Motivation Evaluation Instrument

Reflection and Analysis of Selected Theoretical Framework:

Interest and Affect

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1. Motivation Evaluation Instrument: Theoretical Framework

Rationale for Choice of Theory

I have elected to ground my motivation evaluation instrument in current theories of interest.

I have long felt that interest affects learning, either positively or negatively. As I was researching the different conceptualizations of interest, I was able to confirm just how important a variable interest is in both generating deeper levels of motivation and getting the learner to pay greater attention to what is being taught, which in turn produces better memory and learning (Schunk, Meece, & Pintrich, 2014).

What I found particularly relevant about the concept of interest in terms of what we do as instructional designers is that interest can be potentialized and developed through the interactions among learner, content, and learning environment. (Hidi & Renninger, 2006). For myself as a designer of self-directed e-learning courses, this concept of "environment" is always foregrounded, in particular because a rich, multimodal e-learning environment is needed to mitigate the large transactional distance inherent in self-directed e-learning.

However, an e-learning environment's being multimodal does not necessarily make the learner more motivated or the topic at hand more interesting. By focusing on concepts of situational interest and how this interest can be triggered and maintained by a well-designed learning environment, instructional designers have the ability to help the learner convert this situational interest into something more developed and sustained long after the learning event is over.

I also felt that grounding my motivation evaluation instrument in interest theory would align well with the particular target audience members for whom the learning module to which I

would be applying the evaluation instrument is intended. After performing a target analysis of the language school for which I am designing this module as a part of a compulsory professional development course, I was convinced that the ESL teachers on the staff needed additional professional development in areas such as lesson planning.

Overall, the ESL staff members had a diverse range of teaching experiences, but very few had formal Teaching English as a Second Language (TESOL) training. Several teachers, particularly those with more experience, indicated that they were not necessarily interested in doing additional training; others were convinced that they already knew how to create effective lesson plans. For this audience in particular, then, levels of interest and motivation coming into the training would be somewhat low. Accordingly, the instructional design challenge would be to deliver training that increased this particular trainee group's interest levels in the short term (situational interest) and long term (well-developed individual interest) so that the staff would value the availability of ongoing professional development to enhance both their teaching and their students' learning.

Key Definitions: Interest Theory

In a generalized context, interest is "the liking of and willful engagement in an activity" (Schunk, Meece, & Pintrich, 2014, p. 212). In the context of learning, however, interest becomes a "critical cognitive and affective motivational variable" that develops experientially, guides attention, and facilitates learning at any age and across different domains (Renninger & Hidi, 2011, p. 169).

Even though interest has been identified as a central influence on attention, goals, and levels of learning (Hidi & Renninger, 2006), extant literature consists of a body of unaligned and unrelated conceptualizations of interest. However, there is some consensus as to what constitutes

interest as a motivational variable (Renninger & Hidi, 2011). One general agreement is that interest is not general but specific, emerging from an individual's engagement with an environment; interest is then sustained through the individual's ongoing interaction with that environment and its content (Renninger & Hidi, 2011). Whether interest is specifically a personality trait or a psychological state has been the subject of some debate (Krapp, 1999), though research has indicated that interest is both physiological and neurological (Renninger & Hidi, 2011). Researchers have also distinguished between different types of interest—specifically, personal interest and situational interest (Hidi & Renninger, 2006).

Main Contributors and Theory Elements

Interest as a conceptualization, specifically as implicated in the role of motivation in development and learning, emerged early on in the field of psychology in the writings of William James (1890), John Dewey (1913), and Edward Lee Thorndike (1935) (Schunk, Meese, & Pintrich, 2014). It was not until the 1980s that researchers would once again focus on interest, albeit as an "explanatory construct" to systematically explain elements central to learning and development (Krapp, 1999, p. 23). For Renninger and Hidi (1999), however, there was still not an adequate theory of interest, though there were "many theoretically driven conceptualizations of interest" (Renninger & Hidi, 1999, p. 168).

The work of the following contemporary researchers and practitioners in particular has attempted to synthesize the wide range of research focusing on interest as a motivational factor in learning and development.

Andreas Krapp: Krapp developed a tripartite synthesis of current interest-based research (Figure 1) in which interest is (a) internal, personal, and enduring; (b) triggered by a learning

environment, which for Krapp is what creates an "interestingness"; and (c) a psychological state that foregrounds affect and cognition, which become modified as the individual undergoes "actualized interest" (Krapp, 1999, p. 25).

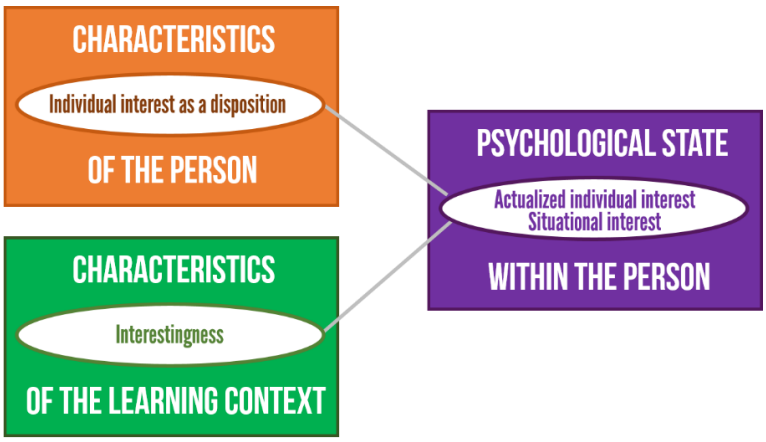


Figure 1. Synthesis of approaches to interest-based research (Krapp, 1999).

Suzanne Hidi and K. Ann Renninger: Hidi connects interest to specific activities; in this sense, situational interest becomes related to both context and text and the different emotions (affects) that a text or context can trigger (Schunk, Meece, & Pintrich, 2014).

Together, Hidi & Renninger constructed a four-phase model of interest development that integrates the conceptualizations of both individual and situational interest (Hidi & Renninger, 2006). Hidi and Renninger's model is both descriptive and prescriptive, identifying ways in which interest can develop and broaden as well as suggesting instructional techniques that can generate situational interest through promoting changes in affective and cognitive processing (Hidi & Renninger, 2006).

The model, whose four phases are linear, projects the progressive development of interest from the situational, which is short term, to the individual, which is more developed and enduring (Figure 2).

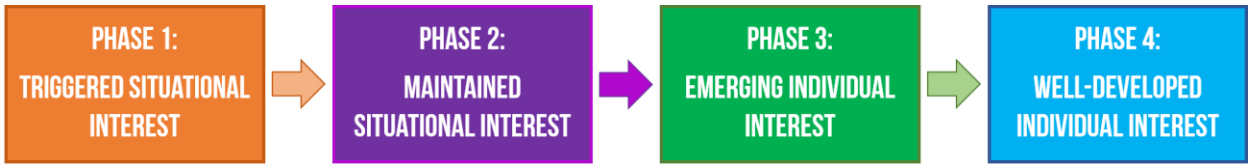


Figure 2. Four phases of interest development (Hidi & Renninger, 2006).

In phase 1, situational interest is triggered by the learning environment or certain textual features that generate surprise or incongruity, or get the individual to identify with some element of the text itself, this finding personal relevance in the context (Hidi & Renninger, 2006). In phase 2, once situational interest has been triggered, it is sustained by focusing the individual's attention on engaging tasks that are personalized or otherwise meaningful. In phase 3, individual interest begins to emerge as a result of "positive feelings, stored knowledge and stored value" (Hidi & Renninger, 2006, p. 114). In phase 4, individual interest is well developed and will likely lead to autonomous and long-term re-engagement of tasks in which the individual is interested.

Mary Ainley: Ainley's approach focuses on the role of interest as an affective state. Ainley's further focus is at a micro task level in which students, who could be in any classroom, identify what they are feeling and rate how interested they are at certain designated points ("critical task points") both during a specific task and across a range of tasks (Ainley, 2006, p. 394). By tracking learner interaction with the task and monitoring interest levels at the different task points (beginning, during, and end), Ainley shows that interest levels need to be constant throughout the task to facilitate learning (Ainley, 2006).

2. Motivation Evaluation Instrument: The Design

Design Rationale

In terms of scope, I have designed this motivation evaluation instrument (MEI) for an instructional designer to evaluate the extent to which any online learning event of any unit of length, be it a complete course, a module, a unit, or a lesson, can generate a high level of learner motivation and interest in a given training topic independently of learner interest or motivation coming into the training.

In terms of functionality, I have designed my MEI to be used by an instructional designer in two ways:

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 initial delivery of a learning event.

The motivation evaluation instrument has specifically been grounded in Hidi and Renninger's four-phase model of interest development (2006). However, to ensure that this instrument is practical for the instructional designer, the four phases of the interest development model have been aligned with the five stages of the ADDIE instructional design model. 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, I found both models to be complementary. Specifically, foregrounding 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; it 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.

Design Format

This MEI has been designed to be both usable and useful to practitioners. Ensuring both usability and that key theoretical concepts are present in the instrument, the design of the tool mitigates cognitive load by presenting information in easy-to-read, color-coded tables. To further support the user, several scaffolding elements have been embedded in the document to ensure ease of use:

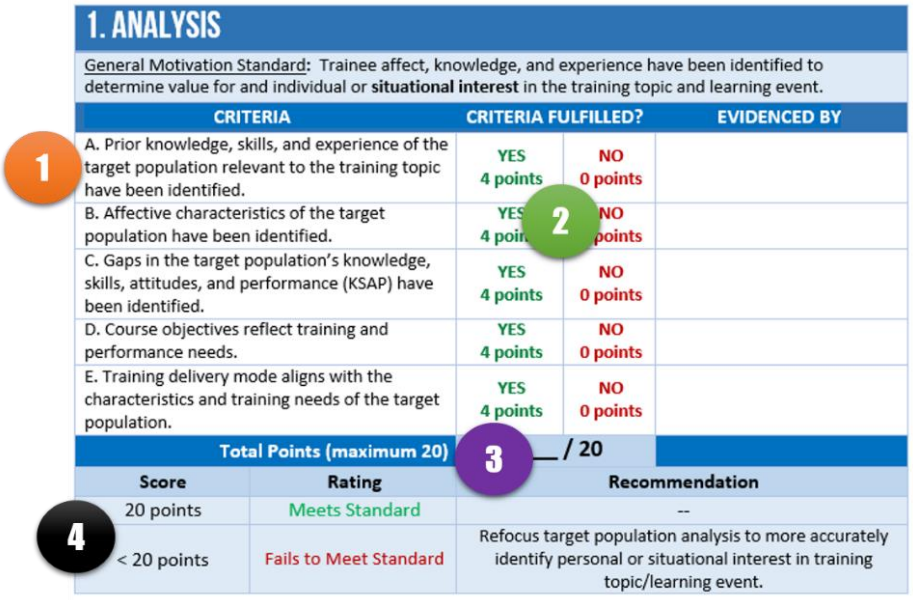
- Instructions indicating how to complete the evaluation are included at the beginning of the form.
- Concrete descriptors identify the information to be evaluated.
- Numbered headings, itemized criteria, and descriptive labels guide the user through the different steps of the form.
- A simple scoring system facilitates the evaluation of a range of motivation criteria individually and holistically.
- A glossary of terms used throughout the instrument is included at the end of the evaluation document to clarify the meaning or use of terms related to motivation and interest theory that are referenced in the standards and criteria.

To ensure the usefulness of the MEI to the practitioner, the instrument has been structured into sections that correspond to each stage of the ADDIE Model. Each ADDIE stage, in turn, is represented on a separate page of the instrument so that the instructional designer can

focus on motivation standards and supporting criteria specific to that particular stage. Once the evaluation has been performed, the instructional designer can review the overall level of motivation incorporated into a training event more holistically by viewing the evaluation results from all five ADDIE stages, facilitated by the color-coding and scoring system on each page of the instrument.

Because this tool is intended above all to be evaluative, specific criteria for each motivational standard have been arrayed in an efficient line-item format to allow the instructional designer to do the following:

1. Evaluate each criterion discretely.
2. Assign a point value for each criterion.
3. Total the points for all of the criteria for a given ADDIE stage.
4. Align the total number of points with the scoring rubric to verify whether a particular stage contains sufficient elements to meet the motivation standard for a particular ADDIE stage.



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	
B. Affective characteristics of the target population have been identified.	YES 4 points	NO 0 points	
C. Gaps in the target population's knowledge, skills, attitudes, and performance (KSAP) have been identified.	YES 4 points	NO 0 points	
D. Course objectives reflect training and performance needs.	YES 4 points	NO 0 points	
E. Training delivery mode aligns with the characteristics and training needs of the target population.	YES 4 points	NO 0 points	
Total Points (maximum 20)	**__ / 20**		

Score	Rating	Recommendation
20 points	Meets Standard	--
< 20 points	Fails to Meet Standard	Refocus target population analysis to more accurately identify personal or situational interest in training topic/learning event.

Should the total number of points be insufficient to meet the motivational standard, the instrument provides remediation, which the instructional designer can consider to ensure that any deficiencies in a particular stage of the ADDIE process are addressed before advancing to the next stage.

Using a point system that corresponds to the different motivational criteria also creates flexibility for the instructional designer to weigh motivation criteria differently by modifying the point values assigned to the different criteria. Because the points for all five sections total 100, a level of motivation percentage for the entire project can be used to create a final scorecard.

Finally, the format of the instrument, with its visual orientation, point value system, and chunking of evaluation elements into discrete sections, is such that it can be rendered electronically using a program such as www.jotform.com and be embedded into a Web-based, instructional design workflow application.

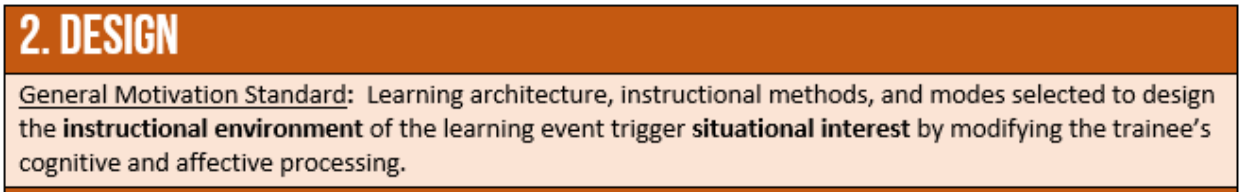
3. Interest Theory in the Motivation Evaluation Instrument: Examples

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

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

1. **General Motivation Standard Descriptors**: I have grounded my motivation evaluation instrument specifically in Hidi and Renninger's four-phase model of interest development (2006). Because this model is both descriptive and prescriptive in nature, I was able to generate several motivation standards based on the four phases of the model and align the standards with

the different stages of ADDIE. These motivation standards guide the flow of the evaluation instrument in terms of the focus on both interest development at a given stage of ADDIE and the types of instructional design choices that will need to be made for that stage. 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).



Accordingly, the motivation standard foregrounds the importance of the learning architecture, instructional methods, and modes the instructional designer will need to select to design an instructional environment that triggers situational interest by modifying the trainee's cognitive and affective processing.

2. Evaluation Criteria: From the more prescriptive elements of the four-phase model of interest development, I abstracted a list of specific criteria in support of the main motivation standards corresponding to the different stages of ADDIE. Because the learning environment is a central concept in the model of interest development, additional evaluation criteria in this instrument have been influenced by Richard E. Mayer's research (2005, 2007) into 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 able to sustain it.

By way of example, in the "design" stage of the instrument, the specific criteria identified in support of the motivation standard focus on the design elements that will trigger situational interest.

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	
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	
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	
D. A mix of **interactivity** types has been selected to support trainee interest development.	YES 2 points	NO 0 points	
E. A variety of pre-instructional strategies prepares trainees for the main content of the training topic.	YES 2 points	NO 0 points	
F. Learning content is credible, current, practical in nature, and relevant to training and performance needs.	YES 2 points	NO 0 points	

For criterion A (learning architecture), for example, were the instructional designer to choose a show-and-tell architecture to structure a training module for a group of teachers learning a new student-centered lesson planning model, it is unlikely that this design choice would create an environment in which situational interest was triggered. However, were the instructional designer to incorporate advanced organizers of audio and video clips, examples and non-examples, lesson plan templates, *realia*, and content that is written by practitioners for practitioners, there is a strong likelihood that these design choices would meet the motivation standard for this stage of the process and trigger sufficient situational interest in this topic.

3. **Instrument Format**: I tried to create a document that an instructional designer could use as not only a blueprint to create an environment that triggers interest but also an evaluative instrument that could be completed efficiently to ensure that learner motivation and interest are foregrounded in any learning event. As I worked through different iterations of the instrument, I could not seem to strip it of a weightiness, resulting in part from the heavy theoretical aspect of the model of interest and in part from my choice to treat the instrument visually as a document rather than as a tool. I realized, then, that I had created something that ran counter to what I was attempting to create for an instructional designer: an easy-to-use heuristic that could visually guide the tool's user to create an environment in which interest is triggered, maintained, and even deepened.

Approaching the design of the instrument from more of a metatheoretical angle, I tried to make the instrument "interesting" and of value to the instructional designer. To accomplish this, I shaped the environment of the instrument using several of the criteria that would be incorporated into the instrument itself. For example, the instrument incorporates

- an overarching organizing principle (stage/standard/criteria);
- chunked sections of information to guide the user to the key elements of each stage of ADDIE and interest development;
- concrete language to avoid ambiguity of terms;
- color coding to distinguish sections of the evaluation from one another;
- a simple scoring system that renders the evaluation quantitatively;
- remediation to help guide the instructional design to remedy any deficiencies in the motivation standard;

- a space for the instructional designer to reflect on the evaluation;
- user support systems, such as a glossary to clarify meanings of terms or concepts that may not be familiar to the practitioner but nevertheless inform the instrument; and
- a list of references from which glossary terms have been sourced for the instructional designer to explore and enhance individual interest in theories of motivation and, specifically, interest-related research.

I envision this instrument as the organic product of an iterative process, much like the instructional design of a learning event is an always developing product of ongoing evaluation and revision. As instructional designers use it, and as quantitative and qualitative learner evaluation feedback for a given learning event is elicited, analyzed, and compared to the completed MEI for that event, modifications to the point system and even the motivation criteria itself can be made to enhance the instrument's usefulness and effectiveness.

References

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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	
B. Affective characteristics of the target population have been identified.	YES 4 points	NO 0 points	
C. Gaps in the target population's knowledge, skills, attitudes, and performance (KSAP) have been identified.	YES 4 points	NO 0 points	
D. Course objectives reflect training and performance needs.	YES 4 points	NO 0 points	
E. Training delivery mode aligns with the characteristics and training needs of the target population.	YES 4 points	NO 0 points	
Total Points (maximum 20)	**____ / 20**		

Score	Rating	Recommendation
20 points	Meets Standard	--
< 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**	
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**	
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**	
D. A mix of **interactivity** types has been selected to support trainee interest development.	**YES 2 points**	**NO 0 points**	
E. A variety of pre-instructional strategies prepares trainees for the main content of the training topic.	**YES 2 points**	**NO 0 points**	
F. Learning content is credible, current, practical in nature, and relevant to training and performance needs.	**YES 2 points**	**NO 0 points**	
G. Learning content is differentiated and incorporates the **personalization principle** where appropriate.	**YES 2 points**	**NO 0 points**	
H. Learning tasks and activities promote personalized exploration of the topic.	**YES 2 points**	**NO 0 points**	
I. Learning tasks and activities promote learner choice.	**YES 2 points**	**NO 0 points**	
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**	
Total Points (maximum 20)	**____ / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	--
< 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**	
B. Content is structured following the **sequencing principle**.	**YES 2 points**	**NO 0 points**	
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**	
D. Graphics and images enhance text-based information.	**YES 4 points**	**NO 0 points**	
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**	
F. Learning tasks and activities are structured following the **sequencing principle**.	**YES 2 points**	**NO 0 points**	
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**	
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**	
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**	
J. Assessment remediation promotes understanding as to why a response may be correct or incorrect.	**YES 2 points**	**NO 0 points**	
Total Points (maximum 20)	**____ / 20**		

Score	Rating	Recommendation
18–20 points	Meets Standard	--
< 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	
B. Instructions facilitate successful navigation or completion of learning task or activity.	YES 2 points	NO 0 points	
C. Trainees are aware of their progress throughout the learning event.	YES 2 points	NO 0 points	
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	
E. Materials required for active participation in the learning event are accessible from within the learning environment.	YES 2 points	NO 0 points	
F. Where applicable, performance rubrics are communicated to both trainee and learning facilitator.	YES 1 point	NO 0 points	
G. Levels one (reaction) and three (behavior) evaluation forms collect both quantitative and qualitative data.	YES 1 point	NO 0 points	
H. Supplementary resource materials have been curated to reinforce and enhance the trainee's experience with the topic.	YES 2 points	NO 0 points	
I. Additional resource materials enhance trainee knowledge and personal interest in the topic beyond the learning event.	YES 2 points	NO 0 points	
J. Learner achievement is acknowledged (e.g., badges, certificate of completion)	YES 2 points	NO 0 points	
Total Points (maximum 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	
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	
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	
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	
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	
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	
Total Points (maximum 20)	**____ / 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
2. **Design**	____ / 20
3. **Development**	____ / 20
4. **Implementation**	____ / 20
5. **Evaluation**	____ / 20
Total Points (maximum 20)	**____ / 100**

Score	Rating	Recommendation
90-100 points	Meets Standard	--
< 90 points	Fails to Meet Standard	Review each stage of the evaluation to identify deficiencies as they align with the motivation standard.

Notes

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).

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