

## CMES - assignment 3b

### Task 02

#### **Goal 4 - Quality Education**

Education is a key to escaping poverty and enabling upward socioeconomic mobility. Significant progress has been made in boosting access to education and school enrolment rates at all levels, particularly for females, over the last decade. Despite this, approximately 260 million children were out of school in 2018, accounting for nearly a fifth of the global population in that age group. Furthermore, more than half of all children and adolescents in the world do not reach the minimum reading and mathematical competence levels.

##### **Consequences:**

- Some 750 million adults – two thirds of them women – remained illiterate in 2016. Half of the global illiterate population lives in South Asia, and a quarter live in sub-Saharan Africa.
- In 10 low- and middle-income countries, children with disabilities were 19 per cent less likely to achieve minimum proficiency in reading than those without disabilities.

##### **What can we do?**

Ask our governments to place education as a priority in both policy and practice. Lobby our governments to make firm commitments to provide free primary school education to all, including vulnerable or marginalized groups.

#### **Goal 5: Achieve gender equality and empower all women and girls**

Gender equality is a fundamental human right, and yet we still encounter discriminatory laws and social norms, women who continue to be underrepresented at all levels of political leadership, and 1 in 5 women and girls between the ages of 15 and 49 report experiencing physical or sexual violence by an intimate partner within a 12-month period.

There has been progress over the last decades: More girls are going to school, fewer girls are forced into early marriage, more women are serving in parliament and positions of leadership, and laws are being reformed to advance gender equality.

### **Goal 10: Reduce inequality within and among countries**

Despite some positive signs toward reducing inequality, such as reducing relative income inequality and preferential trade status benefiting lower-income countries, inequality still persists.

COVID-19 has deepened existing inequalities, hitting the poorest and most vulnerable communities the hardest. At the same time, social, political and economic inequalities have amplified the impacts of the pandemic.

Inequalities are also deepening for vulnerable populations in countries with weaker health systems and those facing existing humanitarian crises.

### **Goal 17: Revitalize the global partnership for sustainable development**

Strong global alliances and cooperation are required to achieve the SDGs.

A successful development agenda necessitates global, regional, national, and local partnerships based on shared ideas and values, as well as a shared vision and shared goals that prioritize people and the environment.

#### **What can we do to help?**

Join/create a group in our local community that seeks to mobilize action on the implementation of the SDGs. Encourage our governments to partner with businesses for the implementation of the SDGs.

#### **Targets**

- Mobilize additional financial resources for developing countries from multiple sources
- Enhance global macroeconomic stability, including through policy coordination and policy coherence

- Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
- By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

We decided upon the fourth goal, namely Quality Education, because we are both interested in teaching and giving back to the community. We know that education is the basis of the formation of any society and that only an educated society can evolve accordingly. Moreover we strongly believe that in order to support all these sustainable development goals we must provide young children with the appropriate education.

### Task 03

#### **ENVISAGE - a CAPS project**

The objective of ENVISAGE is to offer a solution towards optimizing the learning process in virtual labs and therefore maximize their impact in education.

In reaching this challenging goal, ENVISAGE proposes to migrate knowledge from the neighboring domain of digital games, where the capture and analysis of detailed, high-frequency behavioral data has reached mature levels in recent years. In digital games, Game Analytics is used to profile users, predict their behavior, provide insights into the design of games and adapt games to users. These mature technologies can be readily migrated to learning analytics, especially in the situation of virtual labs as these are delivered online thus enabling detailed tracking of learner behavioral data. Tracking and understanding behavioral data can facilitate decision-making at the design level of a lab, but also can allow for adapting learning content to the personal needs and requirements of students.

ENVISAGE thus proposes a data-driven approach to solve the problems of designing, adapting, revising and evolving virtual labs. To this end, ENVISAGE will develop a high-level, easy to use authoring environment that integrates the above methodological paradigms allowing for

designing and implementing high-standard virtual labs. The integrated ENVISAGE solution will offer social benefits, as through the enhancement of virtual labs it will permit easy and effective access to education and learning to the greatest part of community, and economic benefits, as due to its optimized operating level, it will be easily absorbed by educational organizations, offering SMEs the possibility to seize new business opportunities.

#### Task 04

##### **Made in Roșia Montană**

Made in Roșia Montană is a company founded in 2013 by Tică Darie, which deals with the production and sale of wool products. The unique element of this business is that the products are handmade by local women. Tică Darie even set out to grow his business so that crocheting could become a full-time job for those women.

Another social element of the business is that 90% of the profit is reinvested in the production of woolen articles and 10% is invested in education.

#### Task 05

##### **Possible initiative**

Our solution involves a book shop that encourages adults, as well as children, to read more by offering afternoons of reading, people can come and listen to a staff member reading a passage from the “book of the week”. Also, the shop offers support to a school dedicated for disadvantaged children by donating 1 ron for every book sold.

The variables that show this process in LabView are the amount of money a client spends in one transaction, the number of books that were purchased and the amount of money that is being donated from that transaction. The Python algorithm monitors only the amount of money that is being donated.



