

# E-PPRENTICE Flexible Learning for Trades Training in BC



7th Annual  
Canadian e-Learning Conference

June 17-19, 2009  
University of British Columbia, Vancouver

- Development
- Implementation
- Ongoing Delivery
- Maintenance

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# Flexible Learning for Trades

- Development of FL strategy and business plan
- Role of BCcampus
- Flexible delivery models, programs in E-PPRENTICE
- typically discuss e-learning with trades training providers...

# FL for Trades

ITA



- Industry Training Authority (ITA) is provincial crown agency overseeing B.C.'s industry training and apprenticeship system
- currently more than 100 apprentice trade programs in B.C.
- major areas include:
  - construction, automotive and mechanical work, aerospace, metal work, graphic arts, horticulture, hospitality, motion picture and theatre

# FL for Trades

## Apprenticeship

- Apprenticeship is a form of post-secondary education that combines:
  - paid, *work-based training* (about 85% of training),
  - *technical training* in a classroom and shop setting (about 15% of training)
- successful completion of both components, and certification examinations is required to become a tradesperson
- length of apprenticeship ranges from one to five years, with most four years

# FL for Trades

# Apprenticeship

Level 01 • Apprenticeship training tends to be a traditional model, face-to-face

Region: Lower Mainland

Institution	Program Name	Start Date	End Date	Campus	Class Hours
VCC	Automotive Technician Apprenticeship	Jan 4 2009	Oct 30 2009	Broadway Campus	0800-1459
BCIT	Automotive Technician	Sep 28 2009	Nov 13 2009	BBY - Burnaby	0730-1430
VCC	Automotive Technician Apprenticeship/e-pprentice	Oct 19 2009	Oct 30 2009	Broadway Campus	0800-1730
BCIT	Automotive Technician Acura/Honda (AHAP)	Oct 26 2009	Dec 18 2009	BBY - Burnaby	0730-1430
BCIT	Automotive Technician	Jan 4 2010	Feb 12 2010	BBY - Burnaby	1800-2100
BCIT	Automotive Technician	Jan 4 2010	Feb 12 2010	BBY - Burnaby	0730-1530
Fraser Valley Univ.	Automotive Service Technician Apprenticeship Training	Jan 4 2010	Feb 12 2010	Trades and Technology Centre (CEP)	0730-1330
Kwantlen Polytechnic	Automotive Service Technician	Jan 4 2010	Feb 19 2010	Cloverdale	0800-1500
VCC	Automotive Technician Apprenticeship	Jan 4 2010	Feb 11 2010	Broadway Campus	0830-1514
BCIT	Automotive Technician	Jan 4 2010	Feb 11 2010	BBY - Burnaby	0730-1430
BCIT	Automotive Technician GM (ASEP)	Aug 23 2010	Oct 15 2010	BBY - Burnaby	0730-1430

• can cause some difficulty for students to schedule and access technical training components

○ some flexible learning alternatives tried in other jurisdictions

- Australia
- United Kingdom

○ in Canada, Alberta and Nova Scotia

# FL for Trades

# FL Strategy

- Flexible Learning for Trades in BC best practices, strategy, business plan comprehensively developed by trades training system in B.C. over last 2-3 years
  - Alternative Trades Training Report – May, 2006; ITA, Open School BC
  - Flexible Learning for the Trades Steering Committee Report - October, 2007; Ad Hoc Flexible Learning in Trades Steering Committee
  - FL for Trades Business Plan - April, 2008; Ad Hoc Flexible Learning in Trades Steering Committee

A Strategy for the  
Expansion of Flexible Learning  
in the Trades in British Columbia  
Business Plan

Ad Hoc Flexible Learning in the Trades steering committee  
Industry Training Authority of B.C.

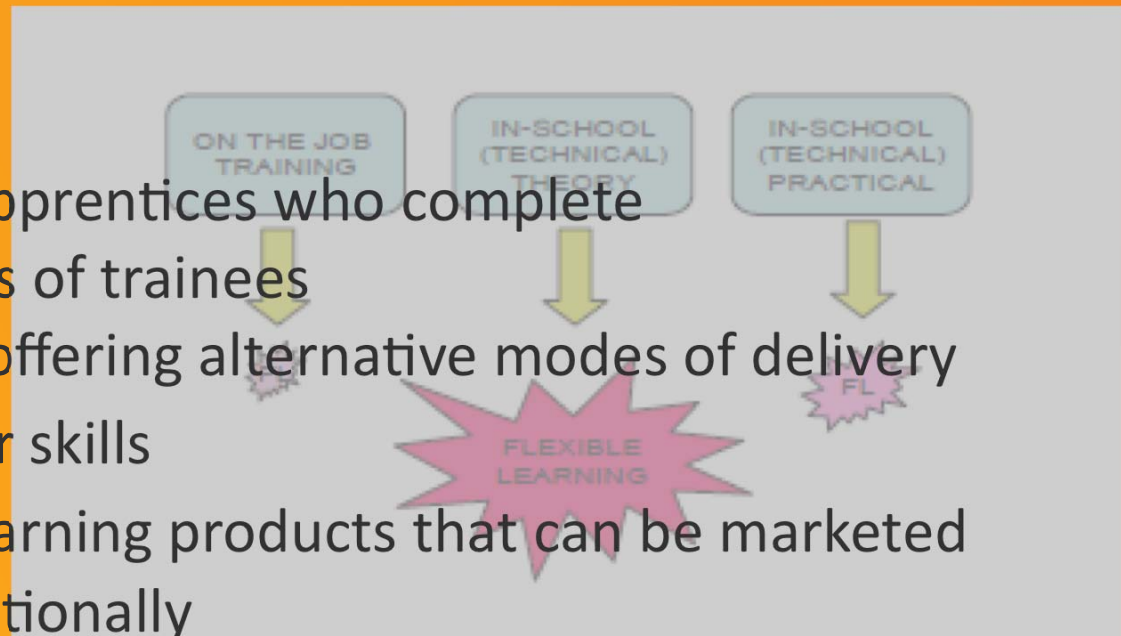
Vancouver  
Community  
College

ita  
industry training authority

# FL for Trades

# FL Goals

- Reduce:
  - barriers to obtain in-school portion of training
  - financial hardships for apprentices to attend training
  - hardship to businesses by reducing time away from work for training
- Increase:
  - percentage of apprentices who complete
  - satisfaction rates of trainees
  - recruitment by offering alternative modes of delivery
- Enhance: computer skills
- Develop: flexible learning products that can be marketed nationally and internationally

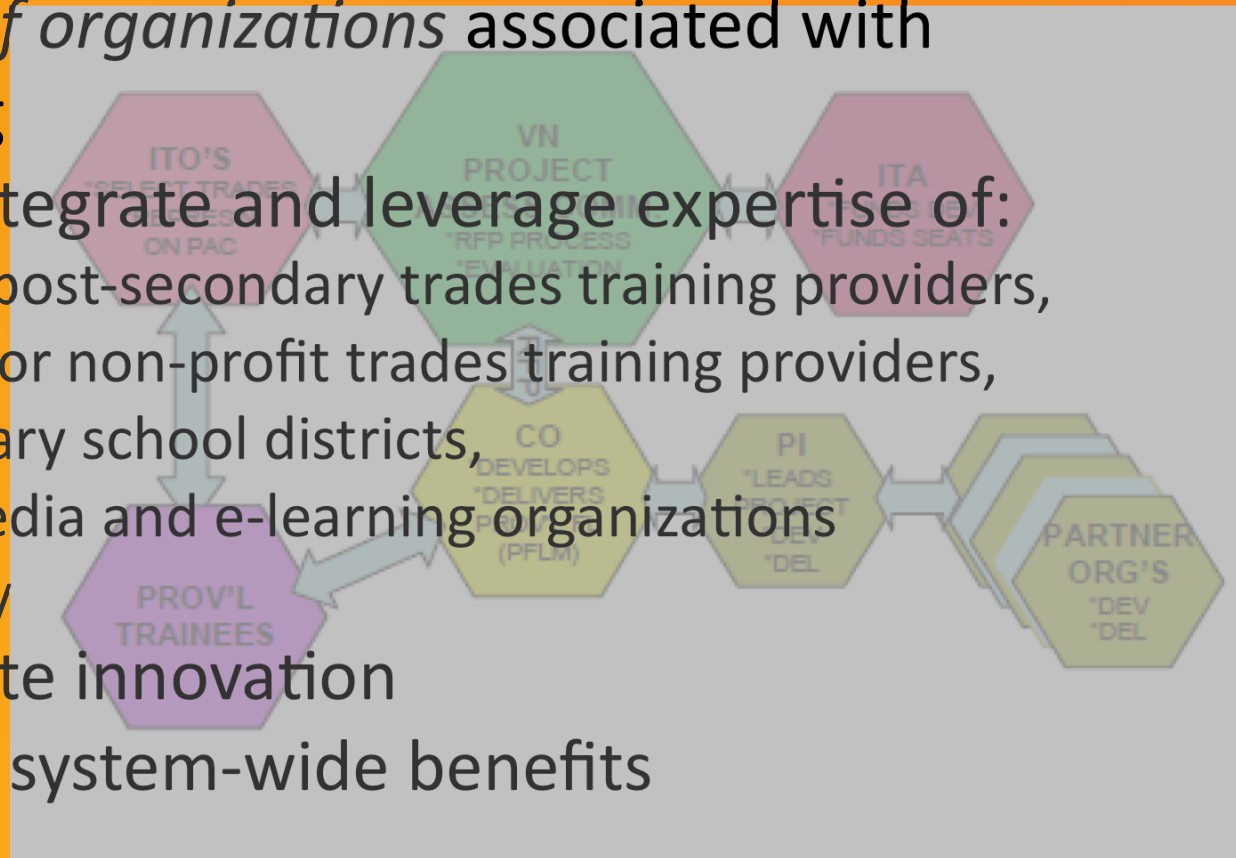


# FL for Trades

# FL Strategy

- critical aspect of strategy is to form *collaborative partnerships of organizations* associated with trades training

- to best integrate and leverage expertise of:
  - public, post-secondary trades training providers,
  - private or non-profit trades training providers,
  - secondary school districts,
  - new media and e-learning organizations
  - industry
- to promote innovation
- to create system-wide benefits





- FL materials to be high quality, media-rich and interactive
- development and delivery of FL programs to utilize contemporary pedagogical practices
- shareable and interoperable FL resources
  - also available to BC public/private post-secondary educators and students for use in:
    - F-2-F training resources
    - continuing education
    - upgrading

# FL for Trades

BCcampus



- BCcampus selected by the ITA to lead and coordinate the E-PPRENTICE initiative on behalf of the ITA
  - act as host organization utilizing BCcampus expertise, systems, collaborative services

- BCcampus FL Mandate:
  - provide cost-effective development and delivery of flexible trades training throughout BC,
  - central co-ordination and decentralized development and delivery, in partnership with ITA, industry and employer training organizations , and delivery institutions

- Several roles and functions including:
  - Lead and coordinate development and pilot delivery of 2-4 trades per year
  - Establish standards for development , delivery
  - Establish processes for calls for proposals for development/delivery and assess proposals
  - Facilitate partnership and collaboration for the development and/or delivery of FL
  - Establish processes to research, evaluate and disseminate best practices of FL

- FL Steering Committee:
  - oversees process and allocation of funding for FL development
  - ensures accountability and quality of activities managed through the initiative
  - provides direction for initiative
  - liaises with and represent key stakeholders and other organizations
  - evaluates the effectiveness of the activities
  - seeks development funding

- Funding
  - BC- Canada Labour Market Agreement (LMA) funding to ITA
    - operations and management
    - development and pilot delivery
  - HRSDC Pan-Canadian Innovations Initiative (PCII)
    - development and pilot delivery
    - research, evaluation, best practices and dissemination
  - initiative has great commitment and funding

# FL for Trades

# Development

- funding for completion of Vancouver Community College Motive Power FL programs, January, 2009
  - Automotive Service Technician
  - Auto Collision Repair Technician
  - initial delivery June, 2009 (AST) and January 2010 (ACR)
- VCC previously initiated work on Programs through ITA, BCcampus funding



# FL for Trades

# Development

- First call for proposals, February 4 – March 31, 2009
  - Professional Cook
  - Industrial Mechanic (Millwright)
  - Welder
- Round 1 proposal adjudication, April, 2009
  - Announcements June, 2009
- Round 2 EOI, call for proposals, July, Sept, 2009
  - consideration of next programs developed
  - review proposal solicitation process
  - consult with ITOs, industry, training organizations



- Vancouver Community College – FL AST Program
  - traditional program - Level 1 technical training 6 weeks at training institution
  - FL option significantly reduces technical training f-2-f component
    - two component model
    - e.g., AST Level 1 reduced from 210 to ~90 hours

*VCC Slide info - Courtesy of Karen Belfer, Robin Popow, VCC CID*

- Vancouver Community College - objectives
  - merge technology and pedagogical best practices for media-rich curricula
  - Implement and support a system of validated curriculum and faculty development
  - formalized mentoring program to enable authentic learning in practical settings
  - extend the educational learning environment into the homes and workplaces of the learners
  - maintain provincial and national curriculum standards

- Vancouver Community College - Motive Power
  - flexible approach to trades training has evolved using experiential design
  - delivery has proven effective and met or exceeded expectations of both Provincial ITA and National Red Seal outcomes
  - model enhances face-to-face training, enabling the student and instructor to focus on areas of study that require more attention while banking those competencies that have been mastered

- Vancouver Community College - Motive Power
  - strategy aimed to meet or exceed the following targets:
    - surpass current student satisfaction rates
    - increase the number of trainees entering the trades
    - realize a 10% cumulative improvement in employer satisfaction rates at end of first five year period
    - increase completion rates by no less than 2.4% per year
  - currently developing delivery partners

- Vancouver Community College - Motive Power
  - model utilizes online, mentoring and traditional face-to-face training methods to deliver technical training based on a multi level outcome program in a two-component structure
    - ***Component 1. Online knowledge and mentored skills development***

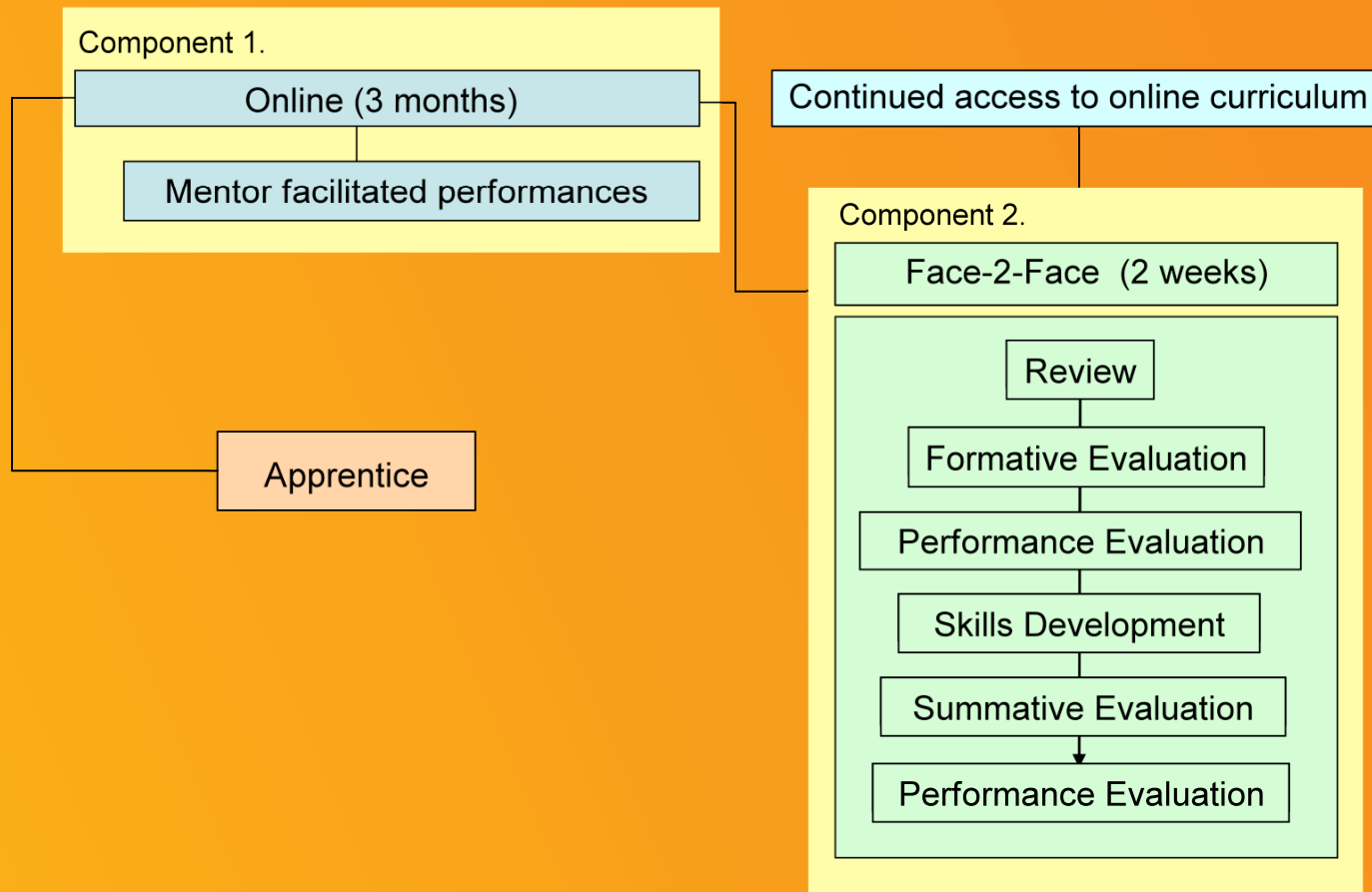
Students complete first component within their own communities, at their convenience, while maintaining their regular jobs
    - ***Component 2. Face-to-face***

Students attend their training institution for a reduced face-to-face segment of 1-3 week(s) depending on the program

# FL for Trades

# Models

- Vancouver Community College – Motive Power



# FL for Trades

# Models

- Camosun College – Professional Cook (Culinary Arts)

- 4 domains to PFLM Framework to support, connect and engage learners

*Camosun slides – Courtesy of Jennifer Stein, Meghan Moore, Distributed Education*



Figure 1: Flexible Learning Provincial Program Framework

- Camosun College – Professional Cook (Culinary Arts) goals
  - Improved communication and collaboration among the apprentices, employers and instructors
  - unlimited access to online materials, resources and activities, regardless of location
  - Improved student satisfaction through the use of interactive, multi-media rich material, online quizzes and various communication/ collaboration tools
  - Improve student retention through the implementation of an integrated student support system and participation in learning communities
  - timely feedback on student performance, knowledge and skill development by individualized feedback, ePortfolio submissions

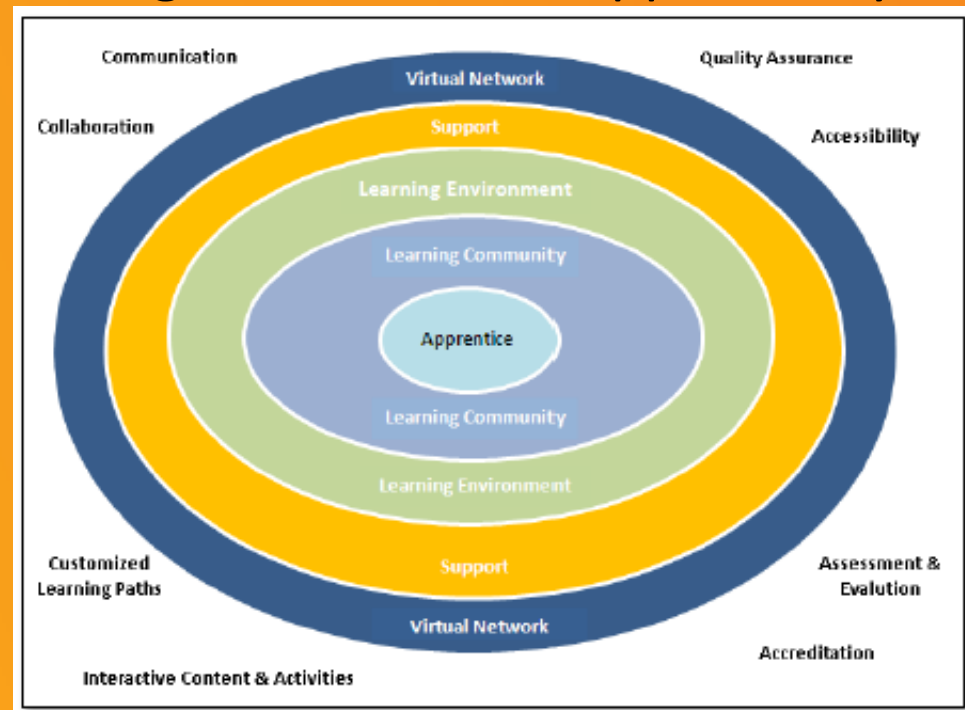


- Camosun College – Professional Cook (Culinary Arts)
  - Enable students, employers and instructors to effectively communicate and collaborate online using various synchronous and asynchronous learning technologies
  - Reduce the costs for both students and employers such as costs incurred due to travel and accommodation, time away from work and block placement scheduling
  - Offer technical support for learners, in addition to an online mentor to guide learners through the online materials and activities
  - Provide a balanced and thoughtful approach to the integration of online learning and face-to-face learning in the Flexible Learning for Professional Cook program.
  - Promote the development of digital literacy skills

# FL for Trades

# Models

- Camosun College – Professional Cook (Culinary Arts)
  - provide students with an integrated, community-based approach to flexible learning with learners supported by their employer, instructor, peers and other industry experts

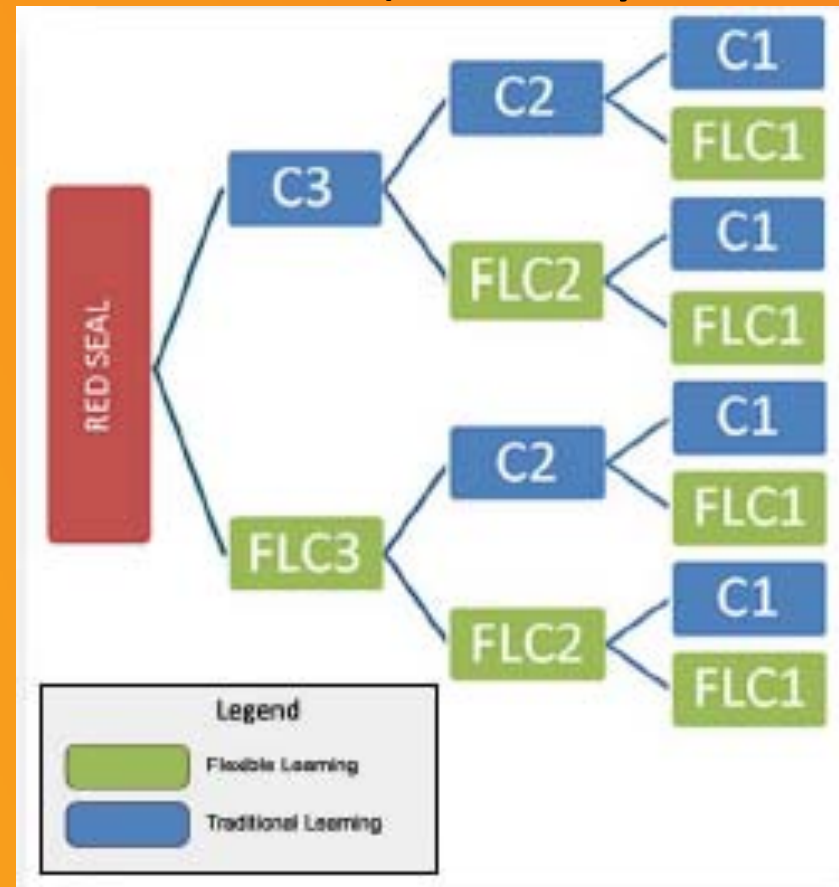


# FL for Trades

# Models

- Camosun College – Professional Cook (Culinary Arts)

o model designed to interweave traditional and FL options of program



- Camosun College – Professional Cook (Culinary Arts)
  - partnership organization:
    - Institutional partners: Northern Lights College and Okanagan College;
    - Industry partners: Executive Chef Melissa Craig, Chef Andrew George, Executive Chef Vincent Stufano, Chef Steve Walker-Duncan; and
    - eLearning partners: eTraffic Solutions and Desire2Learn

- Piping Industry Apprenticeship Board – Welder
  - propose an approach that combines 4 pedagogical practices proven to be the ideal environment for adult learners:
    - Blended learning,
    - Learner-centred,
    - Problem-based, and
    - Socially supported by a community.
  - partnership with Lambda Solutions and public post-secondary training providers

*PIAB slide info – Courtesy of Al Phillips, PIAB; Shevy Levy, Lambda Solutions*

# FL for Trades

# Models

- PIAB – Welder
  - seek to improve existing benchmarks

Key Performance Indicator	Improvement Benchmark
Required Training Time*	Decrease by 28%
Required Face to Face Class Sessions	Decrease by 30%
Commuting Time	Decrease by 35%
Student Satisfaction	Increase by 20%
Student Financial Commitment	Reduce by 25%
Apprenticeship Registrations	Increase by 10%
Apprentice Off Work Time	Decrease by 15%

# FL for Trades

# Branding

- E-PPRENTICE Initiative



- FL courses and programs identified by logo:



# FL for Trades

# Branding

- E-PPRENTICE Initiative
  - sample joint marketing with development and delivery institutions





- Questions?
- Discussion?
- Links:
  - <http://www.itabc.ca/Page874.aspx>