

Instructional Unit Critique Packet

INSTRUCTIONAL UNIT: DTMS: Preparatory Functions

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This packet provides you with several tools to help you design, develop, and critique instructional units. It is helpful to review it **PRIOR** to starting an instructional design project, **DURING** each phase of instructional design, and at the **END** point when the instruction will be reviewed or implemented. Thus this packet acts as an advance organizer, status checkpoint support, and final critique for instructional design projects.

MULTIPLE PERSPECTIVES: The first tool is the “Multiple perspectives ... Thinking like... instructional designers, instructors, and learners” checklist. In each section you are prompted to think about key questions that each of these stakeholders ask when reviewing overall quality of instruction to prompt content learning.

EVENTS OF INSTRUCTION: The second tool is a rubric based on Gagne’s 9-events of instruction and related instructional design and learning principles. Gagne studied the cognitive functions of learning and found that when external variables (instruction) aligned with each of the nine (9) internal cognitive learning functions, learners were more likely to learn content through the instruction. This rubric queries each of the 9-events and prompts for the strength of each event as represented in the instruction. Sub-queries relate to specific instructional and theoretical principles of importance. Your role is to review the target instructional unit, rate each element, sum the column ratings, add column ratings together and write the total score to the title line of the page. The higher the score (out of 75) the stronger the instructional unit is in including the 9-events of instruction.

INSTRUCTIONAL AND MESSAGE DESIGN: The third tool is a quality rubric for specific instructional design and message design principles. Your role is to review the target Instructional Unit and rate each item. The higher the score (out of 50) the stronger the uses of instructional design and message design principles.

OVERALL RATINGS: The final three questions prompt an overall rating for the unit’s instructional quality, creativity in learning design, and use of instructional and message design principles. The broad nature of these questions require that you think about the instruction in multiple ways – from the three perspectives of ID, instructor, and learning ... the use of 9-events... the incorporation of instructional design, learning, and message design principles.

Confluence of these reviews: The first tool prompts you to think about the overall Instructional Unit from *different perspectives*. The second two tools will be helpful in identifying the Instructional Unit’s areas of *strengths and enhancements*, from learning and instructional principles. The third tool prompts for *overall rating* across the unit. It is critical to be honest in reviewing and rating each item in each of the checklists and rubrics.

These ratings are not easy to determine, given the complex nature of learning, instruction, message design, and multiple stakeholders involved with instruction. However this type of thinking and reflection can help you develop a deeper understanding of instruction and the complex relationships among instruction, learning, messages, and delivery. This can be helpful in predicting how successful an Instructional Unit under review will *perform*, and support learning, when it is implemented.

Thinking like... instructional designers, instructors, and learners

AS AN INSTRUCTIONAL DESIGNER			
For unit...	No	Partly	Yes
• do instructional goals, learning objectives, strategies, technology tools, assessments align with each other?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• do instructions/guidelines clearly describe assignments (e.g., introduce, explain goals of activities, describe how to complete the assignment, provide learning outcomes, describe how learning will be assessed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• do assignments include a summary/debrief to help learners reflect on new content?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• is there integration of communications among instructor, peers, and/or others?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• are there clear grading guidelines or rubrics to support each assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• do resources (e.g., readings, graphics, manipulable resources, media) support (focus on) expected learning?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• is it organized in a logical order that supports learner navigation through the content presentation, assignments, activities, and assessments? (identify key tasks, resources, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• are graphics, motivational features, interactive events, resources purposefully integrated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
For resources, do they ...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• prompt learner to physically interact with the content/subject matter to be learned?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• prompt learner to think or act in a variety of cognitive ways (organize, integrate, evaluate) with the content?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• prompt learner to reflect on knowledge/ demonstration and application of content?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• prompt learner at appropriate level of expected learning outcome (e.g., recall, comprehend, problem solve)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• have clear instructions on how they should be used?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• provide learner with multiple ways to demonstrate content learning, share understanding, and extend content learning within and beyond the unit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
AS AN INSTRUCTOR			
Planning...	No	Partly	Yes
• optimal digital/non-digital tools and online/offline strategies are selected to support <i>instructional</i> activity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• optimal digital/non-digital tools and online/offline strategies are selected to support <i>learning</i> activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• optimal digital/non-digital tools and online/offline strategies are selected to support <i>assessments</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• resources are selected (or developed) that exemplify key content, examples, illustrative stories, data, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• learning environment is organized to ensure learners can find, access, and use resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• learning environment effectively integrates tools, strategies and resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
While facilitating learning instructor is...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• engaging (e.g., facilitate, motivate, question, summarize, debrief) learners in content?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• engaging learners with multiple pedagogical strategies (e.g., individual, collaborative, social, field work) as they align with expected learning outcomes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• engaging learners with multiple types of tools and resources, aligned with pedagogy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• using a variety of tools to monitor group dynamics and learning?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• adapting the environment, resources, and activities as necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• employing a variety of appropriate digital/non-digital tools and online/offline strategies to engage learners in applying new knowledge and skills?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
AS A LEARNER			
Learning environment supports learners' needs to...	No	Partly	Yes
• develop realistic expectation for working and learning online and in classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• maintain determination of achieving learning goals (commit to one's self)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• manage challenges of learning (organize, adhere to instructions, meet deadlines, adjust to/ resolve problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• manage time to meet own expectations and course expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• follow academic, ethical, legal standards (course requirements/deadlines, intellectual property, confidentiality, respect)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• use technology proficiently (use tools effectively, explore digital capabilities, manage digital data, seek tech problem solutions)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Instruction prompts learners to...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• be active (interacts frequently, throughout instruction)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• be resourceful (uses resources or finds additional resources to support learning)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• be reflective (thinks about learning, application to instruction, application beyond)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• be self-monitoring (keep track of and manage learning and study time and activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• apply and extend learning (within and outside of instructional contexts)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• engage effectively in online/offline communication, interactions, and collaborative work	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Overview: Use rubric to critique Instructional Units using Gagne’s 9-events of instruction and other instructional design principles. Rate each item from 1 (Weak) to 5 (Strong), if an element is missing, rate it NA. Total columns below.

	NA (0)	Weak (1)	(2)	Moderate (3)	(4)	Strong (5)
		Weak/ erroneous		Moderate Coverage		Multi-faceted Coverage
Gain attention to unit content (any of a number of ways to draw attention to content of unit)	<input type="checkbox"/>	<input type="checkbox"/> Prompts not related to content and/or activity	<input type="checkbox"/>	<input type="checkbox"/> Prompt on content or recall prerequisites	<input type="checkbox"/>	<input checked="" type="checkbox"/> Prompt content attention, recall of prerequisites, exploration of content
Establish learning objective(s) (Give or work with learners to define expected content learning)	<input type="checkbox"/>	<input type="checkbox"/> Poorly stated, vague on content learning outcomes	<input type="checkbox"/>	<input type="checkbox"/> Simple statement of content learning outcomes	<input type="checkbox"/>	<input checked="" type="checkbox"/> Give to, or collaboratively define objectives with learners, align w/content
Formatted learning objective (observable learning outcomes, not focused on activities)	<input type="checkbox"/>	<input type="checkbox"/> Focused on activities, not learning outcomes, not behavioral	<input type="checkbox"/>	<input type="checkbox"/> Uses behavioral format, some not content learning outcomes	<input type="checkbox"/>	<input checked="" type="checkbox"/> Correct format, clear links to content outcomes
Objectives aligned with type/ level of learning (knowledge, skills, attitudes; high-low level)	<input type="checkbox"/>	<input type="checkbox"/> Unclear type and/or level of learning	<input type="checkbox"/>	<input type="checkbox"/> Clearly states type and level learning; vague or unclear alignment	<input type="checkbox"/>	<input checked="" type="checkbox"/> Correctly states type / level of learning and aligns with activities/ assessments
Prompts prerequisite knowledge (helps learners recall related background content)	<input type="checkbox"/>	<input type="checkbox"/> Unclear what prerequisites are required	<input type="checkbox"/>	<input type="checkbox"/> Prompts prerequisites, but not always clearly aligned with new content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Prompts prerequisites, clearly aligned to new content and activities
Present / provide content (any of a number of ways to deliver content during unit, (e.g., read, view, manipulate, discuss, search)	<input type="checkbox"/>	<input type="checkbox"/> No new content presented/ provided, or vaguely presented/ provided	<input type="checkbox"/>	<input type="checkbox"/> Content delivered to learners, uses multiple delivery (e.g., books, video, articles, pictures)	<input type="checkbox"/>	<input checked="" type="checkbox"/> Content provided in multiple ways and formats, given or learner generated
Appropriateness of Content (content aligned with learning objectives)	<input type="checkbox"/>	<input type="checkbox"/> Content vaguely presented, not clearly in support of objectives	<input type="checkbox"/>	<input type="checkbox"/> Aligned with objectives, single strategy in one format /perspective	<input type="checkbox"/>	<input checked="" type="checkbox"/> Present or prompt learner to find content, many strategies support objectives
Provide learner guidance (e.g., advance organizers, rubric, discussion outlines, debriefs, etc.)	<input type="checkbox"/>	<input type="checkbox"/> Little evidence of guidance materials or strategies	<input type="checkbox"/>	<input type="checkbox"/> Guidance tool provided to support content review	<input type="checkbox"/>	<input checked="" type="checkbox"/> Multiple types of guiding tools/ strategies provided to support content review
Engage learner in practice (clear directions, appropriate strategies, alignment to learning objectives)	<input type="checkbox"/>	<input type="checkbox"/> Little/ unclear direction for practice, strategies not aligned to objectives	<input type="checkbox"/>	<input type="checkbox"/> Clear directions for practice, strategies aligned with objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/> Clear directions, multiple ways to practice content, aligns with objectives
Prompt physical interaction with content (e.g., takes note, highlight, manipulate, build)	<input type="checkbox"/>	<input type="checkbox"/> Little physical interaction with content	<input type="checkbox"/>	<input type="checkbox"/> Prompts specific types of physical interaction with content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Multiple types of physical interaction with content, aligns with deeper learning
Prompt mental engagement with content (e.g., reflection, thinking-sharing)	<input type="checkbox"/>	<input type="checkbox"/> Little mental/ cognitive engagement with content	<input type="checkbox"/>	<input type="checkbox"/> Prompts mental/ cognitive engagement with content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Multiple types of cognitive engagement with content, aligns with deeper learning
Prompt flexible interactions with content (e.g., various perspectives, various media)	<input type="checkbox"/>	<input type="checkbox"/> Little flexibility in perspective, viewing, and interacting with resources	<input type="checkbox"/>	<input type="checkbox"/> Prompts at least two perspectives of content, few media types	<input type="checkbox"/>	<input checked="" type="checkbox"/> Prompts multiple perspectives through multiple media types
Provide learner with feedback (e.g., various formats-text, verbal, graphic; various types-corrective, supportive, progress)	<input type="checkbox"/>	<input type="checkbox"/> Little evidence of feedback or reflection prompts on practice and learning assessments	<input type="checkbox"/>	<input type="checkbox"/> Simple feedback (e.g., correct/ incorrect) during practice and assessments prompts reflection	<input checked="" type="checkbox"/>	<input type="checkbox"/> Multiple feedback types; developmental (e.g., confirming, corrective), reflection, progress maps
Help learner transfer knowledge (e.g., apply content within unit, to prior/next units, outside unit)	<input type="checkbox"/>	<input type="checkbox"/> Little evidence of supporting knowledge transfer within and outside of course	<input type="checkbox"/>	<input type="checkbox"/> Strategies (cases, projects) to support knowledge transfer within course; some outside transfer	<input type="checkbox"/>	<input checked="" type="checkbox"/> Multiple strategies support knowledge transfer within & outside course; work with clients, audiences, etc.
Assess content learning (e.g., single measure, multiple measures; surface to deep learning)	<input type="checkbox"/>	<input type="checkbox"/> Vague measures, mono-level; lack alignment to instructional strategies and objectives	<input type="checkbox"/>	<input type="checkbox"/> Clear measures (multi-level) aligned with learning objectives and instructional strategies	<input checked="" type="checkbox"/>	<input type="checkbox"/> Multiple measures / testing strategies aligned with learning objectives and instructional strategies
TOTAL (0 to 75)–add to top	0	[✓ x 1 ↻] column max=15	30	[✓ x 3 ↻] column max=45	60	[✓ x 5 ↻] column max=75
Type Column SCORE per Rating⇒	0	0	0	3	8	65

INSTRUCTIONAL AND MESSAGE DESIGN

	NA	Needs Improvement – 1	2	On the Right Track – 3	4	Ready To Go – 5
Messaging in activities prompt deep learning (oral, written, behavior)	<input type="checkbox"/>	<input type="checkbox"/> No display of learning required by learners	<input type="checkbox"/>	<input type="checkbox"/> Learning display prompted, related to expected outcomes	<input type="checkbox"/>	<input checked="" type="checkbox"/> Learning display required higher level thinking, creative responses
Definition of activity outcomes / products (prompt representation of learning)	<input type="checkbox"/>	<input type="checkbox"/> Not clearly defined	<input type="checkbox"/>	<input type="checkbox"/> Traditional outcomes defined, e.g., paper, drawing, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/> Prompts learner to produce meaningful representations of their own learning; provides sample solutions
Graphics & images (prompt content interactivity & thinking)	<input type="checkbox"/>	<input type="checkbox"/> Images do not prompt content thinking or interactions	<input type="checkbox"/>	<input type="checkbox"/> Images support learning processes by prompting interaction and engagement	<input type="checkbox"/>	<input checked="" type="checkbox"/> Images provide multiple media prompts to content interaction/ deep thinking
Graphics and images (Related to content)	<input type="checkbox"/>	<input type="checkbox"/> Images decorative, not related or distracting	<input type="checkbox"/>	<input type="checkbox"/> Images visualize content learning messages	<input type="checkbox"/>	<input checked="" type="checkbox"/> Images prompt content interaction, deeper learning
Focused topics / activities (align content and learning outcomes)	<input type="checkbox"/>	<input type="checkbox"/> Topic/ activity messages are unfocused and confusing	<input type="checkbox"/>	<input type="checkbox"/> Topic/ activity messages are focused with a clear alignment between content and learning	<input type="checkbox"/>	<input checked="" type="checkbox"/> Topic/ activity messages relate multiple aspects of content/ learning to each other, align with objectives
Quantity of content (enough provided to support learning outcomes)	<input type="checkbox"/>	<input type="checkbox"/> Insufficient or over abundance of information provided or referenced to achieve learning objectives	<input type="checkbox"/>	<input type="checkbox"/> Sufficient content provided or referenced to achieve learning objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/> Significant amount of content provided in multiple connections to support deeper learning
Quality of Content (accurate, informative, valuable content that supports learning)	<input type="checkbox"/>	<input type="checkbox"/> Inaccurate content, uninformative and not presented as valuable to learning	<input type="checkbox"/>	<input type="checkbox"/> Content accurate, informative, and provides value to learning content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Content accurate, informative, and provides value to learn and expand knowledge, and/or skills
Content connected & organized (content associated with clear logical learning message)	<input type="checkbox"/>	<input type="checkbox"/> Lacks clear organization, disjointed/ unrelated content, no logical order or clear learning message	<input type="checkbox"/>	<input type="checkbox"/> Basic organization of connected content with logical progression	<input type="checkbox"/>	<input checked="" type="checkbox"/> Integrated content organization with clear interconnections; content provides focused message
Impact of message on learner interactions (messages prompt interactions & thinking)	<input type="checkbox"/>	<input type="checkbox"/> Passive, little thought or interaction activity prompted	<input type="checkbox"/>	<input type="checkbox"/> Messages promote interacting with and thinking about content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Messages highly engaging, prompts in-depth reflection during learning activities
Colors show focus & relationships (portray meaning in messages)	<input type="checkbox"/>	<input type="checkbox"/> Color use appears to have no purpose or is distracting	<input type="checkbox"/>	<input type="checkbox"/> Color uses demonstrates content themes and focus	<input type="checkbox"/>	<input checked="" type="checkbox"/> Color uses add depth to messages showing focus/ relationships across unit
Message Organization (organization strategies convey key messages)	<input type="checkbox"/>	<input type="checkbox"/> Placement of titles, graphics, audio, video, etc. distract from learning	<input type="checkbox"/>	<input type="checkbox"/> Placement of titles, graphics, audio, video, etc. support learning messages	<input type="checkbox"/>	<input checked="" type="checkbox"/> Placement of titles, graphics, audio, video, etc. strengthen message
TOTAL (0 to 50)–add to top	0	<input checked="" type="checkbox"/> x 1 \Rightarrow column max=10	20	<input checked="" type="checkbox"/> x 3 \Rightarrow column max=30	40	<input checked="" type="checkbox"/> x 5 \Rightarrow column max=50
Type Column DESIGN SCORE Rating \Rightarrow	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>50</u>

OVERALL UNIT CRITIQUE

Cumulative critique...	Weak (1)	(2)	Moderate (3)	(4)	Strong (5)
Unit Instructional Quality Score	<input type="checkbox"/> Missing most 9-events; poorly integrated design	<input type="checkbox"/>	<input type="checkbox"/> Contains all 9-events, not in fully synergistic design	<input type="checkbox"/>	<input checked="" type="checkbox"/> Contains all 9-events, fully synergistic design
Creativity in Learning Engagement Design	<input type="checkbox"/> Lacks creativity in engaging learners in multiple ways	<input type="checkbox"/>	<input type="checkbox"/> Engages learners in multiple ways with content	<input type="checkbox"/>	<input checked="" type="checkbox"/> Prompts learners to engage in traditional and new ways, make own choices
Use of Instructional and Message Design principles	<input type="checkbox"/> Lacks clear & consistent messaging of learning	<input type="checkbox"/>	<input type="checkbox"/> Includes clear and consistent messages to complete instruction and pursue learning	<input type="checkbox"/>	<input checked="" type="checkbox"/> Messages inform & prompt learners to interact/ engage in both traditional & new ways of pursuing learning
TOTAL (0 to 5)–add to top	<input checked="" type="checkbox"/> x 1 \Rightarrow column max=3	6	<input checked="" type="checkbox"/> x 3 \Rightarrow column max=9	12	<input checked="" type="checkbox"/> x 5 \Rightarrow column max=15
Type Column OVERALL score \Rightarrow	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>15</u>