

Assessment in Online Learning

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Overview

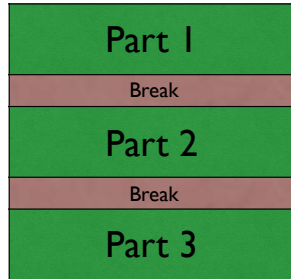
"The move to online learning can be both scary and exhilarating for both teacher and student. Assessment can amplify those emotions. In this blended session, learn good practice, workable examples, and ways to reduce confusion and stress."

Agenda

- Introductions
- Context
- Inspirations: Movies, TV, & Games
- Activity
- LMS Tools
- Secure Testing
- General Concepts & Advice
- Rubrics!
- Q & A



Session Structure



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Introductions

5

Hello
my name is

JAMES MOORE

- Telephone: +1 (312) 362-5870
- Email: jmoore@depaul.edu
- URL: condor.depaul.edu/jmoore/

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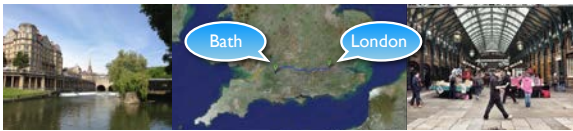
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In case you were wondering...



8

Hometowns: Bath & London



9

But I live in Chicago



I Work At DePaul



10

By Day...

11

James Moore

Director of Online Learning - College of Business

- 1999: Office of Distance Learning
Webmaster
- 2002: Lifelong Learning & Suburban Campuses
Web development manager
- 2005: ITD / IDD
Instructional technology / instructional design
consultant
- 2007: College of Business
Director of Online Learning



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By Night...



MKT595: Internet & Interactive Marketing
11-Week MBA Course
Taught entirely online

condor.depaul.edu/jmoore/mkt595/



Practical Internet Marketing
6-Week Certificate Course
Taught both online and flipped/hybrid

condor.depaul.edu/jmoore/pim/

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Social...



moorejames



@dunsurfin



dunsurfin



+JamesMooreDunsurfin



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Before U.S.A

- Worked for an independently held investment bank in The City
- Worked for one of the "Big" accountancy firms (one that still exists)
- Lived in Israel for two years (working with Jewish and Arab groups)
- ...and numerous other jobs that build experience and character. Or something like that.

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Your Introductions

16



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There's a set of rules that anything that was in the world when you were born is normal and natural.

Anything invented between when you were 15 and 35 is new and revolutionary and exciting, and you'll probably get a career in it.

Anything invented after you're 35 is against the natural order of things.

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To Produce Experts

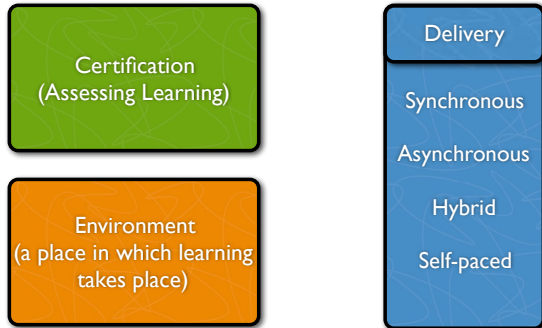
1. Lots of factual knowledge
2. Mental organization (retrieval and application)
3. Meta-cognition ("do I really understand?")

Source: Carl Wieman (2007, September). WHY NOT TRY: A SCIENTIFIC APPROACH TO SCIENCE EDUCATION? Change, 39(5), 9-15.
Retrieved January 20, 2009, from ProQuest Education Journals database. (Document ID: 1364879141).

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University Core Values

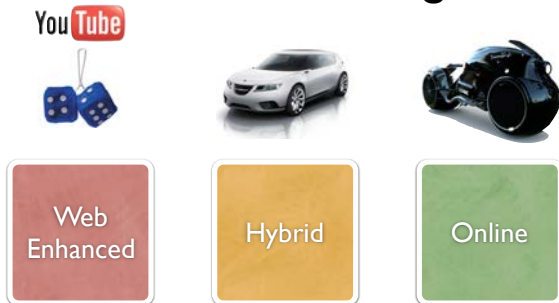


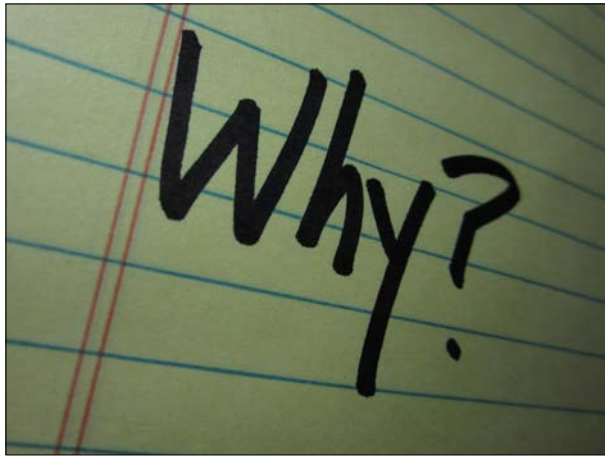
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What Is Online Learning?

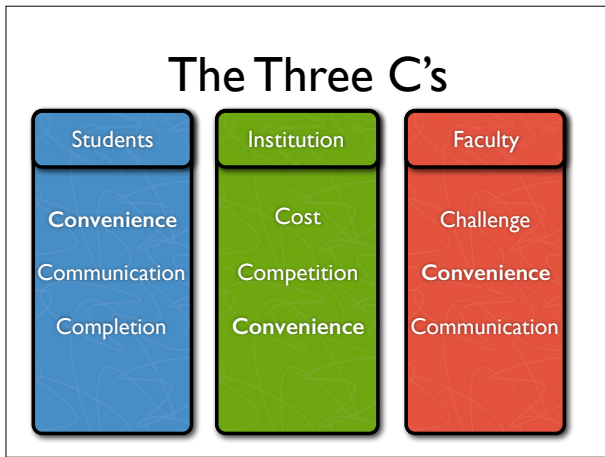
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Online Learning

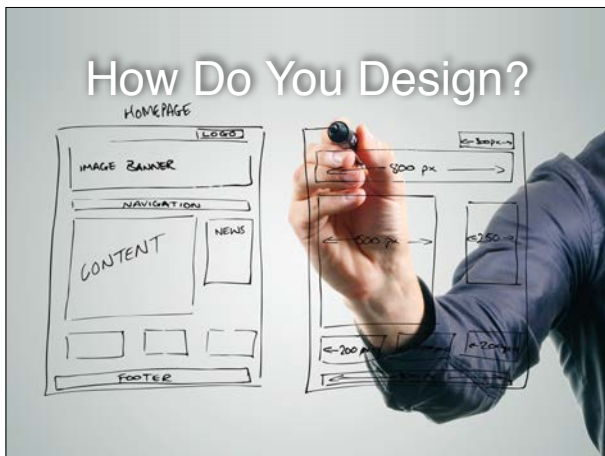




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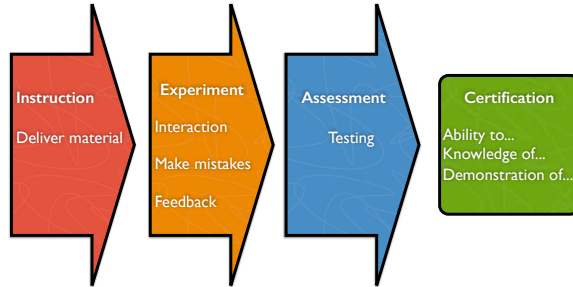
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Start At The End



29

Convenience

- The course has a simple trajectory that students follow
- The technology should be either transparent or a natural extension (like using a pen to write)



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Inspiration



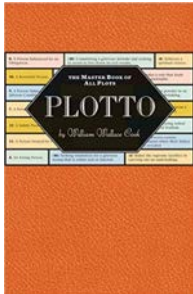


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1462 Stories



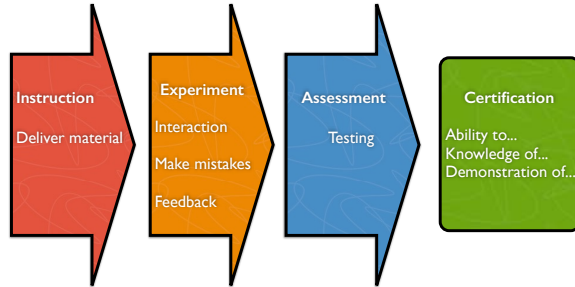
William Wallace Cook (1867-1933)

A murders a stranger, A-4, in a lonely wood where the soil is of a peculiar color, unlike any other soil for miles around. A sulks back home with the mud on his shoes.
(467) (1302)

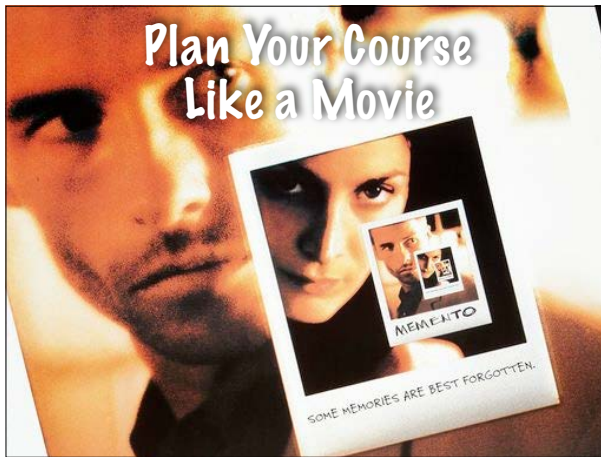
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Start At The End



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Three-Act Structure



Focus/Setup
(Protagonist)



Apprehension
(Unexpected)



Resolution
(Understanding)

Actions - Reactions - Consequences

Discussion



37

Foundation of Trust



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Rubric

Points	
3	Precise, well-reasoned response. Citation of source material (link). Supports position with factual information.
2	Offers relevant information. Makes note of outside source material.
1	Participates.

Five Points Per Discussion

39

Multimedia (HTML)



40

Feedback & Review



"Jane made an excellent point..."

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Three-Act Structure



Focus

Unexpected
(Experiment)

Assessment
(Exam / Project)

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Not Just Discussion Board

44

Not Just Discussion Board



(but feedback needs to be within the LMS)

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Mario and Zelda



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The Call To Action



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Project

Project Defined

Materials / Lectures

Exercises / Assignments

Project Due

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A Quiet Place to Explore



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Week 0

Profile

Discussion Introduction

Introductory Video

Sample Dropbox

50

Constraints



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Weekly Structure

Week 0

Week 1

Week 2

...

Week 11

53

Mini-Bosses and End-of-Level Bosses



54

Sub-Tasks

Form Groups

Create Script

Create Test Video

Upload Test Video

Final
Project

Coins



55

Points

- 🕒 Create groups: 20 points
- 🕒 Create script: 100 points
- 🕒 Create test video: 100 points
- 🕒 Upload test video: 50 points

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GAME OVER

57

Quizzes

- Points for taking a quiz, not the score
- Retake quiz until happy with score
- Take 6 highest score from 8 exercises

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Activity

Turing Test...

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The Ultimate Question

- What question or project truly allows you to assess a student?

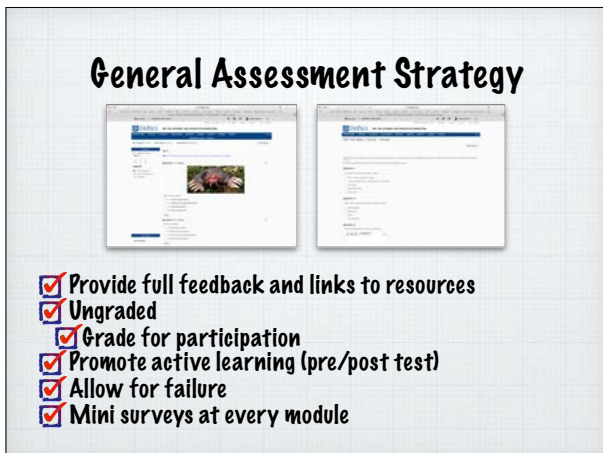
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Mini Survey

- ☒ How useful to you were the lecture videos?
- ☒ What is your preferred format for the lecture videos?
- ☒ Is there anything that you did not understand?
- ☒ Did you experience any technical difficulties?
- ☒ Is there anything you want to tell me?
- ☒ What was the most useful thing that you learned ?
- ☒ What was the least useful thing that you learned ?
- ☒ What didn't you understand?

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Testing Options

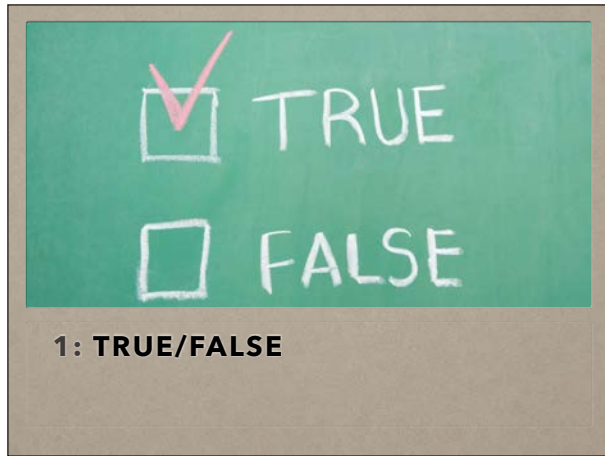
- | | |
|---|--|
| <input checked="" type="checkbox"/> True/False | <input checked="" type="checkbox"/> Uploads |
| <input checked="" type="checkbox"/> Multiple Choice | <input checked="" type="checkbox"/> Discussion Board |
| <input checked="" type="checkbox"/> Multi-Select | <input checked="" type="checkbox"/> Survey |
| <input checked="" type="checkbox"/> Long Answer | |
| <input checked="" type="checkbox"/> Short Answer | |
| <input checked="" type="checkbox"/> Multi-Short Answer | |
| <input checked="" type="checkbox"/> Fill in the Blanks | |
| <input checked="" type="checkbox"/> Matching | |
| <input checked="" type="checkbox"/> Ordering | |
| <input checked="" type="checkbox"/> Arithmetic | |
| <input checked="" type="checkbox"/> Significant Figures | |

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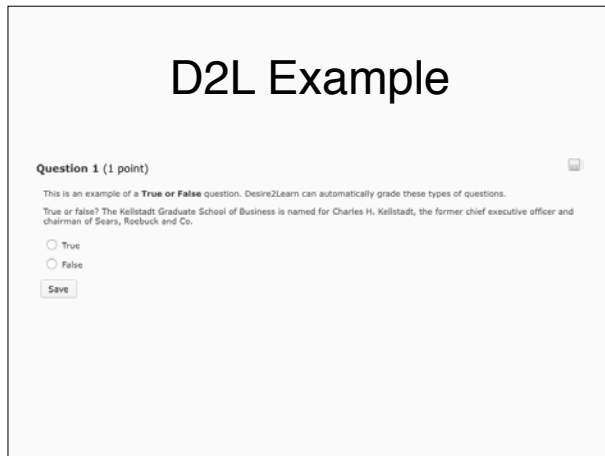
What To Use / What Not To Use



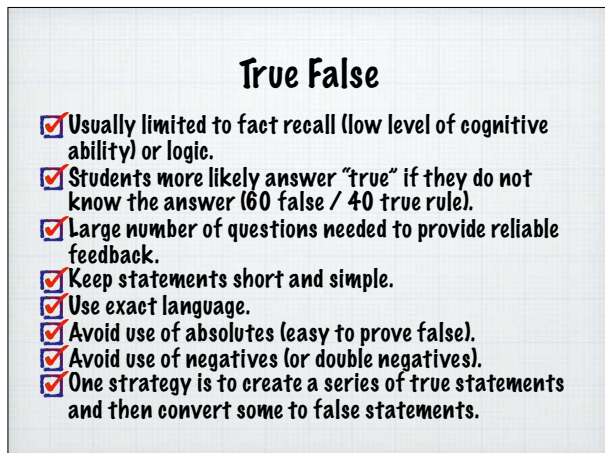
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69

Use It?

Maybe

(limited use)

70



2: MULTIPLE CHOICE

71

D2L Example

Question 1 (1 point)

This is an example of a **Multiple-Choice** question. Desire2Learn can automatically grade these types of questions. You select one correct option only from the choices below.

The Driehaus College of Business launched its master of business administration (MBA) program in:

- ☐ 1912
- ☐ 1948
- ☐ 1963
- ☐ 2001

72

Multiple Choice

- ✓ Offer the most flexibility in terms of content.
- ✓ Construct questions with a single correct answer.
- ✓ Refrain from using the choices "all of the above" or "none of the above" (lazy).
- ✓ Avoid negative wording (especially double negatives).
- ✓ When item is controversial, indicate whose opinion is sought.
- ✓ Avoid irrelevant cues to correct answer (length, grammar).
- ✓ Items should test one central idea or concept.
- ✓ Present options in alphabetical or logical order.
- ✓ Consider randomization of possible answers.

73

Use It?

Yes!

74



3: MULTI-SELECT

75

D2L Example

Question 1 (1 point)

This is an example of a **Multi-Select** question. Desire2Learn can automatically grade these types of questions. You select one or more correct options from the choices below.

Graduate business courses also are offered on these DePaul campuses:

- ☐ Lincoln Park Campus
- ☐ Loop Campus
- ☐ Naperville
- ☐ Oak Forest
- ☐ O'Hare

Save

76

Multiple Answers

- ☒ A different (harder) form of multiple choice.
- ☒ Items should test one central idea or concept.
- ☒ Multiple answers must be clearly correct.

77

Use It?

Yes!

(if you have time.....)

78



80

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82

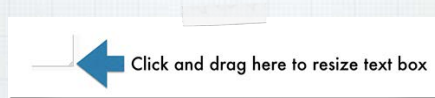
Use It?

Yes!

(if you have time....)

83

Issues With Interface



- ✓ In D2L, students may not understand that they can resize the text box.
- ✓ Students sometimes delete their answers.

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5: SHORT ANSWER

D2L Example

Question 1 (1 point)

This is an example of a **Short Answer** question. Desire2Learn can automatically grade these types of questions. However, your professor may have to manually review your responses for typos or unanticipated spelling in your answer.

Name one of the Driehtaus College of Business' schools/departments.

Save

85

Short Answer

- ☒ Best used for testing fact recall or application of knowledge.
- ☒ Anticipate alternative spelling and capitalization.
- ☒ May require manual review.

86

Use It?

Yes!

(but students need to understand manual grading)

87



6: MULTI-SHORT ANSWER

88

D2L Example

Question 1 (1 point)

This is an example of a **Multi-Short Answer** question. Desire2Learn can automatically grade these types of questions. However, your professor may have to manually review your responses for typos or unanticipated spelling in your answer.

Name three of the Driehaus College of Business' schools/departments.

Save

89

Multi-Short Answer

- ☒ Best used for testing fact recall or application of knowledge.
- ☒ Anticipate alternative spelling and capitalization.
- ☒ May require manual review.
- ☒ Will take some time to create.

90

91

Use It?

Yes!

(but students need to understand manual grading)

92

7: FILL IN THE BLANKS

93

D2L Example

Question 1 (1 point)

This is an example of a **Fill-In-The-Blank** question. Desire2Learn can automatically grade these types of questions. However, your professor may have to manually review your responses for typos or unanticipated spelling in your answer.

The Driehaus College of Business is accredited by . Accreditation standards challenge post-secondary educators to pursue excellence and continuous improvement throughout their business programs.

Fill In The Blank

- ☒ Best used for testing fact recall or application of knowledge.
- ☒ Anticipate alternative spelling and capitalization.
- ☒ May require manual review.

94

Use It?

Yes!

95



8: MATCHING

96

D2L Example

Question 1 (1 point)

This is an example of a **Matching** question. Desire2Learn can automatically grade these types of questions.

Match the following country names with the corresponding capital names.

1. Bulgaria

Brussels 2. Iceland

Reykjavik 3. Spain

Sofia 4. Switzerland

Budapest 5. Hungary

6. Belgium

97

Matching

☒ Best used for testing knowledge level:

☒ Term - Definition.

☒ Cause - Effect.

☒ Problem - Solution.

☒ Symbol - Meaning.

☒ Keep each matching set short.

☒ Arrange responses in alphabetical or logical order.

☒ Reusing matching set will reduce guesses.

☒ Provide more answers than questions.

☒ Indicate basis for matching.

☒ Ensure only one correct answer.

98

Use It?

Maybe

(Unless your LMS uses a better interface)

99

Issues With Matching

Question 1 (1 point)

This is an example of a **Matching** question. Desire2Learn can automatically grade these types of questions.

Match the following country names with the corresponding capital names.

1

Brussels

2

Island

3

Reykjavik

4

Spain

5

Sofia

6

Switzerland

7

Budapest

8

Hungary

9

Belgium

Save

2

-

7

+

2

100



9: ORDERING

101

D2L Example

Question 1 (1 point)

This is an example of an **Ordering** question. Desire2Learn can automatically grade these types of questions.

Put the five departments below in alphabetical order.

1

Economics

2

Finance

3

Marketing

4

Real Estate

5

Management

Save

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Ordering

- ✓ Tests fact recall.
- ✓ Test knowledge of hierarchy / topology / sequencing.
- ✓ Keep options short.
- ✓ Arrange responses in alphabetical or logical order.

103

Use It?

Maybe

(Unless your LMS uses a better interface)

104

Issues With Ordering

Question 1 (1 point)

This is an example of an **Ordering** question. Desire2Learn can automatically grade these types of questions.
Put the five departments below in alphabetical order.

- Economics
- Finance
- Marketing
- Real Estate
- Management

Save

$$2 - 7 + 2$$

105



10: ARITHMETIC

106

D2L Example

Question 1 (1 point)

This is an example of an **Arithmetic** question. The variables in this question are generated randomly. Desire2Learn can automatically grade these types of questions.

If a classroom at DePaul has a length of 380 and a width of 180, what is the area of the floor of that classroom?

Your Answer:

Answer

Save

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Arithmetic

- ☒ Personalizes each question for each attempt.
- ☒ Tests correct application of a formula (and correct calculation)
- ☒ Involves considerable time to create appropriate question. Requires validation.
- ☒ Graded automatically.
- ☒ Does not allow students to show work.

108

Use It?

Yes!

(If you have time, and question type is relevant)

109

2sf

4sf

(2.8 x 4.532) + 12.690 =

12.6896

+ 12.690

25.3796

11: SIGNIFICANT FIGURES

110

D2L Example

Question 1 (1 point)

If you multiplied (1.12x10^11) by (4.900x10^-11), what would the result be? Please calculate to 3 significant digits.

Note: Your answer is assumed to be reduced to the highest power possible.

Your Answer:

x10

Answer

Save

111

Arithmetic

- ✓ Requires students to answer in scientific notation and provide solutions that contain a specified number of significant figures
- ✓ Automatically graded.
- ✓ Does not allow students to show work.

112

Use It?

Yes!

(If you have time, and question type is relevant)

113

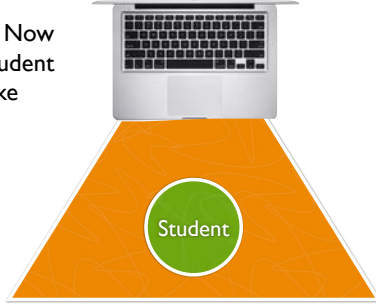
Secure Testing



114

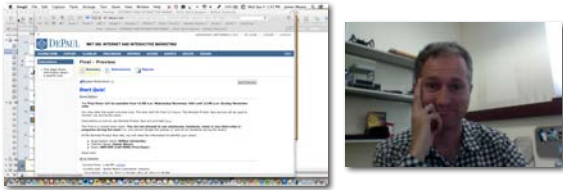
Software Secure

Remote Proctor Now
\$15 per exam/student
Material cost - like
textbook



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Proctored Recording



Clean

Rules Violations

Suspicious

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Remote Proctor Now Timeline

Week	Action Item
Before Course	Information posted in syllabus
Week 1	Exam reminder
Week 3	Practice exam (required)
Week 5	Midterm exam
Week 11	Final exam

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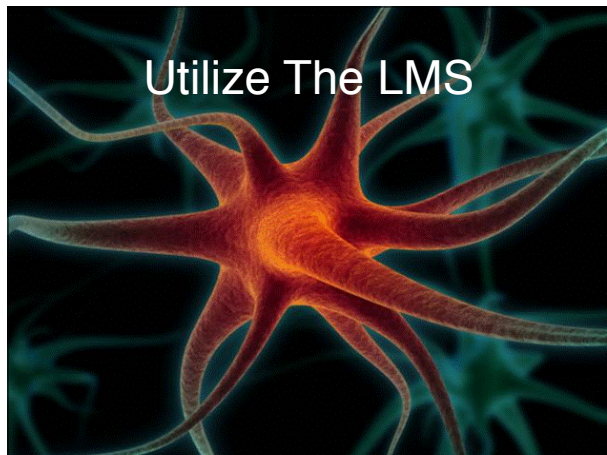
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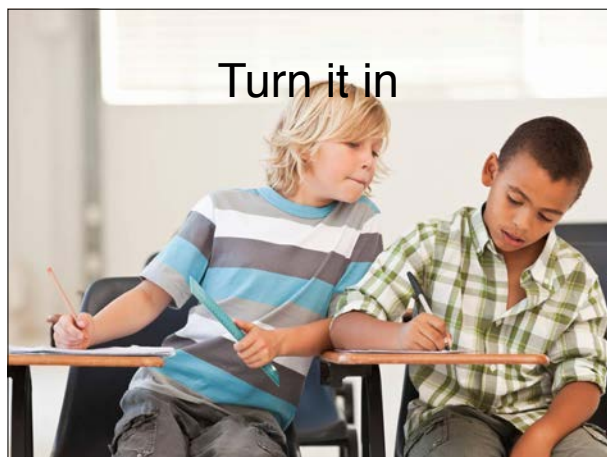
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Note: Rubric is based upon that of the work of Bill Pelz (Journal of Asynchronous Learning Networks, 8(3), My three principles of effective online pedagogy, 2004).

Blogging Rubric

Points	
3	<ul style="list-style-type: none"> Precise, well-reasoned post. Citation (link) of source material. Supports position with factual information.
2	<ul style="list-style-type: none"> Offers relevant information. Makes note of outside source material.
1	<ul style="list-style-type: none"> Participates.
Bonus Points	
+1	<ul style="list-style-type: none"> Uses relevant images to enhance post.
+1	<ul style="list-style-type: none"> Uses relevant tags (keywords).
+1	<ul style="list-style-type: none"> Provides relevant response to blog comments.

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Project Rubric

Content	5 Points	7 Points	10 Points
Content / Information <ul style="list-style-type: none"> Clarity of purpose Critical thought Use of examples 	<ul style="list-style-type: none"> The central idea is expressed though it may be vague or too broad Some sense of purpose is maintained Some evidence of critical careful thought and analysis and/or insight 	<ul style="list-style-type: none"> Central idea and clarity and purpose are generally evident Evidence of critical, careful thought and analysis and/or insight There are good, relevant supporting examples and evidence 	<ul style="list-style-type: none"> Central idea is well developed and clarity of purpose is exhibited throughout the paper Abundance of evidence of critical, careful thought and analysis and/or insight Evidence and examples are vivid and focus remains tight
Originality <ul style="list-style-type: none"> Original thought 	<ul style="list-style-type: none"> Central idea is forced. Central idea is not original. 	<ul style="list-style-type: none"> Central idea works, but is not original. 	<ul style="list-style-type: none"> Central idea is original and works.

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Project Rubric

Execution	1 Point	2 Points	3 Points
Structure <ul style="list-style-type: none"> Organization Flow of thought Transitions Format 	<ul style="list-style-type: none"> There is some level of organization, though digressions, ambiguities, irrelevances are too many Difficult to follow Ineffective transitions Floundering format 	<ul style="list-style-type: none"> Paper has a clear organizational structure with some digressions, ambiguities or irrelevances Easily followed Basic transitions Structured format 	<ul style="list-style-type: none"> Paper is logically organized Easily followed Effective, smooth and logical transitions Professional format
Grammar/mechanics <ul style="list-style-type: none"> Sentence structure Punctuation/mechanics 	<ul style="list-style-type: none"> Uses compound sentences Too many punctuation and/or mechanical errors 	<ul style="list-style-type: none"> Uses complex sentences Few punctuation or mechanical errors 	<ul style="list-style-type: none"> Manipulates complex sentences for effect/impact No punctuation or mechanical errors
Language <ul style="list-style-type: none"> Vocabulary; use of vocabulary Tone 	<ul style="list-style-type: none"> Vocabulary is used properly, though sentences may be simple Inrequently uses specific vocabulary correctly Writer's tone exhibits some level of audience sensitivity 	<ul style="list-style-type: none"> Vocabulary is varied, specific and appropriate Frequently uses subject-specific vocabulary correctly Writer's tone emerges and is generally appropriate to audience 	<ul style="list-style-type: none"> Vocabulary is sophisticated and correct as are sentences, which vary in structure and length Uses and manipulates subject-specific vocabulary for effect Writer's tone is clear, consistent and appropriate for intended audience

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Note: Rubrics are adapted from University of Colorado's Center for Innovations in Training Technology (CITT) online tutorials.


Presentation Rubric			
	1 Point	2 Points	3 Points
Concept Originality Ability to define problems, explore various possibilities and develop unique solutions	<ul style="list-style-type: none">• Provides little or no evidence of new thought, inventiveness or creativity	<ul style="list-style-type: none">• Concept supports design task• Demonstrates some new thought, inventiveness or creativity	<ul style="list-style-type: none">• Concept effectively addresses the design task• Extends client's appreciation to inventive ways• Shows significant evidence of originality and inventiveness
Aesthetic Quality Sensitivity to the principles of design and successful utilization of project criteria	<ul style="list-style-type: none">• Visuals are either too simplistic or cluttered and busy• Graphic effects fail to support the message and hamper communication of content• Graphics are gratuitous• Concept fails to support design task	<ul style="list-style-type: none">• Visual elements relate to content• Visual design criteria (balance, contrast, proportion, harmony, etc.) is apparent• Graphical elements reinforce content and are functional	<ul style="list-style-type: none">• Skillful handling of design elements creates unique and effective style• Visual elements and content reinforce each other• Design strategy supports message• Overall, an effective and functionally sound design
Presentation Degree of technical skill, ability to follow directions, craftsmanship	<ul style="list-style-type: none">• Poor craftsmanship given available technologies• For multimedia, no attempt to manipulate timing, flow, transitions, for effect• Production errors not addressed• Project fails to address assignment production criteria	<ul style="list-style-type: none">• Acceptable craftsmanship, no obvious easily correctable errors• For multimedia projects, elementary efforts to control timing, flow, transitions• Project fulfills assignment criteria	<ul style="list-style-type: none">• Clear effort to achieve high production values and to use production techniques to enhance product• Craftsmanship or presentation may approach professional quality• Project goes beyond assignment criteria
Professionalism Ability to present work on time, interact with instructor, staff, classmates, subject matter experts and other stakeholders in a professional manner	<ul style="list-style-type: none">• Multiple instances of inappropriate communication with stakeholders, clients, team members, or professor• Substantial number of deadlines missed or project incomplete	<ul style="list-style-type: none">• Project completed, communications basic but effective• Deadlines met, but often rushed• Adequately acquires support and resources required to achieve goals	<ul style="list-style-type: none">• Effective verbal and written communications, excellent demeanor and self-presentation• All project deadlines met• Acquires more than adequate support and resources to required achieve goals
Source/Citations Depending on the nature of the project, authors may need to correctly cite project sources	<ul style="list-style-type: none">• One or more resources not cited• Multiple citation errors	<ul style="list-style-type: none">• All resources cited• Some citation errors or formatting inconsistencies	<ul style="list-style-type: none">• Resources well researched and thoroughly and correctly cited
Engagement Ability to demonstrate enthusiasm for the subject and capture attention	<ul style="list-style-type: none">• Lack of focus• Message not communicated effectively	<ul style="list-style-type: none">• Clear delivery• Uses easy to follow	<ul style="list-style-type: none">• Communicates ideas with enthusiasm and appropriate language
Digital Literacy Ability to communicate through digital formats	<ul style="list-style-type: none">• Inappropriate choice of the format• Files do not work as intended	<ul style="list-style-type: none">• Multimedia successfully delivered in electronic format	<ul style="list-style-type: none">• Uses relevant media/tech• Optimal use of the format

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Q & A

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Assessment in Online Learning



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