T3 . . .
Tackling Team Teaching

FICAPS Team

Helping Adult Education Students Go Farther – Faster

How Can We Go Farther – Faster?

- Develop and sustain a variety of meaningful, structured career pathways

- Align adult basic skills curricula with noncredit and credit postsecondary coursework

- Include the instruction of college and career readiness standards in all adult programs

- Expand credit transfer opportunities for career technical programs

- Provide a comprehensive menu of support services

Selecting the Plays to Make Career Pathway Progress

Combine the adult education academic standards with technical course standards and the employer's on-the-job workplace readiness skills to develop the . . . . . . **COMPETENCIES**

Organize the competencies, develop and incorporate teaching methodologies to create the . . . . **COURSE CONTENT**/**CURRICULUM FOCUS**

Review/enhance/select a series of courses and offer in a sequence to form a . . . . **CAREER PATHWAY**

Integrated Educational Opportunities

Workforce Innovation and Opportunities Act

WIOA Core Programs
- Title I- DCEO –Youth, Adult & Training Programs (DCEO)
- Title II -Adult Education and Family Literacy (ICCB)
- Title III -Wagner Peyser (IDES)
- Title IV -Vocational Rehabilitation (IDHS)

Three New Title II Activities
- Integrated education and training
- Workforce preparation activities
- Integrated English Literacy and Civics Education (IEL/CE)

Integrated Education and Training

- Aims to provide adult education and literacy activities concurrently and contextually with workforce preparation activities and workforce training

- Targets training in occupations or clusters that assist adults in their educational and career advancement

Two Forms of Contextualization
Both create direct connection between basic skills and subject area, but approach the connection in different ways:

	Contextualized Basic Skills Instruction	Integrated Basic Skills Instruction
Primary Focus	Basic reading, writing, or math	Specific CTE or academic content area
Who Teaches	ABE/GED instructor	Specific content area instructor
Contextualization	Authentic content; Conventional basic skills with different context/application	Explicit instruction in reading, writing, and math strategies as part of content-area instruction
Challenge	Variety of academic or career goals; Instructor unfamiliar w/content material	Instructors' feelings of lack of competence to teach basic skills; may not feel basic skills instruction as their responsibility

Dolores Perin, Community College Research Center

Integrated Instruction

Instructor Collaboration

Team Teaching

Co-planning/Linked, Paired Courses

Lesson Plan Integration

Doing two things at once

ABE/ASE Competencies
+
Content Outcomes

Instructor Collaboration Approaches

1. Adult basic skills course content is integrated into the postsecondary career and technical education course content.

- Relies on TEAM TEACHING - Adult education and career and technical instructors collaborate to plan, teach, and assess combined content with the same group of students at the same time within one course.
- Curricula is usually extensively revised or newly developed
- Staff participation in initial and on-going professional development is crucial
- Challenging to implement due to departmental resource allocations, time involvement and turnover of staff
- Documentation from existing programs supports the approach is effective with adult students

2. Adult basic skills course content and postsecondary career and technical education course content are taught in separate, but linked courses.

- Adult basic and career and technical instructors collaborate on program goals and contextualization of course content, but teach students at different times in separate courses
- Curricula is usually extensively revised or newly developed
- Staff participation in initial and on-going professional development is crucial
- Many programs structure this approach through student cohort groups
- Wider range in amount and frequency of actual collaboration and content integration

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INSTITUTE FOR THE PROFESSIONAL DEVELOPMENT OF ADULT EDUCATORS

http://www.floridaipdae.org

FAECP

FICAPS

The 2015-16 RFP for Florida's Integrated Career and Academic Preparation System (FICAPS) specified that programmatic designs **must** include the following elements:

- Explicit articulation of one or more educational pathways (enrollment in GED program and career and technical certificate/advanced degree program)

- Determination of the career pathway focus for the FICAPS course that meets the interests and needs of students and the strong job demands of the local workforce region

- Development of partnerships with local educational institutions and stakeholders, including CareerSource Workforce Regional Boards and One-Stops, technical center/college and/or state college, employers, and community agencies

- Implementation of acceleration strategies

- Implementation of concurrent enrollment strategies

- Provision of comprehensive academic and social student supports

- Development of integrated learning outcomes with joint faculty

Team Teaching —

- Identify co-instructors from GED® Preparation and a career and technical clock hour certificate program at district technical centers/colleges or state colleges with at least 50 percent overlap of the instructional time to support both literacy and workforce skills gains.

- Both instructors work as a collaborative team to design and deliver the program.

- Both instructors collaborate together prior to entering the classroom for the first time to work on joint learning outcomes and assessments for the students.

- Both instructors present in the classroom including lecturing, leading group discussions, and managing student projects. The 50% instructional overlap does not need to take place on a daily basis, but cumulatively over the course of the term; for example, if the course material requires more instructional overlap in the beginning of the quarter, but less at the end, the overlap can be "frontloaded" to meet the need.

- Both instructors must be open and willing to engage in this innovative instructional model.

Activity

Group members who have been a partner in a team teaching assignment, or administrators who have supervised team teachers, briefly share answers to the following questions:

1. How did you begin the relationship?

2. How did it evolve?

3. What worked well?

4. What were the biggest challenges?

Team Teacher Qualities

Qualities Evident in Successful Team Teachers

- Open and on-going communication
- Mutual respect, appreciation and willingness to share control and responsibility with another instructor
- Positive and optimistic attitude
- Strong work ethic and commitment to program implementation
- Flexibility to try new, unfamiliar, or unplanned strategies
- Confidence in subject knowledge and instructional abilities to teach in front of a peer
- Creativity to explore new avenues for learning
- Ability to recognize when, and how to incorporate alternative instruction based on variety of student learning styles
- Dedication to and focus on short- and long-term student success
- Genuine caring for students, evidenced by their motivation, engagement, and empowerment

Strategies for Implementing Team Teaching

'Moving from the Playbook to Game Time'

Team Teaching Strategies

1 - Start with building rapport
- Get to know each other on a professional and personal level
- Build trust
- Share

2 - Clarify roles, responsibilities & lesson assignments
- Clarify your expectations
- Show respect
- Present a positive attitude

3 - Vary responsibilities & roles
- Equally share the instructional leadership role
- Try different team teaching models

4 - Communicate, communicate, communicate
- Put a positive spin on suggestions or concerns
- Discuss your teaching philosophy, management style, and instructional preferences before issues arise
- Recognize strengths, forgive weaknesses

5 - Develop a protocol for your planning sessions
- Agree upon a structure
- Rely on preparation
- Capitalize on each partner's strengths

6 - Take time to reflect & check in
- Regularly schedule conference times
- Share and listen
- Think about each lesson
- Laugh together

7 - Resolve difficult situations
- Open a conversation
- Resolve differences
- Equalize responsibilities
- Recognize when it's not working and take action

8 - Pacing guide
- Plan for progression of instructional responsibilities during term

http://www.faculty.virginia.edu/coteaching/strategies.html
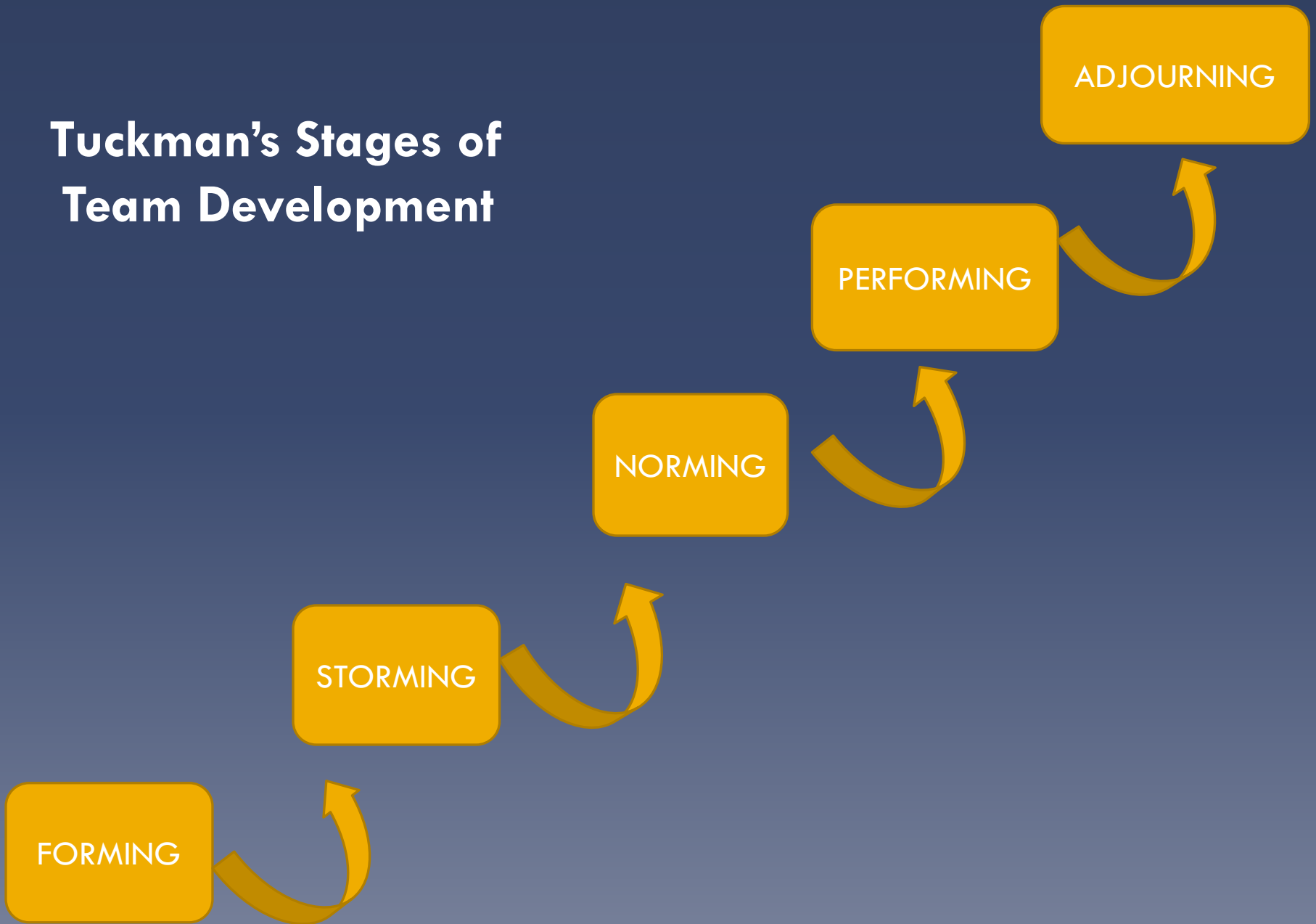
Tuckman's Stages of Team Development

Each development stage takes time, but is necessary and inevitable for:

- Team growth
- Facing challenges
- Tackling problems
- Finding solutions
- Planning work
- Delivering results

Understanding what to expect at each stage will benefit all stakeholders and allow them to strategically build and guide the team progress. It is believed that these stages are universal to all teams, regardless of purpose, culture, goals, demographics, etc.

http://infed.org/mobi/bruce-w-tuckman-forming-storming-norming-and-performing-in-groups/

Tuckman's Stages of Team Development

FORMING

STORMING

NORMING

PERFORMING

ADJOURNING

Team Development Stages

Stage 1: Forming - Orientation and getting to know each other; anxiety; uncertainty; lots of questions about non-negotiables; the polite stage, identifying tasks but little achievement

Stage 2: Storming – Testing each other; driven by individual goals and expression of individual viewpoints; challenges, conflicts, and competition appear; lack of unity; need for clarification of roles/responsibilities to move to next stage; lots of drama; focus on communication and problem-solving

Stage 3: Norming – Valuing differences; mutual acceptance and trust; cohesion develops as focus moves from individual to team goals for student success

Stage 4: Performing – Interdependent with like goals and values; flexibility with trust; effectively improved teaming processes and motivation to problem solve and agree on solutions

Stage 5: Adjourning – Dissolution of team due to program circumstances, change of team member or completion of assignment; anxiety; uncertainty; reflection and professional sharing on accomplishments/issues beneficial

Video clip

https://www.youtube.com/watch?v=2OopKk3G2tY&list=PLbu6naAjG_K93h0wjyn1b1EHQl1Q2pH_y&index=53

Expanded Team Teaching Models

Traditional Team Teaching

- Teachers actively involved in lesson planning, instruction and assessment within the same classroom at the same time with the same group of students.

- Teachers share lead instructional and student support responsibilities; promotes respect for both teachers; unclear who is lead teacher

- Teachers provide different, but equally important tasks

- Requires comfort level between teachers and ample time for collaboration and coordination to plan seamless delivery of topics within lessons

- Models differences in instructional delivery styles through a respectful working relationship between adults

- Allows both teachers to provide topic perspectives

Collaborative Teaching

- Teachers actively involved in lesson planning and share instruction within the same classroom at the same time with the same group of students

- Instruction is presented by both teachers through on-going exchange and discussion of topic ideas and theories, prepared or spontaneous, in front of students

- Allows for creativity and a more lively/fun classroom environment for lesson presentation

- Teachers model collaboration and appropriate topic discussions and exchange of possible opposing viewpoints between adults

- Allows both teachers to provide topic perspectives

- Requires coordination and planning

- Promotes respect for both teachers

Parallel Instruction

- Class divided into two groups; each teacher instructs half the students, using the same strategies to teach the same material

- Teachers can focus on deeper learning and provide more individualized support

- More time for student questions/issues; maximum participation, minimum off-task behavior or ability to hide behind other students

- Smaller group activities should be about the same time

- Requires collaborative planning

- Requires good timing from both teachers

- Each teacher should be equally strong in the lesson being taught

- Can be used with student projects or problem-solving activities

Station teaching

- Instructional content divided into topics/topic activities; each teacher responsible for a topic activity; class divided into groups that rotate between teachers

- Increased student engagement/participation

- Provision of different strategies/modifications to lesson to target skill sets

- Smaller group activities should be about the same time

- Requires collaborative planning

- Requires good timing from both teachers

- Each teacher should be equally strong in the lesson being taught

Differentiated Split Class

Supplemental Teaching

- Class divided into smaller groups according to learning needs

- Each teacher provides the respective group with the instruction required to meet their learning needs

- One teacher works with students needing supplemental instruction/remediation

- One teacher works with students needing enrichment/advanced instruction/activities

- Possibly after formative assessments or student requests

- Immediate attention to students' instructional needs; provides more individual attention

- May label students if continually grouped together

- May reduce a student's exposure to enhanced/advanced lessons

Alternative/Differentiated Teaching

Class divided into groups according to learning needs; size of groups may vary

- Each teacher instructs student group on same material, but uses different strategies; same learning outcomes, different approach

- Provides specific support for student learning styles

- Provides flexibility; can be used for remediation, enrichment, assessment, or pre-teaching

- May eliminate labeling of students if used in a variety of purposes

- One teacher works with students needing supplemental instruction/remediation

- One teacher works with students needing enrichment/advanced instruction/activities

- Possibly after formative assessments or student requests

- Immediate attention to students' instructional needs; provides more individual attention

Monitoring Teacher

1 Teach, 1 Assist/Support

- One teacher has primary responsibility for instructing entire class

- One teacher assists students, monitors student engagement/off-task behavior, distributes materials/correct assignments, asks teacher questions for topic clarifications

- Teacher roles flexible depending on teacher strengths/content taught within any lesson

- Allows content instructor to deliver and focus on instruction without interruption

- Does not make full use of both instructors

- Students may view assisting teacher with diminished instructional/authority role

Monitoring Teacher

1 Teach, 1 Observe

- One teacher has primary responsibility for instructing entire class

- One teacher gathers specific observational info/data on students/teacher

- Teacher roles flexible depending on purpose or as needed to check teacher effectiveness with
  group or individual students

- Allows content instructor to deliver and focus on instruction without interruption

- Minimal coordination of lesson plan required

- Does not make full use of both instructors

- Students may view assisting teacher with diminished instructional/authority role

- Can create animosity between instructors if use is not a mutual decision

Complementary/Supportive Team Teaching

- One teacher has primary responsibility for instructing entire class

- One teacher provides follow-up activities on related topics or study skills

- Teacher roles flexible

- Allows content instructor to deliver and focus on instruction without interruption

- Students may view complementary teacher with diminished instructional/authority role

Benefits And Challenges of Team Teaching

Student Benefits

- Enhances the classroom atmosphere through teacher diversity, expertise, experiences

- Promotes positive interpersonal and teamwork skills needed for lifelong learning

- Provides students with expanded opportunities for individual and small group discussions with both teachers

- Exposes students to various perspectives on topics and appropriate adult communication, cooperation, and collaboration

- Focus is always on student achievement within the course, despite diverse backgrounds and individual learning needs

- Develops confidence in student abilities

- Easier to identify learning gaps and provide remedial/alternative instruction

- Positive impact on students by connecting academic skills required to their chosen career goal

- Contributes to student motivation and program completion for students who may never have considered enrollment in a postsecondary career and technical program

Teacher Benefits

- Provides a supportive environment where teachers can work together on a common goal or with a common purpose

- Forces teachers to be more experienced with individual course standards and competencies and best practices for teaching them

- Promotes professional engagement and growth and interest in expanded professional development activities

- Provides the versatility needed to provide students with a range of teaching strategies, interventions, and learning opportunities

- Both teachers share the planning, organization, delivery, and assessment of lessons taught in the course

- Exposes teachers to innovative instructional approaches and methods

- Positive teacher responses and student completions resulting from program success can generate Increased interest in expanding team teaching within other career and technical areas

Challenges of Team Teaching

- Adequate institutional and administrator support (financial, personnel, resources, etc.)

- Selection and on-going support for the 'right' instructors

- Pre-implementation professional development

- On-going professional development and networking opportunities

- Preconceived and/or unrealistic expectations

- Differentiated funding/resources aligned to instructors

- Turnover of instructors

- Change of career and technical program focus

- Effective communication between all stakeholders

- Adequate pre-implementation planning time for instructors

- Adequate on-going planning time

- Scheduling of courses

- Personal and educational barriers of high-risk students

Video clip

https://www.youtube.com/watch?v=Z4Z5qnS7ol0

Findings from Institutions Incorporating
Team Teaching/Integrated Instruction

Accelerating Opportunities (AO) Initiatives

Independent evaluations of AO were conducted by the Urban Institute, the Aspen Institute, George Washington University.
AO is managed by Jobs for the Future (JFF) in partnership with the National College Transition Network (NCTN), the National Council for Workforce Education (NCWE), and the State Board for Community and Technical Colleges (SBCTC) in Washington State.

First Year Findings:
- Model and intensity of team teaching implemented was varied and needed strengthening; traditional team teaching model not widely implemented; most achieved a 25% team teaching overlap; overlap within programs ranged from 0% – 100%
- Teacher equity was not always achieved
- Increasing buy-in for team teaching among CTE faculty and staff was a major priority
- Requirement of dual-enrollment strategies primarily met through contextualized instruction within adult education courses; most required enrollment in separate adult education courses to complete GED requirements/earn credential.
- Buy-in and cooperation of CTE instructors were important criteria for institution's pathway selections
- Variety of Career Pathways with integrated instruction were implemented, with range of credits/credentials; those leading to the most high-demand, high-wage employment not always offered due to challenging CTE eligibility requirements
- Some programs added integrated instructional elements to existing career pathways funded through other grants
- CTE instructors initially reported uncertainty on how to integrate adult education instructors; utilized them more as assistants; instructor relationship/instructional support improved with time
- Students often categorized adult education instructors as assistants to CTE instructor

- Significant amount of planning time, personnel, and resources needed to implement team teaching and provide appropriate support services

- Effective internal partnerships needed to develop stronger working relationships between CTE and adult education departments, overcome negative perceptions of capabilities of adult education students

- Institution's administrative structure determined the ease of collaboration between departments

- Buy-in from the CTE leadership and staff was a priority; more difficult if initiated by adult education department

- Extra resources needed for team teaching biggest challenge to program success

- Previous interaction with CTE programs/instructors limited in past; had to build relationships from the ground up

- Partnerships and stakeholder engagement are integral to the institutionalization and sustainability

- Equitable, long-term funding model to cover CTE and adult education departmental costs needed to effectively implement and sustain team taught courses

- Employer relationships for Career Pathways needed strengthening

- Attitudes toward and opportunities for adult education students improved; many identified themselves as college students, rather than GED or ESL students

Second Year Findings:

- Variations of implementation models continued to be offered (both contextualized basic skills and integrated basic skills)

- Institutional goals shifted from earning GED to transitioning to postsecondary enrollment or employment

- Student engagement, retention, course completions/GED's, transitions increased

- Team teaching and targeted student support services catalysts for positive cultural shift among students and faculty

- Students requested additional team teaching and tutoring supports

- Students reported educational aspirations and confidence to pursue advanced training beyond immediate certificates

- Enhanced intake, admissions, comprehensive advisement process implemented

- Managed enrollment model, with cohorts, implemented

- Serious professional development increased; community of learners created

- Majority of integrated programs found in healthcare, business, manufacturing, automotive, HVAC

It was not expected that elements of integrated or team teaching models would be adopted uniformly within all institutions in all states, but implemented gradually and in accordance with the specific local needs to meet the long-term goal of enabling more low-skilled students to gain access to college and attain credentials.

Illinois' Team Teaching Continuum

Evaluations were conducted within Illinois institutions implementing AO initiatives that utilized the six most common team teaching models.

Findings:

- Illinois transitioned into ICAPS
- Team teaching is a major contributor to program success
- Team teaching strategies evolved to support any combination 50% overlap model
- Team Teaching Continuum model adopted
- Continuum model validates expected growth with revisions/improvements as team teaching implementation expands

3 Continuum Stages

Stage 1: Observing and Planning (ideally 6 months)

- Monitoring model – CTE instructor has primary instructional responsibility; adult education instructor circulates/monitors/provides feedback
- Adult education instructor in learning mode with CTE program standards
- Instructors communicate/collaborate on instructional plans
- Instructors building acceptance, trust

Stage 2: Traditional Team Teaching

- CTE and adult education instructors share instructional responsibilities
- CTE primarily teaches career and technical content
- Adult education instructor provides support, models learning strategies, provides follow-up activities on related topics/study skills
- Time for observations and planning increased

Stage 3: Collaborative/integrated Teaching
- Both instructors very well versed in curriculum
- Both instructors share instructional responsibilities; no evident leader
- Both instructors model appropriate interactions through exchange and discussion of diverse perspectives/ideas/theories as students observe
- Students observe and build skills in learning from others, respectful disagreements
- Most challenging model for teachers
- Most engaging and exciting for students
- Strategies include small group work, student-led discussions, joint assessments

Recommendations Following 3rd Year Implementation:

- Adult education instructor audit CTE course prior to implementing team teaching; or
- 100% overlap of instruction during first term of team teaching implementation
- Six month observing and planning (prep time) really important before proceeding
- Main focus on the process - moving up and through Continuum model – time periods fluid
- Instructors need to know where program is headed; embrace and stay focused on end result of student/program successes
- All stakeholders must accept that successful team teaching implementation requires time, various supports, and an encouraging work environment

http://icsps.illinoisstate.edu/wp-content/uploads/2014/09/2015-10-09-09.31-Illinois-Team-Teaching-Continuum.mp4

Recommendations from Experienced ICAPS Educators

- Internal partnerships from every department, especially administrators and department chairs, are most important to begin any form of integrated instruction.
- Make funding an important issue from the beginning; models are needed to bring equality to both CTE and adult education departments and staffs; involve all stakeholders and immediately begin financial planning/securing braided funding options for program sustainability
- Establish new Career Pathways programs and partnerships rather than revising existing ones
- Provide adult education instructors opportunities to audit CTE course prior to team teaching
- Develop and communicate clear expectations for all stakeholders
- Never force an instructor to assume team teaching responsibilities
- Request a minimum of a one-year commitment form both instructors; turnover is very disruptive for students and to sustain program
- Recognize that there could be resistance from CTE instructors to allow adult education students who have not met previous eligibility requirements
- Adult education instructors need to accept that CTE instructors could be viewed in the lead role as a result of the physical classroom, curricula, industry certification/credential requirements/exams
- Must find right fit for the most challenging CTE programs; 100% team teaching overlap encouraged

- Continually encourage communication, flexibility and positive attitudes among all stakeholders; schedule variety of activities/events to build and maintain morale
- Celebrate small steps; team teachers have greater chance for success if they accept that team teaching is an evolving process
- Need to oral/speaking component within all team taught courses; conversational skill building definitely needed for ESL students
- Encourage team teachers to establish a course binder to house program planning documents, materials, resource links, etc., related to course content
- Initial and on-going professional development needed to deal with variety of issues
- Maintain rigor within all courses
- Explicit employability skills/soft skills instruction is needed to deal with diverse needs of adult education students
- Promote the cause that these integrated/team teaching initiatives are institutional efforts, not adult education or CTE efforts
- Increase the emphasis on effective intake, placement, advisement and follow-up services to impact student enrollment, retention, and completion
- Think outside of normal marketing plans to showcase integrated/team taught courses; plan for initial low enrollment
- Encourage stakeholders to seek out local employers and community agencies to promote programs, discuss specific job skill needs and potential student placements, and gather up-to-date information on available services for adult students.

Team Teaching Planning Activity

Access the first set of GED/CTE standards for Language Arts and HVAC. With a partner at your table, one assumes the GED instructor role and other partner assumes the CTE instructor role. Quickly review the selected standards.

Activity #1:
Using the appropriate standards, collaboratively plan an introductory lesson to prepare students for an upcoming job fair, addressing specific entry-level HVAC and workplace readiness skills that students may need to present to future employers. Designate the team teaching model chosen, instructor roles within lesson, activity(ies) planned, materials needed, assessment, and anticipated time to complete unit.

Share examples with entire table

Activity #2:
Access the second set of GED/CTE standards for Mathematics and Nursing Assistant. Partners switch roles.
Using the appropriate standards, collaboratively plan a review lesson to prepare students for an alternative assessment.
Results of written exam were very poor on measuring and graphing fluid intake/output within 72 hour period – majority of class did not achieve an acceptable passing scores.

Share examples with entire table

Florida Department of Education Adult General Education Curriculum Frameworks, Effective July, 2015
GED® Reasoning Through Language Arts

LANGUAGE STANDARDS

L.1   **Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.**

L.1.a   Edit to correct errors involving frequently confused words and homonyms, including contractions (passed, past; two, too, to; there, their, they're; knew, new; it's, its).

L.1.b   Edit to correct errors in straightforward subject-verb agreement.

L.1.c   Edit to correct errors in pronoun usage, including pronoun-antecedent agreement, unclear pronoun references, and pronoun case.

L.1.d   Edit to eliminate nonstandard or informal usage (e.g., correctly use tries to win the game instead of try and win the game).

L.1.e   Edit to eliminate dangling or misplaced modifiers or illogical word order (e.g., correctly use to meet almost all requirements instead of to almost meet all requirements).

L.1.f   Edit to ensure parallelism and proper subordination and coordination.

L.1.g   Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns).

L.1.h   Edit to eliminate wordiness or awkward sentence construction.

L.1.i   Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity.

L.2   **Demonstrate command of the conventions of standard English capitalization and punctuation when writing.**

L.2.a   Edit to ensure correct use of capitalization (e.g., proper nouns, titles, and beginnings of sentences).

L.2.b   Edit to eliminate run-on sentences, fused sentences, or sentence fragments.

L.2.c   Edit to ensure correct use of apostrophes with possessive nouns.

L.2.d   Edit to ensure correct use of punctuation (e.g., commas in a series or in appositives and other nonessential elements, end marks, and appropriate punctuation for clause separation).

WRITING STANDARDS

R.1   W.1 Determine the details of what is explicitly stated and make logical inferences or valid claims that square with textual evidence

W.1,   W.4 Produce and extended analytical response in which the writer introduces the idea(s) or claim(s) clearly; creates W.2, W.4 organization that logically sequences information; develops the idea(s) or claim(s) thoroughly with well-chosen examples, facts, or details from the text; and maintains a coherent focus.

W.5,L.1,   W.3 Write clearly and demonstrate sufficient command of standard English conventions

L.2, L.3

Course Number: ACR0041
Occupational Completion Point: A
Air-Conditioning, Refrigeration and Heating Helper – 250 Hours – SOC Code 49-9021

Florida Department of Education
Student Performance Standards
2015-2016

01.0	Demonstrate the importance of health, safety and environmental management systems in organizations and their importance to organizational performance and regulatory compliance --The student will be able to:
01.01	Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments.
01.02	Explain the reasons for regular safety meetings and for company safety policies.
01.03	Explain the need for employee-background checks and medical examinations.
01.04	Identify and use appropriate fire extinguishers and other such safety devices.
01.05	Identify and follow emergency and rescue procedures.
01.06	Identify and use safe-handling practices as they relate to hazardous and volatile fluids, compounds and gases.
01.07	Understand and apply Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA) and Department of Transportation (DOT) hazardous materials safety requirements.
01.08	Apply specific safety and recovery practices for refrigerants used in the industry.
01.09	Apply specific safety practices as they relate to handling and storing cylinders and materials.
01.10	Select and wear proper protective clothing and equipment.
01.11	Identify and use specific safety practices when using soldering and brazing skills.
01.12	Identify and use OSHA practices when working with heating, air-conditioning and refrigeration systems and equipment.
01.13	Follow safety precautions when using hand and power tools.
01.14	Demonstrate an understanding of first aid, Cardiopulmonary Resuscitation (CPR) and the use of portable defibrillators.
01.15	Explain emergency procedures to follow in response to workplace accidents.
01.16	Create a disaster and/or emergency response plan.

Q.3	**Calculate and use ratios, percent, and scale factors**
Q.3.a per	Compute unit rates. Examples include but are not limited to: unit pricing, constant speed, persons square mile, BTUs (British thermal units) per cubic foot.
Q.3.b and	Use scale factors to determine the magnitude of a size change. Convert between actual drawings scale drawings.
Q.3.c require	Solve multistep, real-world arithmetic problems using ratios or proportions including those that converting units of measure.
Q.3.d limited and	Solve two-step, real-world arithmetic problems involving percent. Examples include but are not to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase decrease.
A.5	**Connect and interpret graphs and functions**
A.5.a	Locate points in the coordinate plane.
A.5.b	Determine the slope of a line from a graph, equation, or table.
A.5.c	Interpret unit rate as the slope in a proportional relationship.
A.5.d	Graph two-variable linear equations.
A.5.e	For a function that models a linear or nonlinear relationship between two quantities, interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries, end behavior, and periodicity.
Q.6	**Interpret and create data displays**
Q.6.a	Represent, display, and interpret categorical data in bar graphs or circle graphs.
Q.6.b dot	Represent, display, and interpret data involving one variable plots on the real number line including plots, histograms, and box plots.
Q.6.c	Represent, display, and interpret data involving two variables in tables and the coordinate plane Including scatter plots and grants.

Florida Department of Education
Student Performance Standards

Program Title: Nursing Assistant (Long Term Care)
PSAV Number: H170602

Course Number: PRN0090
Occupational Completion Point: A
Nursing Aides, Orderlies and Attendants –120 hours – SOC Code 31-1014

01.0	Demonstrate mathematics and science knowledge and skills.--The students will be able to:
01.01	Draw, read, and report on graphs, charts and tables.
01.02	Measure time, temperature, distance, capacity, and mass/weight.
01.03	Make, use and convert using both traditional and metric units.
01.04	Make estimations and approximations and judge the reasonableness of the result.
01.05	Convert from regular to 24 hour time.
01.06	Demonstrate ability to evaluate and draw conclusions.
01.07	Organize and communicate the results obtained by observation and experimentation.
01.08	Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
01.09	Calculate ratios.

Resources

Florida Institute for the Professional Development of Adult Educators

http://www.floridaipdae.org/

I-BEST Team Teaching Models

http://www.sbctc.edu/colleges-staff/programs-services/i-best/team-teaching-models.aspx

Perspectives on Team Teaching

http://people.ucalgary.ca/~egallery/goetz.html

Video clips of team teaching:

http://www.archive.org/search.php?query=I-BEST

Highline Community College I-BEST resources:

http://flightline.highline.edu/ibest/modules.php

National College Transitions Network resources:

http://www.collegetransition.org/publications.overview.html

Overview of Team Teaching Menu of Resources

http://icsps.illinoisstate.edu/wp-content/uploads/2015/11/2015-11-12-10.01-Overview-of-the-Team-Teaching-Menu-of-Resources.mp4

Illinois-Team-Teaching-Continuum

http://icsps.illinoisstate.edu/wp-content/uploads/2014/09/2015-10-09-09.31-Illinois-Team-Teaching-Continuum.mp4

Strategies for Co-Teaching

http://www.faculty.virginia.edu/coteaching/strategies.html

Bruce Tuckman's Stages of Team Development

http://infed.org/mobi/bruce-w-tuckman-forming-storming-norming-and-performing-in-groups/

T . . . Time

E . . . Energy

A . . . Attitude

M . . . Management