Hwang, (2014) Comparisons of smart learning, context-aware u-learning systems and adaptive learning

|  |  |  |  |
| --- | --- | --- | --- |
| **Features** | **SLE** | **CULE** | **ALE** |
| Detects and takes into account the real-world contexts | Yes | Yes | No |
| Situates learners in real-world scenarios | Yes | Yes | No |
| Adapts learning content for individual learners | Yes | No | Yes |
| Adapts the learning interface for individual learners | Yes | No | Yes |
| Adapts learning tasks or objectives for individual learners | Yes | No | No |
| Provides personalized feedback or guidance | Yes | Yes | Yes |
| Provides learning guidance or support across disciplines | Yes | No | No |
| Provides learning guidance or support across contexts (e.g., in classrooms, on school campuses, in the library, and on the street) | Yes | Yes | No |
| Recommends learning tools or strategies | Yes | No | No |
| Considers the online learning status of learners | Yes | No | Yes |
| Considers the real-world learning status of learners | Yes | Yes | No |
| Facilitates both formal and informal learning | Yes | Yes | No |
| Takes multiple personal factors and environmental factors (e.g., learning needs, preferences, schedules and real-world contexts) into account | Yes | No | No |
| Interacts with users via multiple channels (e.g., smartphones, Google Glass, or other ubiquitous computing devices) | Yes | Yes | No |
| Provides support to learners with “in advance adaptation” across real and virtual contexts | Yes | No | No |
| Provides support to learners with “on the run adaptation” across real and virtual contexts | Yes | No | No |