

An Introduction To The Method Of Fragments

This presentation is delivered illustrating the method of fragments (MOF) in action. More specifically, we consider this presentation to be a logical structure and we deliver it using MOF.

The strategy of creating a MOF challenge is to start with a logical text or structure and separate some fragments from its content. The learner is then presented with two documents. First the remaining text containing the ordered fragments is generated, indicating where fragments have been removed. Second, a collection of the removed fragments in random order is generated. The challenge for the learner is to reconstruct the initial text using the two items, thus solving the MOF puzzle.

Dr. Bogdan Alex Georgescu, the Director of Top Notch Canada has been faced with this type of exercises while trying to learn Spanish and trying to perform well in DELE (Diplomas de Español Lengua Extranjera) language examinations. By far the MOF puzzles were the most difficult in the lecture comprehension test.

Several reasons led Dr. Georgescu to believe that this type of exercises could be used in education in other fields where logical flow is critical such as mathematics, sciences and engineering. To begin with, no prior knowledge of the MOF puzzle content is necessary to solve it, provided no language and vocabulary barriers exist. To avoid compounding a logical problem with a language challenge we will try to offer these MOF puzzles in three high circulation languages. Because it can be done internally, solely based on logic, solving MOF puzzles is ideal for self study. The teacher only provides fundamental vocabulary and the learner (re)constructs the information.

Another critical aspect of the MOF puzzle activity is it has the engagement level of an assessment. Rather than reading theorems from a textbook or trying to focus on a lecture the learner is engaged in solving a puzzle and being evaluated for it.

While the strategy for solving MOF puzzles may require some further research, the following fact becomes apparent. To reconstruct the puzzle successfully the learner has to load into his memory the meaning of both the removed fragments and the remaining text. Simply, solving the MOF puzzle as a multiple choice test is not usually a successful strategy. This loading into the memory process is ultimately pure learning and it can be applied to linguistics, math theorems, developing engineering concepts and perhaps legal arguments as well.

Currently, on our site we present a few rather difficult MOF examples. Some are based on Geometry studied in the middle schools of Eastern Europe before the fall of communism in 1989 and some are Communications Engineering concepts which, although well known to experts, are challenging for many undergraduate engineering students. We invite you to click the "Courses" button at the top or at the bottom to further explore the application.