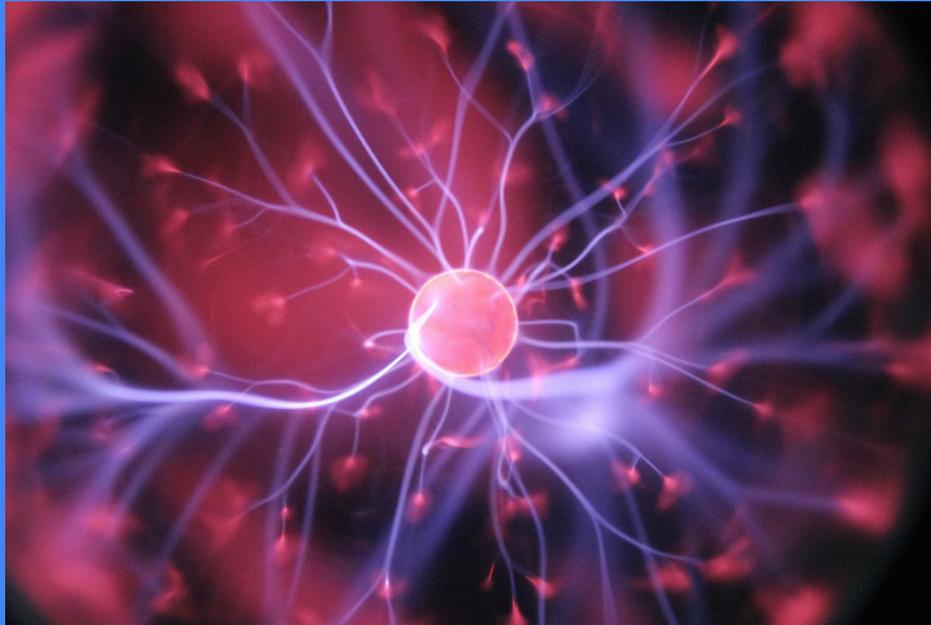


Chapter 5: Situated Cognition

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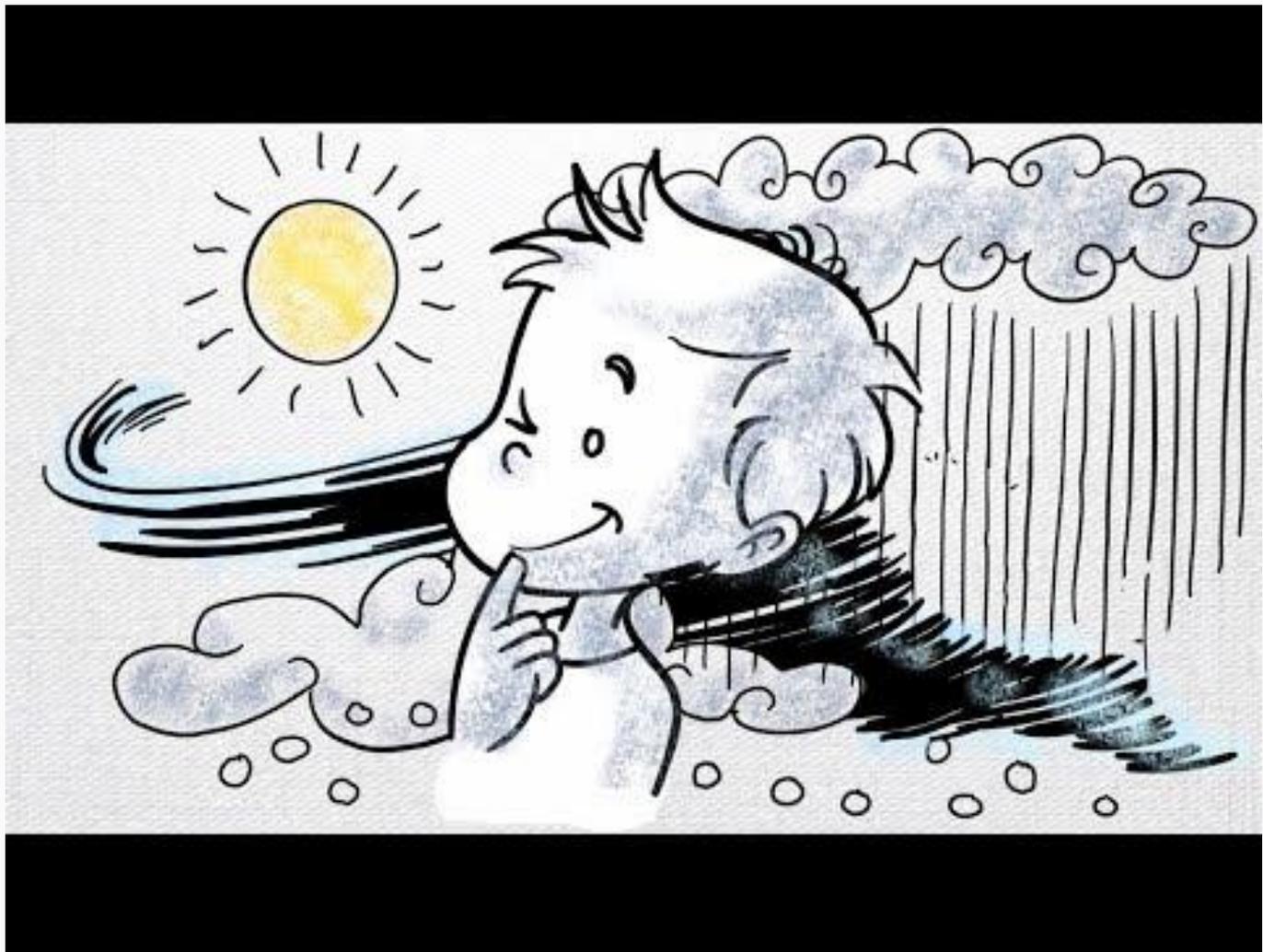


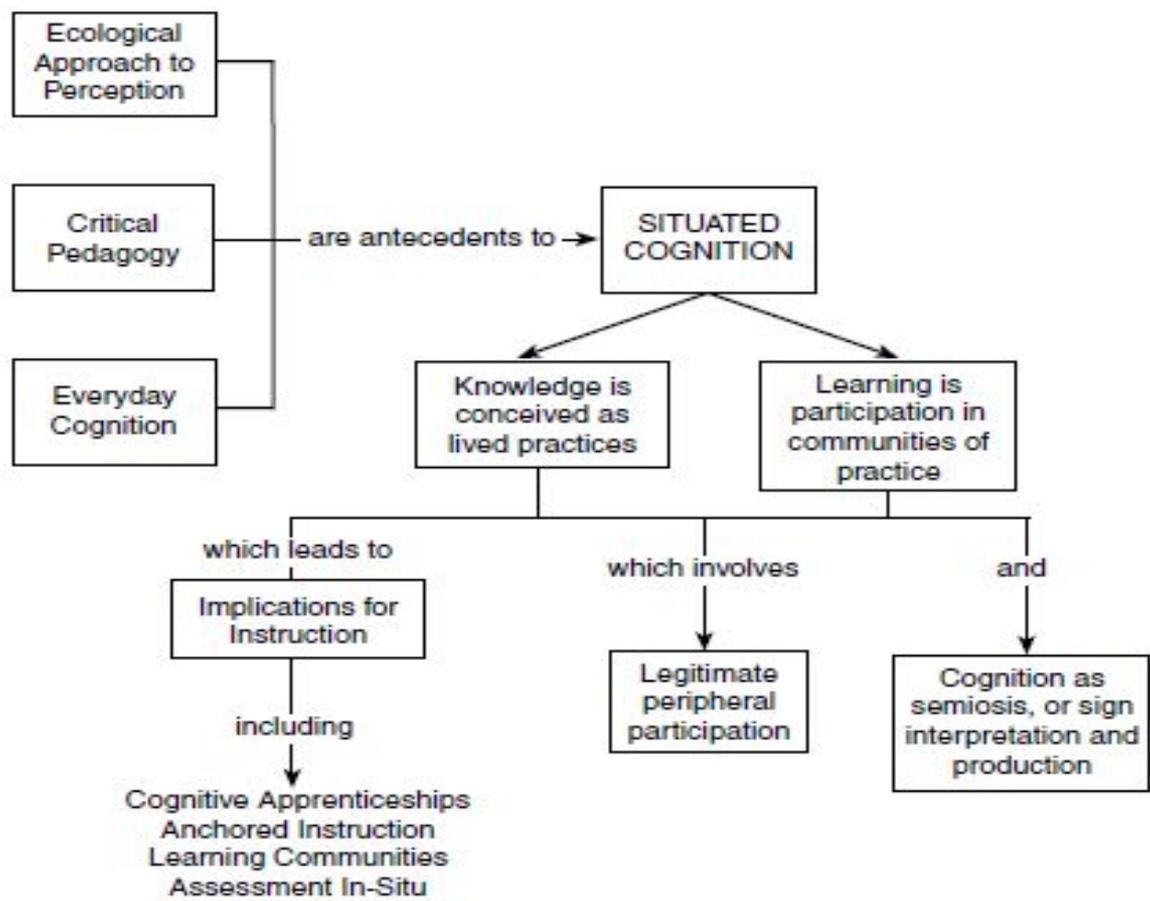
What is Situated Cognition?

Situated cognition, or what is also referred to as ‘situated learning’, **describes the knowledge of an individual as the product of that person’s learning context and culture**. The term refers to a range of theories, all of which assume that cognition and context are bound.

“The theory of situated cognition...claims that every human thought is adapted to the environment, that is, situated, because what people perceive, how they conceive of their activity, and what they physically do develop together”

(Clancey, 1997, pp. 1–2; italics in original)





Cognitive perspective differs from the behavioral one primarily in the assumptions one makes about processes occurring within the learner. Knowledge is presumed to be something that resides within.

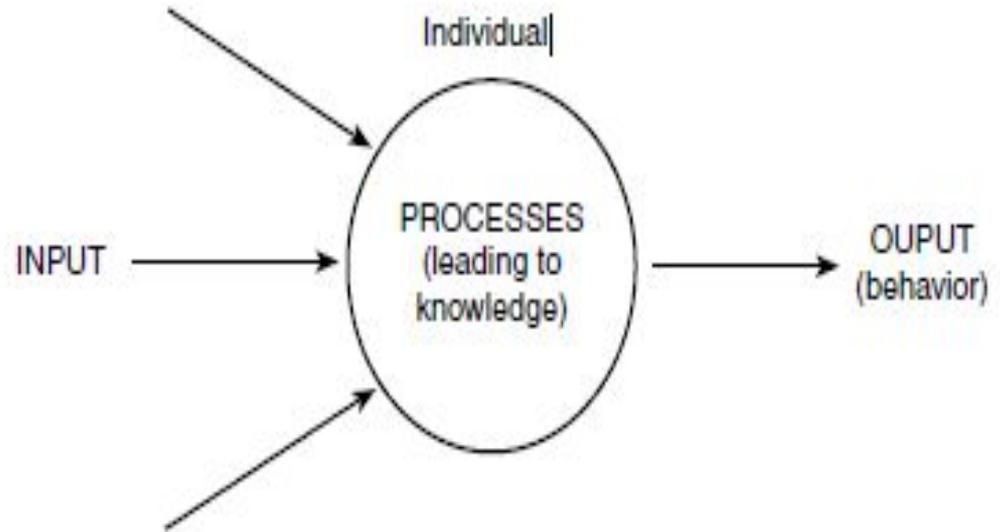
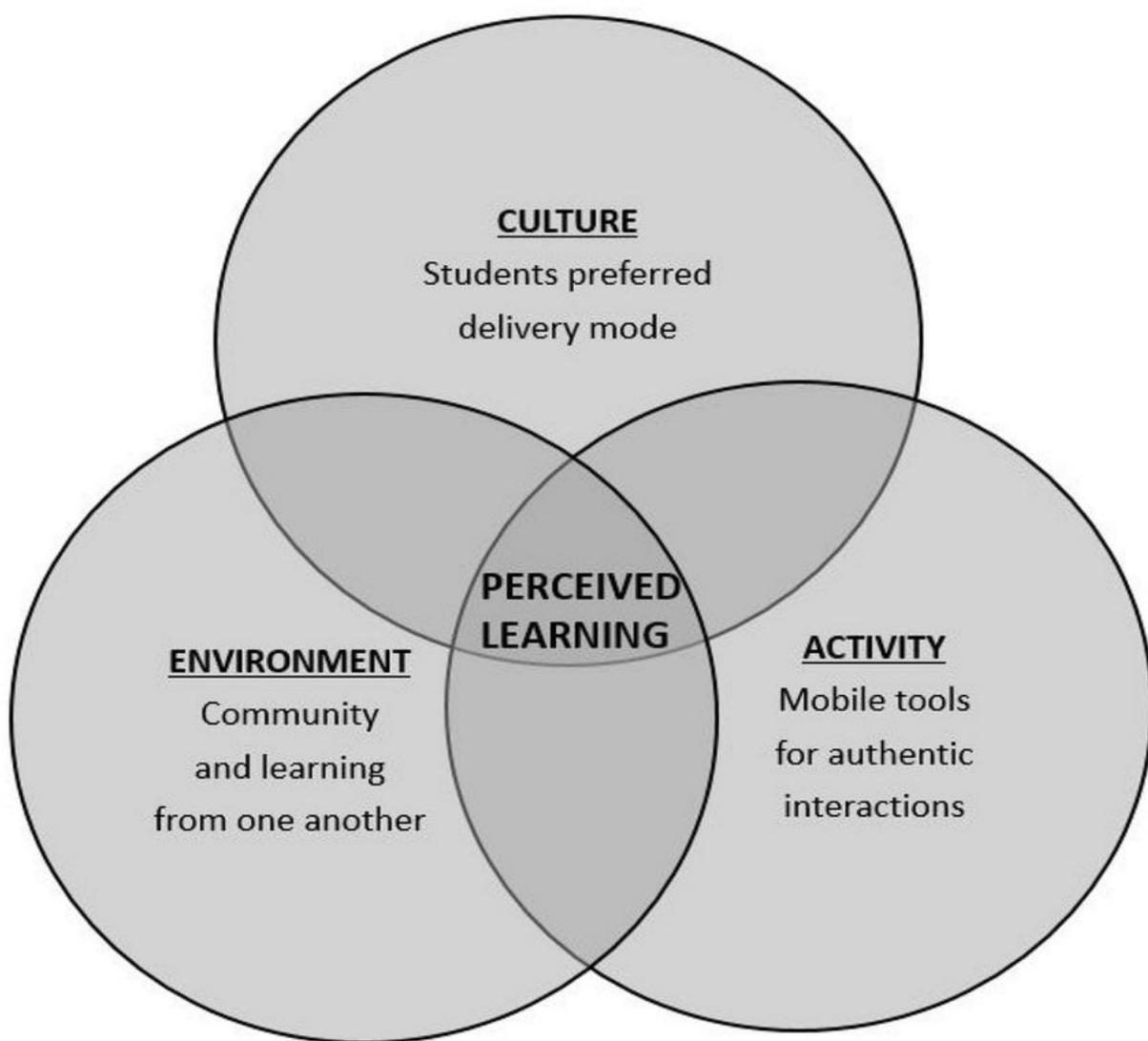


FIGURE 5.1 *Learning as Internalization in the Cognitive Perspective*





Who are the
notable people
associated with
this theory?

- John Seely Brown
- Allan Collins
- Paul Duguid
- Jean Lave
- Étienne Wenger

When and where did this theory originate?

Brown, Collins and Duguid (1989) published “Situated Cognition and the Culture of Schooling,” in 1989 and were met immediately with criticism for their failure to discuss other scientific traditions that are consistent with (and very likely contributed to) their notions about situated learning

With further research, **Jean Lave and Étienne Wenger** pioneered the concept of situated cognition and communities of practice (CoP) in their 1991 book *Situated Learning: Legitimate Peripheral Participation*. Lave was a professor at University of California.

Situated Cognition in Higher Ed

Situated cognition provides educators with a framework for understanding how knowledge is formed and passed on to others. It provides the basis for grasping the learning processes of individuals. Situated learning can serve as a powerful learning tool to form learners into desired shapes and pick-up desired skills while avoiding others.

University instructors in all fields must be aware of the importance of context and that social interaction among students is the driving force behind much of what is being learned in the classroom.

(A Negative Consequence of COVID 19 pandemic)

What is the
important
terminology
associated with
this theory?

- Cognition
- Apprenticeship
- Legitimate peripheral participation
- Learning trajectory
- Semiosis

Trajectory of a Learner

1. Peripheral
2. Inbound
3. Insider
4. Boundary
5. Outbound



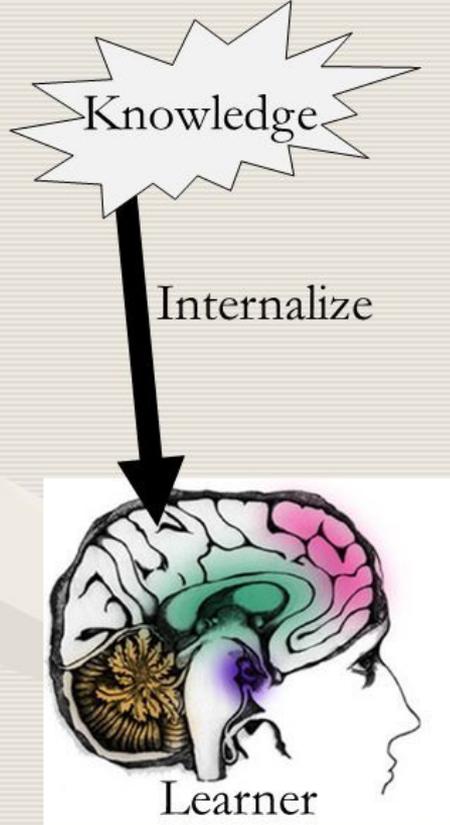
Situated Cognition in Instructional Design

Applied to eLearning course design, Situated Cognition is used in eLearning content that is presented to the audience. This implies that all type of new information learners are exposed to, should be given within context.

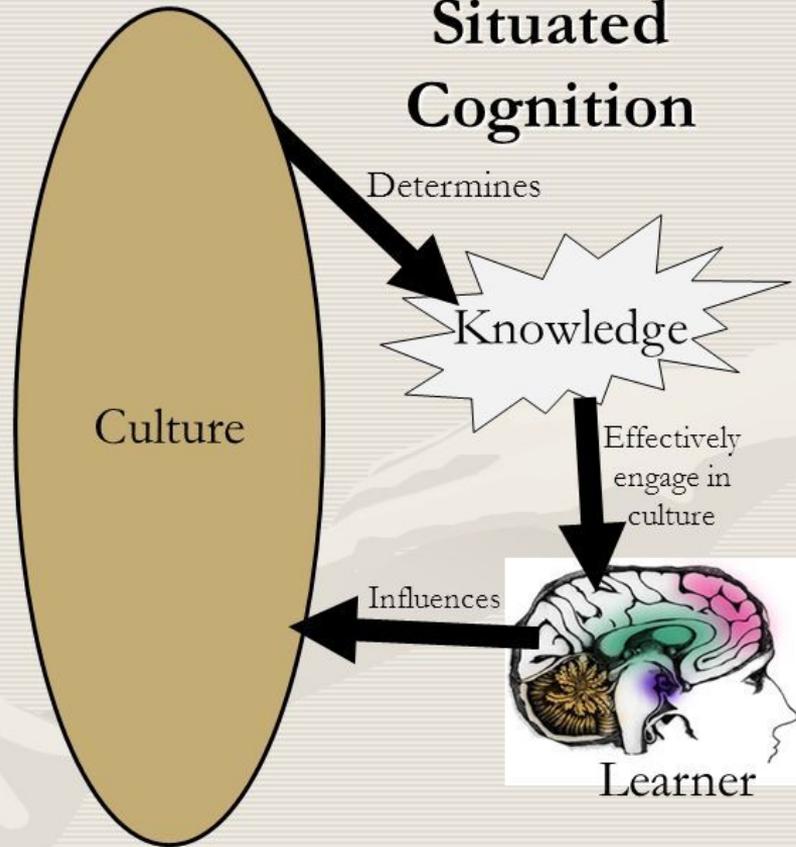
In practice, from an instructional designer's point of view, this can be translated to the incorporation of case studies and interactive branching scenarios and simulations of real life settings in which the particular piece of knowledge would apply. By all means, all eLearning activities should make explicit to the learners the connection of what is actually presented as part of the eLearning content with its practical application in real life.



Most Learning Theories



Situated Cognition



Proponent's View

Proponents argue that knowledge remains inert and unused if taught in a context that separates knowing from doing. They also argue that the theory is a work in progress.

Math Class Example - "An army bus holds 36 soldiers. If 1,128 soldiers are being bused to their training site, how many buses are needed?" Although 70 percent of 13-year-olds nationwide correctly performed the long division that is required to answer this question, only 23 percent actually gave the correct answer. Almost a third said "31 remainder 12. Students fail to connect math problems and symbols with real life applications.

Proponent's View

Proponents also believe this theory represents a profound shift in thinking. Most of their instruction is modeled for childhood education and cognition.

Implications/Suggestions Include:

- Apprenticeships
- Co-Teaching
- Anchored Instruction
- Learning Communities

Proponent's View

Research on situated cognition supports some aspects of the theory, as do many human traditions. For example, for many trades, the preferred method of training is apprenticeship, where people learn by watching, performing tasks, and teaching junior apprentices as they develop more skills. Many people would be reluctant to visit a doctor who only trained in a classroom, illustrating that many people understand situated cognition even if they may not have a name for it; many people assume it is not possible to perform complex tasks from theoretical knowledge alone.



What are the limitations of this theory?

The most obvious limitation to Situated Learning is **its implementation within the parameters of the traditional school system** as it exists today. With teachers being required to meet specific prescribed learning outcomes by the end of a course they are often limited by a number of constraints.

Constraints - limited budget for excursions & experiences, emphasis on testing, strict classroom routines and settings that do not allow for flexibility.

Situated Cognition in Different Cultures

- Jean Lave and Etienne Wenger published their book, *Situated Learning- Legitimate Peripheral Participation* through the University of Cambridge in the UK
 - Jean Lave is American and Etienne Wenger is Swiss
- If a teacher is switching from teaching in populated areas to rural areas, Situated Cognition is applied
 - Although cultural transformations are occurring in some rural locations, an element of social and educational stability for youth prevails in rural society which may lead preservice teachers who are from rural and remote areas to develop a specific way of knowing and viewing their world

Interactive Activity

Kahoot Interactive Quiz

Kahoot!

<https://play.kahoot.it/v2/lobby?quizId=1305da40-8118-4354-abce-bc94199aadb6>

Discussion Questions

- In what ways do you find yourself using situated cognition in your everyday life?
- Do you think situated cognition is a learning style, or something everyone has the ability to adopt?
- How is situated cognition different from other learning approaches?
- Why is situated cognition important?
- Does anyone have real life examples where Situated Cognition takes place?

Any Question?



References

<https://elearningindustry.com/situated-cognition-meaningful-learning-college-classrooms>

<https://learning-theories.com/situated-cognition-brown-collins-duguid.html>

<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.528.7823&rep=rep1&type=pdf>

<https://slideplayer.com/slide/10018142/>

https://www.researchgate.net/figure/Theoretical-framework-situated-cognition-theory_fig2_344825578

<https://elearningindustry.com/situated-cognition-theory-and-cognitive-apprenticeship-model>

<https://www.wise-geek.com/what-is-situated-cognition.htm>