**RUBRIC- Evaluation Criteria for Constructivist Science Lesson Plan for Grade One**

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| **Evaluation criteria** | **0 No constructivist elements used** | **1 Some constructivist elements used** | **2 Multiple constructivist elements used** |
| **General Constructivist Strategies (GCS)** | | | |
| **Learning objectives** | No learning objectives are stated | Some learning objectives are stated clearly and concisely at the learners’ level | Learning objectives are stated clearly and concisely at the learner’s level |
| **A “Hook” / Setting the stage for discovery-  Should be interesting, exciting, elicit interest** | Content is not interesting nor engages students’ interests | Content is somewhat interesting and engages students’ interests | Content is interesting and engages students’ interest |
| **Elicitation of prior knowledge** | Does not elicit prior knowledge | Some prior knowledge is elicited | Elicits prior knowledge |
| **Restructuring Concepts- needs to challenge prior knowledge / be engaging / reformulate thinking** | Cognitive dissonance is not present | Some cognitive dissonance is present | Cognitive dissonance is present |
| **Reflections- what did the learners discovery? Can the learners apply newly found knowledge to new situations?** | Reflections are not provided | Some reflections provide concepts to be transferred to new activities | Reflections provide concepts to be transferred to new activities |
| **Evaluation- Which types of evaluation are suitable for this lesson/ learner/teacher/peer?** | There is an absence of evaluations | Some suitable evaluations were used in the lesson | Appropriate evaluations were used |
| **Total points for GCS:** | **0** | **/ 6** | **/ 12** |
| **Evaluation criteria** | **0 No constructivist elements used** | **1 Some constructivist elements used** | **2 Multiple constructivist elements used** |
| **Constructivist Instructional Model (CIM)** | | | |
| **Identifies learners’ ideas and views (prior knowledge)** | Does not identify learners’ ideas and views | Some identification of learners’ ideas and views | Several identification of learners’ ideas and views |
| **Opportunities for learners’ to explore their ideas** | No opportunities for learners to explore their ideas. | Some opportunities present for learners’ to explore their ideas. | Multiple opportunities present for learners’ to explore their ideas. |
| **Stimuli for students to develop and modify their ideas and views** | No stimuli present for students to develop and modify their ideas and views | Some stimuli for students to develop and modify their ideas and views | Multiple stimuli for students to develop and modify their ideas and views |
| **Total points for CIM:** | **0** | **/ 3** | **/ 6** |
| **Evaluation criteria** | **0 No constructivist elements used** | **1 Some constructivist elements used** | **2 Multiple constructivist elements used** |
| **Prediction, Observation, Explanation (POE)** | | | |
| **Learners are asked to predict and explain the next outcome** | Learners are not asked to predict and explain the next outcome | N/A | Learners are asked to predict and explain the next outcome |
| **Learners test their predictions and explanations by making accurate observations** | Learners do not test their predictions and explanations by making accurate observations | N/A | Learners test their predictions and explanations by making accurate observations |
| **Learners check observations against their predictions and explanations** | Learners do not check their observations against their predictions and explanations | N/A | Learners do check their observations against their predictions and explanations |
| **Searches for appropriate explanations are promoted if observations are inconsistent with their predictions and explanations** | Searches for appropriate explanations are not promoted | N/A | Searches for appropriate explanations are promoted |
| **New understanding is reinforced through practice problems, questions and activities** | New understanding is not reinforced through practice problems, questions and activities | N/A | New understanding is reinforced through practice problems, questions and activities |
| **Total points for POE:** | **/ 0** | **N/A** | **/ 10** |
| **Evaluation criteria** | **0 No constructivist elements used** | **1 Some constructivist elements used** | **2 Multiple constructivist elements used** |
| **Conceptual Change Model (CCM)** | | | |
| **Learners are asked to seek new understanding as there is dissatisfaction with existing concepts** | Learners are not asked to seek new understanding | N/A | Learners are asked to seek new understanding as there is dissatisfaction with existing concepts. |
| **New concepts are intelligible (meaningful)** | New concepts are not intelligible (meaningful) | N/A | New concepts are intelligible (meaningful) |
| **New concepts are plausible (reasonable)** | New concepts are not plausible (reasonable) | N/A | New concepts are plausible (reasonable) |
| **New concepts are fruitful (able to satisfactorily resolve the mental conflict or dissonance)** | New concepts are not fruitful (able to satisfactorily resolve mental conflict or dissonance | N/A | New concepts are fruitful (able to satisfactorily resolve mental conflict or dissonance) |
| **Total points for CCM:** | **0** | **N/A** | **/ 8** |
| **Grand total of GCS, CIM, POE, and CCM:** | **0** | **/ 9** | **/ 36** |