

# Training, Mentorship, & Apprenticeship

Pulling it all together.....

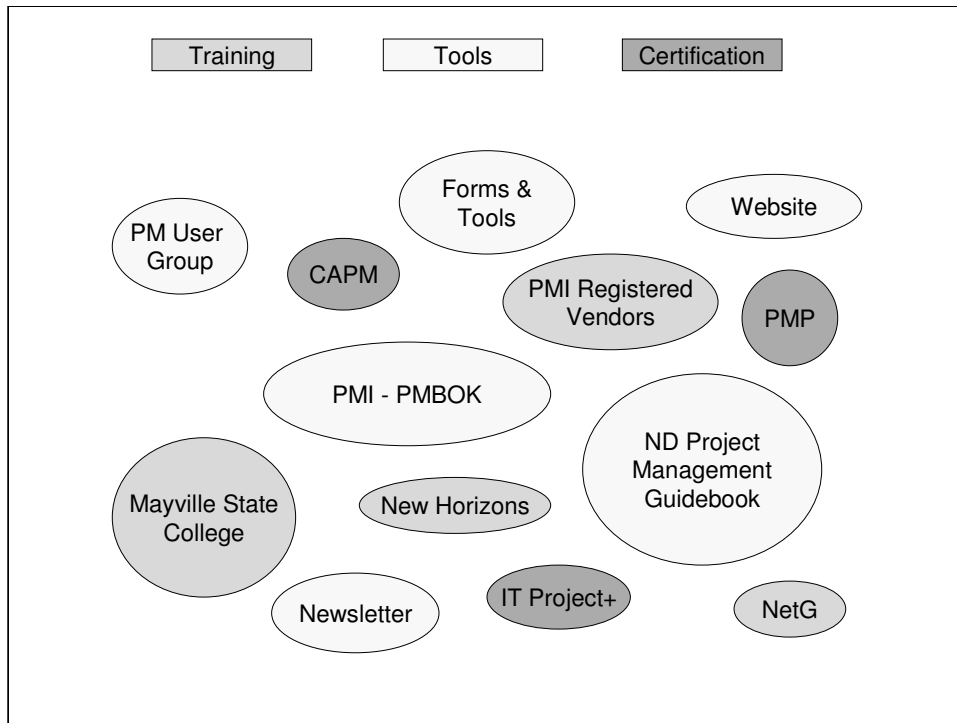
Mark Molesworth  
Enterprise Project Manager

I may be the one who stands in front of everyone today to tell you about the opportunities we have in project management today, but it would not be possible without the hard work and dedication of the Enterprise Project Management Advisory Group. This group meets every week to work on best practices, methodologies, white papers, and today's topic, mentoring and apprenticeship. I would like to introduce each of them to you today.

Brandi Fagerland – Workforce Safety and Insurance  
Dave Eckenrode – Information Technology Department  
Mike Fisher – Department of Human Services  
Cheryl Gessele – Office of Attorney General  
Jennifer Kunz – North Dakota University System  
Rich Lehn – North Dakota University System  
Todd Metzger – Department of Transportation  
Heather Raschke – Job Service North Dakota

# Where are we now?

We already have a variety of training opportunities, tools, and certifications available to project managers in ND. Let's do a quick review of the opportunities that are available right now.



There have been, and continue to be quality training opportunities available.

We have recently had a rather strong push toward providing “tools” for PM’s to help them better understand Project Management and apply the principals correctly to their projects. This is most evident with the completion of the ND Project Management Guidebook and associated forms/templates.

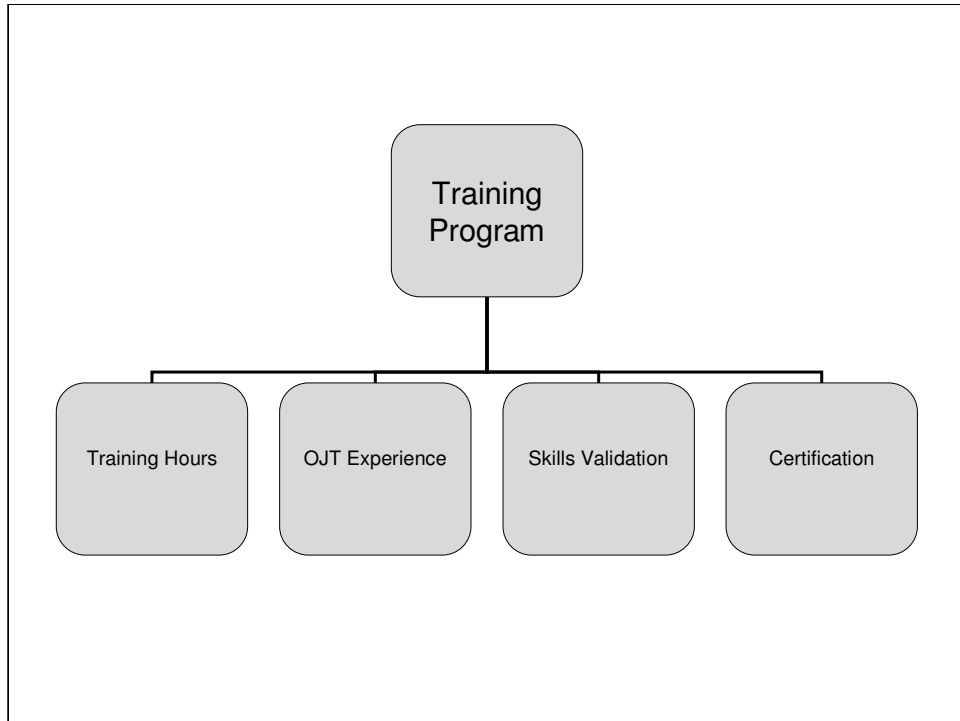
There are also opportunities available for certification at appropriate levels in the PM’s career development.

Unfortunately, we have all of these opportunities and they are all pretty much sitting out in space waiting for someone to pick up a piece here or there.

# What are our future objectives?

When I first came into this position, one of the major objectives identified for me was to identify specific training, certification, etc. that could be made available to individuals who are managing IT projects that would meet the needs of the employers, the demands of project managers, and the intent of the legislature.

What we are talking about today is a common thread to tie all of the various opportunities together into a complete training program.



We are looking for a Training PROGRAM.

A training “program” contains four basic, integrated components as demonstrated by the slide. At various levels, ND project management practitioners have gained training hours, on-the-job experience, and even some certifications. What remains is the skills validation component. We will talk more about that component as we move forward.

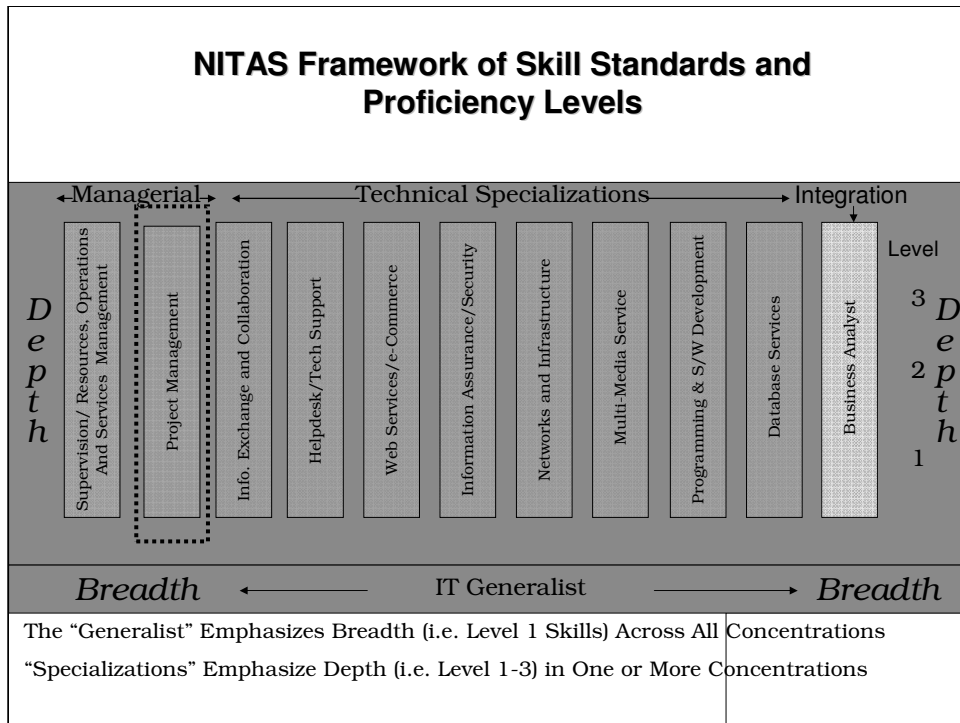
# How do we get there?

Recently ITD and the Project Management Advisory Group have been working with the Federal Department of Labor and CompTIA to learn more about NITAS (National Information Technology Apprenticeship System) and how it may benefit ND IT project managers.

## **What is NITAS?**

- The National Information Technology Apprenticeship System (NITAS) is a nationwide, competency based workforce development and skill validation program for the U. S. Information Technology Industry. The program reflects an industry-wide initiative to ensure the performance, quality and competitiveness of U.S. IT workers. NITAS meets the requirements of registered apprenticeship programs as specified by the U.S. Department of Labor.

The best part of NITAS is we can use what we already have in place, and tie it all together using the NITAS model.



As you can see, NITAS offers much more than just Project Management. However, we propose to pilot the NITAS model utilizing only the Project Management concentration.

If successful, it is possible that more of the NITAS apprenticeship models will be made available.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	Required Hrs of PM Classroom Instruction	Required Hrs of OJL	Required Qualification and Skill Validations	Required Certifications
Level 1- Entry	24 hrs	---	5-18 items	---
Level 2- Full Working	60 hrs	2000 hrs in IT Project Management	40 items	ND PMI Certification IT Project+ PMP
Level 3- Journey	60 hrs	2000 hrs in IT Project Management	40 items	
<i>Total</i>	<i>144 hrs</i>	<i>4000 hrs in IT project management</i>	<i>98 items</i>	<i>ND PMI Certification IT Project+ PMP</i>

This slide describes the detailed credentialing criteria for each level of the Project Management concentration. We will delve further into each level in upcoming slides. However, at this point, it is important to take a few minutes to understand the building block process that NITAS uses to attain each level.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	Required Hrs of PM Classroom Instruction	Required Hrs of OJL	Required Qualification and Skill Validations	Required Certifications
Level 1-Entry	24 hrs	---	5-18 items	---

Level 1 is the entry level for project management. Those who successfully complete Level 1 will have a reasonable knowledge of project management principals and processes. This level requires only 24 hours of classroom experience and validation of basic PM skills via “qual” cards.

Presently, there is a range of 5 – 18 qual cards for this level. The qual cards will be customizable to our needs. The PM Advisory Group will look at the existing options and choose the best package for ND.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	<u>ADDITIONAL</u> Required Hrs of PM Classroom Instruction	Required Hrs of OJL	<u>ADDITIONAL</u> Required Qualification and Skill Validations	Required Certifications
Level 2- Full Working	60 hrs	2000 hrs in IT Project Management	40 items	ND PMI Certification IT Project+ PMP
<i>Total</i>	<i>84 hrs</i>	<i>2000 hrs in IT project management</i>	<i>58 items</i>	<i>ND PMI Certification IT Project+ PMP</i>

Please note that the requirements for Level 2 are in addition to the requirements for level 1. Remember, this is a building block process.

At this point, NITAS has agreed to accept the ND PMI Certification as an acceptable certification for Level 2.

Level 2 should be considered the full-working level for project managers. This level will prepare project managers to manage all types and sizes of IT projects.

Project Managers at this level are considered fully qualified to provide mentor/coaching to NITAS apprentices.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	<u>ADDITIONAL</u> Required Hrs of PM Classroom Instruction	Required Hrs of OJL	<u>ADDITIONAL</u> Required Qualification and Skill Validations	Required Certifications
Level 3- Journey (Large Projects)	60 hrs	2000 hrs in IT Project Management	40 items	PMP
<i>Total</i>	<i>84 hrs</i>	<i>4000 hrs in IT project management</i>	<i>98 items</i>	<i>PMP</i>

At Level 3, the qual card must be completed while working on a “Large Project”. NITAS has agreed to North Dakota’s terminology as it relates to legislatively defined “large projects”.

\*This DOES NOT mean that you must be a level 3 to manage a large project.

\*What it means is, you must have a large project assigned to you before you can complete the requirements to be a level 3 PM.

The required certification for level 3 is the PMP.

This is the point where the questions really start to roll. So, let’s look at some of the Frequently Asked Questions.

What are  
“Skills Validation Items”?

AKA – “Qual Cards”

## Qual Cards

- This is the piece of the puzzle that distinguishes the NITAS program from typical IT certifications.

Qual cards are made up of two parts. First, the “DO” and second, the “KNOW”. The apprentice demonstrates their ability to “DO” through actual work. Therefore, an apprentice must identify and/or be assigned a project to work on during the apprenticeship process. The “KNOW” portion of the qual card is verified through the coaching process. Through a series of verbal, and sometimes written exchanges, the mentor knows or understands the theory and application of the qual card information.

Sample Qual Cards

8	Do	Develop a project schedule by performing effort and time estimations, and resource alignment. Review project plan.	Ability to create a project schedule.
	Know	Compare and contrast the elements needed for each of the estimations and resource activities. Explain how you developed the activities, times and sequence.	
	Exit	Project plan created in appropriate tool such as Excel/ M.S. Project, Milestones are appropriate and identified, Tasks have resources and dates, Dependencies between tasks are identified Time frames meet project charter, There is efficient use of resources, Minimal float, No over allocation of resources, valid effort estimates, Quality in time estimates – How derived?, What's confidence level of the plan?, Verify all key resources engaged in plan development, Organized well?	
16	Do	Implement project control.	Ability to control a project.
	Know	Determine the project status and that corrective actions are required.	
	Exit	Apprentice: determines whether to institute correcting actions. If yes, implement, Analyzes reporting and tracking data, Compares deviations to plan, Discusses options for adjusting plan, Selects best alternative.	

This is an example of a “Qual Card”, which is the skills validation portion of the program.

Can I be “Grandfathered” in?

I’ve been doing this for  
10 years already.....

This is one of the most common questions asked by practicing project managers. The answer is “kinda” but not completely.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	Required Hrs of PM Classroom Instruction	Required Hrs of OJL	Required Qualification and Skill Validations	Required Certifications
Level 1-Entry	24 hrs	---	5-18 items	---
Level 2-Full Working	60 hrs	2000 hrs in IT Project Management	40 items	ND PMI Certification IT Project+ PMP
Level 3-Journey	60 hrs	2000 hrs in IT Project Management	40 items	
<i>Total</i>	<i>144 hrs</i>	<i>4000 hrs in IT project management</i>	<i>98 items</i>	<i>ND PMI Certification IT Project+ PMP</i>

The required hours of PM classroom instruction and required certifications may be grandfathered in. However, to obtain the NITAS level certifications, all applicants must complete the OJL and Qual cards during the apprenticeship period.

We are presently working with NITAS on accepting previous hours of OJL which would potentially be granted upon the completion of a period of involvement in the program (e.g. 3-6 months).

## Scenario

- I took the Mayville State college class
- I attended the last 2 PM User Group training sessions.
- I went to a one-day general management course on supervision.
- I passed the ND/PMI/ITD exam and received a certification.

Let's look at how this scenario applies to the NITAS apprenticeship program in real life.

## Scenario

- Mayville State class = 45 contact hours
- 2 PM User Group trainings @1.5 hr = 3 hr
- One-day course on supervision = 8 hours
- ND/PMI/ITD certification

Mayville State College offers a 3 semester hour course in project management. This equates to 3 hours per week, for a total of 15 weeks, resulting in a total of 45 contact hours.

The rest of the information looks pretty self-explanatory. Let's put it in the chart.

**Example of Levels and Credentialing Criteria**  
*IT Project Management Concentration Example*

Level	Required Hrs of PM Classroom Instruction	Required Hrs of OJL	Required Qualification and Skill Validations	Required Certifications
Level 1- Entry	24 hrs <b>24 hrs complete</b>	---	5-18 items	---
Level 2- Full Working	60 hrs <b>32 hrs complete</b>	2000 hrs in IT Project Management	40 items	<b>ND PMI Certification</b> IT Project+ PMP
<i>Total Remaining</i>	<i>84hrs</i> <b>56 hrs complete</b> <i>28 hrs remaining</i>	<i>2000 hrs in IT project management</i>	<i>58items</i>	<b>Complete</b>

You have a total of 56 contact hours of training. The level 2 requirements will allow for a certain number of general management training hours outside of the PMBOK style training.

The first 45 contact hours through Mayville State College will completely cover the Level 1 classroom requirement of 24 hours and the remainder can carry on to the Level 2 requirements. Therefore, you have only 28 contact hours of training remaining in order to fulfill the classroom requirements through level 2.

In addition, you have taken and passed the ND ITD/PMI/Mayville State College certification exam. That will be accepted and fulfill your certification requirements through level 2.

Basically, you are left with the practical application piece of the pie. While working and earning hours of OJL, you will be completing and verifying your qual cards.

Each level of completion receives a certification from NITAS.

## What is my time commitment?

- **Apprentice**
  - This program is intended to be driven by the apprentice. The amount of time it takes to complete the “qual” cards, training, and certification will depend on the apprentice.
    - The OJL requirements for levels II and III are fixed at 2000 hours each.

You, and your supervisor, will need to come to terms that this will take time out of your day. If you are working 45 hours per week, and start this program, you will end up working > 45 hours per week.

- Plan that there will be a need for time to train.
- Plan that there will be a need for time to meet with your mentor.

When it comes to the qual cards, you will be doing work that you would normally do in the course of the project anyway. But, you will be doing 100% of the steps. Adapting the level of project management applied to a project based on its size and complexity is normal. But, during the apprenticeship, you will apply all of the processes regardless of size or complexity. That will take time.

On the other end of the spectrum, we will be looking closely at establishing a maximum time frame to ensure the apprentice moves forward at a reasonable and consistent pace.

## What is my time commitment?

- Mentor
  - Each mentor will have their own style. On average, a mentor can expect to spend an average of one hour per week with the apprentice.
    - At the onset of a mentor/apprentice relationship, you can expect a greater time commitment.

This program is intended to be apprentice driven. The apprentice will be responsible to set appointments, report progress, etc.

The NITAS web-based application will make those interactions relatively seamless.

## How much does it cost?

- There will be a minor enrollment fee for each level of each concentration (\$10 - \$20).

## Additional Potential Expenses

### – Training Hours

- PM User Group = \$0 per hour
- PMI Registered Vendor = Average \$25 per hour
- Mayville State College = \$400
- PMP Bootcamp = \$2,500

Additional information will be distributed relating to these costs.

## Additional Potential Expenses

### – Certification Costs

- IT Project+ = \$207.00
- PMP = \$405.00
- CAPM – Not Required = \$225.00

## Additional Potential Expenses

– Etc.

- PMI Membership – Not Required = \$119.00
- BSC Mentoring/Apprentice Training = \$200-\$300

## How Does the Mentor/Apprentice Relationship Work?

- BSC Corporate and Continuing Education
  - How to be a mentor
  - How to be an apprentice

Any level 2 or 3 apprentice who participates in the program will be required to attend a training session to learn more about the basic relationship and responsibilities of the mentor and/or apprentice. This will be hosted by the BSC Corporate and Continuing Education Division. They are presently working successfully with the Department of Transportation on a more traditional mentoring program.

## How do I sign up?

- Application Process
  - Requires your supervisors signature
  - Supervisor section will identify time and effort requirements to be successful in this program.

The applications will be sent out by January 31, 2005. Complete instructions will be included.

# How do I sign up?

## Apprentice Level 1

- Pre-requisites
  - Must have a small to medium sized project to manage.
- Additional requirements
  - Project Management should be identified by supervisor as necessary job function

# How do I sign up?

## Apprentice Level 2

### – Pre-requisites

- Must have a medium to large sized project to manage.

### – Additional requirements

- Project Management must be identified by supervisor as necessary job function.

# How do I sign up?

## Apprentice Level 3

### – Pre-requisites

- Must have a large project to manage (in excess of \$250,000 per biennium or \$500,00 over the life of the project).

### – Additional requirements

- Project Management be identified by supervisor as necessary job function.

# How do I sign up?

## Mentor

### – Pre-requisites

- Must be able to document 4,000 hours of project management experience by the time of application.
- Must qualify to sit for the PMP by May 1, 2005 (although the PMP is not required for mentoring)
- Must have previous experience with a level 2 project that would allow the candidate to complete level 2 qual cards.

### – Additional requirements

- Project Management be identified by supervisor as necessary job function.

## When can I apply?

- We will be sending out applications by the end of January 2005.
- Deadline to apply for 2005 will be February 15<sup>th</sup>.

# The Approach

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

## Apprentice Profile

## Skill Qualification Process

Order	Type	Description	Status	Modify
1	Initiate and Develop a Business Case	Discuss what information is required and how to obtain, organize, and present it for the information.	<input checked="" type="checkbox"/>	
2	Develop strategies required to build management buy-in and approval of the project.	State what and why management involvement is vital to the project success.	<input type="checkbox"/>	WIA
3	Maintain a list of authorized customer projects for which you are responsible.	The able to describe the business case assumptions regarding to scope versus out of scope performance of the project deliverables (i.e. schedule, cost, quality) and benefits to the customer.	<input checked="" type="checkbox"/>	
4	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.	Explain why each customer expectation and project outcome is included.	<input checked="" type="checkbox"/>	
5	Ensure project alignment with company strategy and spending plan.	Explain the process by which you gathered the project expectations.	<input checked="" type="checkbox"/>	
6	Order Business Case data into a portfolio tool. (Optional)	Discuss project goals and alignment and potential risks.	<input checked="" type="checkbox"/>	
7	Order Business Case data into a portfolio tool. (Optional)	Explain how to operate the portfolio tool.	<input type="checkbox"/>	WIA

## Progress Charts (traffic light report)

