

# PROJECT MANAGEMENT FOR YOUTH

## PMI TULSA CHAPTER

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### **Overview**

This curriculum unit is designed for an 8th grade Extended Day class at Thoreau Demonstration Academy (Thoreau). The unit will cover the (9) Project Management Knowledge Areas and the (5) processes over a 14-16 week period. The class will meet once a week for 40 minutes and each lesson plan is designed to cover one week of the unit content. Students will learn basic Project Management concepts through a Project Based Learning (PBL) approach where they will apply the knowledge learned through real world projects. The students in this course will develop project plans to implement an 8<sup>th</sup> grade post graduation event at Thoreau.

\*The information provided in this course is essential to secondary students for preparation of their future personal lives, high school, college activities and career goals. This curriculum was selected because it will fulfill several key fundamental areas and provides the information needed to organize and structure work in a way that things are scheduled and completed accordingly. As students move into high school, colleges, or into the workforce, these skills will prove to be efficient assets to their development and growth. This unit was designed to specifically cover the fundamentals of Project Management and to introduce students to the concepts and potential opportunities in the profession.\*

### **Learning Outcomes**

Students will learn how projects are initiated from the onset in addition to learning how to plan a project in detail. Students will develop a project scope statement and schedule of activities for a school project.

Students will be taught to monitor and control their project activities through development of a project status report. The skills acquired in this course will be viable for use in many areas of the students' lives and will give them adequate experience to begin to build a profile for long-term goals of becoming a project manager.

Finally, each student in the group will present a part of the team's project to members of the school faculty, in the process, improving their communication and helping build public speaking and presentation skills. Students will submit their plans to the school principal for implementation of their 8<sup>th</sup> grade post graduation event.

Real world projects will be discussed throughout the units for the students to reflect and build the skills being taught. There are a variety of lesson activities that will be conducted in order to influence their learning and performance.

## **Course Format**

Students will be divided into a project team of 10-12 students. The group will create a project plan based on the charter (which they create), to present to the class in week 14 or 15. The class structure is limited to 40 minutes per session with each session combining a mixture of presentation of the course materials, class discussion, class activities and/or teamwork to create the aspect of the project that was introduced in the class lecture. For example, week four group work will be to create a preliminary scope statement.

Materials needed throughout this course could include Overhead Projector, White Paper, Markers or blackboard with chalk, Internet access, along with various handouts used each week to supplement the material presented in class.

The project sponsor is considered to be Thoreau's Principal and/or Extended Day leader. This role is responsible for providing guidance on project procedures, planning, monitoring, and conflict resolution. While there will be no grades given in this program, it is expected that the students are willing and active participants, as failure to contribute will be detrimental to the team, the project and the overall success of this program.

# Unit Objectives

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Theory and Instruction / [Project Application Activities](#)

## **Lesson 1: Introduction to Project Management**

1. Unique makeup of their peers and instructor
2. Concept of what projects are, through an in class activity
3. 8<sup>th</sup> Grade Day project and their roles in bringing to fruition
4. [Tower Building](#)
5. [Ice Breaker](#)

## **Lesson 2: General Project Methodology and Application**

1. Describe the elements of a project
2. Discuss the Project Lifecycle, evaluating the relationship of the five process groups
3. Explain the nine knowledge areas in project management
4. Discuss the idea of the Triple Constraint and its impact on a project
5. [Create Pre-Event Survey questions to drive scope](#)
6. [Project Management Methodology Word Find and/or Crossword](#)
7. [PM Word Find and Crossword](#)

## **Lesson 3: Diversity and Team Building**

1. Managing & Embracing Diversity in Project Teams
2. [Diversity Paper Tearing exercise](#)
3. [True Colors Assessment](#)
4. [Strength in Numbers Popsicle stick demonstration](#)

## **Lesson 4: Project Charter & Scope Management**

1. Describe a project charter and its importance
2. [Review previous class Lessons Learned \(if applicable\)](#)
3. [Develop a Project Charter](#)
4. [Complete the Scope Statement Worksheet](#)

## **Lesson 5: Schedule Management**

1. Describe project milestones, phases, activity, and task
2. Describe the sequential necessity of tasks and the resulting effects on the schedule.
3. Understand what the Critical Path is on a Project
4. [Cooking exercise to demonstrate task sequence and dependencies](#)
5. [Define and develop a simple Work Breakdown Structure \(WBS\)](#)

## **Lesson 6: Stakeholders**

1. Define roles & responsibilities of PM, sponsor, stakeholders, team members
2. [Define and create a Responsibility Assignment Matrix \(RAM\)](#)
3. [Assign resources/resource types to Project Schedule](#)

## **Lesson 7: Cost/Procurement Management and Supplier Identification**

1. Understand that Make vs. Buy Decisions are the catalyst for Cost/Procurement activities
2. Identify the key criteria reviewed when selecting vendors
3. [Identify suppliers needed for 8<sup>th</sup> Grade Day and assign budget numbers to each](#)
4. [Write script for how to professionally speak to vendors](#)

## **Lesson 8: Supplier Determination**

1. Decide on vendors based on information received
2. [Create the rules around the t-shirt contest](#)
3. [Map out the location for all the selected vendors](#)

## **Lesson 9: Communication Management**

1. Identify appropriate communication method.
2. Determine the importance, frequency and audience of a Status Report
3. [Create a Status Report](#)
4. [NASA Communication Exercise](#)

## **Lesson 10: Risk Identification**

1. Understand what Risks are through Discovery Channel's Deadliest Catch
2. [Complete Risk Identification Worksheet](#)
3. [Watch Deadliest Catch Video](#)

## **Lesson 11: Risk Planning**

1. Identify the Probability and Impact of Risks
2. Understand the 4 responses that can be applied to identified risks
3. Know which Risk Response to use and when
4. [Create a Risk Matrix](#)
5. [Create a Risk Response Plan](#)

## **Lesson 12: Quality Management**

1. Evaluate the basic concepts of quality in project management.
2. Analyze the quality of work in a project.
3. [Create post event survey to measure project success](#)

## **Lesson 13: Time Management, Organization Skills & Goal Setting**

1. Time Management Tips and Tricks
2. Setting S.M.A.R.T. Goals
3. [Goal Setting Exercise](#)

#### **Lesson 14: Project Presentation Preparation**

1. Public Speaking techniques
2. Putting together of presentation
3. Assignment of speakers
4. Dress rehearsal of presentation

#### **Lesson 15: Project Presentation**

1. Present 8<sup>th</sup> Grade Day Project to faculty, staff, and/or parents

#### **Lesson 16: Lessons Learned**

1. Understand the benefit of having a repeatable process
2. Review survey results
3. Document and store materials for the next group that goes through this class

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**for**  
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## Lesson 1: Introduction to Project Management

**Lesson Objectives** – By the end of this lesson, students will be introduced to the:

1. Unique makeup of their peers and instructor
2. Concept of what projects are, through an in class activity
3. 8<sup>th</sup> Grade Day project and their roles in bringing to fruition

### Activities

1. Tower Building
2. Ice Breaker

#### Tower Building Activity

##### Rules

1. Towers must touch nothing in the room except the floor
2. The tallest tower at the end of the class session wins
3. Participants must follow all instructions
4. Participants who break rules will lose a building item

##### Order of Play

1. Empty materials bags
2. Talk, Don't Touch – 5 minutes
3. One Person Touch, the Rest Talk – 5 minutes
4. One Person Talks, the Rest Touch – 5 minutes
5. All Participants can Touch and Talk – 5 minutes

##### Debrief

1. How did you decide what to build?
2. How close to your original plan was your final project? What, if anything changed?
3. What made you more frustrated, not being able to talk or not being able to touch?
4. Which was the most important session during the whole project?
5. Did you consider any risks to building your tower?
6. Did any one participant on your team seem to stand out as the leader?

A project is a temporary endeavor, having a defined beginning and end (usually constrained by time, cost or scope), undertaken to meet particular goals and objectives, *usually to bring about beneficial change or added value.*

The tower building exercise illustrates these traits along with the key project components of planning, communicating and leadership and aptly sets the stage for applying Project Management concepts to any real world project, or specifically for Thoreau, 8<sup>th</sup> Grade Day.

**Ice Breaker Activity <pre tower building exercise>**

1. Each student and the instructor will write down three unique true statements about themselves and one unique false statement.
2. Statements are read aloud with participants trying to guess which statement is the false one.

This exercise allows the instructor to gain some insight into the students as well as areas that can be used to relate to each student throughout the rest of the course.

**Note:** *The amount of time spent on this activity can be as little as 10 minutes up to 30 minutes depending on the amount of available time.*

## Lesson 2: General Project Methodology and its Application

**Lesson Objectives** – By the end of this lesson, students will be introduced to the:

1. Elements of a project
2. Five project phases/process groups
3. Nine knowledge areas in project management
4. Triple Constraint and its impact on a project

### Activities

1. Create Pre-Event Survey questions to drive the scope of 8<sup>th</sup> Grade Day
2. Project Management Methodology Word Find and/or Crossword

**Handouts:** 9 Knowledge Areas, 5 Process Groups, Triple Constraint Diagram; PM Word Find/Crossword

The instructor will begin the class by asking the students to review the previously completed tower exercise in order to illustrate the five process groups of project management. Then, the instructor will ask the students to volunteer what their definitions of a project are.

As described in the definition of a project in Lesson 1, further elaboration on the elements of the triple constraint, how they impact a project and how changing one of the elements impacts the other two will be had. Additionally, a discussion on why setting expectations and getting sign off on the project deliverables upfront are important.

The instructor will ask the students to relate those same ideas to their school project as they start to brainstorm the key items and constraints that make up the 8<sup>th</sup> Grade Day project. The class topics will be supported with handouts describing the knowledge areas and process groups and a session wrap up activity that reinforces the terms discussed.

**Group Activity** - instructor will lead the students in creating a survey of questions for 8<sup>th</sup> Grade Day which will help shape the idea of scope to be followed throughout the life of the project and the class. If time permits, students will complete the PM Word Find using terminology discussed in class.

## Lesson 3: Diversity and Team Building

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Manage & Embrace Diversity in Project Teams

### Activities

1. Diversity Paper Tearing exercise
2. True Colors Assessment
3. Strength in Numbers Popsicle stick demonstration

**Handouts:** Sheets of blank paper; Popsicle Sticks  
Access to <http://www.truecolorstest.com> thru Internet;

One of the great challenges facing project teams is getting all members to embrace diversity. Diversity makes a project team effective by capitalizing on all of the strengths of each member. This helps to create a synergy effect with teams. That is an individual acting alone can accomplish much, but a group of people acting together in a unified force can accomplish great wonders.

First, the idea of diversity will be shown through the Paper Tearing Exercise where:

1. Each student is given a sheet of paper and **told to close their eyes** while holding the paper in front of them.
2. They are then instructed to fold the paper in half and in half again.
3. Then form a triangle with the folded paper.
4. Then rip off the lower right corner.
5. Open their eyes and unfold the paper.

The papers will undoubtedly look different. The instructor will discuss with participants how this illustrates our differences and alikeness. Our perceptions and understanding of the same instructions might be different which also speaks to how important it is to clearly give instructions to team members on a project.

Next, students will take the True Colors Test from <http://www.truecolorstest.com>. This is series of 5 questions that asks the students to rank boxes made up of three words each, in order of most like them to least like them. An example is listed below:

|                                                    |                                               |
|----------------------------------------------------|-----------------------------------------------|
| <p>BRAVE<br/>ADVENTUROUS<br/>IMPULSIVE</p>         | <p>ORGANIZED<br/>TRADITIONAL<br/>RATIONAL</p> |
| <p>COMPASSIONATE<br/>SYMPATHETIC<br/>EMOTIONAL</p> | <p>CONFIDENT<br/>ASSERTIVE<br/>METICULOUS</p> |

After receiving their results on which color(s) overall are most like them (Green, Gold, Blue, Orange), the instructor will lead them in a discussion on what strengths are tied to those colors, what areas could be potential challenges for them, the types of jobs that are closely related to those colors and strategies on how to deal with/communicate with people who are not their same color.

This discussion allows team members to see the strengths in themselves and their classmates/teammates. This will help them better align resources for the upcoming tasks of the project.

To demonstrate the point that together we can accomplish more than we can individually, the instructor will give each class member a Popsicle stick and tell them to break it (which should be easily accomplished). The instructor will then give each class member another popsicle stick and then tell them to combine all their sticks then giving each member a chance to break the collection (this should not be able to be done, assuming 10 or more sticks).

## Lesson 4: Project Charter & Scope Management

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Describe a project charter and its importance

### Activities

1. Review previous class Lessons Learned (if applicable)
2. Develop a Project Charter for 8<sup>th</sup> Grade Day
3. Complete the Scope Statement Worksheet

**Handouts:** Project Life Cycle Cartoon; Project Charter Template; Scope Statement Worksheet

**Q: Why are having directions (on a project) important?** Whether you are taking a vacation or going to a party at someone's house, having the proper directions are integral in order to get where you want to go. There also could be several different ways to get to the final destination so it's important to review before just setting off on your journey so as to avoid traffic, construction, toll roads, etc.

The same can be said of projects, where a good set of instructions will help the project members be successful and allow them to arrive at the final destination together. Reviewing risks (construction) and costs (toll roads) as well as schedule (traffic) are all important factors to consider. Through the PLC Cartoon, a humorous look at what can happen when different directions are given, and/or not completely understood, helps accentuate the point being made.

Students will review the results of the pre-event survey to create the project charter and then in turn, will review the completed project charter and identify the project's directions (i.e. objectives, requirements, acceptance criteria, boundaries, constraints, assumptions, milestones, cost estimates and approval guidelines) on the Scope Statement Worksheet.

**Group Activity** – the instructor will lead the students in the completion of the Project Charter Template and Scope Statement Worksheet.

**Note** - if this is not the first instance of this class being taught at a location, time will be allocated to the reviewing of previous class/year Lessons Learned. This will introduce the importance and ability of not recreating the wheel and/or repeating past mistakes on a project.

## Lesson 5: Schedule Management

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Describe project milestones, phases, activities and tasks
2. Describe the sequential necessity of tasks (i.e. dependencies) and the resulting effects on the schedule.
3. Understand what the Critical Path is on a Project

### Activities

1. Cooking exercise to demonstrate task sequence and dependencies
2. Define and develop a simple Work Breakdown Structure (WBS)

**Handouts:** Completed Project Scope Statement; Post-It Notes

**Q: How do you go from A to Z in creating a project schedule?** Now that we understand the needs of the project, it's important to lay out the steps that are needed from the beginning to the end. Instead of just going from A to Z, project members must account for all the letters (tasks) in between. Some project managers try to start with task Z and work backwards to task A, but just like reciting the alphabet backwards, is harder and less efficient than saying it forwards. Planning your projects by trying to get to the end date is not a good approach.

The Cooking Exercise helps show that certain tasks can't be completed without completing others first. To begin, a chef is selected, with the remaining students being scattered throughout the room, each of whom is given a key step in making a cake for a friend along with an estimated duration to complete the task. The number of steps can be modified based on the number of students but should include:

- Decorate Cake (10 mins) / Pre Heat Oven (20 mins) / Buy Ingredients (1 hr.) / Clean Kitchen (30 mins) / Find Recipe (20 mins) / Bake (45 mins) / Mix Ingredients (15 mins)

The chef has to find each task (fellow student) and place them in sequential order. When complete, the group discusses whether the steps are in optimal order for completing in the quickest amount of time, and if not, how they could be more efficient by changing the order. Students will determine what the critical path is on this project and brainstorm ideas on how to compress the schedule (i.e. add resources to the tasks, work on tasks concurrently, etc.).

After the cooking exercise, students will identify the key milestones of 8<sup>th</sup> Grade Day and then, after breaking into teams, will use Post-It Notes to break down the smaller units of activities and tasks by placing them on a wall/table in preparation of building out the project schedule.

**Note:** *Instructor will take the tasks identified in the WBS group activity and build a preliminary schedule by the next meeting for use throughout the rest of the course.*

## Lesson 6: Stakeholders

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Define roles & responsibilities of PM, sponsor, stakeholders, PTSA, team members, etc.

### Activities

1. Define and create a Responsibility Assignment Matrix (RAM)
2. Assign resources/resource types to the Project Schedule

**Handouts:** RAM; Preliminary Project Schedule

**Q: What are stakeholders and why do I need them on my project?** The person that asks for the project deliverable, whether it's a boss asking for a report at work or a mom asking a child to clean their room, is considered the project sponsor. As project teams are being put together, different skill sets and roles are needed. Not everyone can be the Chief or the head chef in the kitchen. A project manager needs to lead the project but often is not the subject matter expert on the tasks needed to produce the project deliverables.

Most people understand who the sponsor of a project is and can equate that the people working on the project (team members) are stakeholders, but stakeholders actually encompass:

***Any person, group, or organization that affects or can be affected by a project.***

It is therefore important for a project team to understand ALL the stakeholders of the project as well as what their respective roles and responsibilities will be. This allows clear understanding of which resources will be (R)esponsible, (A)ccountable, (C)onsulted, or (I)nformed so that the proper expectations are set.

**Group Activity:** Students will identify all the stakeholders of 8<sup>th</sup> Grade Day and apply the RACI technique to complete the Responsibility Assignment Matrix. Afterwards, students will identify resource names, or at a minimum, resource types and will assign them to the tasks identified in the preliminary project schedule.

## Lesson 7: Cost/Procurement Management and Supplier Identification

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Understand that Make vs. Buy Decisions are the catalyst for Cost/Procurement activities
2. Identify the key criteria reviewed when selecting vendors

### Activities

1. Write a script for how to professionally speak to vendors
2. Identify suppliers needed for 8<sup>th</sup> Grade Day and assign budget numbers to each

**Handouts:** Vendor Selection Matrix

Deciding whether to get your vegetables from a home grown garden or going to the local supermarket is a simple example of a make or buy decision. When individuals or businesses need to take the “buy” route, they turn to suppliers to provide them with the things they need. Research is conducted to identify a pool of suppliers to contact with requestors needing to be prepared to ask all the pertinent questions to make an eventual decision.

Developing and understanding the criteria that sway our decisions, whether they are for project suppliers, which car to buy, or what type of pet to get, are important aspects of everyday life. In the project world, items like cost, reputation and delivery speed are crucial when deciding which vendors will supply the needed items for a project.

The 8<sup>th</sup> Grade Day project will have similar supplier and decision criteria needs. As such, students will brainstorm and/or research via the Internet (if access is available) various vendors that can supply the scope items needed for 8<sup>th</sup> Grade Day and will log the contact information in the Vendor Selection Matrix.

The students will also brainstorm a list of questions, creating a weighting for the various criteria that will be used for evaluating the eventual vendors contacted. To maintain uniformity and professionalism when contacting each of the vendors, the instructor will guide the students in creating a script of introductions, purpose and questions that can be used.

As a final activity, the students will take the approved budget and estimate what costs will be for each of the main items.

## Lesson 8: Supplier Determination

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Decide on which vendors to use for 8<sup>th</sup> Grade Day by evaluating the obtained information

### Activities

1. Create the rules around the t-shirt contest
2. Map out the location for all the selected vendors

**Handouts:** Vendor Selection Matrix

Using the now completed vendor selection matrix from the last lesson, students will discuss the most important criteria for selecting a vendor for this event. The information will be evaluated by the students, with vendors being chosen based on which of the vendors best meets the qualities that the students are after.

Since the t-shirt design will be created by the students, parameters around how to conduct the contest need to be established. The students will discuss the rules (i.e. duration of the contest, how to vote, the prize to be awarded, and the message/theme to be conveyed) with the intent of holding the contest the following week.

Students will visit the park and measure the areas where the vendors will be setting up. This diagram will be used the day of the event to ensure the vendors setup in the right locations.

## Lesson 9: Communications Management

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Identify appropriate communication methods
2. Determine the importance, frequency and audience of a Status Report

### Activities

1. [Create a Status Report](#)
2. [NASA Communications Exercise](#)

**Handouts:** Communication Methods; Communication Styles, Status Report Template, NASA Communication Exercise

**Q. Why is communication important on a project?** Simply stated, communication is the process of using messages to generate meaning. Project managers can spend up to 90% of their time communicating with the project team, stakeholders, customers, and sponsors. Everyone involved in the project should understand how to communicate effectively on the project.

There are four categories of communication methods that can be used throughout a project as noted below:

| Communication Method | Examples                                                        |
|----------------------|-----------------------------------------------------------------|
| Formal Written       | Complex Problems, Project Management Plans, and Project Charter |
| Formal Verbal        | Presentations and Speeches                                      |
| Informal Written     | Memos, emails and notes                                         |
| Informal Verbal      | Meetings and Conversations                                      |

There are also four communication styles:

|                                                                                                                                                                           |                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Style 1</b></p> <p><b><u>WHAT</u></b><br/> Results<br/> Objectives<br/> Achieving<br/> Doing</p> <p style="text-align: center;">ACTION (A)</p>                      | <p><b>Style 2</b></p> <p style="text-align: right;"><b><u>HOW</u></b><br/> Strategies<br/> Organization<br/> Facts</p> <p style="text-align: center;">PROCESS (PR)</p>                                          |
| <p style="text-align: center;"><b>IDEA (I)</b></p> <p><b><u>WHY</u></b><br/> Concepts<br/> Theories<br/> Innovation</p> <p style="text-align: center;"><b>STYLE 4</b></p> | <p style="text-align: center;"><b>PEOPLE (PE)</b></p> <p style="text-align: right;"><b><u>WHO</u></b><br/> Communication<br/> Relationships<br/> Teamwork</p> <p style="text-align: center;"><b>STYLE 3</b></p> |

The instructor will review each of these with the class and will prompt the students to come up with examples for each as they pertain to the 8<sup>th</sup> Grade Day project.

To emphasize the importance of team communication, the students will break into groups of 1, 2 of like students (two guys, two cheerleaders, two red heads), and the rest in order to complete the NASA exercise. Typically the “group” of 1 completes the exercise first, the large group takes the longest but ends up having the most accurate answers.

The exercise leads into a discussion on diversity of teams, speed of communication and how both are effective means of project success.

Communicating project status leads its way into determining the items that should go into a status report as well as to whom it should be delivered and how frequently. The students will then fill out a status report for 8<sup>th</sup> Grade Day.

***Time permitting, the instructor will lead the class in a communication self-assessment exercise.***

## Lesson 10: Risk Identification

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Understand what Risks are through the viewing of Discovery Channel's Deadliest Catch

### Activities

1. [Watch Deadliest Catch Video](#)
2. [Complete Risk Identification Worksheet](#)

**Handouts:** Deadliest Catch video; Risk Identification Worksheet

Noted as the most dangerous job in the world, the men who work the crab boats in the Atlantic Ocean face many challenges that constantly thwart their efforts to be successful. These risks are readily apparent and in vast supply in the short video presentation from this popular Discovery Channel program.

The instructor will provide the class with the definition of Risks – uncertain events or conditions that create an impact on a project and will queue up the 7-minute video. The students will be asked to write down any and everything they see as a potential risk item to the success of the crab fishermen. Discussions will be had amongst the group to see what risks were identified and how each person went about identifying the risks.

After identifying and discussing the myriad of obstacles that the men face in the show, students will apply this same logic to creating a list of risks that could keep their 8<sup>th</sup> Grade Day project from being successful. This new list will be used in the next class session as a part of risk planning.

## Lesson 11: Risk Planning

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Identify the Probability and Impact of Risks
2. Understand the four responses that can be applied to identified risks
3. Know which risk response to use and when

### Activities

1. Create a Risk Matrix for the 8<sup>th</sup> Grade Day Project
2. Create a Risk Response Plan for the 8<sup>th</sup> Grade Day Project

**Handouts:** Risk Assessment Worksheet, Risk Processes

**Q. Once we've identified risks, what do we do with them?** The instructor will review the risks identified in the previous session and then distribute the Risk Matrix Worksheet in order to complete the Probability and Impact sections. To determine the probability (likeliness of a risk occurring) Project Managers estimate using 5% increments from 5% to 95% (or sometimes 10% to 90%). The reason 0% or 100% are not used is that neither represent risks, since in the instance of something having 100% certainty, it no longer is a risk that has to be planned for, but rather an issue that has to be dealt with.

To determine the impact (significance to the project) of a risk, PMs will use low, medium or high designations or weight the impact on a scale of 1 to 10 in whole numbers (with 1 being the lowest).

Once risks have been identified and had their probabilities and impacts determined, there are four Risk Responses that can be applied, their use being dependent on the combined probability and impact of the identified risks:

1. Avoid – create a plan that will remove the risk entirely; often time demanding and/or costly; used when the impact of the risk is significant.
2. Accept – accept the consequences of the risk if it occurs; typically used if there a low probability and/or impact.
3. Transfer – put the ownership of the risk onto another party like an insurance company; there is still risk as you are now relying on a 3<sup>rd</sup> party to handle.

4. Mitigate/Control – come up with strategies that can either lessen the probability or the impact of the risk occurring; the most typical risk response, is used when the mitigation or control plan can be implemented quickly and/or inexpensively.

After a risk response has been planned for, risk owners need to be identified for. Depending on the strategy used, risk owners can complete tasks in advance of the risks happening.

## Lesson 12: Quality Management

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Evaluate the basic concepts of quality in project management
2. Analyze the quality of work in a project

### Activities

1. Create a post event survey to measure project success

**Handouts:** Quality Management Tools

The instructor will begin the class by asking students to volunteer what their definitions are of quality and will then read the PMBOK definition and write down the key points (Quality = satisfying the need). The instructor will bring up large projects such as the building of the BOK center downtown and ask the class what quality needs were involved in the project. This is an introduction to the rest of the lesson material.

Dividing quality into steps and following them in an iterative way is crucial to the quality lifecycle. These steps include quality planning, assurance and control. A discussion of these phases will be had to show how the outputs of one phase, serve as inputs into the subsequent phase.

**Group Activity:** Students will review the project scope statement and identify the project's quality plans. Discussion will also be had on what Gold Plating is and why it's bad for a project. Students will then create a post event survey to query classmates on how well the quality of the 8<sup>th</sup> Grade Day project was met.

## Lesson 13: Time Management, Organization Skills & Goal Setting

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Learn Time Management Tips and Organization Skills
2. Set S.M.A.R.T. Goals for the next 1, 5 and 10 years

### Activities

1. Goal Setting Exercise

**Handouts:** Time Stories; Time Management Tips for Students; S.M.A.R.T. Goals Worksheet

As the students prepare to enter the next phase of their lives, whether it is High School, College or the workforce, it's good to have some tips and tricks at hand to review and refer back to.

The instructor will share the stories about time and time management and distribute the handouts for review and future use.

It means just a bit more and produces more accountability when you write your goals down on paper but the goals need to be S.M.A.R.T. meaning:

**Specific** – must be clear and well defined. Vague or generalized goals are not good because they don't provide sufficient direction. Your goals need to show you the way.

**Measurable** – include precise amounts, dates, etc. in your goals so you can measure your degree of success. Without a way to measure your success, you miss out on the celebration that comes with knowing you actually achieved something.

**Attainable** – make sure it's possible to achieve the goals you set. Setting a goal that you have no hope of achieving will demoralize you and erode your confidence. However, resist the urge to set goals that are too easy.

**Relevant** – goals should be relevant to the direction you want your life and/or career to take. By keeping goals aligned with this, you'll develop the focus you need to get ahead and do what you want.

**Time Bound** – your goals must have a deadline. This is so that you know when to celebrate your success. When you are working on a deadline, your sense of urgency increases.

Students will complete a Setting S.M.A.R.T. Goals worksheet to include 1-year, 5-year and 10-year goals. Students will sign and date the worksheet to add a layer of accountability and historical reference for the student to review in the future.

## Lesson 14: Project Presentation Preparation & Lesson 15: Project Presentation

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Know and apply key tips to public speaking

### Activities

1. Put together Summary Presentation
2. Public Speaking in front of faculty

**Handouts:** Completed PowerPoint Presentation

Many people claim to fear public speaking but most people, especially students, will have to speak in public many times throughout their lives. To help ease, or hopefully erase that concern, this portion of the curriculum is geared to reviewing and preparing

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1. **Know your material** – since the students will have created the material themselves for the presentation to the faculty they will be more invested and familiar than if just given the material and told to memorize and speak to it.
2. **Rely on key words** – setting up your presentation with bullet points or key words about the material not only makes for a more appealing slide but also can help trigger what you are speaking about.
3. **Rehearse** – this should be done both in private and in front of a small group. Actually hearing yourself speak allows you to get your timing down. Students will get to do a dress rehearsal in front of their peers in a non-stressful environment and will be encouraged to practice at home in front of their families as well before the Big Day.
4. **Know your environment** – this includes becoming familiar with the location where the speaking will take place, the audience you are giving your speech to and the equipment that will be used. This will help remove surprises from the presentation experience.
5. **Use gestures and visuals (in moderation)** – No one likes to sit through a presentation that is all talk or review slides that are all words. Let some well placed visuals paint a picture of what you're trying to convey. If you can emphasize a point through natural gesturing of your hands or body, that will highlight your presentation and will put both you and your audience more at ease.

## Lesson 16: Lessons Learned

**Lesson Objectives** – By the end of this lesson, students will be able to:

1. Understand the benefit of having a repeatable process

### Activities

1. Review post event survey results
2. Document and store materials for the next group that go through this class

**Handouts:** Post event survey results

Reinventing the wheel is an axiom used to show that time shouldn't be spent trying to develop a product or process that has already been created before. Putting together and reviewing Lessons Learned are a means to avoid reinventing the wheel.

Students will review the results from the quality survey put together in Lesson12. These will have been summarized in advance by the instructor. Reviewing the feedback from the planned event provides good closure for the project team and allows for the documentation to be used in next year's class.

As such, students will discuss and record the top three things that went right with the project and the three things that could be improved and/or items that the next project team should not repeat.