

## CoPalCam game sessions with high school students

For the second time, the OPAL ETH team engaged with high school students of Le Lycée Français de Zürich.

On 15<sup>th</sup> March 2017, two classes came to ETH to play the CoPalCam game. One class played in the morning, the other in the afternoon.

In each session, students (15-18 years old) were split into two valleys and took on the roles of small growers, truck rental, industrial mill and artisanal mill.

### Statements from teachers:

Once again, an undeniably positive and enriching experience our High School students took full advantage of. Our 11th Graders are now more aware and have a really solid grasp of all the challenges faced by the palm oil industry. We look forward to working with your team of experts and to furthering our collaboration next year. Your hands-on game was both inspiring and motivating for our students, thus raising their awareness of the political, economic and environmental fields whilst strengthening their English skills. Overall, it was a highly beneficial workshop."

Stephanie Massolin, ESL teacher (English as a Second Language)

Feeding humanity became a global issue with a growing world population and limited resources in terms of water, cultivable soils and energy. This is a topic on the French curriculum of the 1st year class of Life and Earth Sciences, and as teachers we are asked to relate it with local practices and their global implications in order to set up the scientific bases necessary for an informed reflection on the choices of practices without teaching the choices that must be made.

The OPAL role-playing game developed by the ETHZ OPAL team is a very good tool for practicing these skills. It helps students develop a critical thinking by studying the environmental, social and economic impacts of such an important commodity: the oil palm. Students will come to understand the overall impact of food practices and the difficulty of managing populations and natural habitats in a sustainable way.

The other advantage is that it is a life-size game that allows us to change the usual teaching practices. It also offers a great deal of freedom to the students. After a first phase of learning the few rules, students can develop individual or collective strategies, collaborate, interact with all players in the field. They explore various strategies, undertake actions and can realize the concrete consequences of their actions.

Anita Poissel, Teacher of Life and Earth Sciences

Translated from French. Original statement here: « *Nourrir l'humanité est un enjeu planétaire avec une population mondiale qui croît et des ressources limitées tant au niveau de l'eau, des sols cultivables et de l'énergie. Ce thème est traité en classe de 1èreS en Sciences de la Vie et de la Terre. Dans les programmes français, il est demandé de mettre en relation les*

*pratiques locales et leurs implications globales afin d'installer des bases scientifiques nécessaires à une réflexion éclairée sur les choix de pratiques sans enseigner les choix qui doivent être faits.*

*Le jeu de rôle OPAL développé par l'équipe FOR-DEV de l'ETHZ est un très bon outil pour travailler ces compétences. Il permet de développer l'esprit critique des élèves en étudiant les impacts environnementaux, sociaux et économiques d'une culture d'importance mondiale, le palmier à huile. Ils sont amenés à comprendre l'impact global des pratiques alimentaires et la difficulté de gestion de populations et de peuplements naturels dans un souci de durabilité.*

*Son autre atout majeur est d'être un jeu, grandeur nature, qui permet de changer des pratiques pédagogiques habituelles. Il offre de plus une grande liberté d'action aux élèves. Après une phase de jeu d'apprentissage de quelques règles, les élèves peuvent élaborer des stratégies individuelles ou collectives, collaborer, interagir avec tous les acteurs de la filière. Ils explorent diverses stratégies, entreprennent et peuvent se rendre compte des conséquences concrètes de leurs actions. »*

This is the second time I have the opportunity to use the model with my students. In my double role as professor of science and language, this modeling is useful and interesting to me at two levels: first, modeling as a tool to understand a complex phenomenon and, consequently, difficult to analyze on the ground. The advantages of working with a model that was put into practice by individuals of all kinds are obvious, since they allow an element of variability to be added without it being completely random: people with feelings make decisions according to those feelings. The "imperfection" of a model executed by humans is its greatest virtue: who is better to simulate the unpredictable but at the same time logical behavior of humans than another human being? Second, the model is an excellent way to launch dialogue and constructive debate. First, during the application of the model, simple human interaction in a foreign language is already interesting in itself. Next, reflection, debate and analysis of behavior (own and others') is a kind of economic philosophy lesson in itself.

To conclude, the feeling that has been repeated the two times we have participated in the project: "why cannot we make a couple more rounds? I had a great idea!"

Joaquin Ruiz, Teacher of science and language

Translated from Spanish. Original statement here: « *Es la segunda vez que tengo la ocasion de utilizar el modelo con mis alumnos. En mi doble vertiente como profesor de ciencias y de lengua, esta modelización me resulta útil e interesante a dos niveles: primero, la modelización como herramienta para comprender un fenómeno complejo y, en consecuencia, difícil de analizar sobre el terreno. Las ventajas de trabajar con un modelo puesto en práctica por individuos de todo tipo son obvias, ya que permiten añadir un elemento de variabilidad sin que ésta sea completamente aleatoria: personas con sentimientos toman decisiones de acuerdo con esos sentimientos. La "imperfección" de un modelo ejecutado por humanos es su mayor virtud: ¿quién mejor para simular el comportamiento impredecible, pero a la vez lógico, de los humanos que otro ser humano? En segundo lugar, el modelo es un excelente medio para lanzar el diálogo y el debate constructivo. Primero, durante la aplicación del modelo, la simple interacción humana en lengua extranjera es ya de por sí interesante. A continuación, la reflexión, el debate y el análisis de la conducta (propia y de los otros) es una clase de filosofía económica en sí misma.*

*Para concluir, la sensación que se ha repetido las dos veces que hemos participado en el proyecto: "¿por qué no podemos hacer un par de rondas más? ¡He tenido una idea genial!" »*

### Statements from students:

This game helped me understand socio-economic concepts in a fun and appealing way. I realized that there are many different factors influencing profit: ethical behaviour, industrial capacity etc. Margaux, 15

I thought that the game was very well designed and impressively realistic. I enjoyed playing it a lot and it enabled me to get a further understanding of the complexity of the situation in Cameroon. Furthermore, the game also shows us the very challenging circumstances in Cameroon and why farmers tend to fall back on aspects such as child labour (that we would never even consider). Ludovic, 16

I liked finding new manipulation strategies. The game was fun, fluid and culturally enriching. I learned why palm oil is an economic problem in Cameroon and how to solve it if my studies lead me to Cameroon or the palm oil industry. Malo, 16

What I particularly liked about this exercise/game was how everyone took it seriously, including me obviously. I was fully invested and luckily I had a good business partner. I also liked the fact that in the game I didn't have to pay taxes, since I worked in the artisanal mill. But the lesson I took out of this is that in businesses like this it is always practical to work with other people. Almost no one was working alone; we all understood how to make profit even though it wasn't the case for everyone (truck neutral). Additionally, the producers had the possibility to make children work but they didn't. All in all, I can confidently say that money didn't kill our humanity and morality. Nadja, 16

I liked trying to negotiate and earn the most money. I learned how to manage money and the about the current situation in Cameroon regarding palm oil. Alexander, 16

Very entertaining and I love the additions to the game (child labour, more autonomy for truckers and industrialists) as well as the authenticity. I learned how money issues can change people (greed, lying, stealing) and the difficult choices farmers make. Hugo, 18

What I liked in this game was the possibility we had to act like in reality; we were allowed to lie or manipulate people just like in real life and it was very instructive. I also learned that the artisanal mill makes more revenue than the industrial one and I wasn't expecting that. Agathe, 15

I loved observing how, when given the chance, people often tend to ignore rules in order to gain money. I learned that real life economics is full of manipulations, lies and theft- much more than a classroom game. Max, 16

I liked the fact that we really felt like in a real life situation. I learned about the challenges producers face concerning competition with their neighbours and the importance of negotiation. Baptiste, 16

Things I found particularly interesting were the social aspect of this game, the importance of interaction in this closed circuit that was the palm oil market in Cameroon and the art of persuasion and diplomacy. This taught me the different components and economic actors in play in this market and how they interact. Also, I simply gained consciousness of the specific socio-economic situation in Cameroon.  
Nicolas, 18

This game has enabled me to understand how complicated the situation in Cameroon actually is. Also, I found it was a very enjoyable and simple way to learn and understand something unknown to me. Anna,  
16

I liked being independent and able to manage my own plantation without having to listen to someone else make my decisions. I learned with this game how complicated the palm oil industry is; I never thought there were so many people involved. Sophie, 16

I really liked this experience, especially the relationships we had to build with other farmers on mills and the moral factors that were taken into account. I learnt that whatever you wish to do, it is extremely important to remain diplomatic in every situation and make deals or compromises with different actors.  
Martin, 16

I liked the freedom we were given, the realistic and vague rules and the lack of moral judgement and constraints. I was able to learn the reality behind the lack of time and the surprising paradox of the palm oil industry in Cameroon. Nicolas, 16

I liked being in a position of power. I learnt that in this business you shouldn't trust anyone. Isabella, 16

I liked every part of it and I learned about the palm oil business in Cameroon and how to keep it stable.  
Laurent, 17

I liked how interactive and engaging the game was. I learnt how intricate the situation is in Cameroon (not as simple as we thought). Nina, 16

**The views set out in these statements are those of the participants and do not necessarily reflect the opinion of the OPAL project.**



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