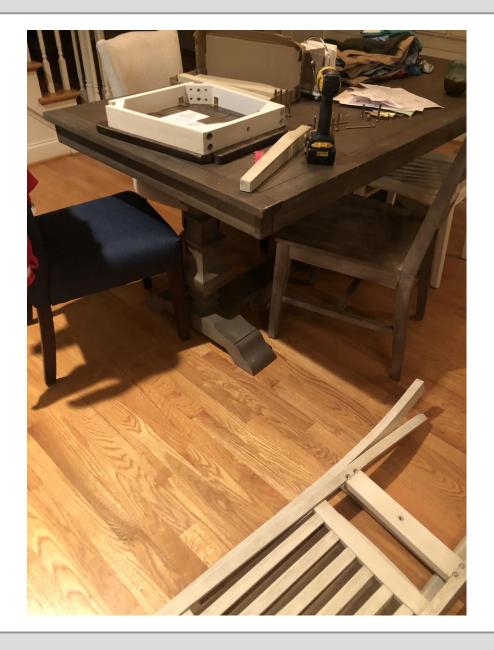


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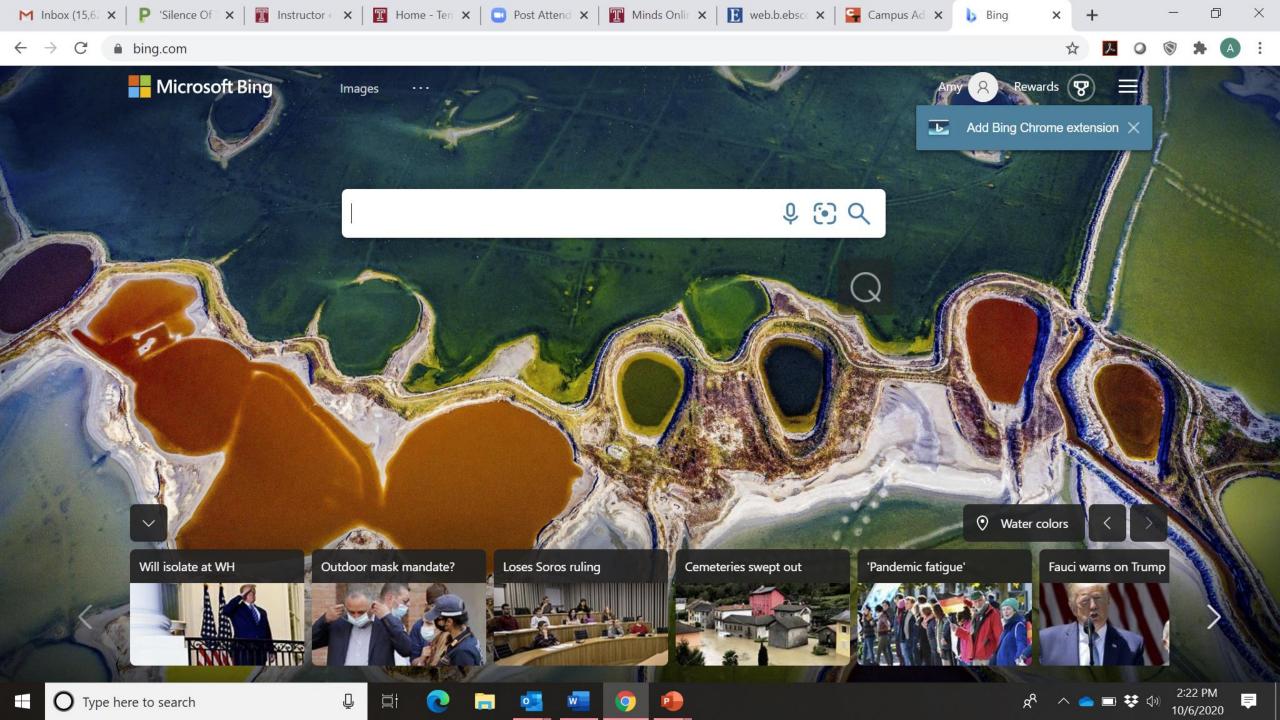
Lavin



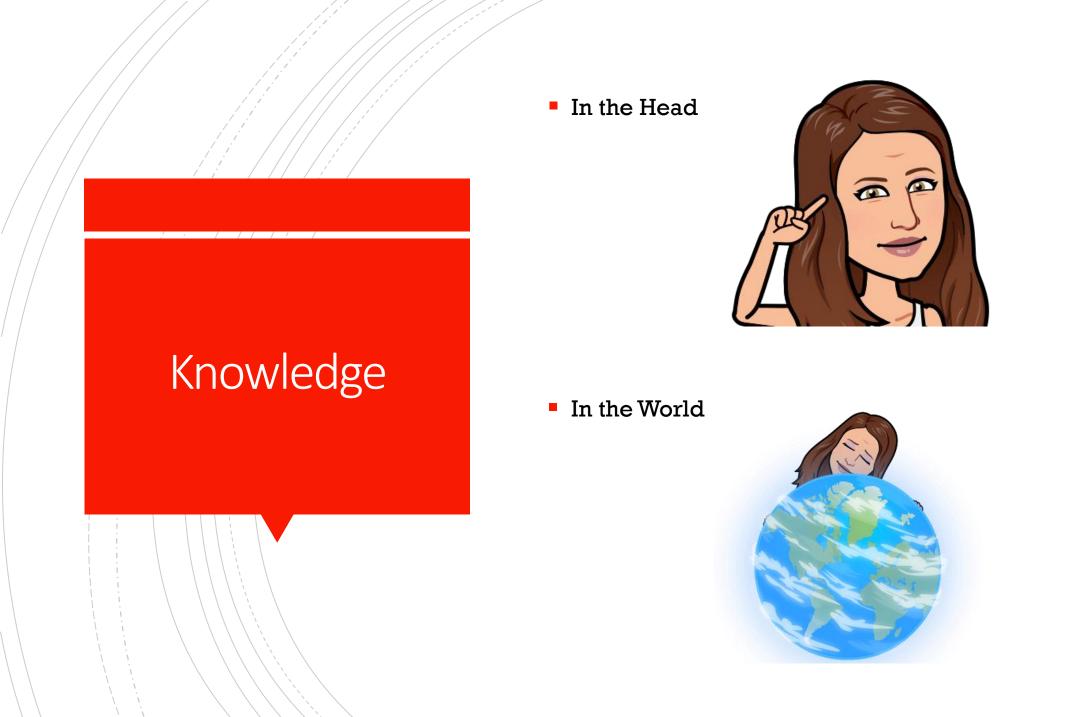












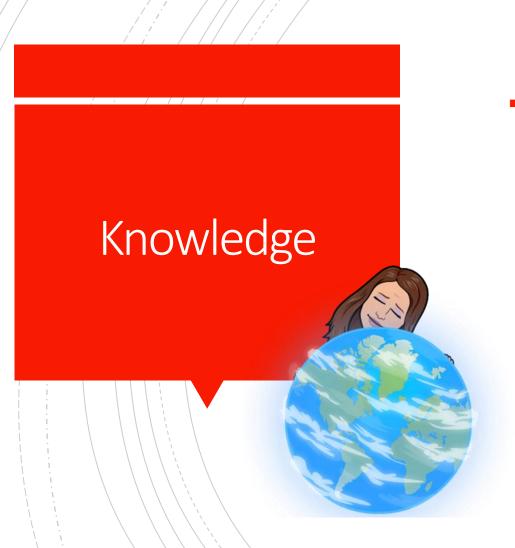


In the Head

- Memory
- Efficient Readily available
- Requires Learning
- Ease of use at first encounter is low
- Designer has freedom better UX



- In the World (Externalized)
 - Information is Perceivable
 - Interpretation substitutes for learning
 - Less efficient if you have to stop to learn
 - Ease of use at first encounter is high
 - Can be ugly requires a deep skillset



- In the World
 - Knowledge Of (Easy!)
 - Declarative Knowledge
 - Facts and Rules
 - Knowledge How (Not so Easy!)
 - Procedural Knowledge
 - Tacit Knowledge







If the user doesn't have it memorized... could take a while to interpret needs

First impression could be tricky



Lack of freedom for the designer

How can you as the designer improve the User's Experience armed with this knowledge?

- Put cues in the design
- Effective mapping
- Understand cultural constraints
- Find the middle ground
- Signifiers, constraints and mappings
- Good conceptual model

Constraints

- In the World Natural Constraints
 - Restrict behavior
 - Physical features
 - Right tighty/lefty loosey

- In the Head Cultural Constraints
 - Reading in different cultures
 - Behavioral constraints/Restrictions on behavior
 - Colors

Knowledge in the world: Constraints







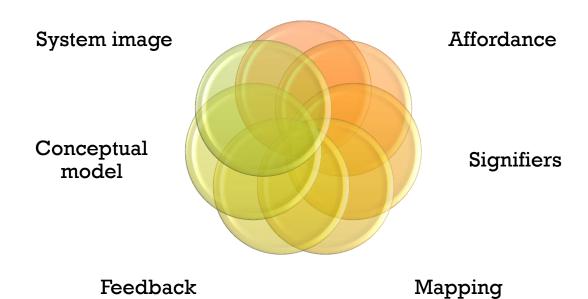


Mapping

Relationship between the elements of two sets of things

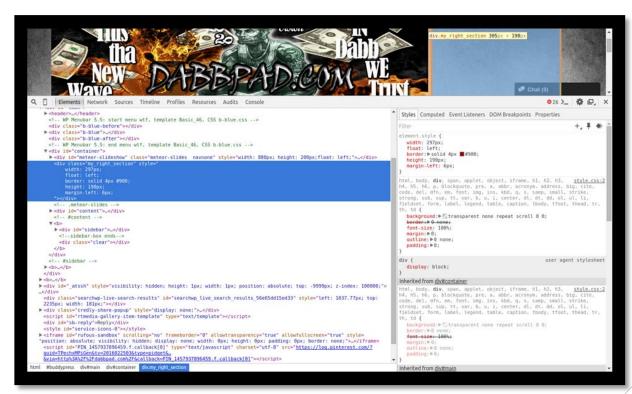
A device is easy to use when the set of possible actions is visible

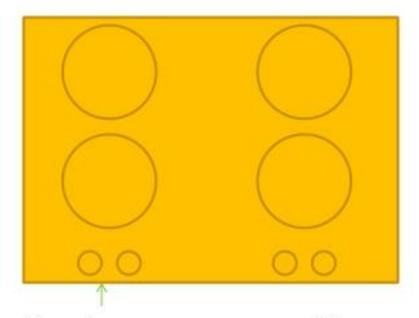
Discoverability



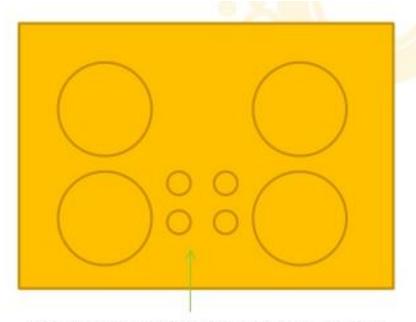
Mapping Examples





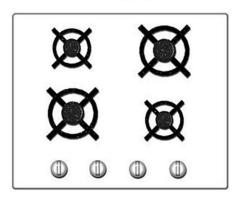


Requires memory or cognitive processing

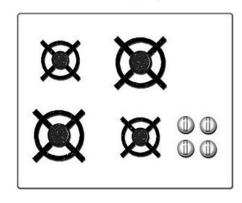


Knowledge is embedded in the interface

Poor mapping



Good mapping



Best: Controls are mounted directly on the item

Second Best: Controls
are as close as
possible to the object
being controlled

Third Best: Controls are arranged in the same spatial configuration as the object being controlled

Mapping

ICA

Exploring Knowledge Domains:

In the Head vs. In the World

Objective: The objective of this activity is to explore the concepts of "knowledge in the head" (individual knowledge) and "knowledge in the world" (externalized knowledge) through various examples and discussions. This activity aims to deepen the understanding of how knowledge is acquired, stored, and utilized both internally and externally.

1.Brainstorming Session (10 minutes):

- 1. Divide into small groups of 3-4 students.
- 2. Using index cards, brainstorm examples of knowledge in the head and knowledge in the world. Think broadly across various domains such as science, history, culture, technology, etc.

2.Sharing and Discussion (15 minutes):

- 1. Each group should share one example of knowledge in the head and one example of knowledge in the world.
- 2. Discussion around the examples provided. Discuss the advantages and limitations of each type of knowledge.
- 3. Consider:
 - 1. How does knowledge in the head differ from knowledge in the world in terms of accessibility and reliability?
 - 2. What are some examples where knowledge in the world enhances or complements knowledge in the head?
 - 3. In what situations is knowledge in the head more beneficial than knowledge in the world, and vice versa?