

Educational affordance

From Telearn Thesaurus

Draft 3

Editor: Paul A. Kirschner, Centre for Learning Sciences and Technologies, Open University of the Netherlands

Contributor: Nicolas Balacheff, LIG, Grenoble, France

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Definition

In the context of research in education and TEL research, the term "educational affordance" has acquired a meaning which relates to the search to express properties of an environment which in interaction with a user enhance the learning potential:

"Educational affordances are those characteristics of an artifact (e.g. how a chosen educational paradigm is implemented) that determine if and how a particular learning behavior could possibly be enacted within a given context (e.g., project team, distributed learning community). Educational affordances can be defined [...] as the relationships between the properties of an educational intervention and the characteristics of the learner (for CSCL: learner and learning group) that enable particular kinds of learning by him/her (for CSCL: members of the group too)."

(Kirschner 2002, p.14)

Comments on the history

Coined by J.J. Gibson (1977), an affordance refers to the possibilities for actions between an actor and an artifact which would exist independently from the fact that it is perceived effectively. It is based upon a perception-action coupling (i.e., see-do) and a reciprocal relationship between an actor and an artifact (i.e., the actor is tired, thus she/he sits on a chair though the chair can be and is used for many other things depending on what the actor needs to and can do such as changing a light bulb). Note that the chair does not have an affordance but that the affordance is defined by the relationship between the person (and his/her state or intention) and the chair (and its characteristics).

Donald Norman (1988) and William Gaver (1991) have modified and/or expanded the term as a conceptual tool for discussing the design of interactive systems and respectively speak of perceived and perceptible affordances.

Related terms

adaptive learning environment, epistemic affordance, interaction, situated learning

Translation issues

French: disponibilité d'une ressource éducative, exploitabilité d'une situation éducative. Most often than not the term is directly imported (affordance)

German: affordanz

Disciplinary issues

This term was imported in computer science by Norman (1988) to refer to action possibilities perceived and perceptible by the user. Its use in the context of TEL research needed some adaptations:

"The reader must not take the original meaning of affordance for an artifact as complicated as a CSCL environment literally. Affordances in Gibson's sense apply primarily to very simple artifacts where a direct 'see-do coupling' exists. The actor doesn't consciously think, but rather perceives the affordance and acts, although the ability to perceive the affordance (discriminate patterns of information in order to be able to perceive something) may need to be learnt.

For complicated artifacts such as educational environments, learning must also be considered and is permitted. There is a perception-action coupling, but it is less direct. After a learning/habituation period, the actions become automatic and unconscious. Affordances in this sense don't cause, but merely allow. They lower the threshold for carrying out and/or permit an action."

(Kirschner, 2002 p.13)

References

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- This page was last modified on 19 March 2013, at 14:20.