

**A Proposal and Annual Report
Regarding the LCC-PCDSS Partnership**

“The New Career Pathways Curriculum at LCC”

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To:

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Table of Contents:

Introduction and Context – **pp. 2-3**

Career Pathways Flowchart – **p. 3**

Recommendation 1, Purchase of WIN-WorkKeys – **pp. 4-5**

Recommendation 2, New Career Pathways Capstone Module – **pp. 6-14**

Recommendation 3, Revised Set of Three Career Development Modules – **pp. 15-26**

Calendar, May 2010 to June 2011 – **p. 27**

Educational Orientation for Career Development Instruction: Narrative – **pp. 28-42**

Introduction and Context

The “Life Skills” curriculum at Lamar Community College was developed in 2007 by the Office of Adult Transition Services at LCC, in consultation and partnership with the Prowers County Department of Social Services. What were originally two classes—each six weeks long—were shortened and revised to add a third module, and this curriculum of three alternating four-week modules (“Life Skills,” “Business Basics,” and “Work Styles”) has been provided to DSS clients throughout the 2009-2010 fiscal year, led by instructors from Adult Transition Services and meeting in class space and computer lab space at LCC.

By agreement with Prowers County Department of Social Services, the Director of Adult Transition Services at Lamar Community College is responsible for supervision of curriculum and instruction in these courses/modules. A key to providing effective instruction is being sensitive to the expressed needs and concerns of 1) the students, 2) our partners at PCDSS, and 3) our instructors. Students have asked for more “hands on” activities and greater relevance to their individual circumstances, backgrounds, and interests. Our partners at PCDSS have specific needs regarding 1) scheduling of classes, 2) accountability, and 3) they initiated discussion, and advised on the development of a fourth module, “Career Pathways,” which has been incorporated as the capstone experience in the newly restructured set of four “Career Pathways” modules to be presented in this document. Finally, our instructors have given valuable input based on their efforts to teach from within and innovate beyond the curriculum in its current format this past year.

The Office of Adult Transition Services at Lamar Community College envisions any person who has educational aspirations to be able to come to LCC and find assistance to a pathway for success. Adult Transition Services hopes to be the beginning for many potential students in our service area. The courses and workshops can begin to prepare students to enter and be successful in a chosen pathway. Staff members can work with students to help them achieve their educational goals. In this role, Adult Transition Services are a vital and important part of the educational mission of Lamar Community College and the LCC vision: At Lamar Community College, we are committed to providing the highest quality education in an environment of service excellence. The LCC values are 1) Integrity, 2) Valuing People, 3) Open Communication, 4) Respect.

Career Pathways at LCC comprises a set of three Career Development Modules (“Personal and Career Development”; “Work Styles and Ethics”; and “Business and Workplace Basics”), followed by a “Career Pathways Capstone” Module in two phases (phase 1 is classroom-based instruction, phase 2 is a mentored search and start process). Each of the Career Development Modules is four weeks; phase 1 of the Career Pathways Capstone Module is also four weeks; phase 2 is 8-12 weeks long. The total length of the Career Pathways program at LCC will be 24-28 weeks. Clients will be encouraged to repeat modules as advanced students with enhanced status and higher expectations. Movement from phase 1 of the fourth module,

“Career Pathways Capstone,” into phase 2 will be determined by readiness, based on performance, skill-sets, task-completion, attendance, and instructor and case manager recommendations. Completion of the Cross Roads experience at DSS is highly recommended, but not required, for movement through Career Pathways at LCC. The 8-week Cross Roads will fit at any juncture between modules or phases.

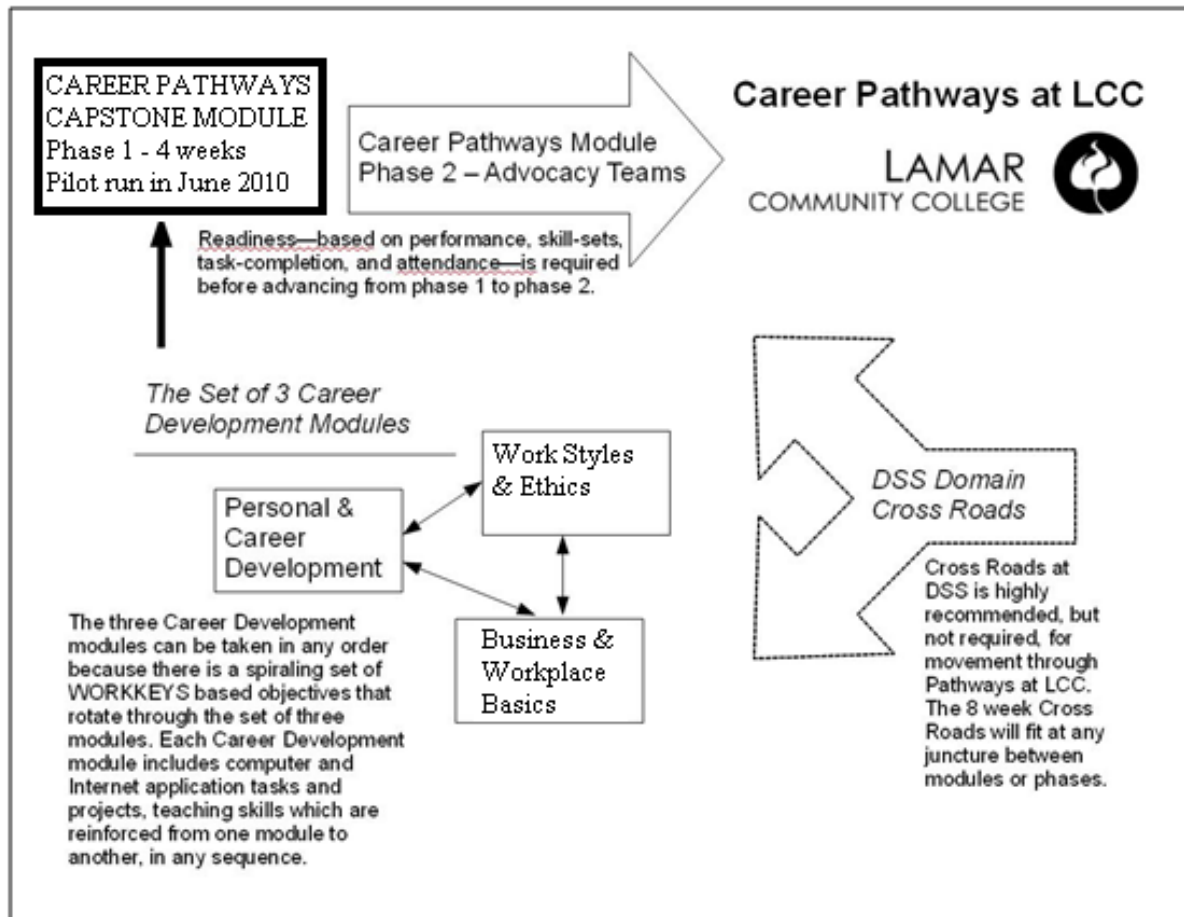


Figure 1: Career Pathways at LCC (flowchart)

Recommendations from the LCC Office of Adult Transition Services

Recommendation 1: Purchase WIN-WorkKeys Career Readiness Courseware Package

This product from ACT has solid brand recognition, and offers a wide range of assessment and training pieces in two different broad categories: foundational skills and personal skills. Foundational skills in a WorkKeys context means applied jobs skills within three areas: 1) Communication, 2) Problem Solving, and 3) Interpersonal Skills.

WorkKeys Foundation Skill Areas

COMMUNICATION

Business Writing
Listening
Reading for Information
Writing

PROBLEM SOLVING

Applied Technology
Applied Mathematics
Locating Information
Workplace Observation

INTERPERSONAL SKILLS

Teamwork

<i>Correlations of SCANS Competencies & WIN</i>	
SCANS Competency Area	WIN WorkKeys Foundation Skill
Resources	<i>Applied math</i>
Interpersonal	<i>Business writing, Teamwork</i>
Information	<i>Reading for info, Locating info, Observation</i>
Systems	<i>Teamwork, Observation</i>
Technology	<i>Applied technology</i>

Figure 6: Correlations Between SCANS Competencies & WIN Skills

The WIN-WorkKeys Career Readiness Courseware also includes a “Work Habits” category that addresses a number of the typical “life skills” competencies and original SCANS “soft skills” foundation areas.

Correlations of UNICEF Life, WIN Work-Habits	
UNICEF Life Skills	WIN-WorkKeys Work Habits Sub-skills
<i>interpersonal communication</i>	listening and speaking
<i>Decision-making, Problem-solving, Critical thinking</i>	Problem solving
<i>internal locus of control, managing feelings, managing stress, advocacy</i>	interpersonal interaction, cooperation and respect, self-management, time management

Figure 7: Correlations Between UNICEF Life, WIN Work Habits

The WIN-WorkKeys and Work Habits bundle also aligns at multiple points with the original SCANS foundation skill areas.

Correlations of SCANS foundation & WIN-WorkKeys competencies plus Work Habits skills	
SCANS Foundational Set	WIN-WorkKeys Competencies plus Work Habits
<i>Basic Skills</i>	Reading for information, Locating information, Applied mathematics, Business writing, Writing, Listening, Habits-listening and speaking
<i>Thinking Skills</i>	Observation, Habits-problem solving
<i>Personal Qualities</i>	Teamwork, Habits-interpersonal interaction, Habits-cooperation and respect, Habits-self-management, Habits-time management

Figure 8: Correlations Between WIN Bundle and SCANS Foundational Skills

Recommendation 2: Development of a New, Fourth “Career Pathways” Module w/ WIN

The Worldwide Interactive Network, Inc., or WIN, Career Readiness Courseware is delivered via the Internet to persons enrolled at a physical site where a license is held. Lamar Community College has purchased a one-year license with funds provided by the Prowers County Department of Social Services. The WIN-WorkKeys Courseware provides placement tests and multiple levels of instruction (with exercises and post-tests at each level) in nine foundational skills and one “soft-skill,” work habits.

WIN-WorkKeys Foundational Skills and Work Habits (soft skill)		
SKILL AREA	Descriptors	Levels available
<i>Applied Mathematics</i>	Solving problems requiring single and combinations of math operations, calculating averages, working with fractions, decimals, and percentages, putting information in correct order before performing calculations, using unit conversions, finding best deals using one and two step calculations, multiple step calculations, finding areas of basic shapes, finding volume of solids, calculating multiple rates, solving nonlinear functions, converting between systems of measurement, setting up and manipulating complex ratios, proportions, applying basic statistical concepts.	1 to 7
<i>Locating Information</i>	Finding pieces of information in one or multiple graphics, understanding relationships between graphics, comparing information and trends, sorting through distracting information, summarizing information, drawing conclusions based on complicated and related graphics, applying graphic information to specific situations and making decisions using the information.	1 to 6
<i>Reading for Information</i>	Identifying main ideas, understanding meanings of words in context, familiarity with everyday workplace vocabulary, follow and apply instructions and steps from a reading to an analogous situation, follow directions that include "if-then" statements, identify meanings of acronyms, apply technical terms and jargon and relate them to stated situations, identify implied details, figure out the principles behind policies, rules, and procedures, apply general principles and policies to situations quite different from those described in a text.	1 to 7
<i>Applied Technology</i>	Identifying how basic tools work, how simple machine parts work, applying basic principles involving a simple system, identifying clear physical symptoms pointing to potential sources of a problem, identify best solution after eliminating unsuitable possibilities, understanding operation of complex tools and diagnostic equipment, operation of complex machines and systems, applying less obvious principles to solving problems within physical systems, disregarding extraneous information, apply two or more principles of technology as they interact in complex systems, solve advanced problems where a variety of mechanical, electrical, thermal, or fluid faults could be the reason for the problem.	1 to 6

Progress in these first four skill areas is reinforced in an accompanying set of “Contextual Modules,” which assess the four areas in the context of 19 different U.S. Department of Labor career clusters. The first three skill areas—Applied Mathematics, Locating Information, and Reading for Information—are given special status in the WIN-WorkKeys courseware because these are the three areas typically assessed at Workforce Centers for the Career Readiness Certificate that Colorado and most states recognize as the standard. Students using WIN-WorkKeys at LCC will need to take the online placement tests in these three skills before pursuing instruction in any skill area.

The next three skill areas in which placement, instruction, and post-tests are included in the WIN-WorkKeys courseware are: Listening, Workplace Observation, and Teamwork.

<i>WIN-WorkKeys Foundational Skills and Work Habits (soft skill)</i>		
SKILL AREA	Descriptors	Levels available
<i>Listening</i>	Taking notes in order to relay messages, including primary information, secondary information, and correction of relationships among pieces of information.	1 to 5
<i>Observation</i>	Maintain focus in order to repeat a demonstration, process, pattern, or procedure; recognize cause and effect, and recommend a course of action based on conditional data; process information from more complex procedure or process; make inferences, deduce from incomplete patterns or process; determine general principles underlying a condition, process, or procedure; apply complicated instructions to novel situations; evaluate relevance of data; make predictions, test hypotheses; consider implications; prioritize and apply principles to reach desired outcomes.	1 to 6
<i>Teamwork</i>	Recognize team goals, work cooperatively towards team goals, identify problems and their causes, persevere in solving problems, demonstrate positive attitude, respond appropriately to praise, give positive feedback, display trust, be dependable, use prioritization and time management skills, show commitment to quality, show sensitivity to customer needs, demonstrate respect for other team members, show appreciation for diversity among team members, exhibit good decision-making and analyzing skills, show leadership by taking that role and by giving that role to others, empower other team members, display initiative, explain personal convictions honestly and with sincerity, organize various parts of a problem or task, create and revise team roles while shifting from one objective to another, integrate/synthesize multiple task components into coherent whole, be flexible in roles on team, be an active listener, resolve conflict, give negative feedback constructively, help create feeling of unity on team.	1 to 6

The placement test at the start of instruction in any skill area begins with a level 3 post-test, and either moves up or down to the next level depending on the student's answers to five questions. In this way, a student is eventually placed anywhere from first level to the highest level to initiate lessons.

The last three skill areas in the menu list on the start page of the WIN-WorkKeys courseware are: Writing, Business Writing, and Work Habits. As explained above, Work Habits is a soft-skill area that covers a number of the skills and competencies typically associated with life-skills approaches. This area is considered of a piece with the rest of the skill areas, and requires instruction at five levels.

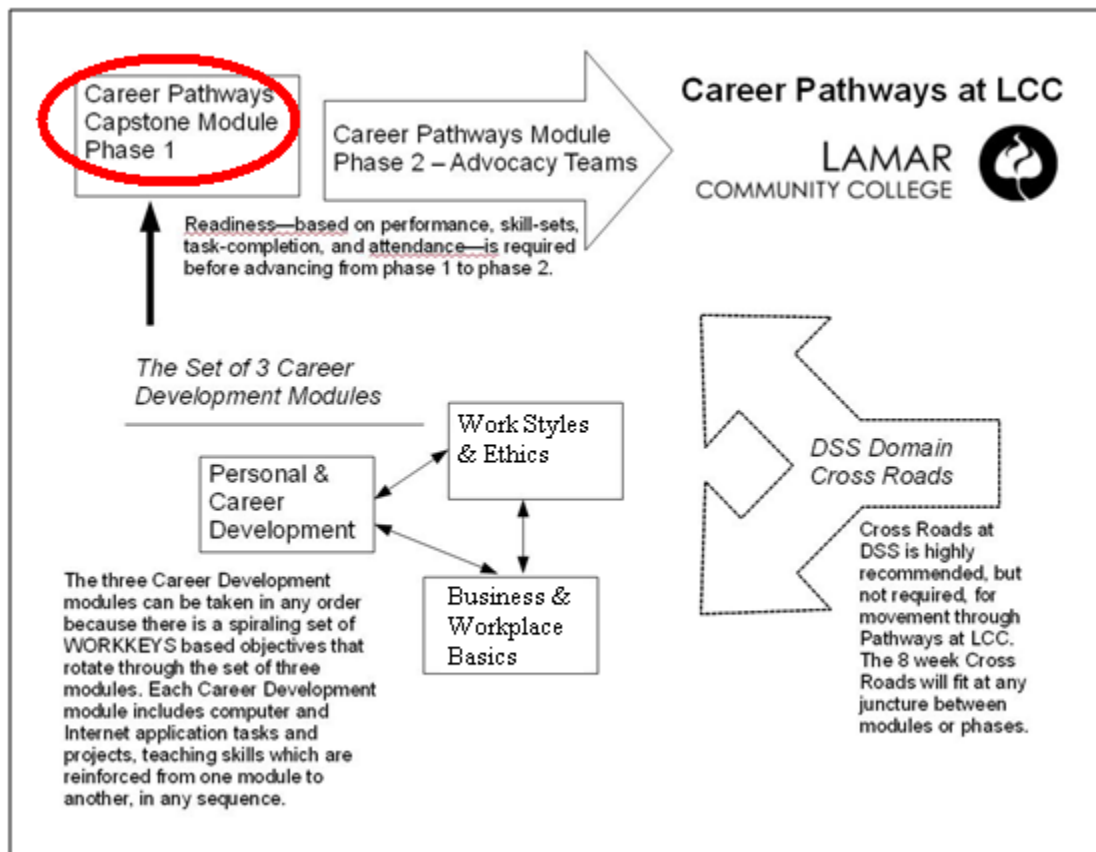
<i>WIN-WorkKeys Foundational Skills and Work Habits (soft skill)</i>		
SKILL AREA	Descriptors	Levels available
<i>Writing</i>	Listen to audio messages and write down information to convey it to a reader. Scored on a rubric where the highest level reflects clear, precise messages free of errors; correct complete sentences that are varied, smooth, polished; no mechanical, grammatical, or word usage errors; businesslike, courteous, professional tone with language highly consistent with standard business English; writing style that flows smoothly; information presented logically.	1 to 5
<i>Business Writing</i>	Read a written prompt and write a response. Scored on a rubric where the highest level reflects clear, precise, error-free writing; communication in a professional, courteous manner; correct, complete sentences of varied length and complexity; few or no errors in grammar and/or mechanics, and any that appear do not interfere with communication; word usage displays precision and variety; style, tone, language consistent with standard business English, with no rude or overly casual language; organization is smooth and maintains clear and consistent focus from beginning to end; transitions varied and effective, creating a seamless flow of ideas; ideas well developed and elaborated on with relevant supporting examples and details; writing shows insight, perception, depth.	1 to 5
<i>Work Habits</i>	Listening and speaking, problem solving, cooperation and respect, self-management, time management, etc.	1 to 5

In addition to these 10 skill areas or sections, the WIN software includes a link to career listings on either DOT (Dictionary of Occupational Titles - <http://www.occupationalinfo.org>) or ONET (Occupational Information Network) or both. This functionality allows a person to list his or her level of advancement in different WorkKeys skills and search for jobs that match these current skills; a person can also search by career cluster or specific job title, and discover the array of level attainments in different skill areas that are valued in that job.

The WIN-WorkKeys Career Readiness Courseware further offers a print option that allows students who are uncomfortable with or unable to use a computer to work through the different skill areas and progress to higher levels using paper and pencil instead.

The Proposed Career Pathways Module: Pilot Run Scheduled for June 2010

The Career Pathways Capstone Module is envisioned as a full-force, hands-on learning and career planning experience for students who have gone through the three modified original four-week courses of instruction that are now called the Career Development Modules: Personal and Career Development, Work Styles and Ethics, and Business and Workplace Basics. In some cases, candidates for the capstone module will also have circulated through the DSS *Cross Roads* training.



The four-week Career Pathways capstone module is scheduled to run as a two-hour classroom and two-hour WorkKeys lab, five days a week. Students can also access their WorkKeys accounts outside of class hours to extend on the benefits of using the WIN-WorkKeys interactive courseware via the Internet. Students will need hard-copy notebooks to maintain goal-setting and progress charts throughout this intensive, student-centered course.


New Curriculum: New Career Pathways Capstone Module			
	<i>Instructional Purposes</i>	<i>Learning Activities</i>	<i>Evaluation of Success</i>
Week One	<p>1) Students become familiar with WIN-WorkKeys 2) Students start online instruction in four key skill areas 3) Students become familiar with library's systematic collection of career and job brochures 4) Students start to plan and set personal goals for themselves re WIN progress 5) First contacts made with reps from different academic and non-academic careers.</p>	<p>1) Enrollment, log-on, placement tests AM, LI, RI. 2) At least one level of progress in at least three of four key skill areas-AM, LI, RI, AT 3) Two visits to library in Bowman, to inspect career brochure collection 4) Hard copy notebook of charts to indicate progress towards personal goals in WIN 5) Phone calls and e-mails used to set up career discovery visits and interviews; Speakers also invited to the class.</p>	<p>1) Visual check-off by instructor 2) Visual inspection by instructor of individual hard copy progress charts &/or WIN reports electronically 3) Sign-off by Ellen Lovell or other library personnel 4) Visual check by instructor—see #2 above 5) Students cc instructor on e-mails and maintain individual logs of all phone calls made and outcomes, for instructor to visually check.</p>

The instructor is a combination of learning facilitator, motivational speaker, and accountability officer in this crucially important career development module. The ideal instructor will have leadership skills and be able lead by example: the perfect instructor will maintain his or her own notebook of progress charts, to monitor their own professional growth as well as the individual developmental trends for each student enrolled in this module.

It is important, too, for the students to quickly develop a sense of team spirit that bonds them together as a cohort of professionals in training. This Career Pathways Capstone Module provides, in addition to direct instruction, a starting place for building the kinds of personal and career networks that increase a person's confidence in himself or herself, awareness of the labor market, and ability to move effectively in the direction of employment opportunities. That is why two other key activities are initiated in this first week of the module: 1) students making contact with offices and individuals for career discovery interviews, and 2) the instructor bringing speakers to the class who represent different industries and a diversity of approaches to success. Again, these are points in each learner's expanding network of associates and potential mentors who can guide them with wisdom and insights from experience.

New Curriculum: New Career Pathways Capstone Module			
	<i>Instructional Purposes</i>	<i>Learning Activities</i>	<i>Evaluation of Success</i>
Week Two	<p>1) Students become familiar with WIN-WorkKeys Career Center and Job Profiles 2) Students deepen involvement in WorkKeys instruction, refine skill focus 3) Students begin to pool information from library's career brochures 4) Students reflect in writing on their experience in this module so far 5) Students research specific career options and share data with cohorts</p>	<p>1) Do at least two keyword searches, two job title searches, two occupation searches, and two qualifications searches, from WIN's link to DOT and ONET. 2a) At least one level of progress in at least two of key skill areas (see above) 2b) Placement tests in LS & Writing, and at least one level of progress in each. 3) Small groups prepare PowerPoints on sets of related careers, based on info in library's career brochures. 4) Reflection is written in the notebook along with updates on personal charts. 5) Visits and phone call interviews with reps at relevant offices.</p>	<p>1) Visual inspection by instructor of notations in progress notebook. 2a) Visual inspection by instructor of hard copy progress charts in notebook &/or WIN reports. 3) Instructor evaluates using PowerPoint rubric. 4) Self-evaluation by each student of his or her own reflection, using rubric from instructor. 5) Activity logged in progress notebooks, and discussed in class.</p>

One special function within the WIN-WorkKeys Career Readiness Courseware is a link and interface with DOT (Dictionary of Occupational Titles - <http://www.occupationalinfo.org>) and ONET (Occupational Information Network). This is not simply a link to an outside Web site, but the search pages show how a student's current levels attained in WIN correspond to the expected levels of proficiency in skills that are relevant to a particular job.

Career Alignment		
ONET Job Title:	Painters and Illustrators	
ONET #	27-1013.01	 PRINT
Career Cluster:	Arts	
Career Area:	Applied Arts (Visual)	Scores you entered
Applied Math:	3	4 - Change
Applied Technology:		5 - Change
Listening:	3	N/S - Change
Locating Information:	4	4 - Change
Observation:	5	N/S - Change
Reading for Information:	4	6 - Change
Teamwork:	4	N/S - Change
Writing:	5	N/S - Change

The library in Bowman Building maintains a complete and continually updated collection of career information booklets, published by the Institute for Career Research (www.careers-internet.org). These booklets provide a lot of data on hundreds of different job titles, including information on the kinds of preparation required and articles by persons in each career explaining what doing that job is really like. This is an excellent resource at Lamar Community College, and will help to support the curriculum of the new Career Pathways Capstone Module: Phase One. The Institute for Career Research hard-copy collection nicely complements and extends the Career Center and Job Profiles links in the WIN-WorkKeys courseware.

Moving from week two to week three, there is an important transition for the students, who now must begin to recognize the reality of their career prospects, and look for a “fit” between what they aspire to do and their competencies in the related skill areas. Instructors need to remember to encourage students to use this realistic data in order to make choices about career options and, in cases where considerable further education would be needed, to break the career pathway and personal vision process into practical, short-term steps leading to a long-term goal.

New Curriculum: New Career Pathways Capstone Module			
	<i>Instructional Purposes</i>	<i>Learning Activities</i>	<i>Evaluation of Success</i>
Week Three	1) Students become aware of the amount of “fit” between their career/job aspirations and their current levels of achievement in relevant skill areas. 2) Students become familiar with the Contextualized Career Modules function. 3) Students refine and redirect their skill area focus. 4) Students reflect on progress in career-readiness skills as well as on their developing personal visions for the future. 5) Students follow up on first round of informational visits/calls and initiate new contacts.	1) Do at least three qualification searches on the DOT/ONET career databases. 2) Locate the most relevant career cluster, and take the Contextualized Career assessment in the four core skills (AM, LI, RI, AT). Record the results in your progress notebook. 3a) Improve a level in at least one of the three main skills (AM, LI, or RI) and also improve a level in at least one of the two skill areas added last week (LS or Writing). 3b) Take placement tests in BW & Observation, and improve one level in at least one of these. 4) This reflection should be written in the progress notebook and also converted to an individual PowerPoint or brochure. 5) Thank-you notes to career reps. Calls or e-mails to new contacts to set up interviews.	1) Visual inspection by instructor of notations in progress notebook. 2) Visual inspection by instructor of notations in progress notebook. 3a) Visual inspection by instructor of charted results in progress notebooks &/or WIN reports. 3b) Visual inspection by instructor of charted results in progress notebooks &/or WIN reports. 4) Student self-evaluates his or her own reflection in notebook; instructor uses PowerPoint rubric to evaluate related product 5) Students cc instructor on thank-yous, as well as new contacts.

By this time, in week three and preparing for the fourth and final week, students are involved in setting up their second round of career discovery visits and interviews, clarifying their own personal and career visions, and pushing to expand their horizons to include experience in all the different skill areas, while making solid progress to higher levels of achievement in the key skill areas of Applied Mathematics, Locating Information, Reading for Information, and Applied Technology.

They are also planning and pulling together resources for their group projects, which will serve as “memory books” or “newsletters” to consolidate and celebrate what they have achieved in the Career Pathways module. These group products will also serve future cohorts by helping new students to imagine what is possible in this intensive four-week experience.

New Curriculum: New Career Pathways Capstone Module			
	<i>Instructional Purposes</i>	<i>Learning Activities</i>	<i>Evaluation of Success</i>
Week Four	<p>1) Students will receive reinforcement and recognition for their progress in skill acquisition. 2) Students will return to core skill areas as a focus. 3) Students will add experience with remaining two skill areas. 4) Students will reflect on their progress in various skill areas. 5) Students will complete a group product that reflects and represents what they have learned and how they have grown. 6) Students will organize a panel discussion of experts from different career areas.</p>	<p>1) Students will receive any ACT WIN Readiness Certificates for which they have qualified by their progress in skills. 2) Improve at least one level in any two of the four core skill areas (AM, LI, RI, AT). 3) Take placement tests in Teamwork and Work Habits skill-areas, and improve at least one level in one of these two areas. 4) Do individual written reports analyzing progress across different skill areas, based on progress notebook data, including progress charts. 5) Complete a group product--group book/pdf or newsletter, documenting the experiences of everyone in the group or cohort. 6) Most popular interview subjects are invited for this panel and questions and agenda planned by cohort participants.</p>	<p>1) Certificates will be printed by WIN administrator for qualifying skill areas. 2) Visual check by instructor of progress notebook charts &/or WIN report. 3) Visual check by instructor of progress notebook charts &/or WIN report. 4) Research self-report on progress will be evaluated by instructor using program-wide rubric. 5) Members evaluated on participation in group work and group evaluated on final product as well. 6) Students will be evaluated on attendance and the questions they ask at the panel discussion.</p>

At the end of the four-week capstone module, students are NOT finished. They have been equipped with an understanding of how to utilize the WIN-WorkKeys courseware, for the purposes of continuing to progress in the skill areas that are valued in the careers and jobs that

they aspire to enter. There are two options for a student who has completed one cycle through Phase 1 of the capstone Career Pathways 4th Module: 1) if he or she has met the attendance requirements and has achieved a level three (3) rank in the core WIN-WorkKeys skills (Applied Mathematics, Locating Information, and Reading for Information), then the next step is to apply for entry to Phase 2 of the Career Pathways Module; if the student is below level three (3) and/or has had attendance problems, then Adult Transition Services will recommend he or she goes through Phase 1 again. Since Phase 1 is a student-centered, project-based course module, with a heavy emphasis on goal-setting and monitoring of progress, the student who takes this four-week session again will have a completely new experience and will be expected to make important advances in his or her skill profile on the WIN-WorkKeys courseware as well.

Phase 2 is a 12-week extension and application of the skills and practices that formed the core of Phase 1. The student who successfully is admitted for participation in Phase 2 will continue to have access to the WIN-WorkKeys courseware, and will be required to continue maintaining a progress notebook and reflection journal. In addition, an “Advocacy Team” of three local individuals will be assembled for each Phase 2 participant, with these volunteers selected from the ranks of business persons, educators, community members, and LCC staff.

The advocacy team will serve as a mentoring committee, with whom the student must maintain regular contact via e-mail, as well as appearing before the panel twice a month to update members on actions and progress towards academic and/or employment goals. The Advocacy Team in phase 2 of the capstone Career Pathways module will help the student begin to build a network of individuals with whom to share pool information and from whom to receive encouragement during months and years of continued personal and career development.

Recommendation 3: Revision of the Existing Life Skills, or Career Development, Modules

The past competency list for the first module, Life Skills, measured ten (10) isolated competencies:

The Old Competency List for Life Skills

- + Identified at least 2 short term goals and 2 long term goals
- + Demonstrated organization and management of time and materials
- + Identified at least 2 transferable skills, 2 job skills, and 2 positive qualities or strengths
- + Identified individual learning style and multiple intelligences and related them to workplace and educational setting
- + Demonstrated ability to follow verbal and written directions to complete a task
- + Identified at least two community resources
- + Completed and submitted 2 phone scripts, 2 short term goals, 2 long term goals, a money budget, a time budget, and a food budget
- + Created and submitted a professional resume using Microsoft Word 2007
- + Created and submitted products using Excel and PowerPoint
- + Presented a PowerPoint presentation

The new competency list for what has been renamed “Personal & Career Development” is a more dynamic set of interrelated objectives that align across the three Career Development modules —1) Personal & Career Development, 2) Work Styles and Ethics, 3) Business and Workplace Basics—as well as aligning with Caffarella’s transfer of learning enhancers (2002) and familiarizing students with the WIN-WorkKeys Career Readiness Courseware which adds a crucial accountability piece to the entire Career Pathways 4-module program.

Competency List for Personal & Career Development Module

* = Competency strand repeated across all three Career Development modules

Italics = Activity strand repeated across all three modules

Attendance is reported for accountability purposes*
Maintain Progress Notebook for tracking achievement of goals*
Maintain Personal Reflection Journal*
(Further) Development of Personal Vision PowerPoint*

<i>Use MS Excel or Open Office Calc to develop personal budget plan</i>
<i>Use MS Excel or Open Office Calc to relate learning styles and multiple intelligences to workplace and educational settings</i>
<i>Use MS Word or Open Office Writer to prepare a resume, listing job and education / training for future version of self</i>
<i>In role play, using cell phone or Internet telephony, demonstrate conversation etiquette and communication skills</i>
<i>Introduce self in two-minute speech, with attention on eye contact</i>

Each of the three primary Career Development Modules has an attendance record plus 20 competencies or objectives. Nearly every one of these new objectives incorporates computer and/or Internet technology. The new Career Pathways curriculum is infused with tasks and projects that require a student to develop and expand his or her computer and Web-related skills. These technical skills are developed through a focus on activities and content that are relevant to students' current situations and to their future aspirations. The relationship between skill acquisition and a focus on interesting activities is analogous to the relationship in ESL instruction between language acquisition and learning activities which focus on compelling content. In the "Program Content" category, in Caffarella's model of adult learning, transfer of learning to real life situations is enhanced when "strategic goals...of learners are key planning variables," when "the focus of content is on application," and when the lessons are "relevant, useful, and practical."

Personal & Career Development Module, continued

<i>WIN-WorkKeys skill target: level 3 in Reading for Information</i>
<i>WIN-WorkKeys skill target: level 3 in Writing</i>
<i>Use WIN-WorkKeys Career Center and Job Profiles to locate 3 desired job titles*</i>
<i>Use, at LCC Library, the Institute for Career Research collection to investigate 2 specific job titles*</i>
<i>Use Internet or Newspaper to locate employment ads in southeast Colorado for 2 desired job titles*</i>
<i>Present two-minute speech, sharing results of southeast Colorado career and job search</i>
<i>Use MS Publisher or Open Office Draw to develop a how-to brochure on being a productive member of a community</i>

“Reading for Information” is one of the WorkKeys Foundational Skills, and time on the WIN courseware will empower students to handle the reading that is involved in nearly everything they are expected to achieve in the three LCC career development modules. This skill level of 3 will also equip them to push for a level of 4 in this crucial skill area when they graduate from the development modules to the Career Pathways capstone 4th module, which places a strong emphasis on individual time spent working through the WIN software. In the “Writing” skill area in WIN, students “listen to audio messages and write down information to convey it to a reader,” according to literature on the WIN-WorkKeys system. This, too, is a skill that will serve students as they participate in career development classes in the Adult Transitions Services program at LCC. Objectives related to WIN-WorkKeys also include developing familiarity with the Career Center and Job Titles section, and starting to assess the employment environment in Lamar and southeast Colorado for opportunities in selected job titles that each student is drawn to.

Personal & Career Development Module, continued

<i>Use MS Publisher or Open Office Draw to develop a flyer promoting 3 local resources to help families and children</i>
<i>Participate responsibly and creatively on a group project, with an end-product that incorporates PowerPoint, brochure/flyer, and a classroom presentation*</i>
<i>Use MS Word or Open Office Writer to prepare an application letter and a post-interview thank-you note*</i>
<i>Fill out a new hard-copy job application form correctly*</i>
<i>Fill out a new Web-based job application form correctly*</i>
<i>Do research and use e-mail, in a role-play scenario, to advocate for self on an issue related to quality of life and access to services</i>
<i>Participate , in a role-play scenario, in 1 face-to-face job interview</i>
<i>Fix and/or repurpose a PowerPoint related to personal growth, career development, and/or community involvement</i>

Each student in this first module works on at least three PowerPoints, two spreadsheets, two publications (flyer and brochure), and numerous other documents. The development and enhancement of computer-based skills are integrated fully with the content objectives and targeted competencies in this module: this is a feature of each of the three primary modules in the Career Pathways program, and this alignment of activity types across the three modules makes it possible to take these classes in any order. This is an important factor because the PCDSS clients who are required to take these career development hours can be referred at the beginning of any month in the calendar year and enter a spiraling curriculum that offers multiple contact points between modules, especially in the project-based, student-centered activities at the heart of each module of instruction.

The old list of competencies for Work Styles, now called “Work Styles and Ethics,” included 13 competencies, again highly de-contextualized and not immediately relevant to students’ interests and concerns.

The Old Competency List for Work Styles

- + Appropriately completed at least 80% of the items on a standard application form after three attempts
- + Submitted a typed, correct, up to date resume, cover letter, and thank-you letter
- + Provided a typed list of names, addresses, and phone numbers for at least three references
- + Identified and submitted a typed list of at least three job skills and at least three positive qualities about himself/herself
- + Completed at least three videotaped interviews and evaluated each
- + Asked and answered at least three appropriate job-related questions in an Interview, at least three times
- + Chose at least four newspaper want ads, and asked questions about the advertised jobs
- + Provided documentation for Workforce Center or the Workforce Web site job information, at least four times
- + Asked appropriate questions, used feedback, or asked for information to be repeated for clarification
- + Appropriately demonstrated active listening, at least three times
- + Practiced and used appropriate eye contact and appropriate body language, at least three times.
- + Demonstrated computer knowledge in the following programs: MS Word, Excel, Publisher, and Internet Multimedia

One key factor in each of the three revised modules of instruction is the progress notebook, in which the student is expected to keep an organized account of his or her weekly goals, including charted progress towards the goals, and a reflection journal, which only the student and the instructor(s) will see. Central to the curriculum revision process this year has been the expectation that the dignity of every student will be respected, and that each instructor is expected to establish a trusting relationship and mentoring rapport with his or her students. The reflection journal activity aligns with two crucial enhancers of transfer of learning, according to the Caffarella model of adult instruction: 1) prior knowledge and experience linked to what is being learned and 2) opportunities exist to integrate what is learned into current life roles. The progress notebook gives the student vital experience in self-evaluation, self-monitoring, and self-tracking, which are linked to an individual's increased awareness of his or her place in the world, enhanced self-confidence, and clarity of understanding regarding realistic options and alternatives in life.

Competency List for Work Styles and Ethics

* = Competency strand repeated across all three Career Development modules

Italics = Activity strand repeated across all three modules

Attendance is reported for accountability purposes*
Maintain Progress Notebook for tracking achievement of goals*
Maintain Personal Reflection Journal*
(Further) Development of Personal Vision PowerPoint*
<i>Use MS Excel or Open Office Calc to develop a rubric for evaluation of job interview performance/behavior</i>
<i>Use MS Excel or Open Office Calc to display Labor Department job titles, job descriptions, and locations of jobs by county in southeast Colorado</i>
<i>Use MS Word or Open Office Writer to prepare (or update) a resume with current and accurate information about self</i>
<i>In role play, using cell phone or Internet telephony, ask three employment-related questions and answer three employment-related questions</i>
<i>Introduce self in two-minute speech, with attention to voice, confidence, and dressing for success</i>

The rubric developed by the student for evaluation of the job interview will be used by the instructor to provide feedback on the videotaped interview (see below) in this module.

There are a number of opportunities in these career development modules for an instructor to invite a guest speaker to class. One example has been the willingness of administrators at LCC to present on topics like “dressing for success” or to draw students’ attention to two-year degree and six- or nine-month certificate programs with a presentation about the college admission process. Instructors are expected to bring visitors for specific, short periods of time, and to inform the Director of Adult Transition Services ahead of time in cases where someone is coming from off-campus.

Work Styles and Ethics Module, continued

<i>WIN-WorkKeys skill target: level 3 in Locating Information</i>
<i>WIN-WorkKeys skill target: level 3 in Work Habits</i>
<i>Use WIN-WorkKeys Career Center and Job Profiles to locate 3 desired job titles*</i>
<i>Use, at LCC Library, the Institute for Career Research collection to investigate 2 specific job titles*</i>
<i>Use Internet or Newspaper to locate employment ads in southeast Colorado for 2 desired job titles*</i>
<i>Prepare an MS Excel or Open Office Calc document, <i>sharing results of southeast Colorado career and job search</i></i>
<i>Use MS Publisher or Open Office Draw to develop a how-to brochure on being an ethical member of a work team</i>

The WorkKeys skill area “Locating Information” is another of the WIN courseware’s basic units (Locating Information, Reading for Information, and Applied Mathematics) that will empower students to get more out of their path through the Career Development modules, and begin a process which will be picked up and amplified in the 4th module, Career Pathways Capstone. The “Work Habits” soft-skill piece is particularly relevant to the revised Work Style and Ethics module. WIN Work Habits content includes: problem solving, interpersonal interaction, cooperation and respect, self-management, and time management.

Again, tying the investigative use of both LCC’s library collection of career brochures and the powerful databases for career categories and job titles available through WIN to actual searches on the Internet as well as in hard copy newspapers, for real jobs in southeast Colorado, makes the entire career search experience more relevant and personal.

Work Styles and Ethics Module, continued

<i>Use MS Publisher or Open Office Draw to develop a flyer promoting a social or community cause (social action or social justice issue)</i>
<i>Participate responsibly and creatively on a group project, with an end-product that incorporates PowerPoint, brochure/flyer, and a classroom presentation*</i>
<i>Use MS Word or Open Office Writer to prepare an application letter and a post-interview thank-you note*</i>

Fill out a new hard-copy job application form correctly*
Fill out a new Web-based job application form correctly*
<i>Do research and use e-mail, in a role-play scenario, to advocate for another person on an issue related to fairness, equity, and/or access</i>
Participate , in a role-play scenario, in 1 face-to-face <i>job interview</i> , videotaped
<i>Fix and/or repurpose a PowerPoint related to ethical decision-making or dressing for success</i>

There was a paternalistic aspect to prior lists of competencies and the name by which the “Life Skills” curriculum was known. Inclusion of social action and social justice issues in the competency that calls for development of a flyer shifts the tone from accusatory to respectful of the positive life force at the center of every human being, and gives students an option that teaches them to advocate for changes bound to be needed regularly in any community.

At the same time, it is essential that the impulse to take social action on behalf of a cause develop authentically from within the student. The teacher is a facilitator and a cheerleader, as well as being a person himself or herself who has things to learn and habits of thought and behavior to change. Instructors in the Adult Transition Services Career Pathways program will be encouraged to lead by example and maintain their own progress notebooks and reflection journals. Teachers need to learn as a result of the experiences that our students go through. In many cases, teachers and students will be witnesses to transformative adult education (Mezirow, 1997) and it will be important for the instructor to acknowledge that autonomous thinking on the part of a student is a high achievement level, and students should be reinforced for making their “own interpretations rather than act on the purposes, beliefs, judgments, and feelings of others” (Imel, 1998).

The previous competency list for Business Basics, now called “Business and Workplace Basics,” was difficult to distinguish clearly from the competency lists for the other two modules, resulting in confusion for students and instructors regarding how the purpose of this module differed from the others.

The Old Competency List for Business Basics

- + Identified, practices, and achieved at least 4 employment related goals
- + Introduced himself/herself, using appropriate eye contact, body language, and voice
- + Asked appropriate questions or asked for information to be repeated for clarification
- + Created and used an observation checklist to make independent observations of at least three different businesses and presented the results
- + Accessed and demonstrated knowledge of MS Word, Excel, and PowerPoint, and produced products using each program
- + Identified and applied ways to demonstrate ability to follow oral and written directions to complete a task
- + Demonstrated organization and management of time and materials
- + Demonstrated ability to work by himself or herself, and/or with a group, to complete a task
- + Provided copies of three job applications
- + Related a completed resume to one of the job applications, including at least three job skills and at least three positive qualities about himself or herself
- + Created and presented a dress for success presentation
- + Answered at least three job-related questions, at least three different times
- + Completed at least three phone scripts, demonstrating customer service and phone skills

The key feature of the revised Business and Workplace Basics module now is an emphasis on the dynamics of working together on a team, and a parallel focus on the resource management and tool selection aspects of doing purposeful work in a company. As with the other two modules, this one incorporates a number of Caffarella's learning transfer enhancers, known to aid students in remembering, retaining, and applying concepts and skills from this module of instruction: 1) work in collaborative teams, 2) active learning, including application exercises, is used extensively, 3) focus of content is on application, 4) innovation and change are viewed as positive, 5) prior knowledge and experience linked to what is being learned and 6) opportunities exist to integrate what is learned into current life roles.

Competency List for Business and Workplace Basics

* = Competency strand repeated across all three Career Development modules

Italics = Activity strand repeated across all three modules

Attendance is reported for accountability purposes*
Maintain Progress Notebook for tracking achievement of goals*
Maintain Personal Reflection Journal*
(Further) Development of Personal Vision PowerPoint*
<i>Use MS Excel or Open Office Calc to develop an observation checklist for comparing 3 visits to local Lamar offices</i>
<i>Use MS Excel or Open Office Calc to develop a management system for inventory in an imaginary company</i>
<i>Use MS Word or Open Office Writer to prepare (or update) a resume with current and accurate information about self</i>
<i>In role play, using cell phone or Internet telephony, respond to 3 specific customer service complaints or requests for assistance</i>
<i>Introduce self in two-minute speech, with attention to body language</i>

A recurring task across the three Career Development modules pertains to students refining their personal visions, expressed in a PowerPoint format. It is expected that as the individual increases his or her awareness of career opportunities and the related sacrifices in terms of training and education required, the development of a personal vision will become more meaningful and more reflective of serious consideration.

With the unique focus of the Business and Workplace Basics module, the addition of WIN-WorkKeys skill building in Applied Mathematics and Teamwork makes sense. Further, if a student does reach the target of a level 3 in Reading for Information, Locating Information, and Applied Mathematics, he or she can be referred to the local Workforce office to take the official WorkKeys Career Readiness exam, because a very nice certificate is available for this level (called the Bronze Level).

Business and Workplace Basics Module, continued

<i>WIN-WorkKeys skill target: level 3 in Applied Mathematics</i>
<i>WIN-WorkKeys skill target: level 3 in Teamwork</i>
<i>Use WIN-WorkKeys Career Center and Job Profiles to locate 3 desired job titles*</i>
<i>Use, at LCC Library, the Institute for Career Research collection to investigate 2 specific job titles*</i>
<i>Use Internet or Newspaper to locate employment ads in southeast Colorado for 2 desired job titles*</i>
<i>Prepare an MS PowerPoint, <i>sharing results of southeast Colorado career and job search</i></i>
<i>Use MS Publisher or Open Office Draw to develop a how-to brochure on an important tool or process for workplace success</i>

The electronic artifacts produced by students as they circulate through the Career Development Modules are supposed to be saved onto a flash-drive that each student has. Students will be required to maintain a logically organized set of folders and sub-folders in their flash-drives, for easy access later when they have to perform many of the same functions, in a real job setting.

The group project in each module is an activity and teaching-approach thread connecting all four modules in the Career Pathways program. The instructor will advise and lead students as they go through this experience in each module. Again, it is important to allow the ideas to come from the students themselves, rather than imposing a specific topic. The only rules are that the end product be related to the current module, and that each member of the group contribute significantly to the success of the project. A rubric is used that allows group members to score each other on effort and participation, in addition to points allocated by the instructor on the final products, including the class presentation.

It is also important not to over-emphasize the project or complicate the feedback process overly much. The instructors in the Career Pathways program at LCC are capable of making these kinds of decisions related to accommodating a course to the needs, interests, backgrounds, and learning styles of all the students. The curriculum serves as an effort to capture in time what is actually a moving target, so teachers are expected to use their best judgment on a daily basis.

Business and Workplace Basics Module, continued

<i>Use MS Publisher or Open Office Draw to develop a flyer promoting the services of a local business or agency</i>
Participate responsibly and creatively on a group project, with an end-product that incorporates PowerPoint, brochure/flyer, and a classroom presentation*
Use MS Word or Open Office Writer to prepare an application letter and a post-interview thank-you note*
Fill out a new hard-copy job application form correctly*
Fill out a new Web-based job application form correctly*
<i>Do research and use e-mail, in a role-play scenario, to advocate for a group/team of people on an issue related to your shared goals</i>
Participate , in a role-play scenario, in 1 telephone <i>job interview</i>
<i>Fix and/or repurpose a PowerPoint related to effective communication between members of a work team</i>

The repeated competencies across the three modules pertain to steps an individual takes en route to obtaining employment. The WIN software adds a powerful search component on the career exploration side, and students will also spend time in the LCC library reading in-depth descriptions and interviews related to specific job titles. Nevertheless, the bottom line is to utilize Department of Labor and other Internet search capabilities, as well as newspaper want-ads, to hone in on jobs for which a person is qualified or could soon be qualified. It is likely in any person's lifetime that he or she will have to find such information effectively and rapidly, for example, if the company where the person is employed shuts down and lays off a lot of workers. The salient importance of these job search skills is what makes them essential items on all three competency lists.

Classroom Materials and Resources

Adult Transition Services is in the process of selecting textbooks or workbooks to fit these classes. A teacher resource collection is available to our instructors. Students will need to be supplied with notebooks for the progress notebook requirement, and separate notebooks for their reflection journaling. Flash-drives with at least 8 and preferably 16 Gigabytes of memory will be needed as well for each student.

CALENDAR FOR ROLLING OUT THE NEW CAREER PATHWAYS CURRICULA

May 2010 – Work Styles and Ethics will be taught using the new curriculum
 June 2010 – Personal and Career Development will be taught using the new curriculum
 June 2010 – Career Pathways Capstone Module PILOT will be taught
 July 2010 – Career Pathways Capstone Module- Phase 2 (Advocacy Teams) will start
 July 2010 – Business and Workplace Basics will be taught using the new curriculum
 August 2010 – Career Pathways Capstone Module – Phase 1 – incorporating revisions from Pilot
 August 2010 – Work Styles and Ethics will be taught using the new curriculum
 Sept 2010 – Career Pathways Capstone Module – Phase 2 (Advocacy Teams) new cohort
 Sept 2010 – Personal and Career Development
 Oct 2010 – Business and Workplace Basics
 Oct 2010 – July Advocacy Teams come to end of 3 month commitments
 Nov 2010 – Career Pathways Capstone Module – Phase 1
 Nov 2010 – Work Styles and Ethics
 Dec 2010 – Career Pathways Capstone Module – Phase 2 (Advocacy Teams) new cohort
 Dec 2010 – September Advocacy Teams come to end of 3 month commitments
 Jan 2011 – Personal and Career Development
 Feb 2011 – Business and Workplace Basics
 Feb 2011 – Career Pathways Capstone Module – Phase 1
 Mar 2011 – Work Styles and Ethics
 Mar 2011 – Dec Advocacy Teams come to end of 3 month commitments
 Mar 2011 – Career Pathways Capstone Module – Phase 2 (Advocacy Teams) new cohort
 Apr 2011 – Personal and Career Development
 May 2011 – Business and Workplace Basics
 May 2011 – Career Pathways Capstone Module – Phase 1
 June 2011 – March Advocacy Teams come to end of 3 month commitments
 June 2011 – Career Pathways Capstone Module – Phase 2 (Advocacy Teams) new cohort
 June 2011 – Work Styles and Ethics

Some dates will need to be adjusted for holidays, school vacations, etc...

Educational Orientation for Career Development Instruction

“A genuine purpose always starts with an impulse,” writes John Dewey in *Democracy and Education* (1916). For Dewey, the purpose of instruction begins with—but is not limited to—a learner’s impulse in a particular direction, and his or her acting on that impulse. This concept of purpose leads to a key question in any curriculum: What is a teacher’s role in the learning process? If there cannot be a purpose without an impulse, then the primary role of the instructor must be to perceive and respond in a certain way to these learning impulses, and to establish a learning environment that is sensitive to and responsive to them.

In “Planning Programs for Adult Learners,” Rosemary S. Caffarella (2002) lists six categories of factors which enhance *transfer of learning*, which she defines as “the effective application by program participants of what they learned as a result of attending an education or training program” (p. 204).

Selected Enhancers to Transfer of Learning: 6 Categories

<i>Program Participants</i>	<i>Program Design & Execution</i>	<i>Program Content</i>	<i>Changes Required to Apply Learning</i>	<i>Organizational Context</i>	<i>Community or Societal Forces</i>
Prior knowledge and experience linked to what is being learned	Active learning, including application exercises, is used extensively	Strategic goals of organization and/or life roles of learners are key planning variables	Doable and realistic	Innovation and change are viewed as positive	Strategies for transfer take into account cultural differences
Work in collaborative teams	Close match between training environment and applications context	Focus of content is on application	Time needed to make changes is recognized	Peers, key leaders, and supervisors offer concrete and useful support	Positively affects the economic climate
Cultural differences of learners are acknowledged	Transfer-of-learning strategies are useful and negotiable	Relevant, useful, and practical	Opportunities exist to integrate what is learned into current life roles	Tangible rewards for learning transfer are apparent	Community and/ or societal norms support changes

Figure 2: adapted from Caffarella (2002), “Examples of Barriers and Enhancers to Transfer of Learning” (p. 212)

Inclusive Instructional Practices and Universal Design for Learning

Universal Design for Learning is a protocol for curriculum based on what was originally an architectural concept for expanded accessibility, in the 1970s. This trend in design developed further in the 1980s, in response to advocacy movements by disability groups who wanted to draw attention to “the creative potential of design to enhance everyone’s experience through design that anticipated human diversity and integrated solutions seamlessly,” according to a document, “History of Universal Design,” by the Institute for Human Centered Design (2010). The same document explains that the term “Universal Design” was coined by the architect Ron Mace, who suggested that it was “not a new science, a style, or unique in any way.” Instead, said Mace, “it requires only an awareness of need and market and a commonsense approach to making everything we design and produce usable by everyone to the greatest extent possible.”

The Original Principles of Universal Design for Industry

1. **Equitable Use:** The design does not disadvantage or stigmatize any group of users.
2. **Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.
3. **Simple, Intuitive Use:** Use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level.
4. **Perceptible Information:** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.
5. **Tolerance of Error:** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
6. **Low Physical Effort:** The design can be used efficiently and comfortably, and with a minimum of fatigue.
7. **Size and Space for Approach & Use:** Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user’s body size, posture, or mobility.

(The Principles are copyrighted to the Center for Universal Design, School of Design, State University of North Carolina at Raleigh, 1997)

In applying the concept of Universal Design to the field of learning, the original principles are synthesized into three: 1) “Multiple, flexible methods of presentation are used to support diverse recognition networks for the students”; 2) “Multiple, flexible methods of expression and apprenticeships are used to support students’ various strategic networks”; 3) “Multiple, flexible options for engagement are used to support diverse affective networks” (Rose

and Meyer, 2000). In Bauer and Kroger (2004), the following explanations and examples for each of the three UDL principles are attributed to Orkwis and McLane (1998):

Providing flexible means of representation

...challenges teachers to develop alternatives that reduce perceptual barriers. Using text, audio, or images alone may create barriers for students. Using digital text, closed captioning, and images with verbal description circumvents these perceptual barriers. Cognitive barriers, if present, can be addressed through providing summaries of the “big ideas,” improving access for some students and review for others. In addition, background knowledge may also be provided for students with limited experiences.

Ensuring flexible means of expression

...teachers should consider individual differences in motor and cognitive skills. Alternatives to expression through writing, speaking, or drawing, may need to be provided to address motor barriers. In terms of cognitive barriers, making strategies explicit or conspicuous may be helpful. Rather than depending on their intuition, some [students] may need strategies to be taught explicitly, step-by-step. Scaffolding may also be helpful, providing temporary support for learning that is gradually reduced as the student becomes more confident.

Providing flexible means of engagement

...may also be a challenge. To help more students stay engaged, students should have flexibility in terms of the amount of support and challenge they receive. Flexible options should also be provided in terms of novelty and familiarity. For example, some students require a great deal of repetition, whereas others thrive on randomness, and surprise. Developmental and cultural interest should also be considered. Finally, curricular materials should be flexible enough so that each student can contribute to the curriculum by adding his or her own images, sounds, words, and texts. This flexibility leads to deeper engagement, allowing for direct input from students with differing abilities.

(Bauer and Kroger, 2004)

Characteristics and Principles of Inclusive Education

Inclusive education is an approach to instruction that strives for the democratic ideal of equity and equality. According to Bauer and Kroger (2004), the most successful teachers in such settings are reflective practitioners who “observe their students, develop hypotheses about learning, develop plans, observe the results, and base further instruction on what they have learned.” These successful instructors, these authors explain, “seek answers to questions, and use people and resources to support their students’ learning.” Bauer and Kroger provide a list of four recurring teacher behaviors in the inclusive classroom, where the instructor:

1. Educates everyone in the classroom;
2. Makes decisions about instruction;
3. Follows the general curriculum while making adaptations to help everyone succeed;
4. Seeks, uses, and coordinates support for those who need extra help; and
5. Enables students’ learning and partners with other professionals.

(Bauer and Kroger, 2004)

The following “Effective Instructional Practices in Inclusive Classrooms” were first described by Jackson, Harper, and Jackson (2002): the list has been adapted for adult contexts.

Selected Practices Found Effective in Inclusive Classrooms

- Collaboration among stakeholders to shape and realize a positive, appropriate learning environment;
- A self-directed learning environment, in which students learn to set goals and engage in self-instruction and self-monitoring;
- Peer supports, so that learners can be both teachers and learners in the classroom, engaged in cooperative rather than competitive learning;
- Flexible grouping, allowing students to work in a variety of structures to meet their current needs and to construct social knowledge;
- Both explicit and implicit instruction, in which skills are learned and students are presented with open-ended and authentic learning opportunities;
- Formative evaluation, measuring the results of instruction in authentic ways.

(Jackson, Harper, and Jackson 2002)

Differentiated instruction means adapting and customizing teaching to the learning styles, skill-levels, and backgrounds of every student. According to Tomlinson (2001), there are three aspects of the curriculum that can be differentiated: 1) content, 2) process, 3) products.

Examples of How Each Element is Differentiated

Content: Differentiation requires that several elements and materials be used to support instructional content. These tasks must be aligned to learning goals. The instruction is concept-focused, and teachers must focus on the concepts, principles, and skills students need.

Process: Flexible grouping is consistently used. In addition, classroom management benefits both students and teachers. Students may work in teams, independently, or in pairs. Grouping varies with the activity. Students may also be provided choice in how they will attack a task.

Products: Ongoing formal and informal assessments provide the teacher with information about students' readiness and growth. Students function as active and responsible "explorers," with each [student] feeling challenged most of the time. Expectations and requirements vary for each student's responses. Students may self-select their products, or may be provided support in completing the activity they have chosen. (Bauer and Kroger, 2004)

NSTTAC Data Correlating Transition Practices with Outcomes

The National Secondary Transition Technical Assistance Center (NSTTAC) has identified evidence-based practices that correlate with post-secondary education and employment success. In the chart below, adapted from the 2009 NSTTAC report, "potential correlation" means that additional research is needed to confirm what appear to be positive correlations between a practice and an outcome. "Moderate correlation," on the other hand, indicates that research findings support a "causal inference" regarding the relationship between a certain practice and an outcome. Strong levels of correlation were not reported because of the lack of group and single-subject experimental designs in reports of outcomes so far in research literature regarding effects of transition practices.

NSTTAC Evidence-Based Correlations for Specific Transition Practices

Transition Practice	Correlation to Post-Secondary Education	Correlation to Employment Success
Career Awareness and Job Search Skills	Potential correlation	Potential correlation
Interagency Collaboration to Support Student/Client	Potential correlation	Potential correlation
Paid Work Experience	Moderate correlation	Moderate correlation
Self-Advocacy and Self-Determination Skills	Potential correlation	Potential correlation
Self-Care and Independent Living Skills	Potential correlation	Potential correlation
Social Skills Instruction	Potential correlation	Potential correlation
Emotional Support and Involvement from Family and Friends	Potential correlation	Potential correlation
Participation in Transition Program Integrated with Service Agencies	Moderate correlation	Potential correlation
Career Development and Technology Courses	Moderate correlation	Moderate correlation
Participation in Work Study	N/A	Moderate correlation

Figure 3: Transition Practices and Outcomes (adapted from NSTTAC, 2009)

According to the NSTTAC data, the strongest level of correlation between transition practices and post-secondary school outcomes has been found for 1) paid work experience, 2) participation in transition programs with integrated local agencies, and 3) training in career development and technology. The most positive correlations for post-secondary employment outcomes are found when students or clients have 1) paid work experience, 2) training in career development and technology, or 3) work-study experiences.

Transformative Adult Education

“Transformative learning” is a way of viewing the adult learning process as a potentially life-changing event in which longstanding habits of thought are challenged and modified as a result of new experiences, critical reflection, and rational dialogue (Imel, S., 1998).

Perspective transformation is the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about the world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrating perspective; and, finally, making choices or otherwise acting upon these new understandings. (Mezirow, 1991, p. 167)

Transformative learning happens when a person's frame of reference for understanding the meaning of life experience is changed, so that new experiences are now interpreted differently. According to Mezirow (1997), this is a necessary part of developing autonomous thinking. “We must learn to make our own interpretations rather than act on the purposes, beliefs, judgments, and feelings of others,” explains Imel (1998). “Facilitating such understandings is the cardinal goal of adult education.”

Mezirow describes two ways that people can change their frames of reference, or “meaning schemes (specific beliefs, attitudes, and emotional reactions).” First, these meaning schemes can develop over time as an individual incorporates new experiences and ideas into an existing mental framework, accommodating perspectives to include new information. Transformative learning, however, which shifts perspectives, is less common, according to Mezirow (1995). This restructuring of mental frameworks is caused by a “disorienting dilemma,” in the context of a crisis or transition.

Mezirow's Phases of Transformative Learning

1. A disorienting dilemma
 2. Self-examination
 3. Critical assessment of assumptions
 4. Recognition that others have shared similar transformations
 5. Exploration of new roles or actions
 6. Development of a plan for action
 7. Acquisition of knowledge and skills for implementing the plan
 8. Tryout of the plan
 9. Development of competence and self-confidence in new roles
 10. Reintegration into life on the basis of new perspectives
- (Imel, 1998, p. 3)

Boyd and Myers (1988) see transformative learning as a psychologically charged process in which intuition, creativity, and emotions play significant roles. According to Boyd (1989), the

restructuring of a person's mental framework and perspective is a “fundamental change in one's personality involving the resolution of a personal dilemma and the expansion of consciousness, resulting in greater personality integration.”

Boyd and Myers (1988) see “discernment,” or new understanding of experience, as central to the process of transformative learning. According to Imel, this special understanding “calls upon such extra-rational sources as symbols, images, and archetypes to assist in creating a personal vision...of what it means to be human.” Imel further explains that discernment “is composed of the three activities of receptivity, recognition, and grieving.” Receptivity means being open to “alternative expressions of meaning” (Boyd and Myers, 1988). Recognition means that the individual knows the message or lesson being received is relevant and authentic to his or her life. Grieving is the process of letting go of familiar habits of thought and patterns of perception, borrowing or generating ones own new patterns, and finally integrating the old and the new.

While transformative learning is an appealing model—and many adult educators and other professionals providing services to adults draw sustenance from and aspire to enactments of this life-changing process—there are warnings in the research literature about overdoing this emphasis.

Differences in learning contexts, learners, and teachers all affect the experiences of transformative learning. Because people learn in different but interwoven ways, educators should not see transformative learning as the only goal of education....Not all learners are predisposed to engage in transformative learning. The same can be said for teachers. Not all teachers of adults may feel comfortable with a goal of transformative learning. In addition, many adult learning situations do not necessarily lend themselves to transformative learning.

(Imel, 1998, citing Cranton, 1994, 1997; Taylor, 1998)

The Instructor as a Model of Transformative Learning

Perhaps the best place to begin if an adult education program wishes to encourage transformative learning experiences among students and clients is with an emphasis on this as a professional development goal for instructors and other service providers. According to Imel (1998), “the teacher's role in establishing an environment that builds trust and care and facilitates the development of sensitive relationships among learners is a fundamental principle of fostering transformative learning.” Loughlin (1993, cited by Imel) sees as one duty of the teacher creating “a community of knowers...united in a shared experience of trying to make meaning of their life experience.”

As a member of that community, the teacher also sets the stage for transformative learning by serving as a role model and demonstrating a willingness to learn and change by expanding and deepening understanding of and perspectives about both subject matter and teaching.

(Imel, 1998, citing Cranton, 1994)

The Difference a Project Makes

Many people have experienced the ways that being involved as a member of a project team sharpens the senses, increases motivation, and drives personal growth. The social intelligence required to be a successful worker today emanates from the need to interact effectively with fellow workers, and on teams of individuals that span disciplines, areas of expertise, and organizational boundaries.

Whatever you think you can do, or believe you can do,
begin it. Action has magic, grace and power in it.

(Goethe, 1749-1832)

In her article “Knowledge in Action: The Promise of Project-Based Learning” (1998), Heide Spruck Wrigley describes a number of different ways that adult basic education and career development training are being revolutionized by the “magic” of projects. “In its simplest form,” she writes, “project-based learning involves a group of learners taking on an issue close to their hearts, developing a response, and presenting the results to a wider audience.”

Spruck Wrigley explains that project-based instruction has gained importance as career development has become a more central component in the transition of TANF recipients to economic independence, under federal law. “Teachers who need to include a workforce development component in their curriculum see project-based work as a creative way to link learner-centered education with investigations into the world of work,” writes Spruck Wrigley. This increased emphasis on workforce preparation has been accelerated further by new language in the 2006 reauthorization of the Carl D. Perkins Career and Technical Education Improvement Act, defining “career and technical education” as “competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual.” Project-based learning is increasingly relevant in this evolving context of workforce and economic innovation.

Project work allows learners...in groups to examine job opportunities, document the history of work in their communities, or to research the training and education needed for different jobs. As they conduct this research and present it to others, they develop the confidence and

knowledge necessary in the job search process. In fact, in a society where companies are looking for employees who have people skills, are able to work in teams, and have the competence to make decisions and solve problems as they arise, project-based learning can serve as a powerful tool to prepare students for the world of work.

(Spruck Wrigley, 1998)

A Typology of Project-Based Instructional Approaches		
Project Type	Supporting Research	Description and Examples
<i>Interdisciplinary Cognitive Development</i>	Kilpatrick, 1918	Using literacy in meaningful contexts to build background knowledge and personal growth. Topics come from students' interests. Students develop understanding of their lives while preparing to work within a democracy.
<i>Progressive Inquiry, Problem Solving</i>	Dewey, 1899	Student-centered, because schools should reflect society. Students learn best through experiences in which they have an interest, and through activities that allow for individual differences. Social interaction key.
<i>Social Interaction, Zone of Proximal Development</i>	Vygotsky, 1930	Learning through social interaction that encourages dealing with cognitive challenges slightly above student's current level of mastery (zone of proximal development). Learning happens through meaningful interaction with more capable peers, teachers, or mentors.
<i>Participatory, Empowering Education</i>	Freire, 1970	Curriculum comes from learners' social context, literacy is used to make sense of ones circumstances. Learning empowers learners to fight status quo and create fairer society through critical reflection and collective action.
<i>Community-Action Research</i>	Barnes, 1988; Curtis, 1990	Adult learners develop language, literacy, and problem solving skills while researching a problem and then moving to effect change in a community. Adults without much formal education can create responses to community issues that are feasible and worthwhile.
<i>Humanistic, Personal Growth and Self-Actualization</i>	Rogers, 1994	Projects involve personal or cultural expressions of self and community, e.g., oral histories, children's stories, plays, skits, poetry, songs, events. Integrated into theme-based curricula, drawing on learners' creative impulses. Expression of human spirit via language and literature.
<i>Classroom-Centered, Fellow Students as Audience</i>	Rosen, 1998	Group develops questions, divides the work, seeks answers to selected questions using various sources, such as Internet or guest speakers. Final product often is often a group document. Learners pick topics of interest, decide direction of their learning, rely peer insights, create their own knowledge. Teacher is a resource.

Figure 4: Project-based Instruction Types (adapted from Spruck Wrigley, 1998)

The Role of a Teacher in Project-Based Instruction

In a project-based approach, the teacher becomes more of a leader and less of a lecturer. The leader needs set the agenda, rally students to the achievement of high goals and standards, and be sensitive to what Spruck Wrigley refers to as “teachable moments” when student enthusiasm indicates a new direction to explore.

Facilitating project-based learning requires the kind of leadership skills that allow teachers to help a group of learners to move in the direction that they want to go, pointing out potential pitfalls or making suggestions without getting defensive when students decide they like their own ideas better. It makes a difference if teachers possess a tolerance for ambiguity, some skill in helping learners negotiate conflicts, and enough self-confidence to not give up when a project peters out or refuses to come together.

(Spruck Wrigley, 1998)

Spruck Wrigley also warns of three types of mistakes that teachers sometimes make in project-based instruction. One error is expecting too much independence on the part of learners, and not laying out the steps and procedures clearly enough for them to carry out a project. Conversely, another error can be when the teacher takes too much control of the activity, not recognizing student readiness to lead their own projects. A third error is not allowing for variations in learning styles, and not including an option that makes project involvement voluntary and permits a student to work on his or her own during project activities. “In cases where both learners and teachers are new to project-based learning,” explains Spruck Wrigley, “infusing the curriculum with multiple opportunities for group discussion and decision-making can ease the transition.” Another important factor is giving learners “sufficient time to plan, revise, implement and reflect on the project before it is presented to others.” She suggests that “tasks, timelines, and responsibilities that the group has mapped out be posted prominently on the walls as reminders of the status of a project.”

Enhancing the Career Development Aspect of Life Skills Instruction

The term “Life Skills” has come to be associated with social rehabilitation and global initiatives to raise standards of living and empower people. There can sometimes be a nuance of paternalism in the use of this term, despite valuable contributions that have been made by teachers and programs instructing adult refugees and immigrants in primarily social skills for survival and success in the United States. One important example of curriculum goals from this perspective is the Life Skills “Unite for Children” campaign of UNICEF (2004).

UNICEF Standards for Life Skills Curricula

Communication and Interpersonal Skills

- + Interpersonal communication skills
- +Negotiation/refusal skills
- +Empathy
- +Cooperation and teamwork
- +Advocacy skills

Decision-making and Critical Thinking Skills

- +Decision making /problem solving skills
- +Critical thinking skills

Coping and Self-Management Skills

- +Skills and increasing internal locus of control
- +Skills for managing feelings
- +Skills for managing stress

(UNICEF, 2004, downloaded from
http://www.unicef.org/lifeskills/index_whichskills.html)

A new direction in career development curricula, incorporating life skills but expanding to a more workplace-oriented set of skills and applications, began with the Secretary's Commission on Achieving Necessary Skills (SCANS) report in 1991. The SCANS report resulted from meetings and research interviews with workers, employers, and business owners. According to Tibbetts, Sherman, Crocker, and Evans ("SCANS-Related, Project-Based Instruction and Learning in Adult Education: A Professional Development Packet," 2000), the results from these discussions were "universal" in supporting the conclusion that "good jobs will increasingly depend on people who can put knowledge to work."

Tibbetts et al present a general list of features for what the authors refer to as "tomorrow's workplace."

Characteristics of Tomorrow's Workplace

NEW STRATEGIES

- +Flexible production
- +Customized production
- +Decentralized control

PRODUCTION

- +Flexible automation
- +On-line (assembly line) quality control
- +Work teams, multi-skilled workers
- +Authority delegated to worker

HIRING AND HUMAN RESOURCES

- +Labor-management cooperation
- +Screening for basic skills abilities
- +Workforce as an investment

JOB LADDERS

- +Limited internal labor market
- +Advancement by certified skills

TRAINING

- +Training sessions for everyone
- +Broader skills sought

(Office of Technology Assessment, 1990, cited by Tibbetts et al, 2000)

This is certainly no longer the workplace of tomorrow—most of these elements are found throughout today's economy. According to Tibbetts et al, the typical work environment has changed in response to two main trends that began in the mid 1970s: globalization and increased utilization of technology.

In 1975, the plans for a personal computer appeared in a popular scientific magazine. That device has altered the speed with which work is done and its very nature. It has created not only a new industry; it has redefined the ways “work” is now carried out.

(Tibbetts et al, 2000)

Tibbetts et al put forth the concept of “workplace know-how,” which they divide into two parts: “competencies” and “a foundation.” The five competencies are listed as: 1) Resources, 2) Interpersonal, 3) Information, 4) Systems, and 5) Technology. The foundation, according to these authors, consists of: 1) Basic skills, 2) Thinking skills, and 3) Personal qualities. The closest relationship with what are generally referred to as “life skills” (see UNICEF list above) can be found in this latter set, the SCANS foundation skills, especially in the second area, thinking skills, which are a) creative thinking, b) decision making, c) problem solving, d) seeing things in the mind's eye, e) knowing how to learn, and f) reasoning, and in the third area, personal qualities, which include a) responsibility, b) self-esteem, c) sociability, d) self-management, and e) integrity/honesty. The UNICEF list of life skills align only loosely, however, with the five SCANS competencies.

Comparing SCANS to UNICEF Life Skills		
	SCANS Competency	Related LIFE SKILLS Area
RESOURCES	TIME / GOAL RELATED ACTIVITY	DECISION MAKING
	MONEY / BUDGETING, RECORD KEEPING	SKILLS AND INCREASING INTERNAL LOCUS OF CONTROL
	MATERIAL & FACILITIES / USES MATERIALS, SPACE EFFICIENTLY	PROBLEM SOLVING
INTERPERSONAL	HUMAN RESOURCES / ASSESSES SKILLS, EVALUATES	COOPERATION, TEAMWORK
	PARTICIPATES AS MEMBER OF A TEAM	COOPERATION, TEAMWORK
	TEACHES OTHERS NEW SKILLS	INTERPERSONAL COMMUNICATION SKILLS
	SERVES CLIENTS/CUSTOMERS	INTERPERSONAL COMMUNICATION SKILLS
	EXERCISES LEADERSHIP	COOPERATION, TEAMWORK
	NEGOTIATES	NEGOTIATION/REFUSAL SKILLS
	WORKS WITH DIVERSITY	INTERPERSONAL COMMUNICATION SKILLS
INFORMATION	ACQUIRES AND EVALUATES INFORMATION	CRITICAL THINKING SKILLS
	ORGANIZES AND MAINTAINS INFORMATION	CRITICAL THINKING SKILLS
	INTERPRETS AND COMMUNICATES INFORMATION	INTERPERSONAL COMMUNICATION SKILLS
	USES COMPUTERS TO PROCESS INFORMATION	DECISION MAKING
SYSTEMS	UNDERSTANDS SYSTEMS	CRITICAL THINKING SKILLS
	MONITORS AND CORRECTS PERFORMANCE	SKILLS AND INCREASING INTERNAL LOCUS OF CONTROL
	IMPROVES OR DESIGNS SYSTEMS	PROBLEM SOLVING
TECHNOLOGY	SELECTS TECHNOLOGY	DECISION MAKING
	APPLIES TECHNOLOGY TO TASKS	PROBLEM SOLVING
	MAINTAINS AND TROUBLESHOOTS EQUIPMENT	PROBLEM SOLVING

Figure 5: Comparing SCANS Competencies and UNICEF Life Skills

Tibbetts et al explain that the SCANS foundation skills “are best learned in the context of the competencies they support” and “applied in real-world contexts.” In other words, the focus of instruction for career development purposes needs to be on authentic, real-world applications of the SCANS competencies, incorporating in those lessons the foundation (and life) skills. This is precisely the focus called for in the 2006 reauthorization of the Carl D. Perkins Career and Technical Education Improvement Act (see above), where “career and technical education” is defined as “competency-based applied learning.” Further, as suggested above by Spruck Wrigley (1998), projects need to be a “more central component” in career development curricula “as a creative way to link learner-centered education with investigations into the world of work.”

That is the rationale and underpinning for the three recommendations from Adult Transition Services at LCC for the new 2010-2011 fiscal year to enhance the Career Pathways Program that serves clients and students referred by the Prowers County Department of Social Services.

Recommendation 1: Purchase WIN-WorkKeys Career Readiness Courseware Package

Recommendation 2: Development of a New, Fourth “Career Pathways” Module w/ WIN

Recommendation 3: Revision of the Existing Life Skills, or Career Development, Modules

Recommendation 1 has been accepted by LCC and the WIN-WorkKeys license was purchased on April 20, 2010, on the fiscal year 2009-2010 budget.

Recommendation 2 includes a Pilot of the new 4th module during June 2010, and the curriculum for the Career Pathways Capstone Module will be modified based on that pilot.

Recommendation 3 represents significant shifts and improvements in the Life Skills curriculum, and these are anticipated to be implemented starting with May and June, the final two Life Skills modules of the current 2009-2010 fiscal year.