BRIDGE

Age group	Primary School, Grades 6 – 9; Secondary School, Grades 1 – 4		
Competency features	Common goal 	Flexibility 	Feedback 
Aims	▪ gaining experience in teamwork ▪ developing verbal communication ▪ to realize the necessity of compromise (agreement) ▪ to feel responsible ▪ to develop creativity ▪ tackling a task in cooperation with others		
Timing	90 - 150 minutes		
Location	indoors		
Resources & materials	For each group: 10 newspapers; 2 sheets of paper (A4); 3 PET bottles; a pair of scissors; 2 chairs (at least 1.5 meters from one another, back to back); 4 meters of string; glue; sticky tape; (1 carton box; sheet of polystyrene); list of roles to play: architect; workers; site supervisor; ecologist; economist; spokesman. PC access advisable.		

Description

1) Teacher splits his charges into groups, and tells them to take up their posts (prepared in advance).
2) He names the activity as he sees fit, e.g.: Design of a new bridge over the river in our town; bridge over the Panama Canal; or it could carry a conceptual label, like the Friendship Bridge; Bridge of the Helping Hand; Bridge between the Developed and Developing Worlds; Bridge from the Past to the Present (Future), etc.
3) Possible introduction: *"Not so long ago, our town was hit by floods. You will doubtless remember the damage suffered by the river bridge. It was repaired afterwards, but it would not be bad at all to build a new one. Now you have the opportunity to design such a bridge, using tools and materials provided. But that is all you have at your disposal – nothing else is allowed. There is a list of roles you will need to play to succeed in construction. Do not underestimate it, since each is important for the job. You may swap around and change professions mid-stream, or play several parts in succession. Initially, you will all be architects, which is fine, but the important part will be that of the spokesman. He has to present the project, explain how you proceeded and why, describe your intentions, provide figures, etc. Use imagination! Take into account all the elements of construction, pay*

attention to the economic as well as social aspects, advantages of using particular materials, etc. For the design and building the bridge, you have an hour exactly. For presenting it afterwards, each group will be given 10 minutes. Off you go, and good luck!"

4) Group presentations.
5) Committee evaluation of projects.
6) Discussion.

Risks and recommendations	It is essential that the teacher arranges for a qualified, independent committee (jury) for the project (other teachers, parents). Its members need to ask pertinent questions and apply judgment. It is advisable to inform the members fully about the project and give them time to think about it. Should the teacher decide to include the exercise as part of "Choosing a profession" lessons, he could call on the representatives of schools and/or colleges that are trying to recruit new students for their institutions. It has proved to be useful to engage staff from technological colleges due to their environmental criteria. On his own, the teacher will discuss with students how they cooperated, their presentation, etc.
Feedback	<u>Questions for discussion:</u> How did you like the group exercise? How did you go about choosing your roles? Did you have enough time for the project? Who was "the brain"? Who directed the work? Did you all manage to have your ideas realized? Who was a passive worker? How did you manage time? Were there clashes? If so, how were they resolved? Did you manage to think about further aspects of the project? (E.g., how could a new bridge impact the local employment; what about environmentally friendly construction materials; traffic issues and pedestrians; safety regulation, etc.) Did you have to look up additional information? If so, what was it and why? Did you learn anything through this exercise?
Application in classes	Civic education; arts; personal and social education; work with materials; math; physics (exact sciences would call for specific, numerical tasks).
Notes	