

Pedagogical Agents



LEARNING
TOGETHER

DESCRIPTION

Pedagogical agents are life-like animated characters that are embedded in instructional applications to support learning. Agents may be used to help stimulate social interactions with learners in a way that facilitates learning through collaboration, sharing of tasks, providing information, and encouraging learners (Kim & Baylor, 2006). This principle will explore the many design considerations that need to be taken into account when developing pedagogical agents such as how the agent is represented, the role the agent plays, down to detail levels of what an agent's age, weight, and personality should be (Heidig & Clarebout, 2011).

CAPABILITIES

- Instruction: Active learning experience

SAMPLE DESIGN IMPLEMENTATIONS

- Robust Technology: Personal one-on-one artificial tutor
- Simple Technology: Learning guide that provides feedback and basic cues
- Content Support: Instructional content to show learners

LEARNER IMPACTS

- Self-regulation
- Motivation



Pearson



Principle Criteria	Integration (4-5 points)	Exploration (2-3 points)	Consideration (1 point)	Not Applicable (0 Points)	Total Points
Definition	<p> Strong application of empirical evidence in the design of agents</p> <p> Strong application of a life-like character who is embedded into the instructional environment</p>	<p> Some application of empirical evidence in the design of agents</p> <p> Some application of a life-like character who is embedded into the instructional environment</p>	<p> Poor application of empirical evidence in the design of agents</p> <p> Poor application of a life-like character who is embedded into the instructional environment</p>	<p> Does NOT apply effectively or is not a related activity</p>	= ____
Model	<p> Strong application of a coherent design process, such as pedagogical agents levels of design (PALD) model, to justify agent design</p> <p> Strong specification of the global, medium, and detail levels of agent design to support learning goals</p>	<p> Some application of a coherent design process, such as PALD model, to justify agent design</p> <p> Some specification of the global, medium, and detail levels of agent design to support learning goals</p>	<p> Poor application of a coherent design process, such as PALD model, to justify agent design</p> <p> Poor specification of the global, medium, and detail levels of agent design to support learning goals</p>	<p> Does NOT apply effectively or is not a related activity</p>	= ____
Design	<p> Strong alignment between learning theory and pedagogical agent design</p> <p> Strong usage of instructional benefits of agents, as identified by the literature</p>	<p> Some alignment between learning theory and pedagogical agent design</p> <p> Some usage of instructional benefits of agents, as identified by the literature</p>	<p> Poor alignment between learning theory and pedagogical agent design</p> <p> Poor usage of instructional benefits of agents, as identified by the literature</p>	<p> Does NOT apply effectively or is not a related activity</p>	= ____
Assessment	<p> Strong consideration of individual differences, such as prior knowledge, in the assessment of performance</p> <p> Strong use of clear feedback</p> <p> Strong provision of assistance to learners to ensure they can utilize feedback messages</p>	<p> Some consideration of individual differences, such as prior knowledge, in the assessment of performance</p> <p> Some use of clear feedback</p> <p> Some provision of assistance to learners to ensure they can utilize feedback messages</p>	<p> Poor consideration of individual differences, such as prior knowledge, in the assessment of performance</p> <p> Poor use of clear feedback</p> <p> Poor provision of assistance to learners to ensure they can utilize feedback messages</p>	<p> Does NOT apply effectively or is not a related activity</p>	= ____