Final Project:

**Development of a New Learning Module Using an Interest and Affect Motivation
Theoretical Framework**

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1. Module Overview

Program Title and Overview

This e-learning module, which is part of a larger asynchronous (self-directed) online course that I am currently designing, is titled "The PPP Lesson Planning Structure." In addition to the PPP Lesson Planning Structure module, this online course includes a compulsory 2-hour staff professional development course titled "Effective Lesson Planning," consisting of a module focusing on lesson planning principles and a module on how to evaluate a lesson plan for overall effectiveness once it has been completed.

The target audience for this module is ESL teachers on staff at a local language school that teaches English to international students. Overall, the ESL staff members have a diverse range of teaching experiences, but very few have formal teaching English to speakers of other languages (TESOL) training. Accordingly, a needs analysis indicated that ESL teachers on the staff needed additional professional development in areas such as formal lesson planning.

This learning module exposes teachers to a learner-centered lesson planning structure, the Present, Practice, and Produce (PPP) model, which is a commonly used planning framework grounded in communicative language teaching (CLT). In addition to becoming familiarized with the tripartite structure of the planning model, teachers will

- Relate the PPP lesson plan structure and its components to their own lesson planning process
- Analyze partial examples (and nonexamples) of PPP lesson plans
- Evaluate a PPP lesson plan and its component parts for overall effectiveness

- Create an original PPP-structured lesson plan that will be evaluated by the academic director

Once the teachers have completed the module, they will be able to explore the topic more deeply through channels like the school intranet performance support site; the academic director will also set up a discussion board to promote ongoing individual interest in the training topics covered in all of the teacher professional development courses.

Instructional Design Model Used

For this project, I used the ADDIE instructional design model, both because it is a model I am comfortable using and because, for the motivation evaluation instrument (MEI) I created, I aligned Hidi and Renninger's (2006) four-phase model of interest development with the steps of the ADDIE process. One reason I aligned my MEI with ADDIE was because I wanted to ensure that the instrument was practical for the instructional designer; the other reason for aligning both models was that I found them to be complementary, even though one model (the four-phase model of interest development) is a theoretical construct and the other (ADDIE) is a design process commonly used by practitioners.

Specifically, prioritizing learner interest and motivation is a process that begins with an **analysis** of the prior experience, affective characteristics, and learning needs of the target audience. Interest is triggered by the learning environment created by choices made in the **design** stage; interest is maintained and even heightened by the **development** of components in the learning environment that provoke changes in affect and cognition (Hidi & Renninger, 2006). Finally, trainee reaction, learning, and behavior will need to be **evaluated** once the learning event has been **implemented** to determine the extent to which learners have been able to sustain

and further develop interest both during and after the learning event.

2. Design Document

I submitted the design document created for this project as a separate file (Design Document-PPP Lesson Plan-David Davis-4-24-16). In addition to an overview of the training project and front-end analysis results, the document includes numbered sections detailing the key design and development considerations, as well as individually numbered development screens for each part of the module. The completed motivation evaluation instrument (MEI) references sections and screen numbers from the design document to evidence fulfilling the MEI's range of motivation criteria.

3. Connection to the Theoretical Framework

Because I have long felt that interest impacts learning, positively or negatively, I grounded my MEI in aspects of the interest and affect theory. As I researched the different conceptualizations of interest, I confirmed just how important the variable of interest is for both generating deeper levels of motivation and motivating the learner to pay greater attention to what is being taught, which subsequently produces better memory and learning (Schunk, Meece, & Pintrich, 2014).

In particular, I found Hidi and Renninger's (2006) model of interest development to be relevant to my own context as an instructional designer of online compliance, licensing, and professional development courses; thus, I used it heavily to inform the content of my MEI. Because of the compulsory nature of these courses, learner motivation and interest are often low

coming into the training; the front-end analysis of the target audience for this professional development module likewise revealed that the teaching staff overall indicated a lower level of interest in taking additional professional development courses. Hidi and Renninger's distinction between individual and situational interest showed that interest can be modified from within an effectively designed learning environment that triggers and maintains situational interest. The development of situational interest can subsequently promote an emerging, well-developed, and long-lasting individual interest in the subject.

Elements of interest theory are present in my MEI in the following ways:

1. In the **general motivation standard descriptors** for each stage of the ADDIE process
2. In the various **evaluation criteria** that support the motivational standards of the instrument

I designed and developed my module using the motivation standards as **descriptive** guidelines; I used the evaluation criteria that support these standards as **prescriptive** guidelines. Because of the prescriptive nature of these criteria, I was able to use them both discretely as a checklist and holistically as a kind of blueprint to create a motivation-rich instructional environment in which the learner's situational interest would be triggered and maintained throughout the module.

For example, in the "design" section of the instrument, the motivation standard is aligned with the first phase of the interest development model: "Triggered Situational Interest" (Hidi & Renninger, 2006).

2. DESIGN
General Motivation Standard: Learning architecture, instructional methods, and modes selected to design the **instructional environment** of the learning event trigger **situational interest** by modifying the trainee's cognitive and affective processing.

As detailed in the descriptor, the general motivation standard foregrounds the importance of the learning architecture, instructional methods, and modes to design an instructional environment that will modify the trainee's cognitive and affective processing, thus triggering situational interest. To this end, my motivation evaluation document incorporates a dedicated section ("2. Design," p. 3) that identifies the specific learning architecture, instructional methods, and modes that facilitate the creation of a learning environment that will trigger situational interest. More specific motivation criteria elements are accounted for in each of the module content screens (see the design document for screen illustrations) and confirmed in the "Evidenced By" column of the MEI, as illustrated below in a completed section of the instrument:

2. DESIGN

General Motivation Standard: Learning architecture, instructional methods, and modes selected to design the **instructional environment** of the learning event trigger **situational interest** by modifying the trainee's cognitive and affective processing.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. **Learning architecture** is compatible with the learning needs and performance goals of the target population.	YES 2 points	NO 0 points	Design Document (2.1): Design Section (2), Learning Architecture and Theory (1)
B. Mix of **instructional modes** creates a learning environment where trainee interest and attention is triggered and maintained throughout the learning event.	YES 2 points	NO 0 points	Design Document (2.2): Design Section (2), Instructional Modes and Methods (2)
C. Variety of **instructional methods** has been selected to spark situational interest and maintain attention throughout the learning event.	YES 2 points	NO 0 points	Design Document (2.2): Design Section (2), Instructional Modes and Methods (2)
D. A mix of **interactivity** types has been selected to support trainee interest development.	YES 2 points	NO 0 points	Design Document: Screen #001 (Navigating); #003 (Dialoguing); #006 (Controlling);
E. A variety of pre-instructional strategies prepares trainees for the main content of the training topic.	YES 2 points	NO 0 points	Design Document: Screen #005; #022; #036
F. Learning content is credible, current, practical in nature, and relevant to training and performance needs.	YES 2 points	NO 0 points	Design Document: Screen #013; #026; #039; #041
G. Learning content is differentiated and incorporates the **personalization principle** where appropriate.	YES 2 points	NO 0 points	Design Document: Screen #001; #007; #008; #020; #034; #048
H. Learning tasks and activities promote personalized exploration of the topic.	YES 2 points	NO 0 points	Design Document: Screen #004; #023; #038; #054
I. Learning tasks and activities promote learner choice.	YES 2 points	NO 0 points	Design Document: Screen #005; #019; #033; 047; #054
J. A variety of evaluation methods assesses trainee performance before, during, and after learning to gauge both cognitive and affective changes in the trainee.	YES 2 points	NO 0 points	Design Document: Screen #051; #054
Total Points (maximum 20)	20 / 20		

For example, for criteria "H," "Learning tasks and activities promote personalized exploration of the topic," screen #004 in the design document was designed to meet this criteria, which is identified in ID note #2:

MODULE TITLE: THE P-P-P STRUCTURE	UNIT/SECTION TITLE: OVERVIEW	SCREEN TITLE: "WHAT IS A LESSON PLAN?"	SCREEN #: 004	VERSION: 1.0

SCREEN LAYOUT		MEDIA	FORMAT	INTERACTIVITY	CONTENT TYPE

WHAT IS A LESSON PLAN?

In the previous module, we covered general lesson planning concepts and reviewed a basic format of a lesson plan. But what exactly is the essence of a lesson plan?

Imagine that an alien teacher of EGL (English as a Galactic Language) has teleported to your school as a substitute instructor to teach an English lesson. Because this alien is used to teaching English telepathically to its students, the alien has no idea what a lesson plan is. You, along with several colleagues, have been asked by the Academic Director to orient the guest teacher and explain the concept of a lesson plan.

Think about a simile (e.g., A lesson plan is like......") that you could use to compare a lesson plan to something concrete that will explain the concept of a lesson plan clearly and concisely to the alien.

You'll get a chance to communicate your simile in the next section.

MEDIA: TEXT, VISUALS, AUDIO, VIDEO

FORMAT: HTML, SCORM, DOCUMENT, IFRAME/EMBED

INTERACTIVITY: NAVIGATING, DIALOGUING, CONTROLLING, MANIPULATING, SEARCHING

CONTENT TYPE: INFORMATION, ICE BREAKER, SCENARIO, POLL/SURVEY, DISCUSSION FORUM, WRITTEN TASK, ASSESSMENT

STYLE ELEMENTS

TITLE FONT:
LETTEROMATIC,
16, NORMAL, RGB = 0:112:192

BODY FONT:
Verdana,
13, NORMAL, RGB = 48:48:48

ASSETS

SCREEN NOTES

This screen does not use visuals since the image of an alien won't align with the tone of the lesson and might take the focus off the task. Even though the alien teacher scenario itself may seem to run counter to the professional tone of the module, the "explain something to an alien" is a common language development activity used to get students to explain a concept to an audience (e.g., an alien) who would not be able to rely on cultural context to understand the concept.

ID NOTES

1) This topic represents a pre-instructional strategy to get learners to think about the concept of the lesson plan before the delivery of specific material.
2) This topic is designed to get the learner to draw from his or her own teaching experiences, thus promoting personalized exploration of the topic.
3) This topic is intended to elicit surprise, disequilibrium and personal relevance.

Because the learning environment is a central concept in the interest development model, my MEI has been influenced by Richard E. Mayer's research (2005, 2007) in learner affect and cognition, as it relates to the use of multimedia in interactive learning environments. Many of Mayer's evidence-based design principles focus on identifying choices that instructional designers should make to reduce extraneous processing (Moreno & Mayer, 2007). An environment that either overwhelms or underwhelms the learner cognitively will be incapable of triggering interest in the learner, much less sustain it. Accordingly, for this training module I use visuals primarily to organize information in a way that generates more cognitive hold, as in my choice to use the concept of a pyramid to dynamically illustrate the PPP structure (screen 1

below). Clicking on each stage of the interactive visual in the module (represented by screen #010 in the design document) will reveal a screen that identifies the main features of that stage (screen shots 2, 3, and 4):
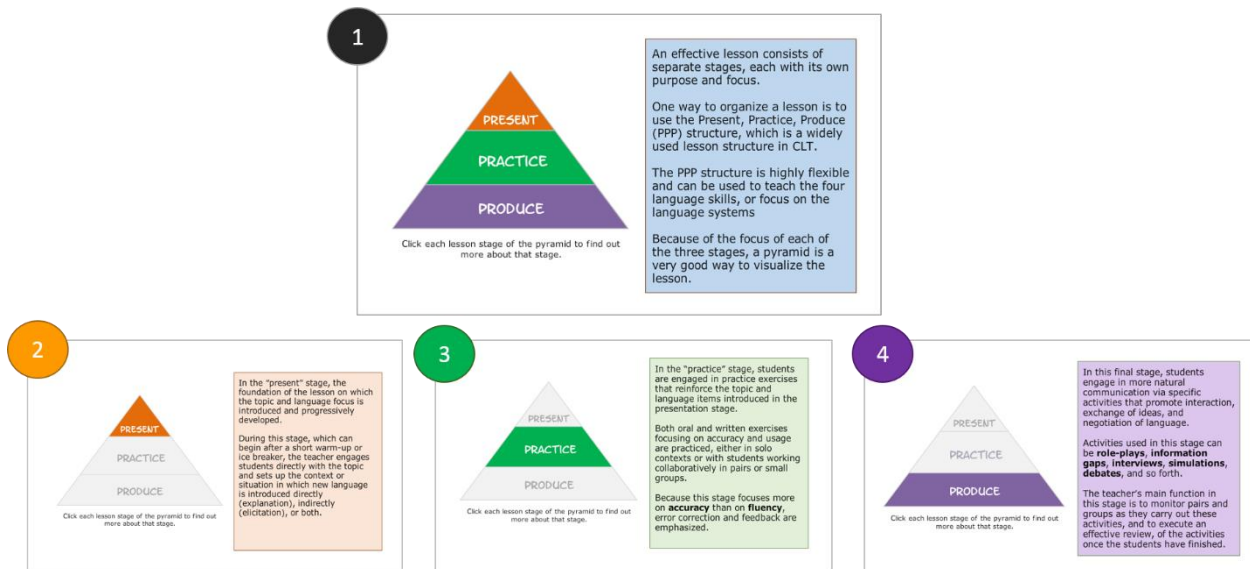
In the MEI, then, the use of the visuals to chunk key information and reduce cognitive load fulfills criteria "a" in "3. Development" as illustrated below.

3. DEVELOPMENT

General Motivation Standard: Instructional materials are developed to generate **interestingness** that will hold and sustain situational interest throughout the learning event by cultivating a high level of attention and focused persistence in the trainee.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. Content is segmented to reduce **cognitive** load.	YES 2 points	NO 0 points	Design Document: Screen #010; #011; #015; #024; #039

In addition to prioritizing the triggering and maintaining of the learner's situational interest, the criteria in my MEI also prescribes strategies that can promote a more enduring individual interest in the learning topic. I referenced these criteria (4.h. and 4.i in the MEI) when designing ways to promote additional exploration of the topic as illustrated below in screen #058 of the design document:

DEDESIGN | MODULE TITLE: THE P-P-P STRUCTURE | UNIT/SECTION TITLE: DIG DEEPER | SCREEN TITLE: "FURTHER EXPLORATION" | SCREEN #: 058 | VERSION: 1.0

SCREEN LAYOUT

FURTHER EXPLORATION

Below are several links that will expand your knowledge of the PPP lesson planning structure:

Video Clips:

https://youtu.be/EddmOr-b57g. In this clip, Scott Thornbury discusses the pros and cons of the PPP model.

https://youtu.be/2OzBOWrP2yc. In this clip, Jack Richards discusses CLT, in which the PPP model is commonly used.

Articles:

http://iteslj.org/Lessons/Pegrum-OutsideWorld.html. This article explores how student language learning can be transferred to the outside world by modifying the structure.

MEDIA	FORMAT	INTERACTIVITY	CONTENT TYPE
TEXT	HTML	NAVIGATING	INFORMATION
VISUALS	SCORM	DIALOGUING	ICE BREAKER
AUDIO	DOCUMENT	CONTROLLING	SCENARIO
VIDEO	IFRAME/EMBED	MANIPULATING	POLL/SURVEY
		SEARCHING	DISCUSSION FORUM
			WRITTEN TASK
			ASSESSMENT

STYLE ELEMENTS | **ASSETS**

TITLE FONT:
LETTEROMATIC,
16, NORMAL, RGB = 0:112:192

BODY FONT:
Verdana,
13, NORMAL, RGB = 48:48:48

SCREEN NOTES

This page provides a list of resources and references, both textual and visual, that have been curated to enhance the learner's knowledge about the PPP lesson structure.

ID NOTES

1) This page of resources has been designed to promote longer-term individual interest in the topic of lesson planning.

I also referenced these criteria when conceptualizing ways to get teachers to communicate and collaborate more in a dedicated space as illustrated in the design document (screen #060):

DEDESIGN | MODULE TITLE: THE P-P-P STRUCTURE | UNIT/SECTION TITLE: CONGRATULATIONS | SCREEN TITLE: "POST-TRAINING SUPPORT" | SCREEN #: 060 | VERSION: 1.0

SCREEN LAYOUT

POST-TRAINING SUPPORT

Log in to the web-based teacher support intranet portal dubbed "TIPs" (Teachers in Practice). With this performance support site, teachers can log in from any location 24/7 and access a variety of support tools, including this online teacher training module. Teachers can access designated Wiki pages, such as "Teaching Best Practices", and collaborate with their colleagues by adding information or commenting on current entries.

The teacher discussion board, which can be accessed through TIPs, is set up so that teachers can post topics on anything relevant to teaching, provide feedback in the form of responses, and read information contained in the posts.

MEDIA	FORMAT	INTERACTIVITY	CONTENT TYPE
TEXT	HTML	NAVIGATING	INFORMATION
VISUALS	SCORM	DIALOGUING	ICE BREAKER
AUDIO	DOCUMENT	CONTROLLING	SCENARIO
VIDEO	IFRAME/EMBED	MANIPULATING	POLL/SURVEY
		SEARCHING	DISCUSSION FORUM
			WRITTEN TASK
			ASSESSMENT

STYLE ELEMENTS | **ASSETS**

TITLE FONT:
LETTEROMATIC,
16, NORMAL, RGB = 0:112:192

BODY FONT:
Verdana,
13, NORMAL, RGB = 48:48:48

1) images created in PPT and saved and inserted as PNG file.

SCREEN NOTES

This screen identifies the two channels through which teachers on staff can interact with other teachers in an online environment. Support sites have not yet been activated, but should be online at the time of the release of this module.

ID NOTES

1) This page of support channels has been designed to promote longer-term individual interest in the topic of lesson planning as well as for other professional development training topics relevant to teachers and their learners.
2) Once the learner completes this final screen, he or she will receive a certificate of achievement indicating the number of hours of training completed.

4. Full Development of Module

This module has been designed and developed to be delivered online by a learning management system (LSM) that will track the progress of the users and act as an interface between the training facilitator (the school's academic director) and the learners for those modules that have tasks and activities that must be assessed manually.

For the purposes of this project, the module is delivered in the same format. To access the module to review

1) Go to: http://dedlearning.talentlms.com/

2) Input user name: motivation

3) Input password: motivation

4) Click on the row under the "teacher training" heading that says "The PPP Lesson Planning Structure;" this will take you to the learning module dashboard.

5. Analysis of Completed Module

I used the MEI in the two ways in which I had designed it:

1. As a predesign checklist to orient the instructional designer to a range of heuristics that can be followed to create a learning environment that triggers and maintains trainee interest and by extension generates motivation throughout the learning event.

2. As an audit tool to ensure that key motivational elements have been accounted for prior to the official delivery of a learning event.

The MEI submitted for this assignment represents the version completed after the training had been developed, though in this analysis I will refer to the MEI both as a checklist of heuristics and as an audit tool.

Although I had already completed the analysis stage and had enough of the raw content for the module to begin the design phase for this project prior to the creation of the MEI, I was not yet sure how I would organize it and, more specifically, what kind of instructional environment I could create that would motivate and maintain the interest of a target audience that was not necessarily keen to undergo compulsory professional development. I also knew that whatever instructional environment I created would need to be one in which teachers were not overtly told how to use a more structured lesson planning model.

Using the instrument as a predesign checklist triggered new ideas that I could incorporate as either components or as strategies to make the module learner-centered and to mitigate the transactional distance inherent in online asynchronous, self-directed learning. For example, because there was not a "live" facilitator who would be monitoring every step of the module, I had to create the presence of an authority who could provide feedback for tasks that were not formally graded. Criterion #3.g., "Feedback on task or activity completion is personalized, specific, and constructive in nature to promote further interest in the training topic" provided a framework within which I created a recurring "Experienced Teacher Feedback" display in which the learner could read how another (experienced) teacher replied to the same survey questions asked of the learner. An example of this display is illustrated below:
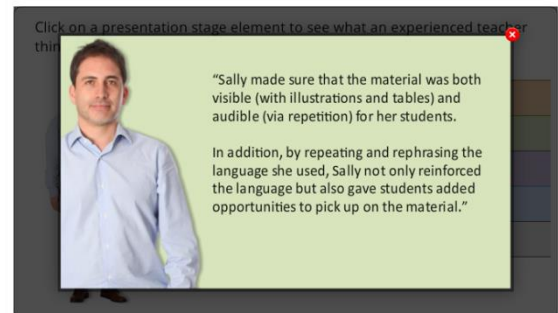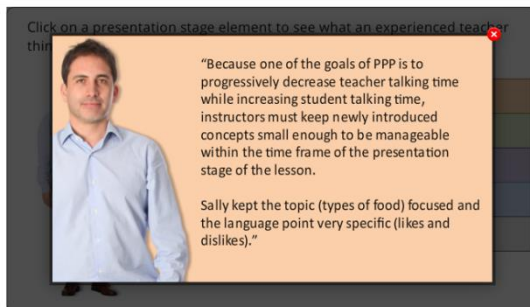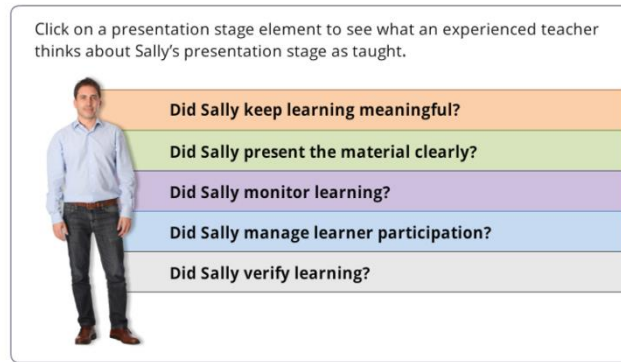
Another way I used the MEI as a design checklist was to combine criteria to create an instructional element. For example, criterion 2.e., "A variety of pre-instructional strategies prepares trainees for the main content of the training topic" and criterion 3.c., "The manner in which content is arranged elicits a range of affective reactions (e.g., personal relevance, surprise, and equilibrium/disequilibrium) in the trainee" gave me the idea to insert a series of examples designed to create an element of surprise or disequilibrium to trigger interest in the main concept explored in each stage (present, practice, produce) of the lesson. To introduce the concept of the lesson plan, for example, the module asks the trainee to create a simile to describe the concept of a lesson plan to a space alien teacher of EGL (English as a galactic language) who has teleported to your school as a substitute instructor to teach an English lesson. The idea of a space alien teacher of EGL should provoke surprise and even disequilibrium, not because of the alien itself, but because using a character like this is a common strategy that ESL teachers use to get their

students to discuss certain ideas with less anxiety. In this sense, the task gets flipped on the teacher (who is now effectively the student).

One way I used the MEI as an audit was to make a change to the "conclusion" screen once the learner has submitted the final lesson plan assignment (screen #55). Criteria 4.b., focuses on the importance of instructions: "Instructions facilitate successful navigation or completion of learning task or activity." User testing indicated that it was not clear to the learner that the course still had another part after the submission of the plan. The original instructions were:

"Your Academic Director will soon return your plan with a final evaluation and lots of feedback that you can use to enhance your future lesson planning."

Instructions were revised to make it clear that there was still a final access that the learner would need to access (added text italicized):

"Your Academic Director will soon return your plan with a final evaluation and lots of feedback that you can use to enhance your future lesson planning. *In the meantime, you can move to the last part of the module. In this final section, you'll be able to explore an alternative lesson planning structure on your own.*"

I have attached a completed motivation evaluation instrument for the "PPP Lesson Planning Structure" training module separate from this document. The completed MEI references sections and screen numbers from the design document to evidence that fulfills the MEI's range of motivation criteria.

References

Hidi, S., & Renninger, K. (2006). The four-phase model of interest development. *Educational Psychologist, 41*(2), 111–127.

Mayer, R. (2005). The Cambridge handbook of multimedia learning. Cambridge: Cambridge University Press.

Moreno, R., & Mayer, R. (2007). Interactive multimodal learning environments. Educational Psychology Review, 19(3), 309–326.

Schunk, D. H., Meece, J. L., & Pintrich, P. R. (2014). *Motivation in education: Theory, research, and applications*. Boston, MA: Pearson.

Motivation Evaluation Instrument

Instructions: For each criteria element listed below, indicate whether the criterion has been fulfilled by selecting either yes or no. Each response is assigned a point value. For each criterion for which you select yes, indicate in the neighboring column the element(s) used in the instructional design process of the learning event that demonstrate fulfillment of the criterion.

For each of the five sections of the instructional design process that you evaluate, total up the number of points from the yes column and record that number as the total points. Should the total points from a given section not be sufficient to meet the general motivation standard, the instructional designer should revise the learning event to mitigate any deficiencies.

Definitions for terms bolded throughout this instrument can be found in the glossary section of this document; we have also supplied references from which definitions have been sourced.

1. ANALYSIS

General Motivation Standard: Trainee affect, knowledge, and experience have been identified to determine value for and individual or **situational interest** in the training topic and learning event.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. Prior knowledge, skills, and experience of the target population relevant to the training topic have been identified.	YES 4 points	NO 0 points	**Design Document** (1.3): Analysis Section (1), Target Population Analysis (3)
B. Affective characteristics of the target population have been identified.	YES 4 points	NO 0 points	**Design Document** (1.3): Analysis Section (1), Target Population Analysis (3)
C. Gaps in the target population's knowledge, skills, attitudes, and performance (KSAP) have been identified.	YES 4 points	NO 0 points	**Design Document** (1.1): Analysis Section (1), Performance Analysis (1)
D. Course objectives reflect training and performance needs.	YES 4 points	NO 0 points	**Design Document** (2.3): Design Section (2), Objectives(3)
E. Training delivery mode aligns with the characteristics and training needs of the target population.	YES 4 points	NO 0 points	**Design Document** (0.3): Project Overview (0), Development & Implementation (4)
Total Points (maximum 20)	**20 / 20**		

Score	Rating	Recommendation
20 points	Meets Standard	None
< 20 points	Fails to Meet Standard	Refocus target population analysis to more accurately identify personal or situational interest in training topic/learning event.

2. DESIGN

General Motivation Standard: Learning architecture, instructional methods, and modes selected to design the **instructional environment** of the learning event trigger **situational interest** by modifying the trainee's cognitive and affective processing.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. **Learning architecture** is compatible with the learning needs and performance goals of the target population.	YES 2 points	NO 0 points	**Design Document** (2.1): Design Section (2), Learning Architecture and Theory (1)
B. Mix of **instructional modes** creates a learning environment where trainee interest and attention is triggered and maintained throughout the learning event.	YES 2 points	NO 0 points	**Design Document** (2.2): Design Section (2), Instructional Modes and Methods (2)
C. Variety of **instructional methods** has been selected to spark situational interest and maintain attention throughout the learning event.	YES 2 points	NO 0 points	**Design Document** (2.2): Design Section (2), Instructional Modes and Methods (2)
D. A mix of **interactivity** types has been selected to support trainee interest development.	YES 2 points	NO 0 points	**Design Document:** Screen #001 (Navigating); #003 (Dialoguing); #006 (Controlling);
E. A variety of pre-instructional strategies prepares trainees for the main content of the training topic.	YES 2 points	NO 0 points	**Design Document:** Screen #005; #022; #036
F. Learning content is credible, current, practical in nature, and relevant to training and performance needs.	YES 2 points	NO 0 points	**Design Document:** Screen #013; #026; #039; #041
G. Learning content is differentiated and incorporates the **personalization principle** where appropriate.	YES 2 points	NO 0 points	**Design Document:** Screen #001; #007; #008; #020; #034; #048
H. Learning tasks and activities promote personalized exploration of the topic.	YES 2 points	NO 0 points	**Design Document:** Screen #004; #023; #038; #054
I. Learning tasks and activities promote learner choice.	YES 2 points	NO 0 points	**Design Document:** Screen #005; #019; #033; 047; #054
J. A variety of evaluation methods assesses trainee performance before, during, and after learning to gauge both cognitive and affective changes in the trainee.	YES 2 points	NO 0 points	**Design Document:** Screen #051; #054
Total Points (maximum 20)	**20 / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	None
< 18 points	Fails to Meet Standard	Review deficient area(s) to determine whether the design of the learning event needs greater emphasis on the environment or content to trigger interest or whether the learning event needs to promote more choice and personalization of tasks and activities.

3. DEVELOPMENT

General Motivation Standard: Instructional materials are developed to generate **interestingness** that will hold and sustain situational interest throughout the learning event by cultivating a high level of attention and focused persistence in the trainee.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. Content is segmented to reduce **cognitive load**.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #010; #011; #015; #024; #039
B. Content is structured following the **sequencing principle**.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #010; #011; #015; #025; #028; #042
C. The manner in which content is arranged elicits a range of affective reactions (e.g., personal relevance, surprise, and equilibrium/disequilibrium) in the trainee.	**YES** **1 point**	NO 0 points	**Design Document:** Screen #004; #016; #022; #038
D. Graphics and images enhance text-based information.	**YES** **4 points**	NO 0 points	**Design Document:** Screen #010; #011; #014; #037
E. Audio text is authentic, appropriate for the tone of the learning event, and integrated into the flow of the training.	**YES** **1 point**	NO 0 points	**Design Document:** Screen #012; #016; #029; #043
F. Learning tasks and activities are structured following the **sequencing principle**.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #017; #030; #044; #050; #053
G. Feedback on task or activity completion is personalized, specific, and constructive in nature to promote further interest in the training topic.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #018; #031; #045; #054
H. Assessment feedback is systematic and standardized (e.g., by grading rubric) for all trainees and learning event facilitators.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #054
I. Assessment tasks get trainees to apply the knowledge, skills, and attitudes developed in authentic, relevant, and meaningful contexts.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #051; #054
J. Assessment/task remediation promotes understanding as to why a response may be correct or incorrect.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #051; #054
Total Points (maximum 20)	**20 / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	None
< 18 points	Fails to Meet Standard	Review deficient area(s) to determine whether content, images, and audio are effective at generating interestingness and promoting a higher level of attention or persistence in the trainee.

4. IMPLEMENTATION

General Motivation Standard: Instructional scaffolding and support systems for the learning event aid in triggering and holding situational interest and promoting emerging individual interest by cultivating in the trainee positive feelings, stored knowledge, and a developed sense of value for the learning topic.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. Learning objectives and performance outcomes are clearly communicated.	**YES** **4 points**	NO 0 points	**Design Document:** Screen# 002; #009; #021; #035; #053
B. Instructions facilitate successful navigation or completion of learning task or activity.	**YES** **2 points**	NO 0 points	**Design Document:** Screen# 005; #023; #038; #051; #053 *See Notes
C. Trainees are aware of their progress throughout the learning event.	**YES** **2 points**	NO 0 points	**Design Document:** (4.1): Implementation Section (4), Delivery system (1); screen #008
D. Course functionality has been optimized for different delivery platforms (e.g., desktops, laptops, tablets, and mobile devices), browsers (e.g., Explorer, Firefox, Chrome, and Safari), and materials format (e.g., PDF and MP4)	**YES** **2 points**	NO 0 points	**Design Document:** (4.2): Implementation Section (4), Technical Info (2)
E. Materials required for active participation in the learning event are accessible from within the learning environment.	**YES** **2 points**	NO 0 points	**Design Document:** (4.3): Implementation Section (4), Learning Materials (2)
F. Where applicable, performance rubrics are communicated to both trainee and learning facilitator.	**YES** **1 point**	NO 0 points	**Design Document:** Screen #054
G. Levels one (reaction) and three (behavior) evaluation forms collect both quantitative and qualitative data.	**YES** **1 point**	NO 0 points	**Design Document:** Screen #003; #059
H. Supplementary resource materials have been curated to reinforce and enhance the trainee's experience with the topic.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #012; #016; #029; #043
I. Additional resource materials enhance trainee knowledge and personal interest in the topic beyond the learning event.	**YES** **2 points**	NO 0 points	**Design Document:** Screen #058; #060
J. Learner achievement is acknowledged (e.g., badges, certificate of completion)	**YES** **2 points**	NO 0 points	**Design Document:** (4.4): Implementation Section (4), Learner Achievement (4)
Total Points (maximum 20)	**20 / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	--
< 18 points	Fails to Meet Standard	Review deficient area(s) to identify ways to enhance instructional support and scaffolding to promote situational interest during the training event and to promote long-term individual interest after training.

5. EVALUATION

General Motivation Standard: Formative and summative evaluation that measures the trajectory of the trainee's development of feelings (affect) and knowledge (cognition) as well as the development of situational and personal interest in the training topic before, during, and after the learning event.

CRITERIA	CRITERIA FULFILLED?		EVIDENCED BY
A. Learning needs survey (level one) incorporates evaluation categories to measure level of trainee's interest and value assigned to the training topic prior to the learning event.	YES 3 points	NO 0 points	**Design Document:** Screen #003
B. Mid-event progress report (level one) incorporates categories of response to measure the extent to which the trainee's level of situational interest has been triggered and maintained during the learning event.	YES 2 points	NO 0 points	*See notes
C. Post-event evaluation (level one) incorporates categories of response to measure level of trainee's personal and situational interest after completion of the learning event.	YES 3 points	NO 0 points	**Design Document:** Screen #059
D. Assessment tasks and activities (level two) have trainees apply the knowledge and skills developed in authentic and relevant contexts throughout the learning event.	YES 4 points	NO 0 points	**Design Document:** Screen #053
E. Post-event follow-up survey (level three) incorporates categories of response to measure level of trainee's personal and situational interest after completion of the learning event.	YES 4 points	NO 0 points	**Design Document:** Screen #059
F. Diversity and quantity of evaluation (levels one to three) instruments is sufficient to generate a summative evaluation (level four) of results of trainee levels of motivation and interest (personal and situational) in the training topic and learning event.	YES 4 points	NO 0 points	**Design Document:** Screen #003; #053; #059
Total Points (maximum 20)	**18 / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	--
< 18 points	Fails to Meet Standard	Identify evaluations (levels one to three) that have not been accounted for and review evaluations (levels one and three) for the presence of questions that identify the extent to which learner interest in the training topic developed during and after the learning event.

Evaluation Summary

Results from the evaluation of each ADDIE stage can be transferred here to create a final motivation evaluation result for the learning event.

ADDIE Stage	Points Assigned
1. **Analysis**	20 / 20
2. **Design**	20 / 20
3. **Development**	20 / 20
4. **Implementation**	20/ 20
5. **Evaluation**	18 / 20
Total Points (maximum 20)	**98 / 100**

Score	Rating	Recommendation
90-100 points	Meets Standard	None
< 90 points	Fails to Meet Standard	Review each stage of the evaluation to identify deficiencies as they align with the motivation standard.

Notes

Notes are in reference to elements identified the Motivation Evaluation Instrument. Each note corresponds to the number of the stage (e.g., 1-5) and the letter of the criterion (e.g., a-j).

4b. One round of user testing indicated some confusion as to when the module was "complete". In this specific case, when the user submitted her assignment, she thought she had completed the module. More instructions were added to clarify that there was still a section to complete in the module.

Original Instructions: "Your Academic Director will soon return your plan with a final evaluation and lots of feedback that you can use to enhance your future lesson planning."

Revised Instructions (added text italicized): "Your Academic Director will soon return your plan with a final evaluation and lots of feedback that you can use to enhance your future lesson planning. *In the meantime, you can move to the last part of the module. In this final section, you'll be able to explore an alternative lesson planning structure on your own*."

5b. It was decided not to add a mid-module Level 1 evaluation since a Level 1 evaluation is administered prior to the module and at the end of the module to determine the extent to which the learner's interest and motivation has changed.

Glossary

Cognitive load: "The amount of mental work imposed on working memory" (Mayer, 2005, p. 612).

Instructional architecture: A design plan that "differ[s] regarding the role of the learner, the role of the instructor, the philosophy of learning, as well as how content is chunked and sequenced" (Clark, 2010, p. 56).

Instructional methods: "Any instructional strategy used to promote learning efficiency or effectiveness" (Mayer, 2005, p. 612).

Instructional modes: "The basic communication devices you will use to explain content and present the instructional methods" (Clark, 2010, p. 50).

Interactivity: "A characteristic of learning environments that enable multidirectional communication" (Moreno & Mayer, 2007, p. 310). Moreno and Mayer (2007) have identified five types of interactivity: dialoguing, controlling, manipulating, searching, and navigating.

Interestingness: "Interest as a characteristic of the learning environment" (Krapp, 1999, p. 24).

Instructional environment: Promotes situational interest when the environment "incorporate[s] comprehensible text, personal relevance, novelty, concreteness and learner activity" (Clark, 2008, p. 344).

Personalization principle: States that "people will learn more deeply when the words in a multimedia presentation are in a conversational style rather than formal style" (Mayer, 2005, p. 201).

Sequencing principle: Indicates that it "is often better to sequence learning tasks or complex pieces of information from simple to complex rather than to present them in their complexity at once" (Moreno & Mayer, 2007, p. 77).

Situational interest: Refers to "focused attention and the affective reaction that is triggered in the moment by environmental stimuli, which may or may not last over time" (Hidi & Renninger, 2006, p. 113).