**Assessment of Constructivist Elements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fully**  **met** | **Partially**  **met** | **Not met** | **Comments** |
| **1** **a)** **Knowledge construction (CIM)** |  |  |  |  |
| 1. Learners are stimulated to access prior knowledge |  |  |  |  |
| 1. Learning activities allow a number of interpretations |  |  |  |  |
| 1. Learning environment provides intellectual support |  |  |  |  |
| 1. Learners are motivated to participate in the learning activities |  |  |  |  |
| 1. Learners have access to information banks |  |  |  |  |
| 1. Learners have access to discussion forums |  |  |  |  |
| 1. Learners manipulate objects in the environment |  |  |  |  |
| 1. Multimedia and hypermedia are provided for learners to access information and construct knowledge |  |  |  |  |
|  |  |  |  |  |
| **1 b) Conceptual Change Model** |  |  |  |  |
| 1. Learners are exposed to a variety of perspectives |  |  |  |  |
| 1. Learners have the opportunity to discover, explore and test new understandings |  |  |  |  |
| 1. Learners are required to reflect on their learning |  |  |  |  |
|  |  |  |  |  |
| **2 a) Process focus** |  |  |  |  |
| 1. Learning involves planning and organization of information |  |  |  |  |
| 1. Learners are provided the opportunity to develop new interpretations and perspectives |  |  |  |  |
| 1. Learners must differentiate between relevant and irrelevant information |  |  |  |  |
| 1. The activity promotes knowledge construction using a variety of information sources |  |  |  |  |
|  |  |  |  |  |
| **2 b) Predict-Observe-Explain (POE)** |  |  |  |  |
| 1. Presenters describe the focus of the demonstration |  |  |  |  |
| 1. Observers predict what they think they will see and describe why |  |  |  |  |
| 1. Observers describe what they see |  |  |  |  |
| 1. Observers reconcile relationship between what they saw and what they predicted |  |  |  |  |
|  |  |  |  |  |
| **3. Multiple perspectives** |  |  |  |  |
| 1. Discussion provides learners with the opportunity to exchange perspectives and reconcile inconsistencies |  |  |  |  |
| 1. Learners are exposed to a variety of perspectives that can be incorporated into their understanding |  |  |  |  |
| 1. Learning activities reflect the complexity of real-life problems |  |  |  |  |
| 1. Learners have the opportunity to collaborate with a variety of stakeholders |  |  |  |  |
|  |  |  |  |  |
| **4. Situated Cognition** |  |  |  |  |
| 1. The learning environment supports constructivist learning |  |  |  |  |
| 1. The problem is interesting, relevant and engaging |  |  |  |  |
| 1. The way the problem is presented is interesting, relevant and engaging |  |  |  |  |
| 1. The problem is embedded in a realistic context |  |  |  |  |
|  |  |  |  |  |
| **5. Meta-cognition** |  |  |  |  |
| 1. Students are encouraged to be self-regulatory, self-mediated and self-aware |  |  |  |  |
| 1. Learners examine personal beliefs about the activity and their learning |  |  |  |  |
| 1. Learners are asked to articulate their problem-solving process |  |  |  |  |
| 1. Learners have the opportunity to suggest ways to improve the activity and their performance in the future |  |  |  |  |
|  |  |  |  |  |
| **6. Cognitive apprenticeship** |  |  |  |  |
| 1. Students receive appropriate support for learning |  |  |  |  |
| 1. Modeling of performance and thinking assist learners in completing the task |  |  |  |  |
| 1. Coaching allows the learner to improve personal performance |  |  |  |  |
| 1. Scaffolding provides a framework to support student learning and performance |  |  |  |  |
|  |  |  |  |  |
| **7. Process-based assessment** |  |  |  |  |
| 1. Assessment tests learning outcomes |  |  |  |  |
| 1. Assessment involves demonstration of skills |  |  |  |  |
| 1. Learners set their own goals |  |  |  |  |
| 1. Learners determine their own strategies |  |  |  |  |
| 1. Learners monitor their own learning |  |  |  |  |
| 1. Learners represent what they know in a structured and visual manner |  |  |  |  |
| 1. Learners are evaluated from multiple perspectives |  |  |  |  |
|  |  |  |  |  |
| **Additional Comments** |  |  |  |  |

Adapted from *Set Criteria* retrieved from http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CGAQFjAD&url=http%3A%2F%2Fcmapspublic3.ihmc.us%2Frid%3D1208298924411\_499532215\_4123%2Fset%2520criteria.doc&ei=2qERUJ-VO8qoiQKaxoCIDA&usg=AFQjCNGP9eV6dMc6or0PWTouFdCPdTVATg