E-Learning by Design

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ISBN-13: 9780470900024

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Ask enough questions.
Make sure one question does not answer another.
Sequence test questions effectively.
Vary the form of questions and answers.
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Report test scores simply.
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Design to accomplish learning objectives.	
Express the goal as a specific task.	
Pick the right sized game.	
Emphasize learning, not just doing.	
Specify challenge and motivation.	
Manage competitiveness.	
Provide multiple ways to learn.	
Create a micro-world.	
Specify the game's world.	
Specify characters and important objects.	
Create a storyline.	
Create a back story.	
Specify the game structure.	
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Let learners try multiple strategies.
Program variety into the game.
Involve the learner.
Teach through feedback.
Provide intrinsic feedback.
Inject educational feedback where needed.
Provide continual feedback.
But give crucial feedback immediately.
Confront bad behavior and choices.
Defer lengthy feedback.
Anticipate feedback (feedforward?).
Enable learning through a variety of experiences.
Provide complete, detailed feedback.
Help learners correct mistakes.
Offer abundant practice.
Acknowledge achievement.
Progressively challenge learners.
Challenge learners.
Ratchet up the challenge.
Give closure between phases.
Control the rhythm of difficulty.
Require consolidating small steps.
Manage game complexity.
Beware combinatorial explosion.
Menu excursions.
Mission-sequential structure.
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Safari structure.
Breakthrough structure.
Simplify learning the game.
Guide actions with instructions.
Explain the game clearly.
Start with training wheels.
Assist when needed.
Show solution after a few attempts.
Let learners request assistance.
Include pertinent hints.
Simplify the display for quick response.

Challenge with time limits.

Minimize distractions.	
Accept all successful actions.	
Design coached task simulations	
Plan progressive interactivity.	
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Patterns of interaction.
The elements of social learning.
Combine patterns for complete activities.
Social capabilities of software.
Send targeted messages.
Meet real-time.
Discuss asynchronously.
Broadcast sporadic messages.
Post message sequences.
Collaboratively create documents.
Share creations.
Vote and rate.
Filter messages.
Establish a point of contact.
Set up and administer a team or other group.
Facilitate rather than teach.
Define the duties of the facilitator.
Establish a code of conduct.
Intervene in cases of bad behavior.
Grade fairly in social learning.
Assess against objectives.
Use available evidence.
Ways to assess learners.
Set criteria for messages and posts.
Or, forego individual assessment.
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Extend Absorb activities for social learning.
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Encourage meaningful discussions.
Design discussion activities.

Ensure learners have necessary skills.
Moderate discussion activities.
Perform message maintenance.
Promote team learning.
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Form a team from individuals.
Align goals of team members.
Learn who can do what.
Adopt team roles.
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Reduce infrastructure costs.
Prepare for an increasingly mobile world.
Adapt existing learning for mobile learners.
Enable participation in classroom learning.
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Design for the mobile learner.
Design for the environment where learning occurs.
Design for the mobile device.
Design guidelines for overcoming limitations.
Design for easy reading.
Maintain contact with learners.
Design for the devices learners already have.
Use learners' time efficiently.
Fit text and graphics to the display.
Provide low-bandwidth alternatives.
Design for imperfect network connections.
Enable "download and go".
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Announce the meeting.

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