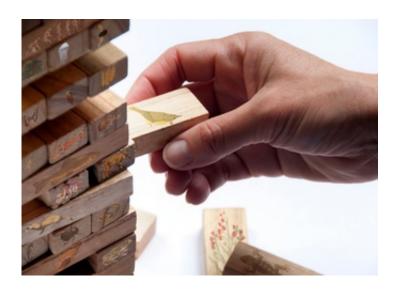# Could gamification enhance biodiversity decision making tools?

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Decision making tools used for policy could benefit from adding features inspired from video games to entice more people to use them. But will they still be credible to policy makers?

Making decision that may affect the environment is not that simple. For example, if a EU policy maker believes that biofuels can reduce CO2 emissions. And then decide to convert all unused agricultural land into, say, willow-biomass plantations capable of generating energy to replace up to 20% of fossil fuels. Their plan may not be readily adopted, should biodiversity specialists points out that the semi-wild unused farmlands

are a perfect habitat for butterflies.

The decision making tool developed by the Bioscore research project is designed to provide a perspective on the consequence of proposed policies on biodiversity. Created with EU funding, it is online since 2009 and answers the 'What if?' question: 'What will happen to species X, if we install policy Y in region Z?' A large database with the habitat preferences of more than a thousand European species, plants and animals, gives the answer in the form of data, graphics, and European maps.

But Bioscore is not perfect. Project coordinator Ben Delbeare, senior programme manager at the European Centre for Nature Conservation (ECNC) in Tilburg, the Netherlands, admits the test panel could include more precision, more species, and a more refined geographical grid. Project scientists hope that the tool will eventually help answer questions such as 'If I put this new road near that little swamp, what will happen to this toad that only survives there?' Until it is further refined, Delbeare and colleagues considered Bioscore as no more than "possibly useful."

Experts acknowledge its value, however. "I like it. It's new to me that you get an answer on biodiversity related to species and location," notes, landscape ecologist Timo Kaphengst, coordinator for biodiversity of the Ecologic Institute in Berlin, Germany. But he agrees that more precision is needed. His colleague Markus Geupel of Germany's Federal Environment Agency in Dessau-Rosslau is "delighted such a tool is being developed." Nevertheless, both experts doubt policy makers will be influenced by Bioscore. Indeed, the results as they appear are not terribly engaging. Graphics, percentages and a few maps aren't speech material for a politician. What's more; you need to really know about biodiversity to fully grasp the meaning of all those data.

So could 'gamification' make Bioscore more effective? 'Gamification' or

rather its spin-off 'serious gaming' is the hottest thing in learning technology. It means applying the laws of computer gaming into learning programs. It makes the task more fun, and users learn quickly because the game forces them to apply whatever they learn.

Two French specialists on gamification think it could work. "Gamification can be applied to a decision making tool like Bioscore," Francois Escolier tells youris.com. He is the owner and CEO of Getzem in Paris, a company that creates these learning programs. "The answers will be much clearer, quicker to understand, and the sheer fun and speed of such a game will invite the policy maker to continue playing with it, to instantly try another policy and see what happens," he adds. Ultimately, Escolier continues, this must result in better policies.

Applying the design and laws of computer gaming could result in better policies, agrees Sylvain Haudegombe, a cognitive psychology researcher, who is co-founder of the 'Play Research Lab' at the University of Valenciennes. But whether politicians will allow themselves to be influenced by something they perceive as a game is another matter. He tells youris.com: " *fear these politicians won't take such a game seriously, never mind how well it's made."*

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