

## **ALE 2009: Proposal for a Hands-on session**

### **Tintin in the land of PBL**

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**Topic covered by the proposal:** The role of emotion in learning and beyond active learning.

### **Objectives of the hands-on session**

The starting point for an active learning activity is the choice of a good situation-problem. But what exactly makes a situation-problem good? What are the ingredients that will make this situation interesting to students and conducive to learning? To reply to this question we propose a hands-on session to search for situation-problems drawn from a resource with a strong cultural nature: comic books, in particular Tintin albums.

The objective of the hands-on session is to place the participants in the position where they must find a motivating situation-problem from Hergé's works and thereby come to identify the principal characteristics of a good situation-problem. At the end of the session, participants will leave with a list of ingredients which will help them choose situation-problems for their own teaching.

### **Targeted issue for the discussion**

The discussion which will follow the practical part will focus on the following questions:

- Why would a situation taken from a Tintin adventure be more appropriate and relevant than one from other comic books, for example Spiderman, Iron man...? What is the main strength of a situation from a Tintin adventure? Is this the same in all regions of the world?
- What is the importance of culture in the choice of a situation-problem?
- What makes a good situation-problem? Is it possible to identify the main characteristics of a good situation-problem?

### **Outline and procedure of the activity:**

T 0: Introduction to the session, example of a situation-problem

T 1: Group work: The participants are assigned to 4 or 5 groups of not more than 6 participants. Each group receives 1 or 2 Tintin albums and looks for a situation-problem and the arguments to support the choice.

T 2: Pooling: Each group presents its situation-problem and justifies its choice

T 3: Synthesis: The participants define the characteristics of a good situation-problem.

### **Author's point of view on the issues**

A good situation problem has the following characteristics:

1. The situation problem is concrete and/or realistic. For example, it represents a situation that the learners may experience in their everyday life.
2. The situation is new for the learner, its resolution represents a challenge.

3. Its formulation arouses the interest of the learner, the scenario is evocative, arresting, stimulates questioning and research.
4. The situation calls upon the learners' current knowledge or competences. They are able to express an opinion, an idea on the problem.
5. The problem is open and will lead to debate. This means that several solutions are possible, that several approaches to the problem may be adopted or, finally, that there is an inherent controversy implying several different opinions.
6. The solution is not immediate. The problem is formulated in such a way that it can be understood but it is necessary to reformulate it, to make hypotheses, to look for information...
7. The solution requires both collaborative and individual work. The complexity and length of the problem are such that its solution cannot be found by an individual learner in the time allotted.
8. The problem is relevant, its resolution will lead to the acquisition of the competences and/or knowledge targeted.

Working from the adventures of Tintin has the following advantages:

- It takes the participant/problem designer outside his/her usual field which generally favours inventiveness (characteristic 2)
- These albums have a strong, general positive cultural content, everyone, or almost everyone, knows and loves Tintin, (characteristics 1, 4)
- The albums are a rich source of cognitive conflicts (characteristics 3, 5, 6, 7, 8)

This last point deserves explanation: Tintin is generally taken to be « serious», the scenarios are constructed, structured and the reader (child) therefore has the impression of a very « realistic» Tintin. Yet Hergé made a large number of scientific errors. Given that these comic books are generally perceived to be realistic, these errors are not really obvious, they do not jump out at the reader. However, on close reflection, it becomes obvious that something is not quite right: a cognitive conflict is born...

### **Materiel needed.**

5 paper boards, transparencies, markers, Tintin albums (provided by the author)