



Using the Transfer Templates

Workforce Development Panel Project

PURPOSE:

The purpose of the Transfer Templates Project is to provide two templates that can be used by the other NSRP Panels to encourage the transfer of their technology-based projects. There are two templates developed in this project.

The first transfer template is a **Presentation Transfer Template** that would be used to inform shipyards about the technology-based project of a panel. It would include what the project is, what problem it was developed to solve, why a shipyard should consider implementation and how, and who to contact for more information.

The second transfer template is a **Technology Training Transfer Template**. This template is to provide a format and guidance to be used to develop a training package for the technology-based project. The intent of this package is to use it for on-the-job training; however, the elements could be used, with minimal effort, by a shipyard to develop instructor-led training in a classroom context. With more effort, it could be used to develop a Computer-Based Training as well.

WHAT IS A TECHNOLOGY-BASED PROJECT?

In the Instructional Design world, technology-based content is procedural. Procedural content is made up of steps that are followed the same way each time. The steps may have decision points that direct the trainee through one of two separate pathways; however, both pathways will come back together. The steps are followed the same way in that the decision point is always encountered even though the result of the decision may take different paths.

Procedural content is distinguished from processes and principles. Processes are “how things work” such as how crane brakes or a robotic welder works. The steps used by the trainee to maintain the crane brakes or how the worker would use the robotic welder would be the procedural content. Unlike procedures, principles are not performed the same way each time; rather, a set of guidelines are applied to a given situation and a course of action is followed based on those guidelines. For example, principle content would be applying safety or cleanliness guidelines on the job. With principles, there are a multitude of situations that a worker may encounter on the job so it is not possible to go over every situation in their training material.

THE PRESENTATION TRANSFER TEMPLATE

Refer to the file named: **Presentation_Template.pptx**

The Presentation Transfer Template is used to provide a brief and high-level introduction of a panel project to shipyards around the country. It is informational and motivational in nature, rather than procedural (*see above for procedural content explanation*). It can be placed on the NSRP Website or sent, via email, to the shipyards. It is more desirable, from a transfer perspective, to “push” the presentation to shipyards rather than assume that they will go to the NSRP Website to “pull” it.

The Presentation Transfer Template uses Power Point and can be viewed in slide show mode with text displayed on each slide. A more effective approach is to use narration so that the text does not have to be displayed. Narration can be recorded in Power Point (*your computer will require a sound card, microphone, and speakers*) or there are several software products that allow the importation of narration.

Accessing the Presentation Transfer Template

Open up the Power Point file named “Presentation_Template.pptx” in the Transfer Templates folder and view the notes pages to review how to use the Presentation Transfer Template.

Using the Presentation Transfer Template

This Presentation Transfer Template is intended to be used as a model to assist in developing a presentation to inform the shipyards of new NSRP projects and why it may be important to them. Each of the eight Power Point slides that follow includes a separate topic for this presentation. Too much information can negate its effectiveness; therefore, use the Presentation Transfer Template for guidance in order to minimize the content. The template includes the following suggested topics:

Refer to the appendices file named: **Appendices.pdf** for useful information that applies to both templates.

Topics of Presentation Transfer Template:

- Title slide with name of project and panel
- What is in this presentation?
- Description of the project technology

- Overview of the project technology
- Problem in the shipyards that the project technology addresses
- How the project technology addresses the problem
- Why your shipyard should consider implementing the project technology
- Contact information

Some of these topics may take more slides than the one provided. For example, an overview of the technology may take multiple slides to explain it. This will depend on the nature of the project technology. In those cases that require more slides, simply duplicate the slide template as many times as is required.

Keep it Simple

Each individual project may have elements that should be included in this introductory presentation. This template is not to restrict the topics to the ones listed, but encourages the inclusion of content deemed relevant by the panel; however, the old adage “Keep it simple” should be followed. What may seem important to include may be content that would better revealed when interested parties contact the panel or in a training package of the technology.

Title Page Header

The Title Page header has the NSRP banner and the content to be included. The background color, text color, and text size may be modified to suit individual taste: however, the header and footer is to be kept as it is. If the background and text color are modified, keep in mind that it needs to have a nice contrast and not be so flamboyant as to be distracting from the presentation.

Notes Pages

The notes page of each slide in the template is to be used for any narration included in the presentation.

SCIM presentation as an example

An example of a transfer presentation has been developed using the Ship Common Information Model (SCIM) project of the Information Technology Panel. This presentation is about 15 minutes long. A shorter presentation of 5 to 10 minutes is more desirable for an introductory presentation. The SCIM presentation is longer because it has more abstract concepts that needed explanation. A more concrete technology should be kept to the 5 to 10 minute length. When reviewing this presentation, notice how the above topics have been addressed.

The SCIM presentation was produced in PowerPoint® and published in Articulate®. The published version is provided in the Transfer Template folder as a deliverable so that the presentation may be viewed as intended for shipyards to see it. The PowerPoint® version is also provided so that the animations and notes may be viewed for informational and learning interest. The notes pages of the PowerPoint® file contain the narration used for the published Articulate® version.

These files are in the SCIM folder:

1. SCIM_Presentation.pptx (This is the Power Point file containing the content and animation)
2. SCIM_Auto (This folder contains the .html version of the presentation that runs automatically)

Viewing the SCIM Presentation:

To view this example presentation, open up the SCIM_Auto or SCIM_Control folder within the SCIM Folder and double click on the .html file inside (*check your computer's sound setting first*).

THE TECHNOLOGY TRAINING TRANSFER TEMPLATE

Refer to the file named: Tech_Training_Template.pptx

The Technology Training Transfer Template is used to capture the elements of instructional design for procedural content. Recall that the technology-based content of most of the panel projects is procedural content.

This Training Transfer Template is composed of a format to be filled in with the instructional elements. These elements may be captured as the project technology is being developed and tested.

Open up the Power Point file named "Tech_Training_Template.pptx" and view it in notes-page mode to review how to use the Presentation Transfer Template.

Again, due to the specificity of each project, the template is not to constrain the developer; however, it is to be used as a foundation for developing an effective on-the-job training package.

Contact Information

If you have any questions, please feel free to contact me using the following contact information:

David Bennett

Workforce Development Panel

Instructional Designer

Huntington Ingalls – Newport News Shipbuilding

Dave.L.Bennett@hii-nns.com

Work number: 757-688-7481

Cell number: 757-897-7600

Need Assistance?

The Workforce Development Panel has the necessary skill set and would like to be able to submit supporting projects to assist other projects in developing these transfer products; i.e. the presentation and the training package. This would allow each panel to focus on developing the technology of their respective projects. In addition, having the presentation and training package funded to develop these projects separately by the Workforce Development Panel would not take any funding from these other panel projects.

Video Option

If your organization has the necessary means, these topics may also be composed in a video format.

Transfer Template Appendices

Appendix A: Guidelines for slide composition

These are established guidelines that should be used when composing each slide of the presentation. These guidelines are proven methods that enhance the effectiveness of communicating the topics of the presentation.

Appendix B: Guidelines for Taking Good Pictures

Appendix C: Guidelines for Taking a Good Video

Appendix D: Transfer Attributes

Appendix E: Hard Data that Support Transfer Attributes



Appendix A

Guideline 1: Keep slides simple; do not complicate

Do not make any slide too complicated. If it begins to look like it will have an overload of information, make a new slide to continue the topic (ensure there is a nice transition).

Example from slide 7 from the SCIM presentation:

Notice that this slide is not congested with too many images. The yellow arrow and question mark on the slide are synchronized to display with the narration text (see the narration text below the slide)



Narration:

- Beyond its design and construction time, in-service support and future modification of the ship will FAR exceed the life span of the original computer system.
- Though the current-generation IPDE computer systems may die in a few short years, or at most a decade, much of the design and manufacturing data contained within them must survive long into the future, some for the lifetime of the ship.

Appendix A

Guideline 2: More image, less text

Too much text overloads the viewer of the presentation. Communicate your topic with an applicable image (and animation, if required) rather than a lot of text.

Example from slide 10 from the SCIM presentation:

This slide has been composed with a minimum of text. The narration and animation of it communicates the message.

The yellow horizontal arrows are displayed first and then the other 3 arrows are displayed, all synchronized with the narration (see the narration text below the slide) You can view the animation of this slide by opening to slide 14 of the SCIM Power Point Presentation and view it in slide show mode.



Narration:

- The ability to “work in concert” is called “interoperability”
- Interoperability can be challenging within the systems and organizations of each individual shipyard
- As already mentioned, the challenge increases when there is a need to communicate between these systems and those at partnering shipyards and the Navy

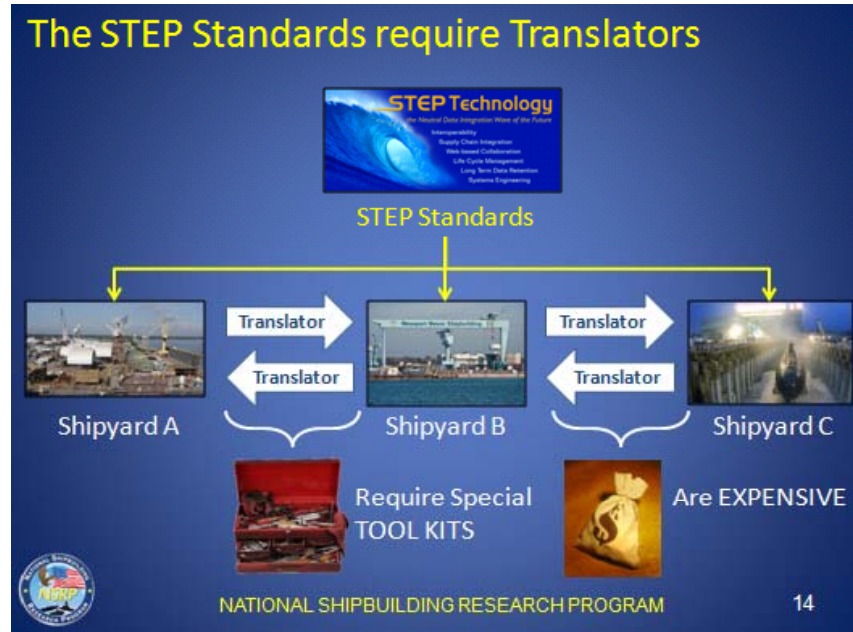
Appendix A

Guideline 3: Position the text close to the image that depicts it

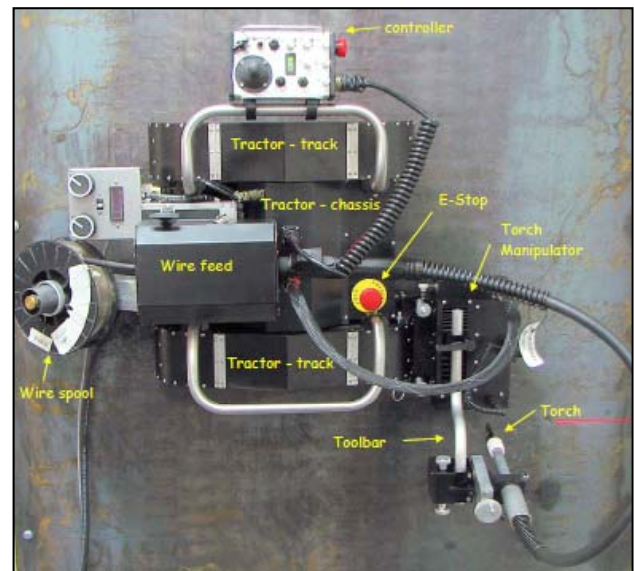
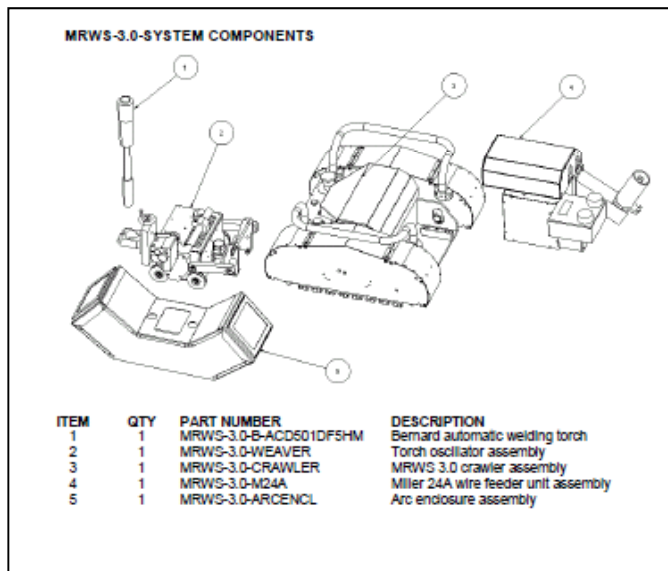
The viewer of the presentation should not expend time looking for text related to images. Ensure that the text is as close to the image that it describes as possible.

Example from slide 14 from the SCIM presentation:

Notice in the example below how the text “Translator” is inside the arrows and the other text is close to what they describe...



In the examples below, the first diagram has labels separated from the objects they represent. The viewer must take time to look at the object and match it with the label from the list. The second image has the labels at the location of the objects they describe. No such effort is expended identifying the object...



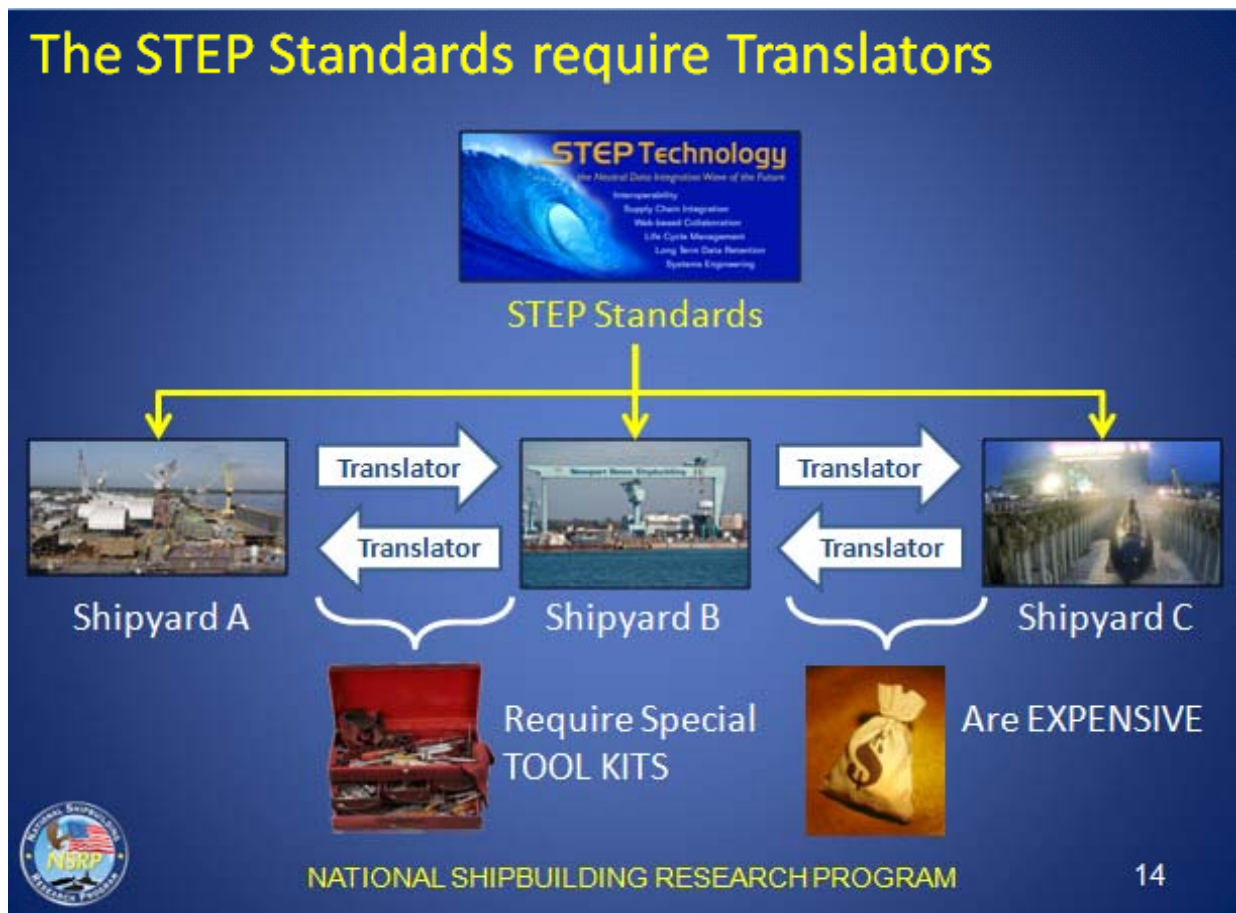
Appendix A

Guideline 4: Synchronize the display of content

When a slide displays several items, synchronize them using the animation feature in Power Point to come in incrementally so that the viewer’s attention is not distracted or overwhelmed at once. Any narration should also be synchronized to the display of the content to which it refers.

Example from slide 14 of the SCIM presentation:

This slide is relatively complicated . To avoid overwhelming the viewer, animation was used to bring in the labeled images incrementally and synchronized with the narration (see narration text below). You can view the animation of this slide by opening to slide 14 of the SCIM Power Point Presentation and view it in slide show mode.



Narration:

- The STEP Standards require Translators to share the data between different systems and between shipyards
- Developing the translators requires specialized knowledge and special software tool kits, making them expensive to implement

Appendix A

Guideline 5: Use cues to direct attention to important content

Do not leave the viewer searching for what is being referred to by the narration. At the proper time, display cues to direct their attention to what is being discussed. This helps to prevent the attention of the viewer from wandering to other images not relevant to what is being narrated. Cues come in many different forms.

Purpose of this presentation:

- ➔ What an IPDE is and why the sharing of data is important
- ➔ An overview of the SCIM and how it can be used within an IPDE
- ➔ The ability of the SCIM to allow the sharing of data between organizations
- ➔ Factors affecting the implementation of the SCIM



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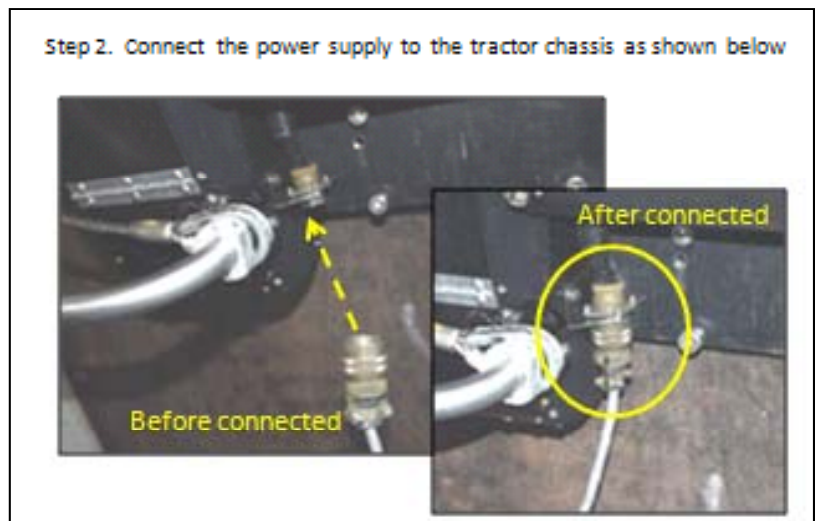
Example from slide 2 of the SCIM presentation:

This slide shows how animation can be coordinated with cues in order to direct the attention of the viewer. The arrows are displayed one-at-a-time and the text that they point to changes color and then returns back when the next arrow is displayed. The viewer's attention is directed to each purpose statement when it is narrated.

Step 2. Connect the power supply to the tractor chassis as shown below



The 2 images on the left show a step without the cues. The images on the right include the cues. You can see that it is easier to follow the expected action when the cues are present.



Appendix A

Guideline 6: Personalize the presentation

Use a pleasant voice for the narration and present the narration in a soothing and conversational style.

View the SCIM presentation and listen to the narrator's voice.

She models this guideline throughout the presentation.

Appendix A

Guideline 7: Use real images whenever possible

Stay away from clip art or symbols if a real image of the topic can be used. Refer to Appendix B for guidelines on taking good pictures.

Example from slide 9 of the SCIM presentation:

In this example, it was decided to go with actual images of the respective shipyards, rather than have a clip art image of a shipyard in the labeled box. The effect is more professional and representative. The overlapping text in the middle comes in one-at-a-time in the actual presentation so as to direct attention when needed.

Most recent and future U.S. Navy ship contracts involve multiple shipyards

Newport News Bath

Virginia Class
Ford Class
Ohio Replacement Class
Carrier Class

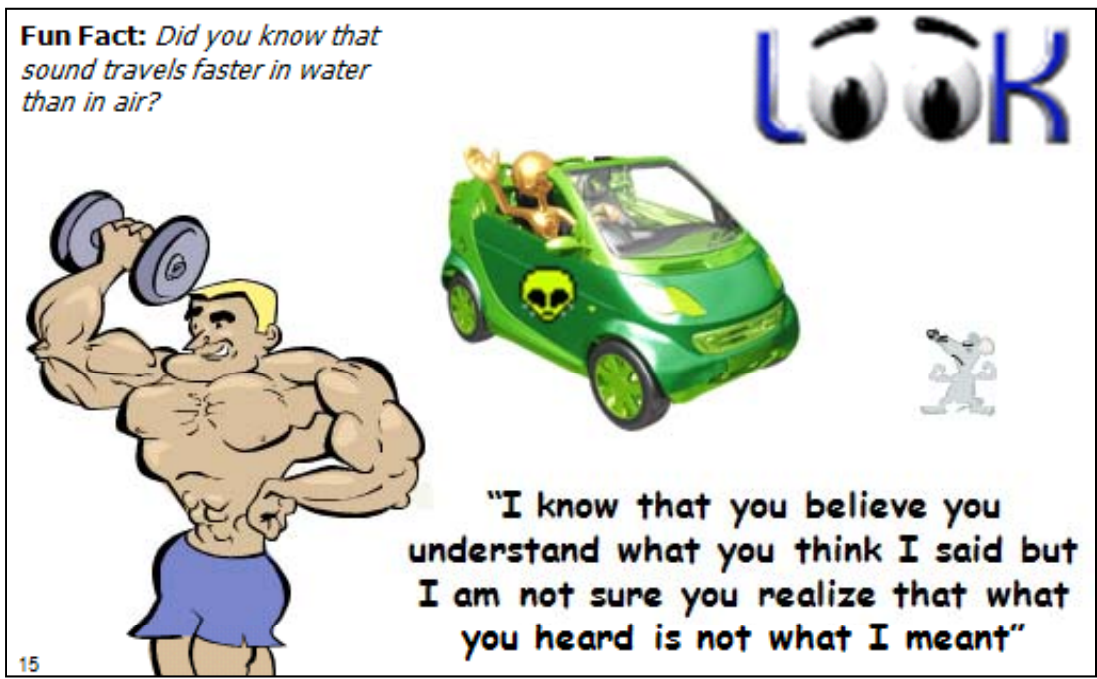
Ingalls Electric Boat

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Appendix A

Guideline 8: Leave out distracting text and images

Text and images that are added to a slide can be interesting or “cute”; however, they will distract the viewer if they are not directly relevant to the performance expected. This holds true for animations such as the image of the word “Look” below. The eyes blink in slide show monde on a slide (this one is just a copy and does not blink). Many times, even actual images are displayed with good intentions; however, if it does not support the objective, they should be left off. Remember, less is better.



Appendix B Taking good Pictures

Guideline 1: If any of your color pictures may end up as printed black and white images, you can first view them in B & W to make sure the contrast is correct.

Guideline 2: Do not use the camera flash in these situations:

- When shooting large area floor spaces like shops; rather use available light.
- When the subject is naturally illuminated and you want to capture the effect.
- When the object has it's own light.
- Outdoors when you want to capture details by eliminating shadows.

Guideline 3: Use the flash in these situations:

- Use a flash to add light to dimly lit subjects within 10 – 12 feet (depending on the strength of the flash).
- Use a flash when detail needs to be highly visible
- Use a flash to fill-in dimly lit or heavy shadows
- Use a flash to override an unusual color balance

Guideline 4: A tripod will steady the camera with close-up shots, manual settings, and to avoid small movements.

Guideline 5: Learn all of the functions of your camera and take time to think through a shot.

Guideline 6: Use the rule of thirds:

The rule of thirds is a method for composing visual images. The composer visualizes 9 equal parts of the picture as shown in the picture below.

Notice that the picture to the right is divided into 9 equal parts. The important elements of the image should be placed along these lines or their intersections. For example, the horizon falls along one of the horizontal lines. The tree is located at one of the intersection points of 2 of the lines. The brightness of the sun is close to one of the intersection points. Those who use this rule claim that it creates more tension, energy, and interest in the image.



Image: User Moondigger/CC-BY-SA-2.5 from Wikipedia

Commons

Appendix B Taking good Pictures

Guideline 7: Consider the direction of lighting by observing the subject and seeing where shadows fall.

Guideline 8: An image is more personal when you get down on the level with your subject.

Guideline 9: Use a plain background in order to avoid distractions and clutter.

Guideline 10: Move closer to fill the image with your subject and capture details while avoiding background distractions

Guideline 11: Take a picture of certain subjects (if they are vertically oriented) in a vertical orientation to add variety to your images.

Guideline 12: Add creativity by composing your picture rather than just taking what is there.

Guideline 13: Lock the focus to capture details of a subject that is off-center (like when using the rule of thirds). Otherwise, when taken off-center, the camera will focus on the center of the shot and the subject may be blurred.

Follow these steps:

1. Center the subject in the view
2. Then, press the shutter button part way down (this will lock the focus on the centered subject)
3. While holding the shutter button part way down, reframe your subject off-center
4. Lastly, press the shutter button all the way to take the picture

Appendix C

Taking good Videos

Guideline 1: Always plan ahead...A storyboard is a useful planning tool. It will reduce your time at the video location and keep you from going off on a tangent.

Guideline 2: Have an establishing shot...This is at the opening of the video. It is usually shot where the action of the video will take place. It provides context for the rest of the video. For example, a welding video may have an opening shot of the welding area including the bulkhead and seam that needs welding.

Guideline 3: Use Close-ups...Fill up the viewing window with the main subject that is being shot. Any extraneous background material will be distracting and interfere with the purpose of the video.

You can start with a wide shot, transition to a medium shot, followed by a close-up. You may even continue with an extreme close-up, depending on the subject.

Guideline 4: Try a variety of angles and positions...Shooting from the same spot will make for a boring video. Variety is the spice of life, even with making a video.

Guideline 5: Include cutaway shots...A cutaway shot is a different shot related to the main theme. For example, if you were shooting the robotic welder in action, you may have a cutaway shot of the person operating it with the remote control.

Guideline 6: Keep your video steady with a tripod...This will allow for a smoother panning that that will avoid shaking and focus problems.

Guideline 7: Take advantage of built-in editing capabilities...For example, the video camera may have a built-in “fade-in” and “fade-out” feature for whenever you start and stop.

Guideline 8: Don't forget to check the sound level...You do not want the sound to be too high or too low.

Guideline 9: Add professionalism with a movie editor...There are several movie editing software products available and many are inexpensive and easy to learn. You can make your video stand out with a few simple techniques.

Appendix D Transfer Attributes

The purpose of the transfer attributes are to showcase the advantages of implementing the project technology to the interested shipyards.

The questions below are to aid in identifying any attributes that may apply to the project being presented.

These transfer attributes that are identified should be used on the Presentation Template slide entitled, “Why your shipyard should be interested in implementing the “project technology.”

Of course, each project will have its own set of transfer attributes and there may be others that are specific to your project not indicated below.

The purpose is to identify any positive attribute that will show why the technology should be transferred (implemented) by the shipyard that reviews the technology transfer presentation.

Questions to aid in identifying transfer attributes:

1. How easy/fast is it to setup the project technology for operation?
2. How many workers does it take to set it up and/or operate?
3. How easy is it to maintain the technology? How often is it maintained?
4. What is the cost of consumables, if any, that need replacement and how often do they need to be replaced?
5. Are any workflows required by the technology compatible with current shipyard workflows?
6. Are the personnel job tasks and competencies required by the technology compatible with current shipyard personnel skill sets?
7. Would current shipyard facilities be acceptable for storage, operation, and maintenance of the technology?
8. Would current policies and safety practices be adequate in the implementation of the technology?
9. Is a training package a deliverable with the project technology that a shipyard will receive (eliminating the need for an individual shipyard to develop training for their personnel)?
10. **Are there any metrics from the testing or piloting of the technology that would indicate a benefit to the shipyard implementing it? NOTE: See Appendix E: Hard Data, for attributes that can be used to identify any metrics that may apply to the project technology.**

Appendix E

Hard Data that Support Transfer Attributes

Use these data attributes to identify metrics that may be applicable to your project. The metrics identified by your project may then be used to populate the Presentation Template slide entitled, “Why your shipyard should be interested in implementing the “project technology.”

Output:

1. Completion rate
2. Units produced
3. Tons manufactured
4. Items assembled
5. Money collected
6. Items sold
7. New accounts generated
8. Forms processed
9. Loans approved
10. Inventory turnover
11. Patients visited
12. Applications processed
13. Students graduated
14. Tasks completed
15. Output per hour
16. Productivity
17. Work backlog
18. Incentive bonus
19. Shipments

Time:

1. Cycle time
2. Equipment downtime
3. Overtime
4. On-time shipments
5. Time to program completion
6. Processing time
7. Learning time
8. Meeting schedules
9. Repair time
10. Efficiency
11. Work stoppages
12. Order response
13. Late reporting
14. Lost time days

Quality:

1. Failure rates
2. Dropout rates
3. Scrap
4. Waste
5. Rejects
6. Error rates
7. Rework
8. Shortages
9. Product defects
10. Deviation from standard
11. Product failures
12. Inventory adjustments
13. Time card corrections
14. Incidents
15. Compliance discrepancies
16. Agency fines

Costs:

1. Shelter costs
2. Treatment costs
3. Budget variances
4. Unit costs
5. Cost by account
6. Variable costs
7. Fixed costs
8. Overhead costs
9. Operating costs
10. Program cost savings
11. Accident costs
12. Program costs
13. Sales expense
14. Participant costs

From: Phillips, Patricia and Phillips, Jack (2007) *The Value of Learning: How Organizations Capture Value and ROI*, Pfeiffer, San Francisco, CA