The anatomy of a student learning experience

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College of Design / NC State University

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Forces shaping contemporary design practice:

• Increasing complexity in the scale of contemporary problems
• Escalating demand for interdisciplinary teamwork
• Accelerating pace of technological evolution
• Growing participation by users in the development of content and form
• Expanding accountability for anticipating the outcomes of design action
The design of learning experiences:

• open-endedness

• situatedness

• responsiveness

• position

• integration

• assessment
open-endedness

excerises

Render a mechanical object, using only black and white, to illustrate the Gestalt principle of closure.
excerises

Design a poster on a typeface and its designer, including a full alphabet, examples from history that use the typeface, and the designer’s biography.
exercises

puzzles

Package a raw egg, using only toothpicks and glue, so that it survives a drop of 10 feet. The student who uses the least number of toothpicks wins!
Design a system for helping people who live in urban “food deserts” to eat a healthy diet and to develop good nutritional habits in their children.
open-endedness

excerises

puzzles

problems

speculations

How might a reader’s interaction with magazines read on the iPad be different from the same content in print?
open-endedness

exercises

puzzles

problems

speculations
open-endedness

excerises
How much of what kind?

puzzles
At what point in the course/curriculum?
In service of achieving what learning objectives?

problems

speculations
situatedness

the goodness of fit
between form
and context
situatedness

the goodness of fit between form and context

HIV prevention information for teenagers
situatedness

the goodness of fit between form and context

HIV prevention information for teenagers

HIV prevention information for 15-17 year-old girls

HIV prevention information for 15-17 year-old girls who have dropped out of school
situat**edness**

the goodness of fit between form and context

HIV prevention information for teenagers

HIV prevention information for 15-17 year-old girls

HIV prevention information for 15-17 year-old girls who have dropped out of school

HIV prevention information for 15-17 year-old girls who have dropped out of school and live on the streets
the goodness of fit between form and context

enabled by technologies and systems such as

with associated social practices and structures such as

resulting in conventions and product behaviors such as

HOW MUSIC IS RECORDED AND SOLD
INTERFACE DESIGN ON MOBILE DEVICES
ANYTIME ACCESS TO MUSIC AND INFORMATION
SOCIAL STATUS CONNECTED WITH TECHNOLOGY
IPHONE, IPAD, IMOVIES, ETC.

is used by people whose behaviors and attitudes are

arises from a history of ways to listen to music such as

is used in settings such as

encourages or alters practices, technologies, or perspectives such as

that extend or distort its meaning by...

that enhance or diminish its use by...
1 lawn mower : 3 lawns
SOLD USE
One lawn is in need of occasional cutting maybe three times a month for about an hour or two.
If you are not hiring a lawn service, you most likely own your own gas powered, rotary lawn mower.
That is one lawn mower too many in a neighborhood of 30 lawn mowers.
Spend less on a mower - SHARE.

amount of use per owner

Quick Facts:
1 MOWER emits 87 lbs of carbon dioxide per year
1 MOWER = 5% of nations total air pollutant
1 MOWER in 1 hour is the equivalent to the pollution of 34 cars

INTERPRETATION

CONTRACTIONS

INCENTIVE

COMMUNAL

The communal mower

SOLVED

the

Scalability

Does anyone have a power drill?
Don't forget that there are many other household tools that can be shared throughout the neighborhood, it is a social way to use and share expensive and rarely used household tools. It is also a very good way to store space.

Sustainability

Meet your neighbors.
More lawn mowers = more waste = more pollution

REDUCED: Waste reduction and recycling by using one source is useful. The fewer materials used for the same output means the less amount of waste.

REUSE: In a neighborhood why not reuse, reuse, and reuse. This helps save the planet from harmful carbon dioxide emissions as well as save your wallet.

RECYCLE: This means making used items into new raw materials which in turn uses less energy, or making you investing items collecting the amount of waste. Using less energy means less emissions.

Instead of buying a new mower of your own, borrow and just repair!

Does anyone have a power drill?

Scalability

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responsiveness

behavior, perception, motivation, and reasoning of audiences and users
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<td>3A</td>
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<tr>
<th>Not ready to know</th>
<th>Ready to know</th>
<th>Ready to hold opinion</th>
<th>Ready to act on opinion</th>
<th>Ready to advocate</th>
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position

on the scope of designer responsibility

creation

distribution

reproduction

consumption by culture

reception by individuals
position

on the scope of designer responsibility

creation

distribution

reproduction

consumption by culture

reception by individuals
position

on the scope of user responsibility

consumer → user → participant → co-creator
integration

making
connections

letter
word
sentence
paragraph
page
document
integration

making connections

letter
word
sentence
paragraph
page
document

formal systems
descriptive systems
technological systems
reading systems
language systems
integration

making connections

Kathleen Meaney, faculty
assessment

Evaluation structures
Nature of feedback
assessment

Grant Wiggins and Jay McTighe
what should students know and be able to do?

Things to have seen, heard, read, or otherwise encountered

Skills, theories, and concepts

Enduring understanding:

• Self-awareness
• Empathy
• Holding a perspective
• Applying
• Interpreting
• Explaining
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<tr>
<th>assessment</th>
<th>qualities of performance</th>
<th>levels of achievement</th>
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<tr>
<td>self-awareness</td>
<td>reflective, self-adjusting</td>
<td>refines over time, debates options, resolves conflict</td>
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<tr>
<td>empathy</td>
<td>perceptive, open</td>
<td>inclusive, sensitive</td>
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<tr>
<td>holding a perspective</td>
<td>credible, revealing</td>
<td>critical, aware of other points of view</td>
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<tr>
<td>applying</td>
<td>effective, efficient, fluent</td>
<td>no need for coaching, innovative</td>
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<tr>
<td>interpreting</td>
<td>meaningful, insightful, illustrative</td>
<td>significant, clear, responsive to context</td>
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<tr>
<td>explaining</td>
<td>accurate, coherent, justified</td>
<td>complete, shows depth</td>
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conclusion...

learning experiences are designed!