

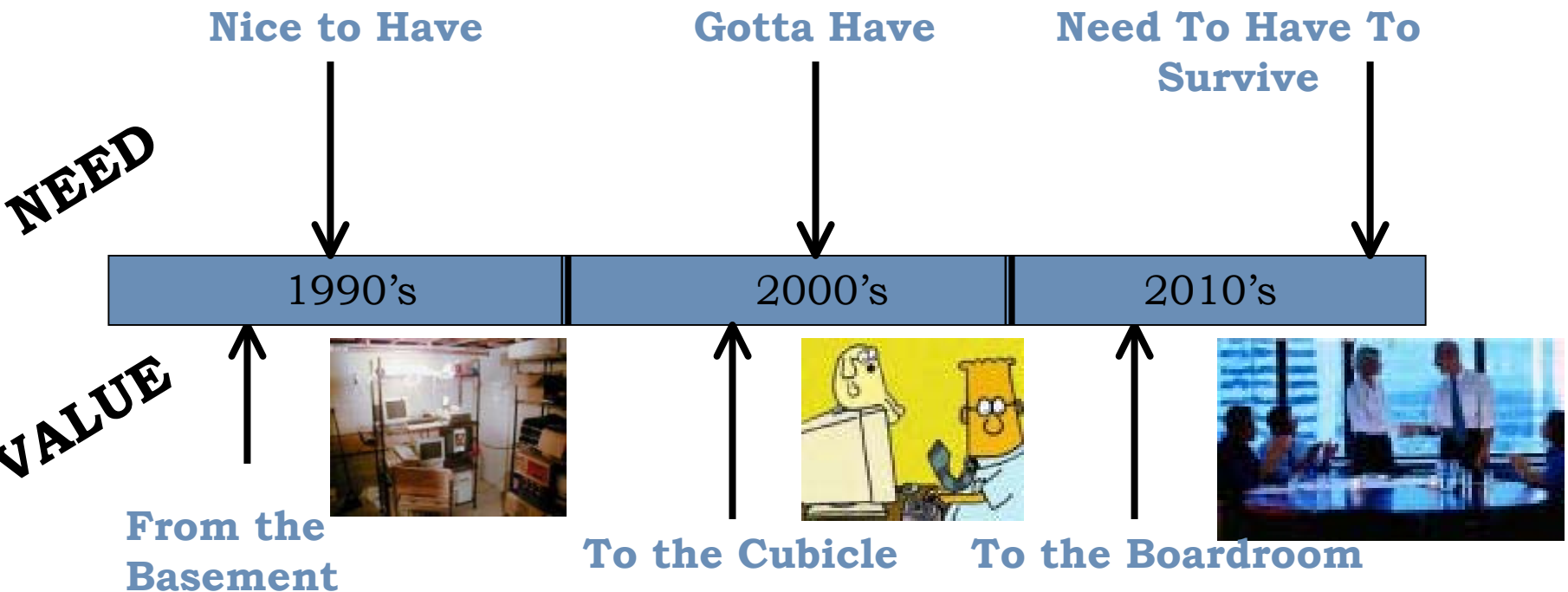


National IT Apprenticeship System

<http://www.nitas.us>

# IT Worker Valuation Timeline

IT advantage in organizations has become one of **THE** critical success factors in business...



# Education And Skill Requirements of the *Implementation Oriented IT Worker*

## **Education**

- Deep foundational knowledge; less immediate practical skills
- Important to career advancement
- More than 2/3rds have bachelor's degrees
- Majority in science and engineering

## **Technical Skills**

- Numerous and diverse
- Market-based
- Rapid advances drive new skill demands, frequent skills upgrading
- Near term needs

## **Experience**

- Risk mitigator
- Validation of ability to apply theoretical knowledge
- Value of hands-on, work-study, internships

## **Business Skills**

- IT ubiquity throughout company
- Centrality of IT to core business functions
- Business-focused versus tech-focused
- Career advancement, especially to management

# Trends

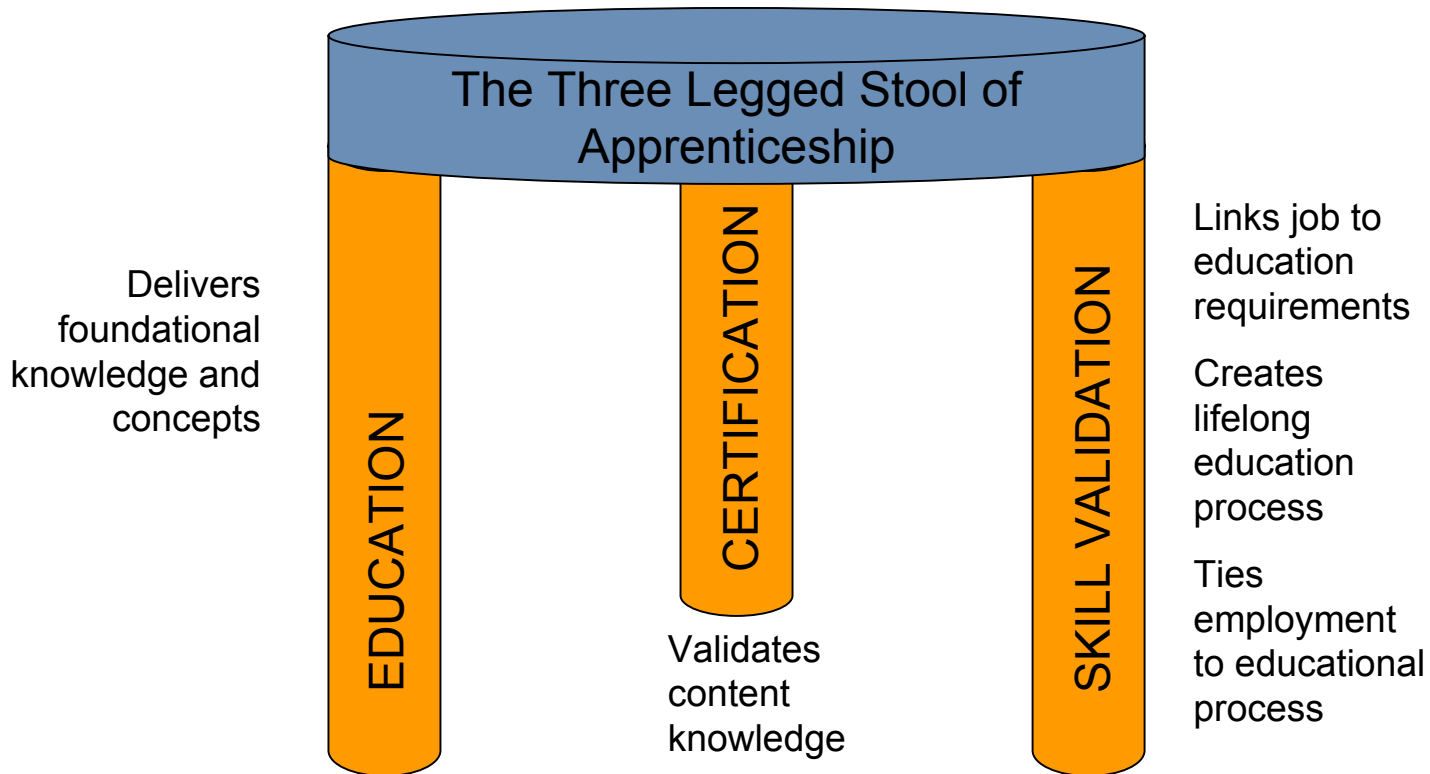
- Skills versus “expertise”
- Solution orientation
- Vendor / open / skill standards
- Technical versus job role certification
- Connect informal and formal education
- Collaboration of companies and educational institutions – Mesa CC/DHL

# Why NITAS?

“The most valuable assets of a 20<sup>th</sup> century company was its *production equipment*. The most valuable asset of a 21<sup>st</sup> century institution, whether business or non-business, will be its *knowledge workers and their productivity*.”

Peter Drucker

# Creating a 21st Century IT Professional

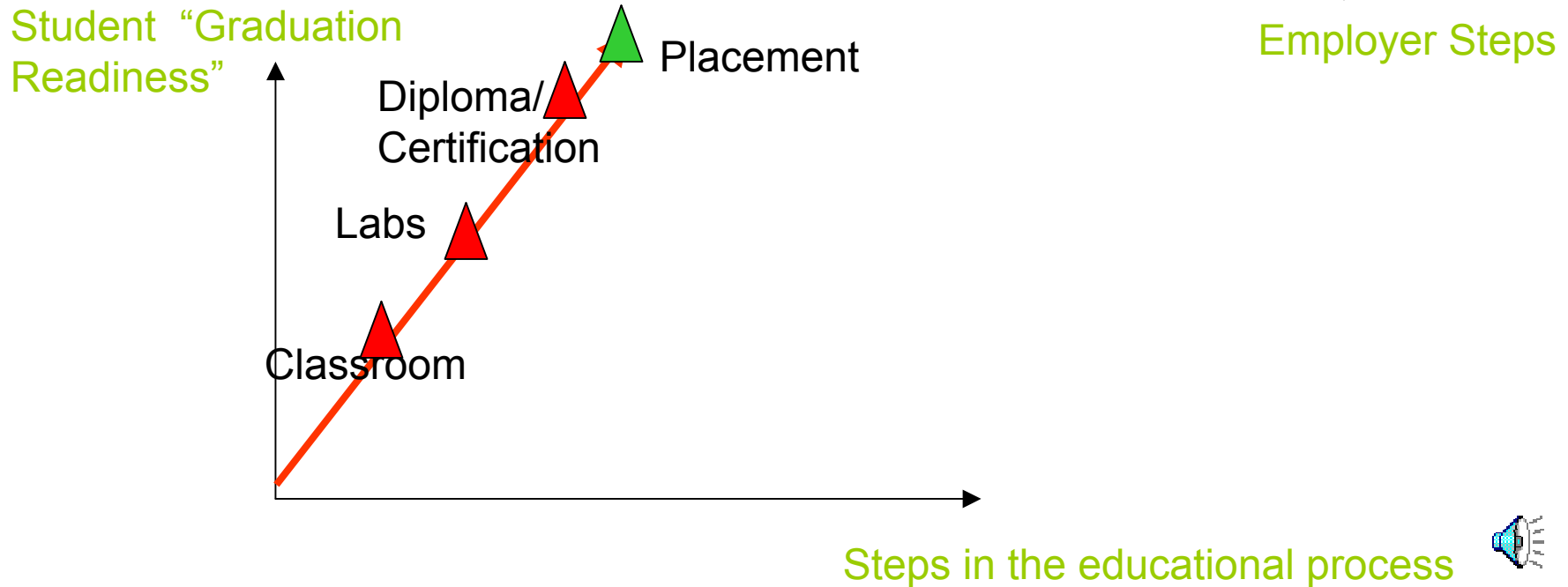
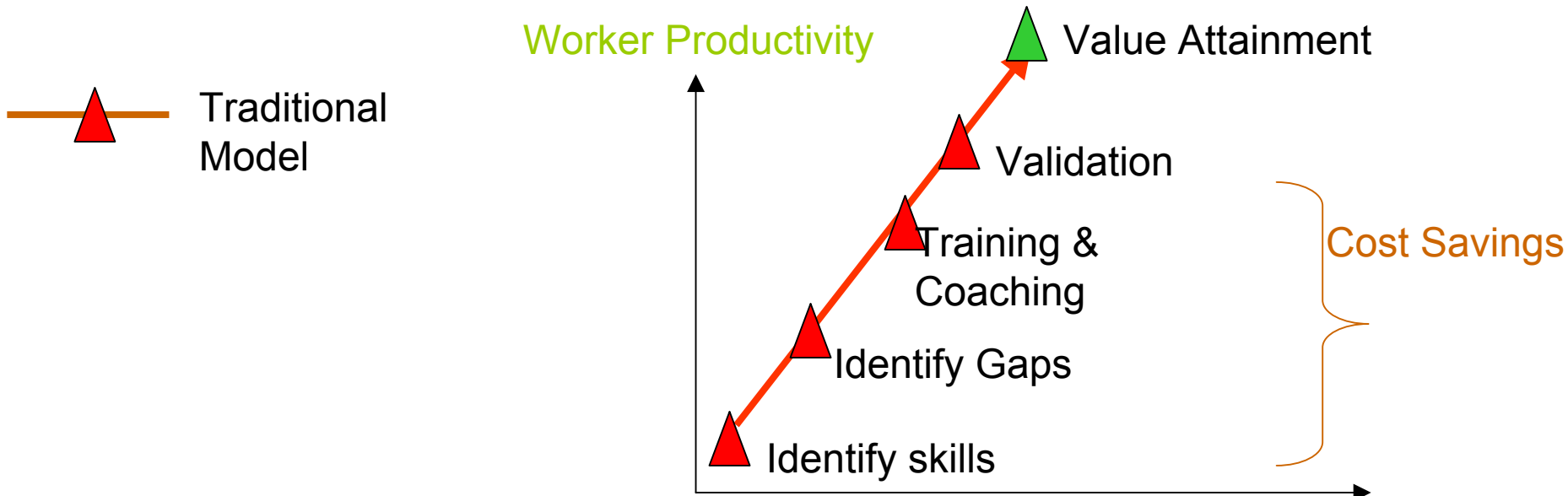


# **NITAS is a Platform to Educate, Groom and Grow IT Workers With Target Qualifications and Credentials**

**NITAS begins with the essential components of  
Apprenticeship:**

- **Industry skill standards**
- **Classroom instruction**
- **Structured on-the-job learning**
- **Competency validation on the job**
- **Documented experience**
- **Industry Certification**

# NITAS Delivers



# The NITAS Integrated Supply Chain Model for Entry Level Workers



Traditional Model



Apprenticeship Additions

**NITAS/CompTIA**

Apprenticeship System Outputs

**The School**

**The Employer**

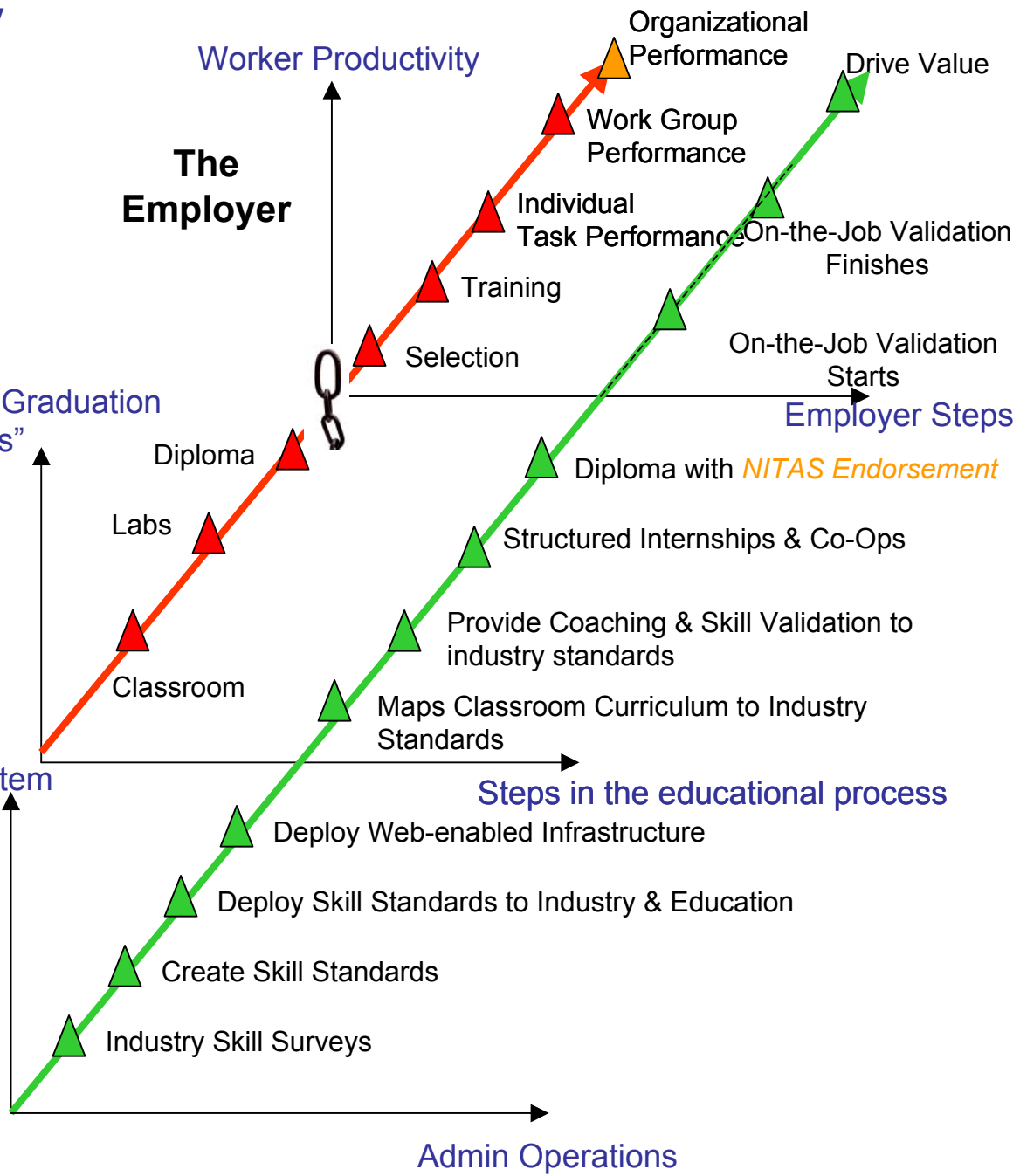
Admin Operations

Steps in the educational process

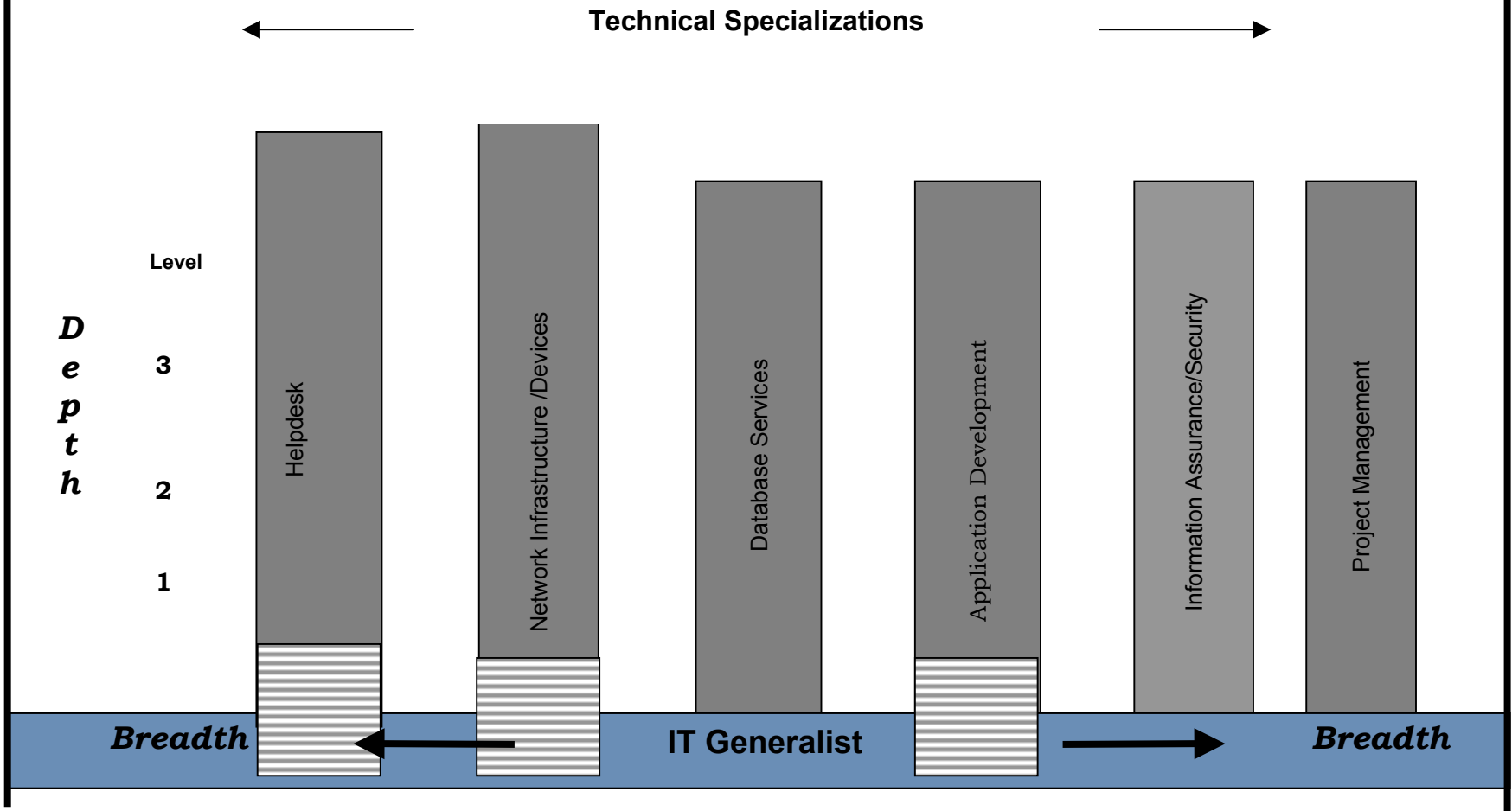
Employer Steps




Student "Graduation Readiness"

Worker Productivity



# Educational Institutions Mapping Their Curriculum to NITAS Industry Standards



-  IT Generalist consists of a broad horizontal level touching all concentrations.
-  IT Generalist Starter Tracks are available for Help Desk, Networking, and Applications.
-  All other concentrations have 3 levels describing competencies, critical work functions and key activities for the technician;  
Level 1 - Entry Level. Level 2 - Full Working. Level 3 – Expert.

# 1. Identify and Counsel (Schools, Workforce System)

# The Candidate Experience

- NITAS™ = Roadmap for IT Career Development



TCC is a worldwide Information Technology (IT) repository for resources critical in attracting, training and developing properly skilled IT workers.

**NEW!** [More In-Depth Certification Mapping](#) - Each job role skills page lists the top 5 certifications that most closely map to the skills defined for that job.

Tell us who you are...

- I'm new to the IT Industry** **New to the IT Industry**
- I'm an IT Professional** If you're looking for a new career in the information and communications technology (ICT) industry, CompTIA's TechCareer Compass can provide you the tools to define your career goals, find out which certification(s) you need to get there, and yourself as an ICT professional. With the TechCare
- I'm an Employer** can -
- I'm a Career Advisor**
  - [Assess your interests](#)
  - [Explore and compare careers](#)
  - [Research certifications](#)
  - [Locate training for a certification](#)
  - [Locate online job banks](#)
  - [Use the TechCareer Compass Individual User Guide](#)
- I'm a Training Provider**
- I'm a Curriculum Developer**

**Project Management Level 2 QC - PM L2**

**Qual Card Information**

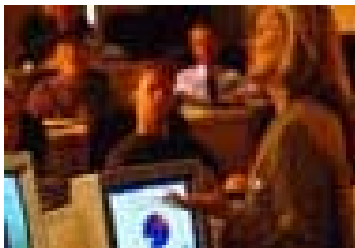
**Concentration:** Project Management Level 2 - Level 2

**Description:** These Job Qualification Performance Requirements must be performed under the direction of a Mentor or Coach. The purpose of these activities is to verify your ability to correctly perform and verbally explain the required job functions for an IS Project Manager on a project that has at least a moderate level of scale and complexity. The standard to which the task must be accomplished will be you can perform the job function at the stated level of performance independently.

**Do's and Know's**

| Order | Type | Description   | Status | Modify |
|-------|------|---|--------|--------|
| 1     | D    | Initiate and Develop a Business Case  | Green  | ✓      |
|       | K    | Discuss what information is required and how to obtain, organize, and present the information.  | Green  | ✓      |
| 2     | D    | Execute strategies required to build management buy-in and approval of the project.   | Yellow | W/A    |
|       | K    | State what and why management involvement is vital to the project success.  | Green  | ✓      |
| 3     | D    | Maintain a list of authorized customer projects for which you are responsible.  | Green  | ✓      |
|       | K    | Be able to describe the business case assumptions regarding in scope versus out of scope performance of the project deliverable(s), schedule, cost, quality and benefits to the customer. | Green  | ✓      |
| 4     | D    | Develop and validate a list of customer expectations and project outcomes for a project. Document each customer expectation and how the project will meet their expectations.             | Green  | ✓      |
|       | K    | Explain why each customer expectation and project outcome is included. Explain the process by which you gathered the project expectations.  | Green  | ✓      |
| 5     | D    | Ensure project alignment with company strategy and spending plan..  | Green  | ✓      |
|       | K    | Discuss project goals and alignment and potential risks.  | Green  | ✓      |
| 6     | D    | Enter Business Case data into a portfolio tool. (Optional)  | Yellow | W/A    |
|       | K    | Explain how to operate the portfolio tool.  | Red    | ☐      |

# 2. Educate and Train (Educational Providers)

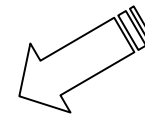


# 3. Place and Validate (Employers)



# Institutional Competency Coaching Takes Burden of Skill Development Validation Away From Employer

| Information Assurance Specialization - Tools<br>(IA2 6.1) |              |  | Sign off<br>Sheet                   |
|---|--------------|--|-------------------------------------|
| IA2<br>6.1  | <b>Know:</b> | Advanced Firewall Management Practices & Procedures  | <input checked="" type="checkbox"/> |
|   | <b>Do:</b>   | Ability to analyze the requirements for a firewall entry, make the entry, and apply it to an interface.                | <input checked="" type="checkbox"/> |
|   | <b>ILT:</b>  | Internet Firewalls and E-Commerce Security   | <input checked="" type="checkbox"/> |
|   | <b>Cert:</b> | Security+  | <input checked="" type="checkbox"/> |
|   | <b>Exit:</b> | Analyze the requirements for a firewall entry, explain conclusions, make the entry, and then apply it to an interface. | <input type="checkbox"/>            |



Training, practice of skill, and coaching occurs within **education environment**

Based on NITAS industry standard and expectations

Reduces skills gap training cost burden to Employer and links education process to employer requirements

# Employer Management of Exit Criteria to Complete Concentration and recognition by the US Department of Labor

| Information Assurance Specialization - Tools (IA2 6.1) |              |   | Sign off Sheet                      |
|--|--------------|---|-------------------------------------|
| IA2 6.1  | <b>Know:</b> | Advanced Firewall Management Practices & Procedures   | <input checked="" type="checkbox"/> |
|  | <b>Do:</b>   | Ability to analyze the requirements for a firewall entry, make the entry, and apply it to an interface. | <input checked="" type="checkbox"/> |
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|  | <b>Cert:</b> | Security+   | <input checked="" type="checkbox"/> |
|  | <b>Exit:</b> | Analyze the requirements for a firewall entry, explain conclusions, make the entry,                     | <input checked="" type="checkbox"/> |

Training, practice of skill, and coaching occurs within **education environment**

Based on industry standard and expectations

Exit Criteria is validated **ONLY** by Employer to assure Employer Driven Model

# The Skills Management System

- NITAS™ uses a web based tracking and validation system to manage the process of IT apprenticeship

## Apprentice Profile

**nitass** The National IT Apprenticeship System

Learn About NITAS | Register | Tools | Resources | NITAS Locator | About NITAS | Home

White Papers | Testimonials | NITAS Player Flowcharts

apprentice [logout]

**jerry garcia** [Apprentice Information] [Edit]

**Join Date:** 10/29/2003 15:49:30 **Address:** 7100  
**Department:** Accounting **City:** park city  
**Direct Phone:** 435 615 2161 **State / Prov:** UT  
**Secondary Phone:** 435 615 2161 **Zip:** 84060  
**Email:** joel@mytechsupport.com **Country:** United States  
**Member Number:** 654 **Username:** garcia  
**Billing Information:** [Click to Modify] **Password:** [Click to Modify]

**Current Concentrations:** [Add New]

| Name                       | Description  | Coach   |
|----------------------------|--|---|
| IT Generalist              | The is the first concentration an apprentice will take in NITAS    | joel ostenstrom<br>joel@mytechsupport.com<br>801-373-1299 |
| Project Management Level 2 | Developing IT Workers with Project Management Skills and Knowledge | joel ostenstrom<br>joel@mytechsupport.com<br>801-373-1299 |
| Project Management Level 3 | Developing IT Workers with Project Management skills and knowledge | NA  |

**Completed Concentrations:**  
 No Completed Concentrations to Date

**Certifications:** [Add New]

| IT Project Concentration | Industry Project Management requirement for Project Management Concentration |
|--------------------------|--|
| CompTIA A+               | PM's Project Management Professional Certification                           |
| CompTIA                  |  |
| CCNA                     |  |

**Confirmed Education:** [Add New]

| Name          | Description         | Hours | Complete Date |
|---------------|---------------------|-------|---------------|
| asdfasdfasdf  | 'sdfas'dfa'sdfasdf' | 1234  | 11/26/2003    |
| 'sdfasdfasdf' | 'sdfas'tsa'sdf'     | 12312 | 11/12/2003    |

## Skill Qualification Process

**Project Management Level 2 QC - PM L2**

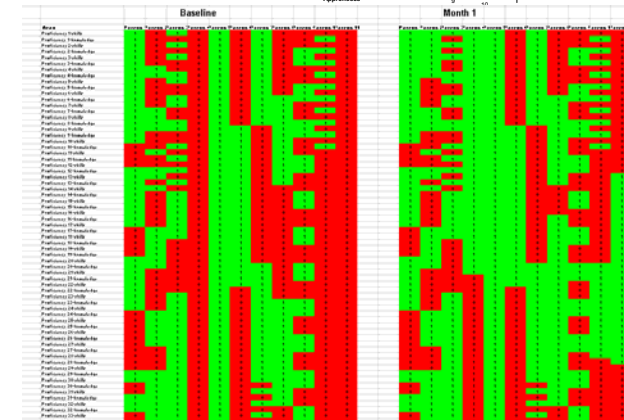
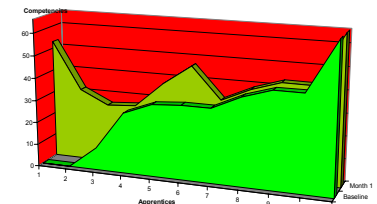
**Qual Card Information**

**Concentration:** Project Management Level 2 - Level 2

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|       |      | K Explain how to operate the portfolio tool.  | Red    | ☐      |

## Progress Reports & Skills Gap Reports





The National IT Apprenticeship System



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apprentice | logout |

- Profile
- Reports
- Documentation

**jerry garcia**

**Apprentice Information:** [Edit](#)

|                            |                        |                      |                     |
|----------------------------|------------------------|----------------------|---------------------|
| <b>Join Date</b>           | 10/29/2003 15:49:30    | <b>Address:</b>      | 7100                |
| <b>Department</b>          | Accounting             | <b>City:</b>         | park city           |
| <b>Direct Phone:</b>       | 435 615 2161           | <b>State / Prov:</b> | IN                  |
| <b>Secondary Phone:</b>    | 435 6152161            | <b>Zip:</b>          | 84060               |
| <b>Email:</b>              | joel@mytechsupport.com | <b>Country:</b>      | United States       |
| <b>Member Number</b>       | a54                    | <b>Username:</b>     | garcia              |
| <b>Billing Information</b> | ( Click to Modify )    | <b>Password:</b>     | ( Click to Modify ) |

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**Completed Concentrations:**  
No Completed Concentrations to Date

**Certifications:** [Add New](#)

|               |   |  |
|---------------|---|--|
| IT Project +  | <b>Industry Project Management requirement for Project Management Concentration</b> |  |
| PMP           | <b>PMI's Project Management Professional Certification</b>                          |  |
| CompTIA A+    |   |  |
| CompTIA CDIA+ |   |  |

**Continued Education:** [Add New](#)

| Name             | Description           | Hours | Complete Date |
|------------------|-----------------------|-------|---------------|
| asdfasdf/as'df'  | 's'dfas'dfa'sdf'asdf" | 1234  | 11/26/2003    |
| 'asdf'asdf'asfd' | 'sa'dfas'fda'sfd"     | 12312 | 11/12/2003    |

Permanent, Validated eRESUME

Skills Concentrations In Progress

Validated Certifications Achieved

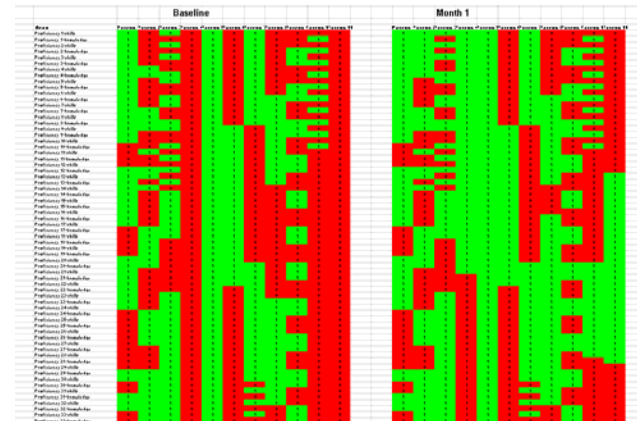
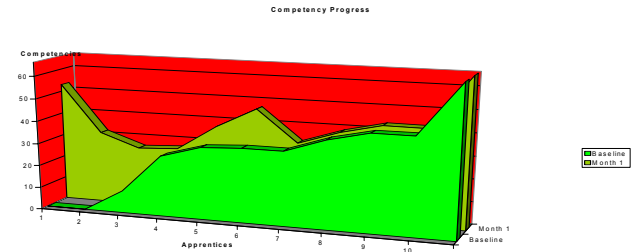
Continuing Education Requirements

# Validate Skills in Work Environment

## Skills Management System (SMS)

| Project Management Level 2 QC - PM L2  |      |   |        |        |
|--|------|---|--------|--------|
| Qual Card Information  |      |   |        |        |
| <b>Concentration:</b>  |      |   |        |        |
| Project Management Level 2 - Level 2   |      |   |        |        |
| <b>Description</b>   |      |   |        |        |
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|  |      | Explain why each customer expectation and project outcome is included.  | Green  | ✓      |
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|  |      | K Explain how to operate the portfolio tool.  | Red    | ☐      |

## SMS Progress & Skills Inventory Reports



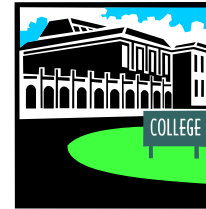
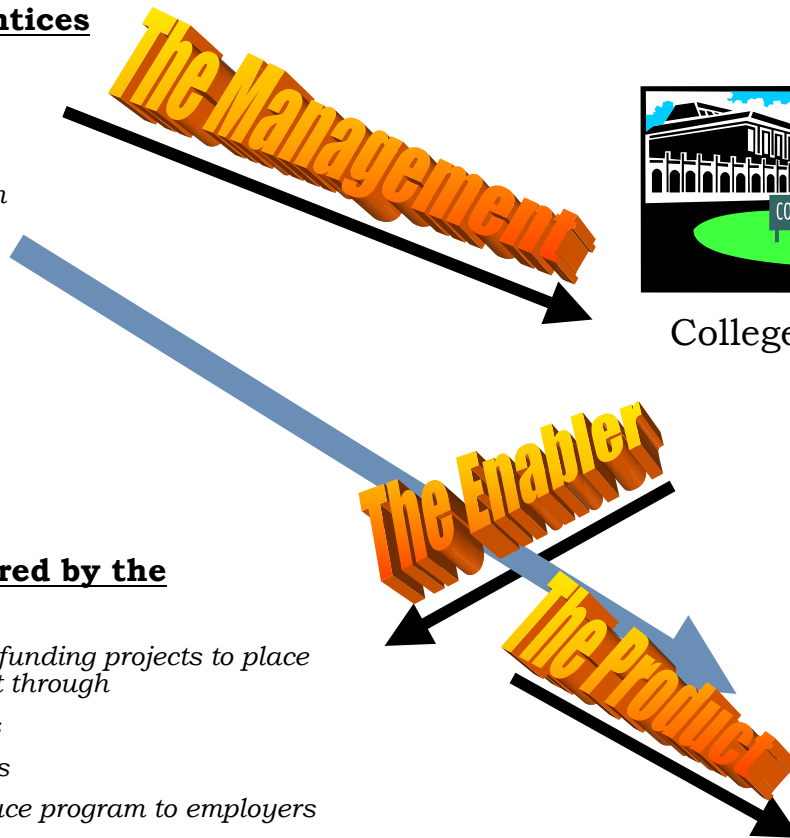
# Program Benefits

- **Less Skill Gap Training Burden to Employers**
- **Continuous Benchmarking**
- **Strong Linkage from Education to Work**
- **Early Access to Talent**
- **Increased Productivity Through Targeted Training**
- **Faster Ramp Up from New Hire to Productive Employee**
- **Continuous Career Roadmap for Employees**
- **Ability to Develop Custom Employer Education, Skill, and Certification Programs, specifically a Help Desk track and assistive technology training for both the worker and employer**

# The NITAS Apprenticeship Process

## Prospective NITAS Apprentices

- High School Student
- College IT Student
- WIA Funded Student
- Career Changer
- Current IT Worker in Organization



Colleges

## NITAS Consultants

### Providing:

- Training to Apprentices
- Management to NITAS Employers of the Apprenticeship Process and Skills Validation



IT Tech Centers

## Assisted and Empowered by the Workforce Network:

- Development of coordinated funding projects to place apprentices into employment through
- Source for employer contacts
- Source for NITAS Apprentices
- Assisted by NITAS to introduce program to employers
- Use of the NITAS system to track apprenticeship progress and deliver progress reports to employer

## NITAS Produces:

- Skills Validated, Educated, IT Professionals
- Certificate of Completion by the DoL
- More Competent, Productive, Workers



# IT Career Development Solution

## Candidates

- High School Students
- Minority Students
- Undeclared IT Students
- IT Students
- WIA Candidates
- Incumbent Workers

## Prepare



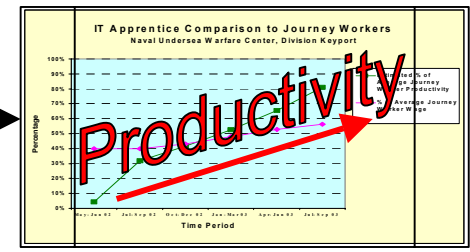
## Profile



## Educate

|   | State  | Modify |
|---|--------|--------|
| K the information.  | Green  | Red    |
| g Execute strategies required to build management buy-in and approval of the project. | Yellow | W/A    |
| 2 K State what and why management involvement is vital to the project success.        | Green  | Red    |
| D Maintain a list of authorized customer projects for which you are responsible.      | Green  | Red    |
| 3 B able to describe the business case assumptions regarding in scope versus          | Green  | Red    |

## Validate & Certify



## Perform



National IT Apprenticeship System

<http://www.nitas.us>

