Tendencies of interaction and instruction

Criteria	A	B	C	D
1) Types of Collaboration	No **one-to-one** peer collaboration	Little **one-to-one** peer collaboration	Some **one-to-one** peer collaboration	Much **one-to-one** peer collaboration
2)	Collaboration **within** one group	Little collaboration **within** one group	Some collaboration **within** one group	Much collaboration **within** one groups
3)	No collaboration **among** groups	Little collaboration **among** groups	Some collaboration **among** groups	Much collaboration **among** groups
4) Types of argumentation	**Requests** no information from other groups or only when prompted	**Requests** little information from other groups	**Requests** some information from other groups	**Requests** much information from other groups
5)	Does not **share** any ideas or information to teammates or only when prompted	**Shares** very few ideas or little information	**Shares** some ideas and basic information	**Shares** actively many ideas and a great deal of information
6)	Uses no **tools** to explain arguments or only when prompted	Uses little or few **tools** to explain arguments	Uses some **tools** to explain arguments	Uses often **tools** to explain and support arguments
7) Types of information	Uses no databases (**external** information)	Uses rarely databases (**external** information)	Uses sometimes databases (**external** information)	Uses often databases (**external** information)
8)	Requests **expert** information	Requests rarely **expert** information	Requests sometimes **expert** information	Requests often **expert** information
9) Type of communicated content	Communicates no **task related** information	Communicates little **task related** information	Communicates some **task related** information	Communicates mostly **task related** information
10) (R)	Communicates no **tool related**/technical information	Communicates **little tool related**/technical information	Communicates some **tool related**/technical information	Communicates much **tool related**/technical information
11) Type of instructional approach	No **learner-centered** instruction	Little **learner-centered** instruction	Some **learner-centered** instruction	Much **learner-centered** instruction
12) (R)	No **teacher-centered** instruction	Little **teacher-centered** instruction	Some **teacher-centered** instruction	Much **teacher-centered** instruction

Description

The table above shall serve as a rubric to guide the observation process of COLDEX activities in formal as well as informal learning settings. Points 1 – 10 focus on the student behavior. Points 11 and 12 focus on the teacher's behavior. It is advised to follow one student group closely throughout the activity and to add rich descriptions to the points. If the instructional activity takes several hours it is advised to split the activities into sessions and to fill out the rubric for every session

For example:
Session One: 10 – C (communication about finding the "save" button)
Translates into
First session: Software Introduction. The observed student group communicates some tool-related information. They talk about ways of understanding the menu and finding the "save" button.

For the additional information it is very useful to have a blank sheet of paper.

Eventually an observation Chart can look like this:
Session One: 1-A, 2-A, 3-A, 4-B, 5-A, 6-A, 7-B, 8-A, 9-C, 10-A, 11-B, 12-A
Session Two: 1-A, 2-A, 3-B, 4-B, 5-B, 6-A, 7-C, 8-A, 9-C, 10-D, 11-B, 12-A
Session Three: ….

Legend to criteria

1) Two students on one computer
2) Apply only if the group is bigger than 2 people.
3) Interaction spanning more than one group.
4) -
5) Openness of the students to help each other
6) Tools can be any kind of virtual and physical tools except the Cools Modes working area. E.g.: Cool Modes help file, scratch paper, overhead projector, beamer
7) External information could be books, Internet or other databases
8) Experts could be the teacher itself or other helpers in the instructional activity
9) Task-related communication means that the communicated content relates to the actual content of the phenomenon, problem or experiment that is given to the students.
10) Tool-related communication focuses on the functionality of the software: For example communication about problems to find an icon or struggling with the interface if software would be tool-related.
11) Learner-centered instruction relates to the teacher's behavior within the learning activity. Highly learner centered instruction is charachterized througth the role of a moderator, mentor or advisory expert rather than a teacher who provides content and facts. In a learner-centered instruction the teacher tries to engage students in designing their own learning process.
12) Teacher centered: A Teacher aims to transfer knowledge. Teacher controls the pace of learning. Student is dependent on the teacher's input to perform an activity