behavior and attitudes within social, organizational and technological systems
4.1.3 Communicate through acceptable methods to interact with social, organizational, and technological systems effectively, efficiently, and ethically
4.1.4 Recognize how a system's structures relate to goals
4.1.5 Recognize the right of people to ask for information and where to get resources

Competency 4.2 Monitor and correct performance of a system

Competency Builders:

4.2.1 Distinguish trends
4.2.2 Predict impact of actions on system operations
4.2.3 Diagnose deviations in the function of a system/organization
4.2.4 Correct performance through necessary action
4.2.5 Detect deviations from systems intended purpose
4.2.6 Troubleshoot the system
4.2.7 Make changes to the system to rectify system function and to ensure quality of product

Competency 4.3 Improve and design systems

Competency Builders:

4.3.1 Make suggestions to modify or improve existing products or services
4.3.2 Implement approved improvements in systems
4.3.3 Evaluate the benefits of the improvements
4.3.4 Develop/recommend new or alternative system designs based on relevant feedback
4.3.5 Communicate the results of the evaluations

Unit 5: Technology

Competency 5.1 Select appropriate technology

Competency Builders:

5.1.1 Determine the desired results or outcomes and applicable restraints
5.1.2 Visualize the necessary methods and applicable technology
5.1.3 Evaluate specifications
5.1.2 Judge which procedures, tools, machines or programs will produce the desired results

Competency 5.2 Apply technology to task

Competency Builders:

5.2.1 Set up tools such as machines, computers, and programming systems, using proper procedures, to get desired results
5.2.2 Analyze how different parts of machines interact and how machines interact with broader production systems
5.2.3 Install machines including computers
5.2.4 Interpret machine output accurately
5.2.5 Detect errors from program output

Competency 5.3 Maintain and troubleshoot technology

Competency Builders:

5.3.1 Prevent problems in machines, computers, and other technologies
5.3.2 Identify problems in machines, computers and other technologies
5.3.3 Perform routine maintenance and service of machines, computers, and other technologies
5.3.4 Detect more serious problems
5.3.5 Generate workable solutions to correct deviations
5.3.6 Recognize need for additional help

Unit 6: Basic Skills

Competency 6.1 Read written information in prose and documents, such as manuals, graphs, and schedules with understanding

Competency Builders:

6.1.1 Determine the main idea or essential message
6.1.2 Identify relevant details, facts, and specifications
6.1.3 Infer or locate the meaning of unknown or technical vocabulary
6.1.4 Judge the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers

Competency 6.2 Communicate thoughts, ideas, information, and messages in writing

Competency Builders:

6.2.1 Record information completely and accurately
6.2.2 Compose and create documents such as letters, directions, manuals, reports, proposals, graphs, and flow charts
6.2.3 Use language, style, organization and format appropriate to the subject matter, purpose, and audience
6.2.3 Include supporting documentation where appropriate
6.2.4 Attend to level of detail
6.2.5 Check, edit, and revise for correct information, appropriate emphasis, form, grammar, spelling, and punctuation

Competency 6.3 Perform arithmetic computations and concepts with appropriate technology and/or paper and pencil to solve simple work problems

Competency Builders:

6.3.1 Perform basic computations
6.3.2 Use basic numerical concepts such as whole numbers and percentages in practical situations
6.3.3 Make reasonable estimates of arithmetic results without a calculator
6.3.4 Use tables, graphs, diagrams, and charts to obtain or convey quantitative information

Competency 6.4 Perform mathematics in a variety of techniques to approach practical problems appropriately

Competency Builders:

6.4.1 Choose appropriate technique to solve problem
6.4.2 Use quantitative data to construct logical explanations for real world situations

6.4.3 Express mathematical ideas and concepts orally and in writing
6.4.4 Predict an event considering the role of chance in the occurrence

Competency 6.5 Listen and react appropriately to verbal messages

Competency Builders:
6.5.1 Receive, attend to, interpret, and respond to verbal messages appropriately
6.5.2 Receive, attend to, interpret, and respond to other cues such as body language appropriately
6.5.3 Listen to comprehend, learn, critically evaluate, appreciate, or support the speaker

Competency 6.6 Deliver oral messages appropriately to listeners

Competency Builders:
6.6.1 Organize ideas and communicates orally as appropriate for the situation and listeners
6.6.2 Participate in conversation, discussion, and group presentations
6.6.3 Select an appropriate medium for conveying a message
6.6.4 Use verbal language and other cues, such as body language, in a way appropriate in style, tone, and level of complexity to the audience and the occasion
6.6.5 Speak clearly and communicate a message
6.6.6 Respond to listener feedback in a way that indicates understanding
6.6.7 Ask questions when needed

Unit 7: Thinking Skills

Competency 7.1 Generate new ideas using creative thinking

Competency Builders:
7.1.1 Change or reshapes goals using nonlinear or unusual connections
7.1.2 Imagine new ideas by combining ideas or information in new ways
7.1.3 Connects seemingly unrelated ideas
7.1.4 Reshape goals in ways that reveal new possibilities

Competency 7.2 Make decisions

Competency Builders:
7.2.1 Specify goals and constraints
7.2.2 Generate alternatives
7.2.3 Consider risks
7.2.4 Evaluate and choose best alternatives

7.2.5 Analyze how personal, family, and social factors influence decisions, behaviors, and lifestyles
7.2.6 Utilize a decision-making process to develop future career goals

Competency 7.3 Apply problem solving skills appropriate to situation

Competency Builders:
7.3.1 Recognize a problem exists (i.e., that there is a discrepancy between what is and what should be)
7.3.2 Identify possible reasons for the problem
7.3.3 Devise and implement a plan of action to resolve the problem
7.3.4 Evaluate and monitor progress
7.3.5 Revise the plan as indicated by the findings
7.3.6 Communicate in both oral and written language while working with others to identify/resolve problems
7.3.7 Reason inductively and deductively to solve problems
7.3.8 Select and apply problem-solving methods

Competency 7.4 See things in the mind's eye

Competency Builders:
7.4.1 Organize and process symbols, pictures, graphs, objects or other information to visualize actual representation (such as a building from blueprints)
7.4.2 Visualize possible options
7.4.3 Communicate visualized options verbally

Competency 7.5 Apply learning strategies to support life-long learning

Competency Builders:
7.5.1 Apply and adapt existing and new knowledge and skills, using learning techniques, in both familiar and changing situations
7.5.2 Evaluate learning style (visual, aural, etc.) to make proper selection of learning techniques
7.5.3 Identify various learning techniques including formal learning strategies (note taking or clustering items that share some characteristics) and informal learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions)
7.5.4 Make decisions/plans concerning school to work training and future educational needs using relevant resources

Competency 7.6 Apply reasoning to finding solutions or draw conclusions

Competency Builders:
7.6.1 Discover a rule or principle underlying the relationship between two or more objects
7.6.2 Extract rules or principles from a set of objects or a written text
7.6.3 Apply principles to solve problems

7.6.4 Draw conclusion from available information using logic
7.6.5 Apply rules and principles to a new situation
7.6.6 Determine which conclusion is correct when given a set of facts and conclusions
7.6.7 Evaluate alternatives and assess consequences to achieve personal and social goals

Unit 8: Personal Qualities

Competency 8.1 Act responsibly

Competency Builders:
8.1.1 Persevere toward goal attainment with a high level of effort
8.1.2 Set high standards in order to become excellent at doing tasks by setting high standards, paying attention to details, working well and displaying a high level of concentration even when assigned an unpleasant task
8.1.3 Display a high standard of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing tasks

Competency 8.2 Exhibit effective self-esteem

Competency Builders:
8.2.1 Maintain a positive view of self and believes in own self-worth
8.2.2 Identify won skill and abilities possessed
8.2.3 Recognize own emotional capacity and needs
8.2.4 Identify/Apply effective ways to handle emotional capacity and needs
8.2.5 Recognize own impression on others

Competency 8.3 Employ appropriate social skills

Competency Builders:
8.3.1 Demonstrate understanding, friendliness, adaptability, empathy and politeness in new and on-going group settings
8.3.2 Assert self in familiar and unfamiliar social situations
8.3.3 Relate well to others
8.3.4 Respond appropriately as the situation requires
8.3.5 Take an interest in what others say and do

Competency 8.4 Manage self

Competency Builders:

8.4.1 Assess own knowledge, skills, and abilities accurately
8.4.2 Set well-defined and realistic personal goals
8.4.3 Monitor progress toward goal attainment
8.4.4 Motivate self through goal achievement
8.4.5 Exhibit self-control and respond to feedback unemotionally and nondefensively
8.4.6 Initiate action

Competency 8.5 Apply integrity and honesty to all matters

Competency Builders:

8.5.1 Recognize situations when faced with making a decision or exhibiting behavior that may break with commonly held personal or societal values
8.5.2 Understand the impact of violating these beliefs and codes on an organization, self, and others
8.5.3 Choose an ethical course of action

WorkKeys® Process Overview

Developed by American College Testing (ACT), the purpose of the Job Profiling process is to identify the level of applied academic skills that, according to business and industry, students must master to qualify for and be successful in their occupation of choice. The results of Job Profile "leveling" can help teachers to better target instruction toward their students' needs.

The WorkKeys component, developed by ACT, measures students' applied academic skills. These academic skills include Applied Mathematics, Locating Information, Reading for Information, Listening, Writing, Teamwork, Observation, and Applied Technology. It is determined during the profile which skills apply to the specific job or occupational area.

The ACAP (Austin Competency Analysis Profile) typically includes one or more of the skills described below. A fourth skill may be identified and included if the subject matter experts agree that it is necessary for entry into the position.

- *Applied Mathematics* measures students' ability to analyze, set-up, and solve math problems typically found in the workplace.

- *Locating Information* measures students' ability to use graphic documents to insert, extract, and apply information (includes charts, graphs, tables, forms, blueprints, maps, and instrument gauges).

- *Reading for Information* measures students' ability to read and understand work-related reading materials (text only—does not including charts, graphs, tables, forms, blueprints, maps, or instrument gauges).

Each WorkKeys assessment is further broken down into four to five levels of achievement, with higher numbers indicating higher achievement in the assessed skill. For each academic skill, the Job Profiling process identifies the level required for successful entry into an occupational area as identified by subject matter experts.

ACT WorkKeys® Skill Levels

Skill Area and Rank	Entry Level	Performance Level
1) Reading for Information	5	6
2) Applied Mathematics	4	5

Entry Level

Refers to the requirements necessary for someone entering into the occupation (without previous on the job experience).

Performance Level

Refers to the level at which an employee would need to function effectively having gained on-the-job knowledge.

Skill Ranking

Refers to the criticality of the skill to the performance of the occupation with the most critical skill indicated with one (1) and higher numbers indicating lower criticality.

Levels of WorkKeys® Defined

The skills needed to achieve each level for WorkKeys academic skills identified in this profile are as follows:

Reading for Information

Reading for Information measures skill in reading and understanding work-related reading materials. There are five levels of complexity, 3 through 7, with Level 3 being the least complex and Level 7 the most complex. Although Level 3 is the least complex, it still represents a level of reading skill well above "no skill at all." The levels build on each other, each incorporating the skills at the preceding levels.

Level 3

- Identify uncomplicated key concepts and simple details.
- Recognize the proper placement of a step in a sequence of events, or the proper time to perform a task.
- Identify the meaning of works that are defined with in a passage.
- Identify the meaning of simple words that are not defined within a passage.
- Recognize the application of instructions, from a passage to situations that are described in the passage.

Level 4

- Identify details that are more subtle than those in Level 3.
- Recognize the application of more complex instructions, some of which involve several steps, to described situations.
- Recognize cause-effect relationships.

Level 5

- Understand the paraphrased definition of specialized words or phrases (jargon or technical terms) defined in these reading materials
- Use jargon or technical terms appropriately in describing situations stated in these reading materials
- Understand the meaning of acronyms defined in these reading materials (an acronym is a work or collection of letters which stands for a longer phrase, such as HMO to mean Health Maintenance Organization).
- Figure out which definition of a word with multiple meanings is appropriate in the context of these reading materials.
- Apply information given in these reading materials to situations that are not directly described, but similar**.**
- Apply instructions or procedures with a number of steps to described situations. These instructions may include conditional (if X happens, then you should do Y).

Level 6

- Recognize the application of jargon or technical terms to new situations.
- Recognize the application of complex instructions to new situations.
- Recognize the less-common meaning of a word with multiple meanings from context.
- Generalize from a passage to situations not described in the passage.
- Identify implied details.
- Explain the rationale behind a procedure, policy, or communication.
- Generalize from a passage to a somewhat similar situation.

Level 7

- Recognize the definitions of difficult, uncommon jargon or technical terms from context.
- Generalize from a passage to situations neither described in nor completely similar to those in a passage.

Applied Mathematics

Applied Mathematics measures skill in applying mathematical reasoning to work-related problems. There are five levels of complexity, 3 through 7, with Level 3 being the least complex and Level 7 the most complex. The levels build on each other, each incorporating the skills at the preceding levels.

Level 3

- Perform basic mathematical operations (addition, subtraction, multiplication, and division) and conversions from one form to another, using whole numbers, fractions, decimals, or percentages.
- Translate simple verbal problems into mathematical equations.
- Directly apply logical information provided to solve problems, including those with measurements and dollars and cents.

Level 4

- Perform one or two mathematical operations (such as addition, subtraction, or multiplication) on several positive or negative numbers. (Division of negative numbers is not covered until Level 5.)
- Add commonly known fractions, decimals, or percentages (e.g., ½, .75, 25%) or add three fractions that share a common denominator.
- Calculate averages, simple ratios, proportions, and rates, using whole numbers and decimals.
- Reorder verbal information before performing calculations.
- Read simple charts or graphs to obtain information needed to solve a problem.

Level 5

- Look up and calculate single-step conversions within English or non-English measurement systems (e.g., converting ounces to pounds or centimeters to meters) or between measurement systems (e.g., converting centimeters to inches).
- Make calculations using mixed unit (e.g., hours and minutes).
- Determine what information, calculations, and unit conversions are needed to find a solution.

Level 6

- Set up problems and do several steps of calculations or conversions.
- Calculate using negative numbers, fractions, ratios, percentages, or mixed numbers (e.g., 12 1/8).
- Transpose a formula before calculating (e.g., 8X = 20 => X = 20/8).
- Look up and use two formulas to change from one unit to another unit within the same system of measurement (e.g., 1 cup = 8 fl oz, 1 quart = 4 cups).
- Find mistakes in calculations, such as those required in lower levels.
- Determine the best deal and perform a further calculation with the result.

Level 7

- Solve problems requiring multiple steps of logic and calculation.
- Solve problems involving more than one unknown, nonlinear functions (e.g., rate of change), and applications of basic statistical concepts (e.g., error of measurement).
- Locate errors in multiple-step calculations.
- Solve problems with unusual content or format, or with incomplete or implicit information

Glossary

ACAP–*Austin Competency Analysis* Profile–a well-established job analysis process unique to Austin Community College involving business, industry, labor, and community agency representatives from throughout the Austin area.

Advanced Competencies–The occupation and academic competencies needed to advance in a given occupation

Competency–an observable and measurable behavior that has a definite beginning and end; can be performed within a limited amount of time; consists of two or more competency builders; and leads to a product, service, or decision.

Competency Builders–The skills, knowledge, and attitudes (written in measurable terms) needed to perform a given competency.

Core Competencies–The essential occupational and academic competencies needed to enter and remain in a given occupation.

Employability Competencies–Underlying skills, abilities, and knowledge as they relate to work ethics, work habits, and personal growth and development.

Entry Level–refers to the requirements necessary for someone entering into the occupation (without previous on the job experience).

Performance Level–refers to the level at which an employee would need to function effectively having gained on-the-job knowledge.

Skill Ranking–Refers to the criticality of the WorkKeys skill to the performance of the occupation with one (1) indicating the most critical skill.

SME–*Subject Matter Expert*–incumbent worker in a given occupation that is knowledgeable about the job.

Target Job Titles–titles that may be assigned to the types of jobs aligned with an ACAP. Possible titles of jobs for which students would qualify with certificates or degrees in the programs based on an ACAP.

WorkKeys Skills–Eight skills, defined by ACT, referring to underlying, academic skills as they relate to the workplace. The skills include *Applied Mathematics, Applied Technology, Locating Information, Reading for Information, Observation, Teamwork, Listening, and Writing.* Each skill has a very specific definition and levels of each skill can be aligned with specific abilities defined at each level. WorkKeys skills are the basis for an occupational analysis system developed by ACT. The WorkKeys analysis is the final part of the overall ACAP report. All ACAPs include *Reading for Information, Locating Information, and Applied Mathematics.* A fourth skill may be included in the profile if the subject matter experts identify a need for it.