Division of Juvenile Justice Services – Course on Human Performance Technology Instructional Design and Evaluation Plan Ladd Kevin Newsome Purdue University

Abstract

This is a full instructional design and evaluation plan for a course on Human Performance Technology, for the Utah Division of Juvenile Justice Services. After conducting a thorough performance analysis and needs assessment it was determine that there is a performance gap between where the Division is (implementing "gut-feeling" solutions), and where the division would like to be (implementing well thought out and effective solutions). To resolve this performance gap, it was determined that the best plan of action would be to develop a course on Human Performance Technology that would give supervisory staff the knowledge and tools necessary to conduct a thorough analysis of potential staff performance problems. Within this report you will find a full instructional design plan laid out in conjunction with the Dick and Carey Instructional Design Model (2015), and an evaluation plan laid out according to the Kirkpatrick 4-Levels Evaluation Model (2006). The report contains sections on: Front End Analysis, Objectives and Assessments, Design and Development, Implementation, and Evaluation. This report is intended to give the reader a full and clear picture of how the final course will look, feel, and behave.

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Introduction

The Division of Juvenile Justice Services is a place that is filled with challenges and tribulations not only for the youth which are served by the Division, but for the staff working within the Division as well. Staff working within the Division, those working directly with the youth and those who work to make sure it runs smoothly, have difficult jobs that often times get overlooked. They work with at-risk youth from across a state that is so diverse that they may be working with a transgender youth one day, a gang youth the next, a mental health youth the day after, and a Native American youth the day after that. With a job as difficult as this it often seems as though staff are not performing up to their highest standards, that they aren't motivated to work, or that they just don't have the skills or knowledge necessary to do the job. However, how often is the difficulty of the job taken into account? How often do we forget that there are not always rules regarding how to handle some of the situations thrown at staff? How often do we assume that training will be the answer to all of our problems?

The purpose of this instructional design plan is to lay out the instructional design and evaluation plan for a new course on Human Performance Technology (HPT), for the Division of Juvenile Justice Services (DJJS). This course will be a two-part course consisting of an online asynchronous course where the learner will get an introduction to HPT, and a live classroom course where the participants will learn to analyze performance problems. The purpose of this course is to get Division supervisory staff into the mindset of being cause-conscious instead of solution focused; meaning that they need to identify the cause of the performance problems before they try to apply fast fixes. This project is not about manipulating staff into working harder, controlling behavior, or getting any staff into trouble for their lack of performance. What the project is about, is reducing unnecessary training and expenditures related to the implementation of failed performance interventions, and to help supervisory staff see performance in a new light, and to use this to benefit not only themselves but their staff as well.

For this report and project, I will be using the Dick and Carey Instructional Design Model (2015) as a guide for the creation of the course and the instructional design plan. In addition, I will as use the Kirkpatrick 4-Levels Evaluation Model (2006) as the foundation for designing and creating the projects evaluation plan. As you read through the instructional design plan you will notice it is broken up into a number of different sections according to the D&C Model (2015): Front End Analysis, Objectives and Assessments, Design and Development, Implementation, and Evaluations. This instructional design plan should give a clear picture of how the final course will look, feel, and behave.

Front End Analysis

Instructional Goal

The goal of this course is to provide staff with the necessary tools to properly resolve staff performance problems in an effective and long lasting way. This will be done by showing staff how to identify worthy performance problems, identify the true causes of these performance problems, and how to identify effective solutions that produce valued accomplishments. It is simple to find a solution to a performance problem, but it is not as simple to find an effective one.

Needs Assessment

To assess the gap between where the Division is at, and where the Division should be, in regards to solving staff performance problems, I conducted observations during various planning meetings, had

discussions with current problem solvers within the Division, and talked with various co-workers to gain an insight into how performance problems are currently being resolved. Ideally, all performance problems would be analyzed, and effective solutions would be implemented to target the root causes of the performance problem, while still following all Division policy. However, what seems to be the case is that instead of conducting any sort of analysis of the problem, either formal or informal, staff instead go with their gut feeling on how to resolve the performance problem. Though no analysis was conducted to determine losses incurred by ineffective solutions being implemented, it is safe to assume that each solution implemented has the potential to incur huge costs due to the time, money, and resources needed to implement any solutions. There is clearly a gap between where the Division would ultimately like to be, and where it currently is. Further analysis was conducted to determine the best course of action in regards to shrinking this gap.

Performance Analysis

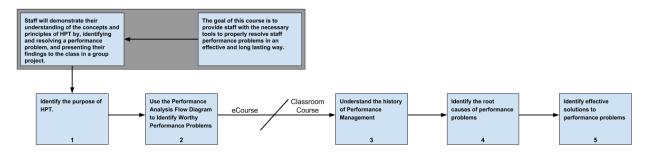
During the performance analysis I conducted observations during various planning meetings, had discussions with current problem solvers within the Division, and talked with various co-workers to gain insight into how the Division is currently handling staff performance problems. In the needs assessment it was determined that there was a gap between where the Division would like to be (careful consideration and implementation of effective performance solutions), and where they are currently at (implementing solutions according to "gut feeling," and what has "worked" in the past). Due to this discovery a closer analysis was conducted, and a number of causes were identified (*See Appendix A*).

Using Chevalier's Cause analysis worksheet and Force Field Analysis (2003), two main contributors to the performance problem were identified: 1) Staff seem to have no knowledge of how to conduct any sort of cause analysis (formal or informal), & 2) there are no clear expectations that staff should be conducting any sort of analysis to help identify effective solutions. After conducting the performance analysis two interventions were identified: 1) Develop a course that teaches supervisory staff how to identify worthy performance problems (those where the increased value would outweigh the costs), how to use cause analysis tools to identify the root causes of performance problems, and how to identify and leverage effective solutions. 2) Gain buy-in from upper management to ensure that the information in the course is being used throughout the division, and so that they can see the value in the course.

These two interventions were selected because of the benefits that were identified in both. In conducting the Force Field Analysis, it became apparent that the key restraining forces in this performance problem were centered on a lack of clear expectations and feedback, as-well-as a lack of knowledge and skill. To begin closing the gap between where the Division is, and where the Division wants to be it was decided that addressing these two areas would be the best possible solution. In addition, it also seemed that these interventions would help to address some of the other causes of the performance problem through the idea of *diffusion of the effects* (Winiecki, 2015 & Chyung, 2005). It is assumed that these interventions will diffusion down and effect change in the other problem areas: through the course we can identify quick ways to perform the analysis that should save staff time (resources), it will show staff the possible outcomes that could come from conducting, or not conducting, a proper analysis (incentives/consequences), which in turn should motivate the staff to begin using the tools given to them during the class (motivation).

Task Analysis and Learning Type

This is an ill-structured intellectual skill that will require verbal information, and intellectual skill to understand concepts and use rules to solve problems.



(For the full Task Analysis refer to Appendix B)

Learner Analysis

The target audience for this course will be Utah Division of Juvenile Justice Services supervisory staff. This will consist of any staff within the Division who are in a supervisory role: Counselor III's, Supervisors, Assistant Program Directors, Program Managers, and the Executive Management Team. Staff that make up the division Training Committee, as well as the members of the Training Bureau, will also be a part of the target audience and will take the course because of their roles in solving training problems throughout the Division. The staff who make up the Training Committee work in various capacities throughout the Division, and come from each of the programs operated by the Division. The Division of Juvenile Justice Services is made up of roughly 30 different facilities, around the state of Utah, that work to support and help at-risk adjudicated youth. These facilities range in services from early intervention and observation and assessment, to long term secure care facilities and detention centers. The staff's roles in helping these youths are to teach them the skills to think critically, live independently, and to become productive members of society. For this course in particular, these staff will focus on learning how to manage their own staff's performance problems. The Division already employs a number of Evidence Based Practices for helping staff to manage the youth's performance and behavior problems, and so the course will not focus on helping staff to learn these skills.

Context Analysis

This course will be a two part course: 1) An online asynchronous course and 2) A live face-to-face classroom course. Within the online course students will be allowed to take the course at their own convenience, but will be required to take the online course prior to attending the live face-to-face course. The course will be hosted using the Divisions learning management system – Adobe Connect, and all staff, who will be attending the live face-to-face course, will complete the course during regular work hours. To complete the course staff will need access to a computer, a printer, and have the time available to complete the course. Some of the constraints are:

 Many of the computers in the Division are outdated, and so the course must remain relatively small (for quicker download times), or an offline version of the course should be provided to the staff. Not all the computers within the Division are capable of printing, and so a .pdf will have to be sufficient; instructions for how staff can save an electronic version of their work should be provided.

The live face-to-face classroom course will take place at the Divisions Training Center. The course will be a one day, 8-hour course that will consist of lecture, group-work, and a group-presentation. Staff will not be required to bring anything to the class other than a writing utensil and their print-out from the online course. All other materials will be provided by the Training Department and the course instructor. Since staff will be attending the course from around the state, it will be important to set up the course in advance so staff may make the necessary travel arrangements.

Objectives and Assessments

Assessment Instruments

Entry Skills Assessment. No entry skills assessments will be given for this particular course. The topic of this course is something the Division is not currently using, and so it has been assumed that the staff will have no prior knowledge of any of the topics, terms, or tools that will be taught during this course. The only entry skill identified during the task analysis is the ability to calculate costs, a math skill that all participants should have because of their current positions within the Division. All information and data collected during the Performance Analysis will be used in place of an entry skill assessment, and will be used to help shape the course.

Pretest. Because the Division is not currently using any form of HPT, no pretests will be conducted. All information and data collected during the Performance analysis will be used in place of any pretests, and will be used to help shape the course.

Practice Test. For the online course, the practice test will be the question and answer flow chart drill. This will consist of the learner answering a number of questions in regards to identifying a worthy performance problem. These questions will be based around identifying the performance gap, calculating the performance problem worth to determine if it is worth pursuing, identifying potential barriers to consequences, determining if the problem is caused by a skill deficiency, and looking at any other potential barriers causing the performance problem. The purpose of this is to help learners understand how the Performance Analysis Flow Diagram works, how to use it, and what questions should be asked to identify a worthy performance problem. The answers to these questions will then be printed off, by the learner, at the end of the course and they will bring their answers into the classroom course. They will then compare their results with others in the group to identify the most worthy performance problem for their group project. In addition, a number of quick practice quizzes will be implemented into the online course. These quick practices will not be graded, they will only be used as a reference for the learner to check their understanding of the concepts (*See Appendix C*).

The group project will be completed and presented during the classroom course. During the classroom course we will hit on two main topics regarding how to resolve performance problems: 1) Identifying the causes of performance problems and 2) Identifying solutions to performance problems. The practice of these skills will be done as groups throughout the course. After each of these main sections, and at the end, the groups will breakout to work together on compiling the information for their final presentation.

During these breakout sessions the instructor will guide the groups and offer feedback to them, however all information must come from and be collected by the individual groups.

The entire class will also work together to solve a performance problem all the way from the beginning to the end. This will give them an example to work off of for their own projects, and help to guide them through the performance analysis process. Though this will mostly be used as a learning tool, it does offer the learner a chance to practice using the HPT tools prior to breaking out for their own group projects.

Posttest. For the online course there will be a simple word matching posttest. The purpose of this test is to ensure that the learners have a full understanding of the main verbiage associated with human performance technology. Many of the terms used within HPT are very specific in there meaning, and so it is important that the learners have a solid grasp of these terms and know what each means. This will be important for them throughout the online course, and throughout the classroom course. The word matching posttest will consist of 10 words and their definitions (*See Appendix D*), and staff must get a score of 100% to pass the matching posttest. A score of 100% will be required because of the simplicity of the posttest, and because staff will be allowed to go back and review the course while taking the test.

The posttest for the classroom course will be a graded group presentation. In the class there will be 4-5 groups that will each be broken out into 4-6 members. Within these groups the members will be responsible for: 1) Identifying the groups worthy performance problem, 2) Identifying the causes of their group's performance problem, and 3) Identifying potential solutions for their group's performance problem. Once they have compiled their group presentations they will be give 10-15 minutes to present their findings to the class. Things that will be looked for by the instructor are: whether they identified a truly worthy performance problem and the steps they took to do so, what tools they incorporated to identify the causes of the performance problems and if they included all possible causes from all stakeholders, what solutions they identified, how they identified them, if they conducted a cost analysis of the solutions to leverage them, and if the solutions are feasible (*See Appendix E*).

Main Instructional Goal	Terminal Objective	Test Item
The goal of this course is to	Staff will demonstrate their	After completing both the online
provide staff with the necessary	understanding of the concepts	course, and the live face-to-face
tools to properly resolve staff	and principles of HPT by	course, staff will be required to
performance problems in an	identifying a performance	complete a group presentation.
effective and long lasting way.	problem, findings its root causes,	This presentation will consist of
	and identifying potential	each group describing the
	solutions; they will demonstrate	performance problem they
	their ability to do this by	identified, how they identified it
	presenting their findings to the	as a worthy performance
	class in a group project.	problem, the causes of the
		performance problem that they
		identified, and the possible
		solutions they came up with.
		Each presentation will be 5-10
		minutes in length and each
		group will be required to
		complete a presentation.

Assessment Items and Objectives

Main Instructional Goal	Performance Objective	Test Item
1.	Staff will be able to accurately	At the end of the online course
Identify the purpose of HPT	define human performance	there will be a short matching
	technology, and its components,	quiz where the learners are
	according to what is taught in	required to identify the
	the online course.	definition of a number of HPT
		concepts. They will be required to get a score of 100% to pass.
Main Instructional Goal	Subordinate Objectives	Test Item
1.1	After completing the online	At the end of the online course
Define Human Performance	course, staff will be able to	there will be a short matching
Technology	identify the definition of HPT,	quiz where the learners will be
	during a short online quiz.	required to identify the
		definition of <i>"Human</i>
		Performance Technology."
1.2, 1.2.A, & 1.2.B	After completing the online	At the end of the online course
Differentiate between behavior	course, staff will be able to	there will be a short matching
and accomplishment	identify the definitions of	quiz where the learners will be
	behavior and accomplishment,	required to identify the
	during a short online quiz.	definitions of "Behavior &
		Accomplishment."
1.3, 1.3.A, & 1.3.B	After completing the online	At the end of the online course
Identify what worthy	course, staff will be able to	there will be a short matching
performance and valued	identify the definitions of worthy	quiz where the learners will be
accomplishments are	performance and valued	required to identify the
	accomplishments, during a short	definitions of <i>"Worthy</i>
	online quiz.	Performance and Valued
Main Instructional Goal	Performance Objective	Accomplishments." Test Item
2.	Staff will be able to identify	Throughout the online course
Use the Performance Analysis	performance problems, using	the learner will answer various
Flow Chart to identify worthy	the Performance Analysis Flow	questions to help them
performance problems	Diagram, developed by Mager &	determine if they have identified
h	Pipe (1997), to identify a real life	a worthy performance problem.
	performance problem for their	All answers will be available to
	group project.	be printed off at the end. They
		will bring these with them to the
		classroom course, and will use
		them to identify the best
		problem for their group projects.
Main Instructional Goal	Subordinate Objectives	Test Item
2.1	By answering a number of	To identify the performance gap
Identify the performance gap	questions during the online	the learner will answer a number
	course, staff will be able to	of questions:
	identify the performance gap,	3) Whose performance is
	for their particular performance	being examined?
	problem.	

2.1.A & 2.1.B	After completing the online course, staff will be able to	 4) What is the desired performance? 5) What is the actual performance? At the end of the online course there will be a short matching.
Define Performance Gap Define Potential for Improving Performance	identify the definitions of performance gap and potential for improving performance, during a short online quiz.	there will be a short matching quiz where the learners will be required to identify the definitions of <i>"Performance Gap</i> <i>and Potential for Improving</i> <i>Performance."</i>
2.2 & 2.2.A Use W = V-C to identify if it is a problem worth pursuing	By answering a number of questions during the online course, staff will be able to use W=V-C to determine if the problem is worth pursuing, for their particular performance problem.	 To determine if the problem is worth pursing, the learner will answer a number of questions: 6) What would happen if 1 left it alone? 7) What are the costs caused by the discrepancy? 8) What would be the value of fixing the problem? 9) Would the costs outweigh the value? 10) Can we apply fast fixes?
2.3 Identify any potential barriers in regards to consequences	By answering a number of questions during the online course, staff will be able to identify any potential barriers in regards to consequences, for their particular performance problem.	To determine if there are any potential barriers in regards to consequences, the learner will answer a number of questions: 11) Is desired performance punishing? 12) Is undesired performance rewarding? 13) Are there any consequences at all?
2.4 Determine if the performance problem is caused by a skill deficiency	By answering a number of questions during the online course, staff will be able to determine if the problem is cause by a skill deficiency, for their particular performance problem.	To determine if the skill is something they should already know, the learner will answer a number of questions: 14) Is it a skill deficiency? 15) Could they do it in the past? 16) Is the skill used often? 17) Do they have what it takes?
2.5 Recognize and identify other barriers	By answering a number of questions during the online course, staff will be able to	To determine if there are any other obvious barriers to the performance problem, the

	identify any other potential barrier, for their particular performance problem.	learner will answer a number of questions: 18) Does anything get in the way of doing it right? 19) Are there conflicting demands? 20) Are their Restrictive Policies?
Main Instructional Goal	Performance Objective	Test Item
3. Understand the history of performance management	During the classroom course, staff will learn about the history of performance management, and will be able to identify how it has changed throughout the years, and will use this to help guide them in the creation of	Learners will work in groups to identify a performance problem, identify the causes of the performance problem, and identify solutions. They will then present their findings to the class as a 10-15 minute group
	their group projects.	presentation.
Main Instructional Goal	Subordinate Objectives	Test Item
 3.1 Define theories 3.2, 3.2.A, 3.2.B, & 3.2.C Identify the difference between Scientific Management, Modern 	After completing the classroom course, staff will have a solid understanding of the definition of theories, and will use it to help guide them in the creation of their group projects. After completing the classroom course, staff will have a solid understanding of the definitions	Learners will work in groups to identify a performance problem, identify the causes of the performance problem, and identify solutions. They will then present their findings to the class as a 10-15 minute group presentation. Learners will work in groups to identify a performance problem, identify the causes of the
Management, and HPT	and history of scientific management, modern management, and human performance technology, and will use it to help guide them in the creation of their group projects.	performance problem, and identify solutions. They will then present their findings to the class as a 10-15 minute group presentation.
Main Instructional Goal	Performance Objective	Test Item
4. Identify the root causes of performance problems	In groups, staff will be able to lay out and identify causes of their performance problem, using a number of different analysis models, and will present their findings to the class.	Learners will work in groups to identify the causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
Main Instructional Goal	Subordinate Objectives	Test Item
4.1	After completing the classroom course, staff will have a solid	Learners will work in groups to identify the causes of their

Identify the HPT mantra, and define what it means	understanding of the HPT mantra, and will use it to help guide them in identifying the causes of their performance	particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.2 Describe the importance of the "Behavior Cult"	problem. Staff will be able to identify and describe the importance of the "Behavior Cult," and will use this to help guide them in identifying the causes of their performance problem.	Learners will work in groups to identify the causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.2.A, 4.2.B, & 4.2.C Define the Subcult of Work Define the Subcult of Knowledge Define the Subcult of Motivation	After completing the classroom course, staff will have a solid understanding of the definitions of subcult of work, knowledge, and motivation, and will use these to help guide them in identifying the causes of their performance problem.	Learners will work in groups to identify the causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.3 Identify Gilbert's Three Leisurely Theorems	Staff will be able to identify and describe Gilbert's Three Leisurely Theorems (2007), and will use these to help guide them in identifying the causes of their performance problem.	Learners will work in groups to identify the causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.4 Use Gilbert's Behavior Engineering Model to identify the causes of the performance problem	During the classroom course, staff will be able to use Gilbert's Behavior Engineering Model (2007) to identify potential causes of their performance problems.	Learners will work in groups and use Gilbert's Behavior Engineering Model (2007) to identify the causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.5 Use Marker's Synchronized Analysis Model to identify environmental causes	During the classroom course, staff will be able to use Marker's Synchronized Analysis Model (2007) to identify potential environmental causes of their performance problems.	Learners will work in groups and use Marker's Synchronized Analysis Model (2007) to identify environmental causes of their particular performance problem. They will then present their findings to the class as a 10-15 minute group presentation.
4.6 Use Chavelier's Cause Analysis Worksheet to identify driving and restraining forces	During the classroom course, staff will be able to use Chavelier's Cause Analysis Worksheet (2003) to identify the driving and restraining forces of their performance problems.	Learners will work in groups and use Chavelier's Cause Analysis Worksheet (2003) to identify the driving and restraining forces of their particular performance problem. They will then present

		their findings to the class as a 10- 15 minute group presentation.
4.6.A & 4.6.B Define Driving Forces	After completing the classroom course, staff will have a solid	Learners will work in groups to identify the causes of their
Define Restraining Forces	understanding of the definitions of driving forces and restraining	particular performance problem. They will then present their
	forces, and will use these to help	findings to the class as a 10-15
	guide them in identifying the causes of their performance	minute group presentation.
Main Instructional Cool	problem.	Test litere
Main Instructional Goal	Performance Objective In groups, staff will be able to lay	Test Item
J Identify effective solutions to the	out and identify possible	Learners will work in groups to identify effective solutions to
performance problem	solutions to improve their	their performance problem.
performance problem	performance problems, and will	They will then present their
	present these solutions to the	findings to the class as a 10-15
	class.	minute group presentation.
Main Instructional Goal	Subordinate Objectives	Test Item
5.1	After completing the classroom	Learners will work in groups to
Identify a number of potential	course, staff will identify a	identify a number of potential
solutions	number of potential solutions for	solutions to their performance
	their performance problem, and	problem. They will then present
	will present their findings to the	their findings to the class as a 10-
	class as a group project.	15 minute group presentation.
5.1.A, 5.1.B, 5.1.C, & 5.1.D Define/Describe Learning	After completing the classroom course, staff will have a solid	Learners will work in groups to identify effective solutions to
Interventions	understanding of learning,	their performance problem.
Define/Describe Performance	environmental, and emotional	They will then present their
Aids	interventions and Performance	findings to the class as a 10-15
Define/Describe Environmental	Aids, and will use these to help	minute group presentation.
Interventions	guide them in identifying	
Define/Describe Emotional	potential solutions for their	
Interventions	performance problem.	
5.2	After completing the classroom	Learners will work in groups to
Leverage the Solutions	course, staff will have a solid	leverage the solutions to their
	understanding of how to	performance problem. They will
	leverage the solutions to select	then present their findings to the
	the best possible solutions for	class as a 10-15 minute group
	their performance problem.	presentation.
5.3	After completing the classroom	Learners will work in groups to
Calculate the ROI of each	course, staff will have a solid	calculate the return on
potential solution	understanding of how to	investment for the potential
	calculate the return on	solutions to their performance
	investment, for the potential	problem. They will then present
	solutions they identified for their performance problem.	their findings to the class as a 10- 15 minute group presentation.
		To minute group presentation.

5.3.A	After completing the classroom	Learners will work in groups to
Define Return on Investment	course, staff will have a solid	identify effective solutions to
(ROI)	understanding of Return on	their performance problem.
	Investment, and will use this to	They will then present their
	help them leverage potential	findings to the class as a 10-15
	solutions for their performance	minute group presentation.
	problem.	
5.4	After completing the classroom	Learners will work in groups to
Select the most appropriate	course, staff will select the most	select the most appropriate
intervention plan	appropriate intervention plan for	intervention plan and solutions
	their performance problem, and	for their performance problem.
	will present their findings to the	They will then present their
	class as a group project.	findings to the class as a 10-15
		minute group presentation.

Cluster Analysis

The follow cluster analysis was broken up by the two separate courses, and according to the information being taught in each of the main instructional goals.

	Online Course			Classroom Cours	e
1	2	3	4	5	6
1	2	1.2.A	3	4	3.1
1.1	2.1	1.2.B	3.2	4.4	3.2.A
1.2	2.2	1.3.A	4.1	4.5	3.2.B
1.3	2.3	1.3.B	4.2	4.6	3.2.C
	2.4	2.1.A	4.3	5	4.2.A
	2.5	2.1.B	5.1	5.2	4.2.B
		2.2.A		5.3	4.2.C
				5.4	4.6.A
					4.6.B
					5.1.A
					5.1.B
					5.1.C
					5.1.D
					5.3.A

Content Presentation and Student Participation

Cluster 1

Objectives:

1. Identify the purpose of HPT; 1.1. Define Human Performance Technology; 1.2. Differentiate between behavior and accomplishment; 1.3. Identify worthy performance and valued accomplishments

Content Presentation:

Content: Introduce the learner to the concept of Human Performance Technology to help them understand the importance of it, and how it can benefit the Division.

Examples: Students will be introduced to the concepts of HPT through looking at the definitions of behavior and accomplishment. This is to show that performance should be a measure of accomplishment, not behavior.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login credentials to ensure they have completed the course, and they must complete the course before being allowed to take the classroom course.

Student Participation:

Practice Items and Activities: Given a multiple-choice matching test, staff will have to match 10 individual HPT concepts to their proper definition.

Feedback: Because this is an online course, students will instantly be given feedback as to whether their answers are correct or not. If they do not correctly answer they will be allowed to return to the course to find the correct answers. They must receive a score of 100% to pass the matching test.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login credentials to ensure they have completed the course. They must complete the course before being allowed to take the classroom course.

Cluster 2

Objective:

2. Use the Performance Analysis Flow Diagram to Identify Worthy Performance Problems; 2.1. Identify the Performance Gap; 2.2. Use W = V - C to identify if it is a problem worth pursuing; 2.3. Identify any potential barriers in regards to consequences; 2.4. Determine if the performance problem is caused by a skill deficiency; 2.5. Recognize and Identify other Barriers

Content Presentation:

Content: The learners will learn how to identify a worthy performance problem by following the Performance Analysis Flow Diagram developed by Mager & Pipe (1997). The leaners will be introduced to the idea of performance gaps, W=V-C, consequence barriers, how to recognize if the problem is a skill deficiency, and how to recognize other barriers to the performance problem.

Examples: Students will begin by identifying whose performance they are looking at, and then evaluating what their current performance is vs what the desired performance is.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login credentials to ensure they have completed the course, and they must complete the course before being allowed to take the classroom course.

Student Participation:

Practice Items and Activities: The learner will be asked to answer a number of questions that should help guide them through the Performance Analysis Flow Diagram. This will give them a solid performance problem that is worthy of moving on into the full cause analysis process. It will also give them a chance to practice using the flow diagram, and will provide them a hard copy of their answers to use during the classroom course.

Feedback: They will have the opportunity to work their way through the Performance Analysis Flow Diagram on an actual performance problem they have encountered in their work. As they answer the various questions throughout the course they will be given feedback on whether the performance problem they have identified should move into the cause analysis process. They will then take their results with them to the classroom course and will discuss these results with the other members of their group.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login credentials to ensure they have completed the course, and they must complete the course before being allowed to take the classroom course.

Cluster 3

Objective:

1.2.A. Define Behavior; 1.2.B. Define Accomplishments; 1.3.A. Define Valued Accomplishments; 1.3.B. Define Worthy Performance; 2.1.A. Define Performance Gap; 2.1.B. Define Potential for Improving Performance; 2.2.A. Define W = V - C or W = V/C (Worth, Value, Cost)

Content Presentation:

Content: The learners will learn the HPT definitions of several important HPT concepts, so that they can begin using them properly to identify worthy performance problems.

Examples: Students will learn the HPT definitions to 10 different HPT concepts: Human Performance Technology, Behavior, Accomplishments, Valued Accomplishments, Worthy Performance, Performance Gap, Potential for Improving Performance, Worth, Value, and Cost.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login credentials to ensure they have completed the course, and they must complete the course before being allowed to take the classroom course.

Student Participation:

Practice Items and Activities: Given a multiple-choice matching test, staff will have to match 10 individual HPT concepts to their proper definition.

Feedback: Because this is an online course, students will instantly be given feedback as to whether their answers are correct or not. If they do not correctly answer they will be allowed to return to the course to find the correct answer. They must receive a score of 100% to pass the matching test.

Student Grouping and Media Selection: Students will take this course individually in an online course at their own pace. Each student will be required to complete the course under their own login

credentials to ensure they have completed the course, and they must complete the course before being allowed to take the classroom course.

Cluster 4

Objective:

3. Understand the history of Performance Management; 3.2. Identify the difference between Scientific Management, Modern Management, and HPT; 4.1. Identify the HPT mantra, and define what it means; 4.2. Describe the importance of the "Behavior Cult"; 4.3. Identify Gilbert's Three Leisurely Theorems; 5.1 Identify a number of potential solutions

Content Presentation:

Content: This information revolves around teaching the concepts of HPT, and less on the tools used to solve performance problems (those are within cluster 5).

Examples: Learners will get a brief history of performance management looking back at Frederick Taylor's Scientific Management Model, and how it differs from Modern Management and Human Performance Technology.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Student Participation:

Practice Items and Activities: Learners will work as groups to create a 10-15 minute group presentation on a performance problem they would like to resolve. They will use the concepts of HPT to help guide their decisions, and their group project.

Feedback: During the group presentation the instructor will look for a number of key items to determine how well the group did in identifying and resolving their performance problem. This will give them direct feedback on their performance from the instructor, and they will also be given feedback directly from their peers.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Cluster 5

Objective:

4. Identify the root causes of performance problems; 4.4. Use Gilbert's Behavior Engineering Model to identify the causes of the performance problem; 4.5. Use Marker's Synchronized Analysis Model to identify environmental causes; 4.6. Use Chavelier's Cause Analysis Worksheet to identify Driving and Restraining Forces; 5. Identify effective solutions to performance problem; 5.2. Leverage the

Solutions; 5.3. Calculate the ROI of each potential solution; 5.4. Select the most appropriate intervention plan

Content Presentation:

Content: This information is aimed at helping the learners to understand how to use various HPT tools to identify the causes of performance problems, and to identify effective solutions that will help with the performance problem.

Examples: Using Chevalier's (2003) Cause Analysis Worksheet learners will be able to identify the driving forces and restraining forces of the current performance problem, and can use force field analysis to begin leveraging the potential solutions.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Student Participation:

Practice Items and Activities: Learners will work as groups to create a 10-15 minute group presentation on a performance problem they would like to resolve. They will use the various tools provided to them to help them identify the causes of the performance problem, and to begin identifying an effective intervention plan.

Feedback: During the group presentation the instructor will look for a number of key items to determine how well the group did in identifying and resolving their performance problem. This will give them direct feedback on their performance from the instructor, and they will also be given feedback directly from their peers.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Cluster 6

Objective:

3.1. Define Theories; 3.2.A. Define Scientific Management; 3.2.B. Define Modern Management; 3.2.C. Define Human Performance Technology; 4.2.A. Define the Subcult of Work; 4.2.B. Define the Subcult of Knowledge; 4.2.C. Define the Subcult of Motivation; 4.6.A. Define Driving Forces; 4.6.B. Define Restraining Forces; 5.1.A. Define and describe Learning Interventions; 5.1.B Define and describe Performance Aids; 5.1.C. Define and describe Environmental Interventions; 5.1.D. Define and describe Emotional Interventions; 5.3.A. Define Return on Investment

Content Presentation:

Content: The learners will learn the HPT definitions of several important HPT concepts, which they will then use to help guide the creation of their group projects. It will also give them a deeper understanding of the concepts of HPT, and help them to begin communicating the HPT concepts.

Examples: They will learn the definitions for the various subcults of the "Behavior Cult," so that they can ensure they avoid falling into the trap of work, knowledge, and motivation as indicators of effective performance.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Student Participation:

Practice Items and Activities: Learners will work as groups to create a 10-15 minute group presentation on a performance problem they would like to resolve. They will be graded by the instructor on their understanding of the various HPT concepts, and if they are able to properly incorporate these concepts into the presentation.

Feedback: During the group presentation the instructor will look for a number of key items to determine how well the group did in identifying and resolving their performance problem. This will give them direct feedback on their performance from the instructor, and they will also be given feedback directly from their peers.

Student Grouping and Media Selection: This will be a live face-to-face classroom course. The students will be broken up into 4-5 groups made up of 5-6 group members each. The course will be taught using a basic PowerPoint and lecture style, with a common performance problem that will be resolved together as a class.

Design and Development

Online Course

- Storyboard/Wireframe: The storyboard and wireframe for the online course will be created using Microsoft PowerPoint. The storyboard will detail exactly how the course will function, what information will be included, the objectives that will be addressed during each slide of the presentation, and will include the course script. Detailed wireframes will be included for each individual slide of the presentation to assist with the development of the final digital course (See Appendix E). The reason behind this is because it will be significantly easier to make adjustments in the detailed wireframe than it will be in the digital portfolio. This will help to save time both during the designing of the online course, and during the development of the full-digital course.
- <u>Script:</u> The script will be written alongside the creation of the storyboards and wireframe. This will help to ensure that the correct information is being scripted, and to ensure that each audio file is embedded in the proper location within the course. The script will be recorded using an external microphone to enhance the quality of the audio. For added quality, all audio files will be ran through a rendering process to remove any and all background static and noises. This is to ensure that the audio during the course is crisp and clear. Local talent from within the Division will be used to record all the audio. This should help to save on development costs for not hiring outside talent.
- <u>Matching Quiz, Quick Practices, and Flow Diagram Assessment</u>: The matching quiz, quick practices, and flow diagram assessment will all be storyboarded and wire framed alongside the

rest of the course. This will give a clearer understanding of how these assessments will work, where in the course they will take place, and how they will be laid out. The 10 words, and their definitions, for the matching quiz have already been selected and they are: Human Performance Technology, Behavior, Accomplishment, Performance Gap, Potential for Improving Performance (PIP), Valued Accomplishment, Worthy Performance, Worth, Value, and Cost (*See Appendix D*). For the Flow Diagram Assessment, a number of questions have been identified to help learners determine if their performance problem is a worthy performance problem or not. These questions can be found in the Assessment Items and Objectives Table found on pp. 9-10. This assessment will continue throughout the entire second half of the online course. Each question will be "yes or no," or short answer, and all responses will be recorded within the course and made available for the learner to print off at the end. Examples of the Quick Practices can be found in the Aspendix *(See Appendix C)*. The Quick Practice scores will not be recorded, they will be used solely as a reference for the learner to help them determine their level of understanding.

Digital Course: The digital course will be created using Adobe Captivate 8 and will be launched using the Division's LMS, Adobe Connect. All images for the course will be pulled from Pixabay.com to prevent any potential copyright issues. Scores for the matching quiz will not be collected by the LMS since learners must pass this with a score of 100%. The answers provided during the Flow Diagram Assessment will also not be collected by the LMS, learners will be required to print these off at the end of the course to take with them to the classroom course. The LMS will only track whether the learners actually completed the course or not. The Quick Practice scores will not be recorded, they will be used solely as a reference for the learner to help them determine their level of understanding.

Classroom Course

- Storyboard/Instructor Guide: For the classroom course a detailed storyboard/instructor guide will be created. The storyboard will outline exactly what will be going on during each moment of the class, and will give an overall timeline of the class. It will also go over what will should be discussed during the class and on each slide of the presentation. In addition, there will also be instructor notes to ensure that the instructor does not miss any key items, and a description of each activity will be given throughout the storyboard/instructor guide. The wireframe will be a detailed representation of the classroom presentation so that the instructor can use it as a reference throughout the classroom course.
- Classroom Performance Problem: Though this class is being designed for the Division of Juvenile Justice Services, the course content is not specifically being designed with the Division in mind. What this means is that the examples within the course are not only targeted at the Division, but for performance problems in general. The reason for this is so that the course can be easily applicable to any learner population, not just the Division of Juvenile Justice Services. However, to ensure that the course is tailored specifically to any learner population, and to make it applicable to them, a classroom performance problem will be analyzed together. This performance problem will be selected by the class, and all information will be pulled from the learners. The instructor will facilitate the discussion around analyzing this performance problem. The reason for this is to give the learners an opportunity to use the tools and skills they are learning prior to analyzing their own performance problems.

- Grading Sheet and Rubric: The grading sheet and rubric is for the group presentations. This will be used by the instructor to offer feedback, as-well-as an overall performance grade, to the groups on how well they implemented the concepts and tools taught during both the online course and classroom course. The grading sheet will consist of a number of questions that will be aimed directly at assessing each group's ability to identify a performance problem, identify the causes of the performance problem, and identifying potential solutions to the performance problem (See Appendix E). Grades will be given on a group basis, but individual feedback will be provided as needed. Copies of the filled out grading sheets will be provided to each member of the group so that they can keep it for their own records, and so they can look back on it. In addition to the grading sheet, there will be an opportunity at the end of each presentation for other group members to offer feedback on what the group did well, and what they could work on. This offers them the opportunity to evaluate other group member's abilities to analyze performance problems. Students will be graded on a scale of: Excellent, Good, Satisfactory, and Needs Improvement. They will not need to hit any particular score to pass the class, but if they do receive a lower grade it will be recommended that they go back and review the online course, and possibly re-take the classroom course.
- <u>Classroom Presentation</u>: The classroom presentation will consist of lecture, group discussion, and a PowerPoint presentation. The presentation will be conducted in a normal classroom setting, with the class split into 4-5 groups, with 5-6 members in each group. The materials need for this class are: a projector, a whiteboard or two, a number of large post-it note boards, dry erase markers, permanent markers, and print-outs of the presentation. The projector will be used to cast the PowerPoint presentation, and the print-outs will be provided to the learners for note taking and to have after leaving the course. The white board and dry erase markers will be utilized by the instructor during the analysis of the classroom performance problem. The large post-it notes and permanent markers will be used by the groups to create their group presentations.

Implementation

Implementation Plan and Schedule

Once the full project has been completed, the online course fully developed and launched on the Divisions LMS and the classroom course fully developed and planned, the implementation process can begin. To begin implementing the course a number of things have to happen:

- 1) An initial announcement needs to be made. The initial announcement will be made to help gain buy-in for the project, and to get the target audience interested in the course. This was one of the performance solutions that was identified during the initial performance analysis process – provision of information (*See Appendix A*). This will consist of a 10-15 minute presentation that will go over what human performance technology is, and how it can benefit the Division. This should be done about 1-2 weeks before the course is fully developed, and 3-4 weeks before registration begins, to gain buy-in for the course early on.
- 2) Formative evaluations will be conducted. These must be conducted to determine any changes that must be made to the course. Formative evaluation will be conducted after the completion of each of the storyboards, after the development of the final course materials, and a final pilot study will be conducted after all materials have been fully developed. More on the formative evaluations can be found below in the *Evaluations* section.

- 3) Announcements for course registration will begin. Once all changes have been made to the courses, and they have been finalized and approved, an announcement will be sent out for registration. This announcement will be sent out directly to the supervisors, Assistant Program Directors, Executive Management Team, and the Training Committee group. The announcement will have a brief description of the course and the benefits that may come from taking the course. During the registration process participants will be filled into classes composed of 25-30 participants each. The number of classes will depend on the level of interest in the course. The announcement will be sent out immediately following the final revisions and approvals of the online course and classroom course. Registration will be left open for a month after the initial announcement to give all interested parties time to apply for the course, and to schedule all necessary classes.
- 4) Participants will begin completing the online course. This will need to be completed prior to attending the classroom course. Participants will be given access to the online course immediately following their registration for the course, and access to the online course will remain open for the participants until the day of the classroom courses. They will be given roughly 1-2 months from the time they register for the course, until the time they will attend the classroom course. Anyone who does not complete the online course prior to the date they were registered to attend the classroom course, will be reassigned to another class date.
- 5) Participants will complete the classroom course. The classroom course will consist of one 8-hour course, where the participants will learn about various HPT concepts and will be given a number of cause analysis tools to use. Once they have completed the classroom course they will not be required to complete any follow-up trainings.
- 6) Summative Evaluations will be completed and analyzed. Reaction surveys will be conducted at the end of the online course and the classroom course. Behavior surveys will then be sent out on a quarterly basis for one year. More information about the summative evaluations can be found below in the *Evaluations* section.

Evaluations

Formative Evaluations

- <u>Design Phase</u>: During the design phase formative evaluations will be conducted to determine any changes that need to be made to the design of the course. Using the storyboard and wireframe outlines of the two classes, 2-3 participants will be selected to review the courses and give their feedback. During the review process they will be guided through the storyboards by the instructional designer as if they were taking the actual course.
 - <u>Online Course</u>: For the online course the instructional designer and the participants will sit down together and go over each and every slide in the storyboard. The IDer will explain the basic functionality of the slide, but will not give the participant any further information. The participants will think out loud during the process and explain what they are thinking, and explain the decisions they would make during the course (e.g. click on the button or not). The purpose of this is to ensure that the navigation of the course is set up in a logical way and that all of the information in the course is laid out in a way that makes sense to the participant. In addition, to ensure that all relevant information is included in the course, the participants will be asked to take the assessments. This

information will be used to determine if further information needs to be added for any of the assessments. All information gathered during this process will go towards redesigning the course to ensure that it fulfills its intended purpose.

- <u>Classroom Course</u>: For the classroom course the participants will be walked through the storyboards as well, but the instructional designer will be more involved in the process. They will be responsible for ensuring that the participants can ask any questions during the process, and that they are getting all the information to make a solid judgement on the materials. The purpose is to ensure that the classroom course is set up in a logical order, that the practices and activities make sense to the participant, and to ensure that it will fit within the allotted time for the course. All information gathered during this process will go towards redesigning the course to ensure that it fulfills its intended purpose.
- <u>Development Phase</u>: After the final digital course has been created, and the classroom materials have been developed we will conduct formative evaluations. These evaluations will be conducted using 5-6 participants who will take the finished courses and give their feedback on whether anything in the course needs to be changed.
 - <u>Online Course</u>: Once the final digital course has been launched participants will take the course with the instructional designer in the room. During this they will be asked to think out loud and to express any questions, comments, or concerns they may have. They will not be guided through the course, as the instructional designer wants to note any difficulties encountered during the course. These difficulties could arise because of a lack of information, confusion with the navigation, ineffective interactions or assessments, etc. All information gathered during this process will go towards redesigning the course to ensure that it fulfills its intended purpose.
 - <u>Classroom Course</u>: For the classroom course all the participants will be evaluated together. They will run through the course, with the instructional designer as the instructor, as if they were attending the actual course. During this process it will be suggested to the participants to bring up any questions, comments, or concerns about the course as they arise. The purpose of this evaluation is to determine any issues that may arise due to lack of clarity from the instructor, inappropriate or ineffective activities and assessments, and to determine if the course structure will fit the allotted time, etc. All information gathered during this process will go towards redesigning the course to ensure that it fulfills its intended purpose.
- <u>Pilot Study:</u> Once the courses are both fully developed and all changes have been made, a final pilot study will take place. For the pilot study 10-20 participants will be selected to take both the online course and the classroom course. The purpose of the pilot study is to identify any problems that were not recognized during the design and development formative evaluations. All information gathered during this process will go towards redesigning the course to ensure that it fulfills its intended purpose. After these final revisions have been made the final product will be ready to be implemented.

Summative Evaluations

Once the course is fully up and running we will have a number of evaluations to help determine the overall effectiveness of the course. These evaluations are based on the Kirkpatrick 4-Levels of Evaluation Model (2006), and will be used to evaluate the learner's reactions to the courses, their level of learning during the course, and their behavior change once leaving the course. Do to time and resource issues within the Division no data will be collected for level 4 – Results. Instead, it will be assumed that if level 3 – Behavior has changed, and they are actively using the information taught during the course, than there should be some beneficial results.

Level 1 – Reaction – For the online course and the classroom course:
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Level	Evaluation Objectives
Reaction	 Measure participant's overall satisfaction with the overall course. Achieve an average of 4.5 or higher on the satisfaction evaluation survey. Determine if online delivery of introductory information is appropriate for this content. Determine if participants felt the information was appropriate for their jobs. Determine participant's overall feelings towards the pace, navigation, and structure of the course. Determine participant's felt about the group presentation, and if they felt they were beneficial.

Instrument: Participant Satisfaction Feedback survey (*See Appendix G*). This will used to evaluate all the objectives listed above.

Data Collection Procedure: To measure learner's reactions to the online course and classroom course, and to answer the evaluation objectives identified above, a participant satisfaction feedback survey will be created. This survey will be created using Google Forms, and all data will be collected, stored, and analyzed using Google Spreadsheets (*See Appendix I*). For the online course the surveys will be taken immediately following the completion of the online course; there will be a button on the last slide of the course that will take them directly to the survey. To ensure participation in the survey the learner will be notified that they will not receive credit until they have completed the feedback survey. For the classroom course they will also take the survey online. QR codes will be placed around the classroom that when scanned will take the learners directly to the online survey. In addition, if they do not have a smartphone with QR capabilities all participants will be sent an e-mail, one week following the completion of the course, requesting them to fill out the feedback survey. This will allow them to take the survey at their own convenience. All survey responses will be kept anonymous to help ensure honesty from the learners.

Level	Evaluation Objectives
Reaction	 Identify the purpose of HPT Define HPT Differentiate between behavior and Accomplishment Identify worthy performance and valued accomplishments Use the Performance Analysis Flow Chart to identify worthy performance problems.

Level 2 – Learning – Online Course:

- Identify the Performance Gap

Instrument: Quick Practices, Definition Matching Quiz, and Performance Analysis Flow Diagram Assessment. (*See Appendix C-D*). These will be used to evaluate all the objectives listed above.

<u>Data Collection Procedure</u>: For the online course there will be three types of learning assessments: 1) Quick Practices that are not scored, 2) A Definition Matching Quiz that will also not scored, and 3) An Analysis Flow Diagram Assessment were the learners will be asked to print of their results to bring with them to the classroom course. Each of these assessments will be taken within the digital course, and feedback for each will be given immediately after answers are submitted. The Quick Practices and Definition Matching Quiz will be used to help the learners judge their own level of understanding. They will not be scored by the LMS, but learners must pass the matching quiz with a score of 100% to continue on in the course. For the Performance Analysis Flow Diagram assessment, the results will not be recorded, but the learners will be asked to bring these results with them to the classroom course. The results will be used to help their projects.

Level 2 – Learning – Classroom Course:

Level	Evaluation Objectives
Reaction	 Have a solid understanding of the history of performance management. Identify the root causes of performance problems Use Gilbert's Behavior Engineering Model (2007) to identify causes of performance problems Use Chavelier's Cause Analysis Worksheet (2003) to help identify driving and restraining forces. Be able to identify a number of potential solutions to resolve performance problems.

Instrument: Group Presentation Grading Sheet (*See Appendix E*). This will be used to evaluate all the objectives listed above.

<u>Data Collection Procedure</u>: To measure the learners understanding of the concepts and tools taught during the classroom course they will be required to put together a group presentation that will then be graded by the instructor. The presentation will consist of the participants identifying a performance problem, identifying its root causes, and identifying effective solutions. The instructor will than use the Group Presentation Grading Sheet to give the participants a grade on a scale of: Excellent, Good, Satisfactory, and Needs Improvement. The grading sheet will not be used to determine if the learners pass the class or not, but to give them an idea of their current level of understanding of the subject matter. They can then use this grade to determine if they should re-take the class or not.

<u>Level 3 – Behavior – For the online course and the classroom course:</u>

Level	Evaluation Objectives
Reaction	 Participants will take what they have learned during the online course (Identifying Worthy Performance Problems) and begin using this knowledge to resolve staff performance problems. Participants will take what they have learned during the classroom course (Being Cause-Conscious, not Solution Focused) and begin using this knowledge to resolve staff performance problems. Participants will look at accomplishments and not behaviors to identify performance problems.

- Participants will identify the performance gap, and use that to determine a
best plan of action.
- Participants will use Mager and Pipe's (1994) Performance Analysis Flow
Diagram to identify worthy performance problems.
- Participants will use Gilbert's Behavior Engineering Model (2007) to identify
causes of performance problems.
- Participants will use Chavelier's Cause Analysis Worksheet (2003) to help
identify driving and restraining forces.
- Participants will be able to identify a number of potential solutions to resolve
performance problems.

<u>Instrument</u>: Participant Behavior Tracking Survey (*See Appendix H*). This will be used to evaluate all the objectives listed above.

<u>Data Collection Procedure</u>: The participant behavior tracking survey will be sent out to the learners once every 3-months, for 1-year. The first survey will be sent out 3 months after the learner completes the classroom course. This will allow the learners to take what they have learned back to their facilities and to begin using it, prior to us trying to measure their behaviors. The surveys will be collected every three months for a year to help see how the learner's behaviors change from the time of the first survey and the last survey. This survey will be created using Google Forms, and all data will be collected, stored, and analyzed using Google Spreadsheets (See Appendix I). These surveys will be sent out via e-mail, and all responses will be kept anonymous to ensure honesty from the learners.

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Appendix A – Course Performance Analysis

Cause Analysis

In conducting the performance analysis for this project, the Gilbert's Behavior Engineering Model (2007) and Chevalier's Cause Analysis Worksheet (2003) were used. Below is what was identified during the cause analysis:

Environmental	Information	Resources	Incentives/ Consequences
Factors	 Lack of a clear expectation to conduct analysis No immediate feedback on how to implement effective solutions Currently no immediate information on how to conduct analysis 	 Lack of time or resources to conduct a formal analysis They do not have the tools to conduct formal analysis Policy may prevent some solutions 	 No direct incentives/ consequences for staff to conduct formal analysis
Individual	Knowledge and Skills	Capacity	Motivation
Factors	 No knowledge of the tools to conduct a proper analysis Staff may not be aware of the tremendous costs that could occur from implementing ineffective solutions. Staff may have no idea how to select proper solutions to performance problems 	 All supervisory staff have authority to implement new solutions 	 Possible lack of motivation for taking the time to conduct a thorough analysis

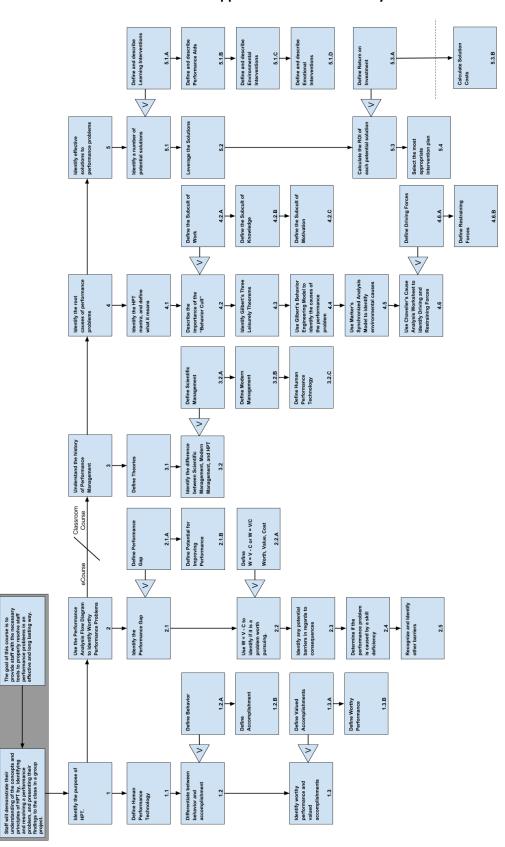
Based off of Gilbert's Behavior Engineering Model (Gilbert, 2007, p. 88)

Interventions

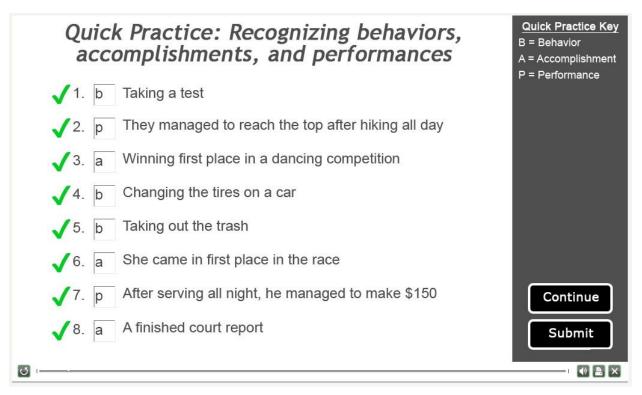
Since the topic of Human Performance Technology is a fairly new concept being introduced to the Division, two potential interventions were identified during the performance analysis. These two interventions were selected because of their effect on the main restraining forces, identified using force field analysis (Chevalier, 2003), and were believed to have the largest diffusing effect (Winiecki, 2015 & Chyung, 2005).

Root Cause to be Addressed		Intervention Type	Description of Intervention		
1.	No knowledge of how to conduct	Online and Classroom	Develop a course that teaches staff the basics of human performance technology, the importance of human		
	any sort of cause Training analysis (formal or		technology, and how to conduct a cause analysis. The course will consist of 4 main parts: 1) A		
	informal).		background/history of HPT, 2) How to identify worthy performance problems (would the value outweigh the		

			costs), 3) How to identify the causes of the performance problem using a number of tools, & 4) How to identify effective solutions, and leverage the value of performance change vs the cost of the potential solutions.
2.	No clear expectations that staff should be conducting any sort of analysis to help identify effective solutions.	Provision of Information	A quick 10-15 minute presentation of what the course will entail and how it will benefit the division will be put on for all upper management. This will help them to understand the importance of the course and the topic, and will help to gain buy-in from them. Once buy-in has been achieved, it will be the responsibility of upper management to ensure that supervisors, Assistant Program Directors, and other problems solvers throughout the Division are using the techniques, taught during the course, to effectively identify and resolve staff performance problems.



Appendix B – Full Task Analysis



Appendix C – Learner Quick Practice Examples

Quick Practice: Identify the Valued Accomplishments 1. 2. 3. **Desired Performance** Desired Performance Desired Performance Take out the trash 1/day Repair 25 cars/day Collect 5,000 oranges/day Actual Performance Actual Performance Actual Performance Takes out trash 1/week Repairs 10 cars/day Collected 6,000 apples/day 4. 5. 6. **Desired Performance** Desired Performance Desired Performance Complete 10 reports/week Process 100 transactions/day Make 20 sales/week Actual Performance Actual Performance Actual Performance Completes 2 reports/day Process 150 transactions/day Makes 2 sales/day Regular Valued Accomplishments Accomplishments Submit J 🜒 🗎 🗙

Appendix D – Online Course Matching Quiz

Matching Quiz: Match the words with their Definition

- ____ Human Performance Technology
- ____ Behavior
- ____ Accomplishment
- ____ Valued Accomplishments
- ____ Worthy Performance Problems
- ____ Performance Gaps
- ____ Potential for Improving Performance
- ____ Worth
- ____ Value
- ___ Cost

Answer = F,B,G,D,A,C,I,J,H,E

A) A performance problem that isn't easily resolvable, and were the value of resolving it would outweigh the cost of fixing it.

B) Something a person does that involves an action.

C) The difference between "where we are" (the present level of performance) and "where we want to be" (the desired level of performance

D) The results obtained is one that the organization, the person performing, and all other significant stakeholders view as being desirable.

E) The amount that has to be paid or spent to buy or obtain something.

F) Applying what science and respectable professional practice have discovered that can help us achieve valued performance from and through people.

G) The outcome of the behavior.

H) The regard that something is held to deserve; the importance, worth, or usefulness of something.

I) W_{ExemplaryPerformance}/W_{TypicalPerformance} - 1

J) Comparing value (e.g. what buyers would pay for it) to cost.

accomptishment	s, and performances	
1. Human Performance Technology	a. A performance problem that isn't easily resolvable, and were the value of resolving it would outweigh the costs of	
2. Behavior	fixing it.	
	b. Something a person does that involves an action.	
3. Accomplishment	c. The difference between "where we are" (the present level of performance) and "where we want to be" (the desired	
4. Valued Accomplishments	level of performance). d. The result obtained is one that the organization, the	
5. Worthy Performance Problem	person performing, and all other significant stakeholders view as being desirable.	
6. Performance Gap	e. The amount that has to be paid or spent to buy or obtain something.	
7. Potential for Improving Performance	f. Applying what science and respectable professional practice have discovered that can help us achieve valued	
8. Worth	g. The outcome of the behavior.	
9. Value	h. The regard that something is held to deserve; the importance, worth, or usefulness of something.	
	i. WExemplaryPerformance/ WTypicalPerformance – 1 i. Comparing value (e.g. what buyers would pay for it) to	it.
0. Cost	j. Comparing value (e.g. what buyers would pay for it) to cost.	TL.

Appendix E – Group Presentation Grading Sheet and Rubric

Human Performance Technology Group Project Grading Sheet

Group Members:					
Performance Problem:					
Circle the score you feel is most appropriate: 1=Poorly 4=Excel	lent.				
They identified the performance gap: Comments:	1	2	3	4	
Used the PAFD to identify a worthy performance problem: Comments:	1	2	3	4	
Use the Gilbert's BEM to identify any potential causes: Comments:	1	2	3	4	
Used Marker's SAM to identify the environmental causes: Comments:	1	2	3	4	
Used Chevalier's CAW to identify driving & restraining forces: Comments:	1	2	3	4	
They selected at least 3 potential solutions: Comments:	1	2	3	4	
They calculated the ROI for each of their solutions: Comments:	1	2	3	4	
They explained the <i>diffusion of effect</i> for their solutions: Comments:	1	2	3	4	
Groups overall ability to use the HPT tools: Comments:	1	2	3	4	

Grading	Rubric:
---------	---------

Point Ranges	Excellent – 4	Average – 2-3	Below Average – 1
They identified the	Identified both the actual	Identified both the	They did not identify the
performance gap	and desired performance,	actual and desired	performance gap.
	and calculated the PIP.	performance.	
Used the PAFD to	Identified a worthy	The identified a worthy	The problem they
identify a worthy	performance problem,	performance problem,	identified was not a
performance problem	and was able to explain	and somewhat	worthy performance
	why using the PAFD as a	explained how they	problem.
	reference.	identified it.	
Use the Gilbert's BEM to	Used Gilbert's BEM to	Used Gilbert's BEM to	They did not identify the
identify any potential	identify the causes of	identify the causes of	causes of their
causes	their performance	their performance	performance problem.
	problem, and clearly	problem.	
	explained how they		
	identified them.		
Used Marker's SAM to	Used Marker's SAM to	Used Marker's SAM to	They did not break out
identify the	identify the various	identify the various	the causes of their
environmental causes	environmental causes of	environmental causes	performance problem
	their performance	of their performance	by the environmental
	problem, and clearly	problem	factors.
	explained how they		
	identified them.		
Used Chevalier's CAW to	Used Chevalier's CAW to	Used Chevalier's CAW	They did not identify the
identify driving &	identify the driving and	to identify the driving	driving and restraining
restraining forces	restraining forces of their	and restraining forces	forces of their
	performance problem,	of their performance	performance problem.
	and clearly explained	problem.	
	how they determined		
	their level of importance.		
They selected at least 3	They selected at least 3	They selected 1-2	They did not identify any
potential solutions	potential solutions.	potential solutions.	potential solutions.
They calculated the ROI	They calculated the ROI	They only calculated	They did not calculate
for each of their	for each of their	the ROI on a couple of	the ROI.
solutions	solutions.	their solutions.	
They explained the	The explained the	They only explained	They did not explain the
diffusion of effect for	diffusion of effect for	the diffusion of effect	diffusion of effect for
their solutions	each potential solution.	for a few of their	any of their solutions.
		solutions.	
Groups overall ability	They managed to use all	They used most if not	They only used a few, if
to use the HPT tools	the HPT tools and	all of the HPT tools	any, of the HPT tools
and concepts	concepts provided during	provided during the	provided during the
	the course, and explained	course.	course.
	their use in regards to		
	their problem.		

PAFD = Performance Analysis Flow Diagram SAM = Synchronized Analysis Model BEM = Behavior Engineering Model CAW = Cause Analysis Worksheet

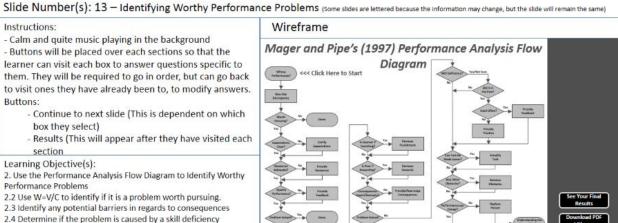


Appendix F – Examples of the Online Course Storyboard and Wireframe

making process for patient care. (4 second pause)

So in a nutshell, HPT are the Evidence Based Practices for identifying and improving human performance problems (Short Pause). So now that we have established what HPT is, let's see if we can figure out its purpose.

Title: Human Performance Technology – Identifying Worthy Performance Problems



2.5 Recognize and identify other barriers.

Narration:

To help you identify if your performance problem is worth pursuing, and to get some clarifying information about your performance problem, we will use Mager and Pipe's Performance Analysis Flow Diagram. During this portion you will be answering a number of questions about the performance problem you identified before, so please consider each question carefully. To begin, click on the first part of the Diagram in the upper left hand corner of the screen. You will be required to follow the Diagram in order, however you will be allowed to return to sections you have already visited to update answers as needed.

Appendix G – HPT Reaction Survey

Human Performance Technology Online Course Survey

All evaluations are anonymous. No identifying information is collected.

* Required

Was the subject matter of this course relevant to your job? *

- Strongly Agree
- O Agree
- Neutral
- O Disagree
- Strongly Disagree

Do you feel that the activities, practices, or games helped you gain a clearer understanding of the subject?*

- Strongly Agree
- O Agree
- O Neutral
- O Disagree
- Strongly Disagree

Did you feel the amount of time it took you to complete this course was appropriate for the content? *

- Strongly Agree
- O Agree
- O Neutral
- O Disagree
- Strongly Disagree

Do you feel as though the course contained all the information necessary to learn what was being taught?*

- Strongly Agree
- O Agree
- O Neutral
- O Disagree
- Strongly Disagree

Was this course easy to navigate? *

- Strongly Agree
- O Agree
- O Neutral
- O Disagree
- Strongly Disagree

Did the material presented, flow together? *

- Strongly Agree
- O Agree
- Neutral
- O Disagree
- Strongly Disagree

Do you feel the content was appropriate for online delivery? *

- Strongly Agree
- Agree
- Neutral
- O Disagree
- Strongly Disagree

Did this training enhance your knowledge of Human Performance Technology? *

- Strongly Agree
- Agree
- Neutral
- O Disagree
- Strongly Disagree

Do you feel like this course properly introduced you to the concepts of HPT? *

- Strongly Agree
- Agree
- Neutral
- O Disagree
- Strongly Disagree

Please briefly explain your answer to the last question.

Overall did you enjoy the course? *

- O Strongly Agree
- O Agree
- © _{Neutral}
- O Disagree
- O Strongly Disagree

What do you feel were the strengths of this course?

In what ways do you feel this course could be improved?

Appendix H – HPT Behavior Survey

Human Performance Technology Survey

All evaluations are anonymous. No identifying information is collected.

* Required

What is your Job Function? *

Have you completed the online HPT course? *

This is the course entitled (HPT - Identifying Worthy Performance Problems)

O Yes O No

Have you completed the classroom HPT course? *

This is the course entitled (HPT - Begin Cause-Conscious, Not Solution Focused)

O Yes

O _{No}

I have begun to use the concepts and tools of HPT anytime I encounter a performance problem. *

• Strongly Agree

O Agree

• Neutral

- O Disagree
- Strongly Disagree

In your own words, explain how you use the concepts and tools of HPT to resolve performance problems.*

If you do not use the HPT concepts and tools, please put N/A in the box below.

I use the Performance Analysis Flow Diagram, learned during the online course, to help me identify worthy performance problems. *

- Strongly Agree
- O Agree
- Neutral
- O Disagree
- Strongly Disagree
- O _{N/A}

If you do not use the Performance Analysis Flow Diagram, please explain why. *

If you do not use it, please put N/A in the text area.

If you do use the Performance Analysis Flow Diagram, please explain how you use it. *

If you do not use it, please put N/A in the text area.

I use the Behavior Engineering Model, the Synchronized Analysis Model, or the Cause Analysis Worksheet, learned about during the classroom course, to help me identify the causes of my performance problems. *

- Strongly Agree
- O Agree
- O Neutral
- O Disagree
- Strongly Disagree
- O _{N/A}

Which of these three models do you use the most? Why? *

If you do not use them, please put N/A in the text area.

If you do not use the Behavior Engineering Model, the Synchronized Analysis Model, or the Cause Analysis Worksheet, please explain why. *

If you do use them, please put N/A in the text area.

If you do use the Behavior Engineering Model, the Synchronized Analysis Model, or the Cause Analysis Worksheet, please explain how you use them. *

If you do not use them, please put N/A in the text area.

I leverage all the potential solutions, and weigh the benefits and costs prior to implementing any solutions. *

- Strongly Agree
- Agree
- Neutral
- O Disagree
- Strongly Disagree
- O _{N/A}

If you do not weigh the benefits and the costs prior to implementing any solutions, please explain why. *

If you do, please put N/A in the text area.

If you do weigh the benefits and the costs prior to implementing any solutions, please explain how you go about doing this. *

If you don't do this, please put N/A in the text area.

I feel like my use of the HPT concepts and tools has increased since completing both of the HPT courses.*

- Strongly Agree
- Agree
- O Neutral
- O Disagree
- Strongly Disagree
- I have not yet completed both of the courses, but am planning too.
- I have not yet completed both of the courses, and am not planning too.

I feel as though being able to use the HPT concepts and tools is an important skill set for me to have. *

- Strongly Agree
- Agree
- Neutral
- O Disagree

Strongly Disagree

I feel as though there are better tools/concepts than HPT, for identifying and resolving performance problems. *

- Strongly Agree
- O Agree
- Neutral
- O Disagree
- Strongly Disagree

My employees, co-workers, and supervisors are very supportive of using the HPT concepts and tools in the workplace. *

- Strongly Agree
- O Agree
- Neutral
- O Disagree
- Strongly Disagree

What has helped you to begin implementing the HPT concepts and tools into your workplace? *

If you do not use the HPT concepts and tools, please put N/A in the box below.

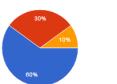
Are there any barriers you have faced in trying to implement the HPT concepts and tools into your work? *

If you do not use the HPT concepts and tools, please put N/A in the box below.

Appendix I – Evaluation Survey Analysis Example

Though the data will be collected electronically through Google Forms, it is beneficial to understand how this is done, and how the data will be used to make improvements. Once a survey has been filled out it will automatically populate within a Google Spreadsheet. On the second page of this spreadsheet it will automatically count up the total number of responses to each possible response for each question. Based on the response it will then be multiplied by its respective quantitative value (*listed in the example portion below*), and then averaged out to give us an overall score. Anything below a 4.5 will be looked at for improvements.

Did the material presented flow together?





Disagree 0 0%

0%

Strongly Disagree 0

Do you feel the content was appropriate for online delivery?



Example:

Question – Do you feel the content was appropriate for online delivery?

Quantitative Values of Each Answer Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly Disagree = 1

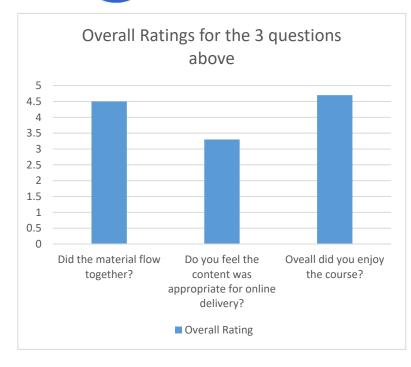
Steps to average out the scores

1. Add the totals of all the scores together = 5x1 + 3X4 + 4X3 + 2X2 + 0X1 = 33

2. Average the scores = 33/10 = 3.3

3. Since it is only 3.3 this question needs to be looked at

to determine what improvements need to be made.



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fx						
	A	В	С	D	E	F
1 2	Question 1 📼	A	Neutral	Discourse	Character Discourse	Tatal Assesses
2	Strongly Agree 30	Agree 16	Neutrai 0	Disagree 0	Strongly Disagree	Total Average 4.6
3 4	Question 2	10	U	0	U	4.0
4 5		Agree	Neutral	Disagree	Strongly Disagree	Total Average
6	35 35	12	0	Disagree 0	Ottoligiy Disagree	4.7
7	Question 3	12	0	v	0	4.7
8		Agree	Neutral	Disagree	Strongly Disagree	Total Average
9	30	- 12	3	Disagree 0	Ottoligiy Disagree	4.5
10	Question 4	12				4.5
11		Agree	Neutral	Disagree	Strongly Disagree	Total Average
12	20	24	0	0	0 Chongiy Diougroo	4.4
13	Question 5					
14	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Average
15	30	16	0	0	0	4.6
16	Question 6					
17	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Average
18	35	12	0	0	0, 0	4.7
19	Question 7					
20	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Average
21	30	12	3	0	0	4.5
22	Question 8					
23	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Average
24	5	12	12	4	0	3.3
25	Question 9					
26	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Average
27	25	16	3	0	0	4.4
28						
29						