**Module 4: Focus on inquiry-based science – link with creativity**

**Task 7 Handout: Barrow Chart: Essential features of classroom inquiry and their variations**

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| **Essential Feature** | |  | **Variations** |  |
| Learner engages in  scientifically orientated questions | Learner poses a question | Learner selects among questions, poses new questions | Learner sharpens or clarifies question provided by teacher, materials or source | Learner engages in question provided by teacher, materials and source |
| Learner gives  priority to evidence in responding to questions | Learner determines what constitutes evidence and collects it | Learner directed to collect certain data | Learner given data and asked to analyse | Learner given data and told how to analyse |
| Learner  formulates explanations from evidence | Learner formulates explanations after summarising evidence | Learner guided  in process of formulating explanations from evidence | Learner given possible ways to use evidence to formulate explanation | Learner provided with evidence |
| Learner connects explanations to scientific knowledge | Learner independently examines other resources and forms links to explanations | Learner directed  toward areas and sources of scientific knowledge | Learner given possible connections |  |
| Learner  communicates and justifies explanations | Learner forms reasonable and logical argument to communicate explanations | Learner coached in development of communication | Learner provided broad guidelines to sharpen communication | Learner gives steps and procedures to communication |
| More…….............................................Amount of Learner Self-Direction……...............................................Less | | | | |
| Less…….....................................Amount of Direction from Teacher Material…….......................................More | | | | |

*Essential features of classroom inquiry and their variations (Barrow, 2010, p. 3)*