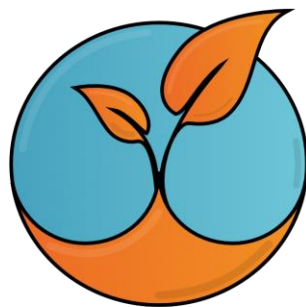
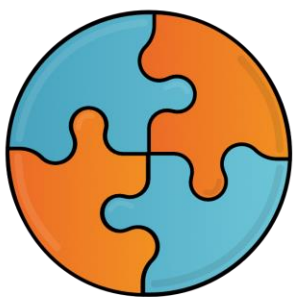


# ACES



A Community-Centred Educational Model for  
Developing Social Resilience through Play

## Vietnam context

Prof. Hoang Thi Bich Thuy, Hanoi University of Science and Technology  
Country PI

@GCRF\_ACES

[aces.gchangers.org](https://aces.gchangers.org)

#GChangers



Economic  
and Social  
Research Council



# ACES Vietnam Team



Hoang Thi Bich Thuy



Trinh Viet Dung



Nguyen T Thom Thom



Nguyen Thi Thu Huyen



Do Minh Minh



Bui Thi Ngoc Thuy



Le Chi Ngoc

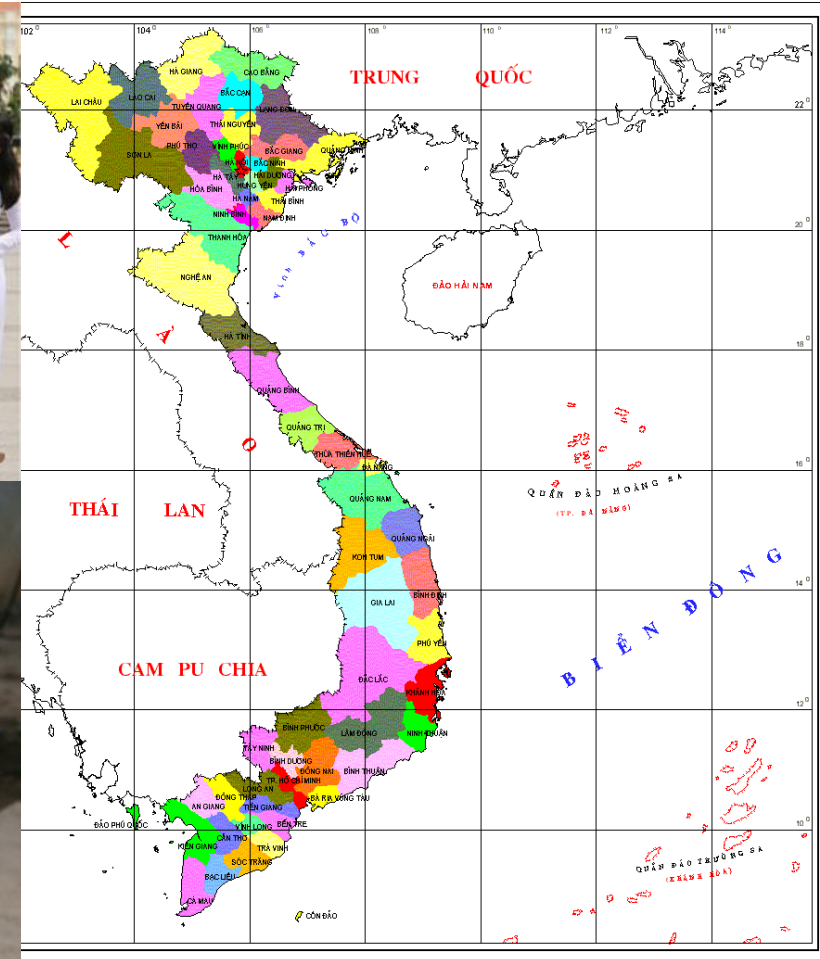


Doan Thi Thu Trang



# STATUS QUO

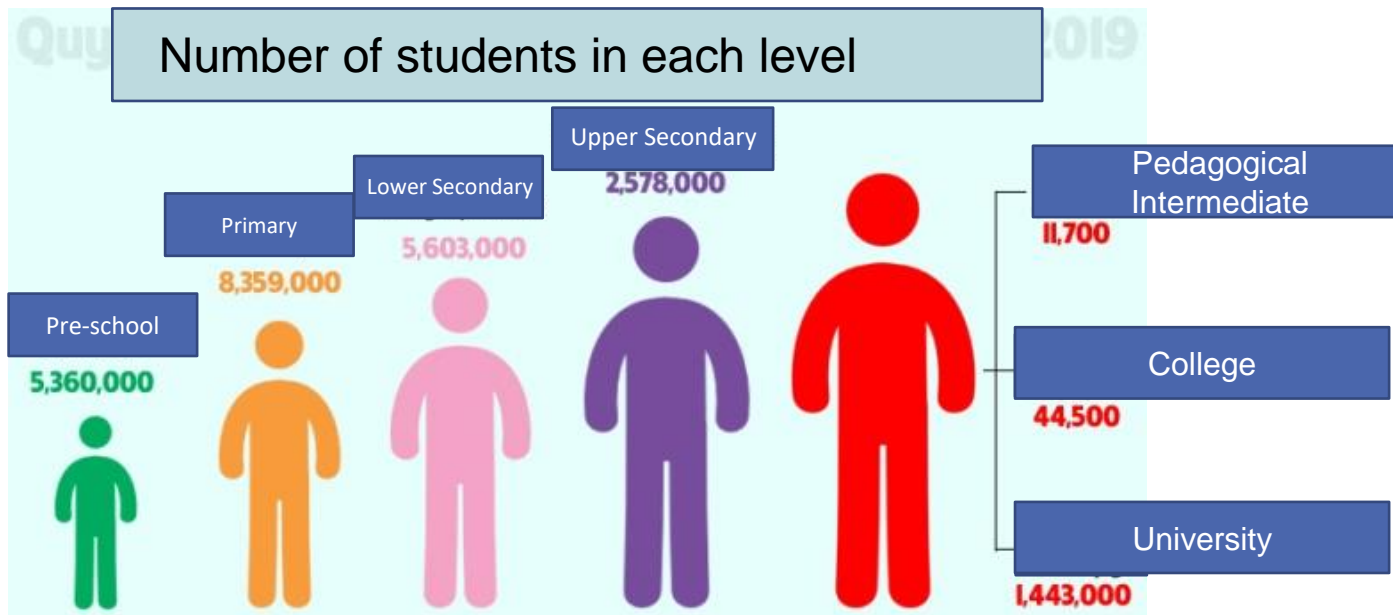
- Area: **330,967 km<sup>2</sup>**
- Population: **97.5 million people**; **65.8%** of rural residents **34.2%** of urban residents, **49.8%** male and **50.2%** female
- 54 ethnic groups, the largest group is **Kinh (Viet) 85.7%**.
- Literacy rate: **97.3%**
- Poverty rate: **23.60%**, 5.4% declined compared to 2016
- Gross Domestic Product: **220.4 billion USD**. Per capita income: **USD 2,354**
- Unemployment rate: **2.2%**



# Education background

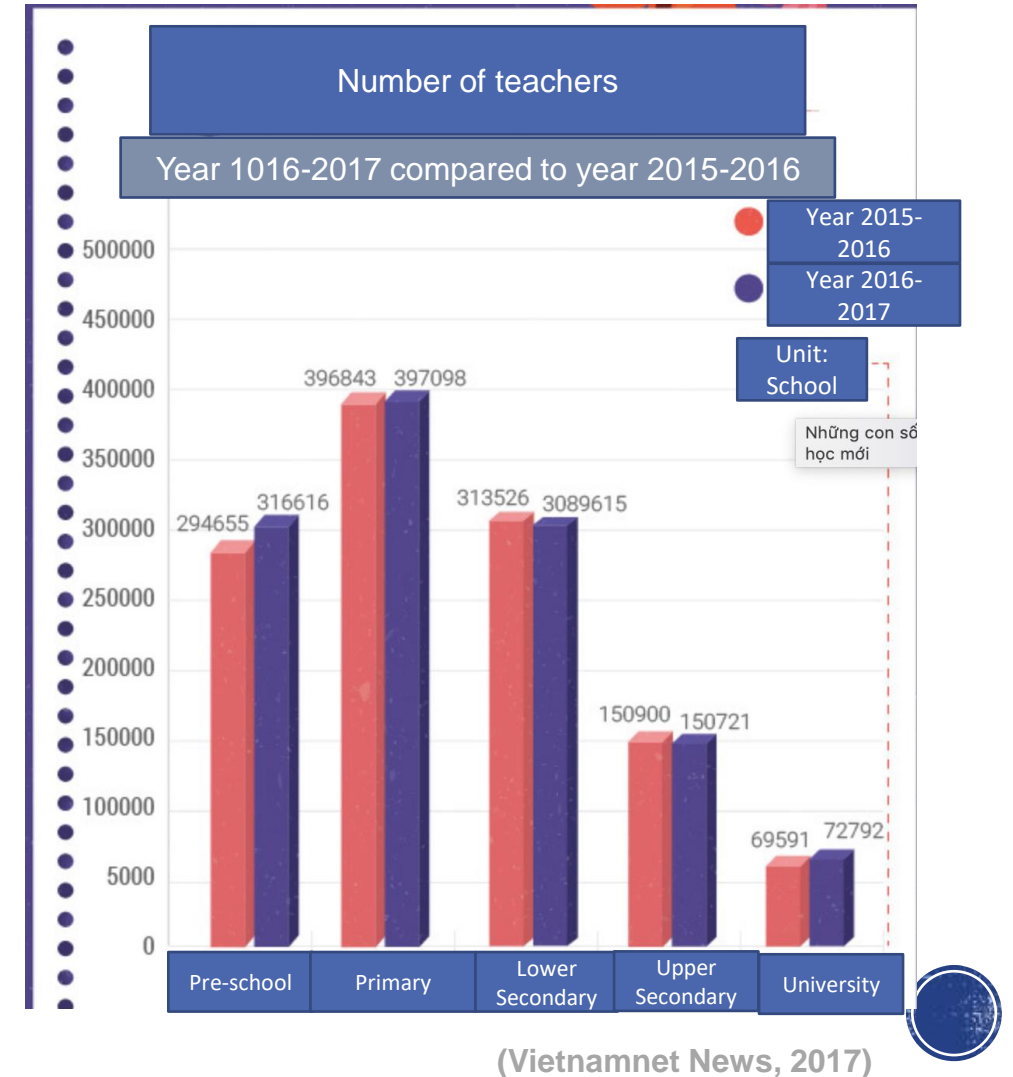
## Challenge:

Students **lack 21<sup>st</sup> century skills** to adapt to the fourth industrial revolution



**Vietnam has a total number of approximately 23,5 millions students**

( Xuan & Trung, 2018)



# STEM

*STEM education is essentially understood as equipping learners with the necessary knowledge and skills related to the fields of science, technology, engineering and math. These knowledge and skills are now integrated, integrated and complementary to help students understand both the principles and can be applied to practice and create products in everyday life.*



01

**STEM was brought to VN  
From a famous contest Robotic**



02

**Annual  
Stem Orientation**



03

**STEM is slowly being put in  
Official curriculum**

The new general education program has all STEM subjects. These are the subjects of Mathematics; Natural Sciences; Technology; Information Technology.

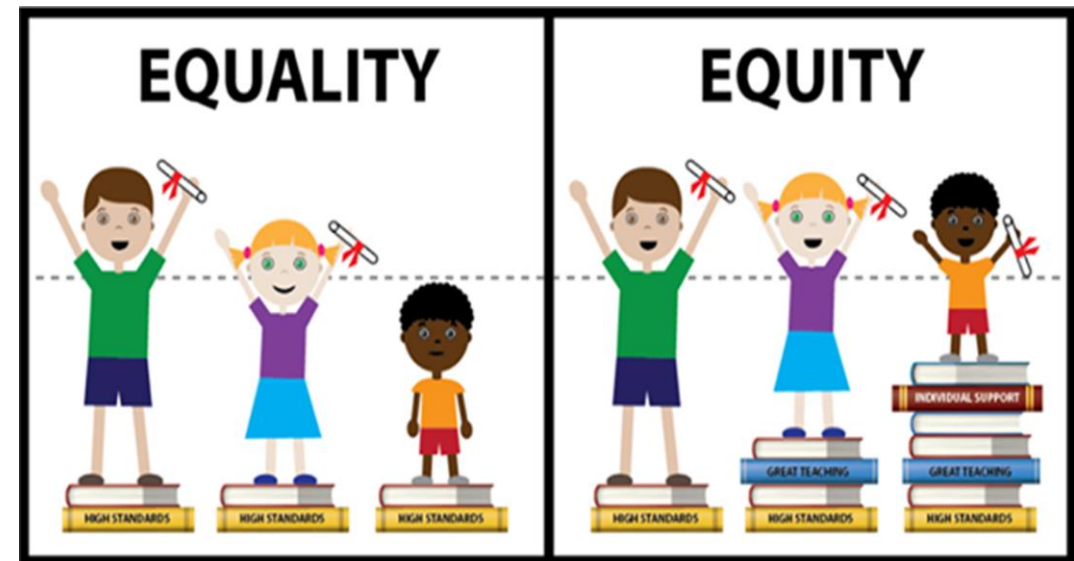
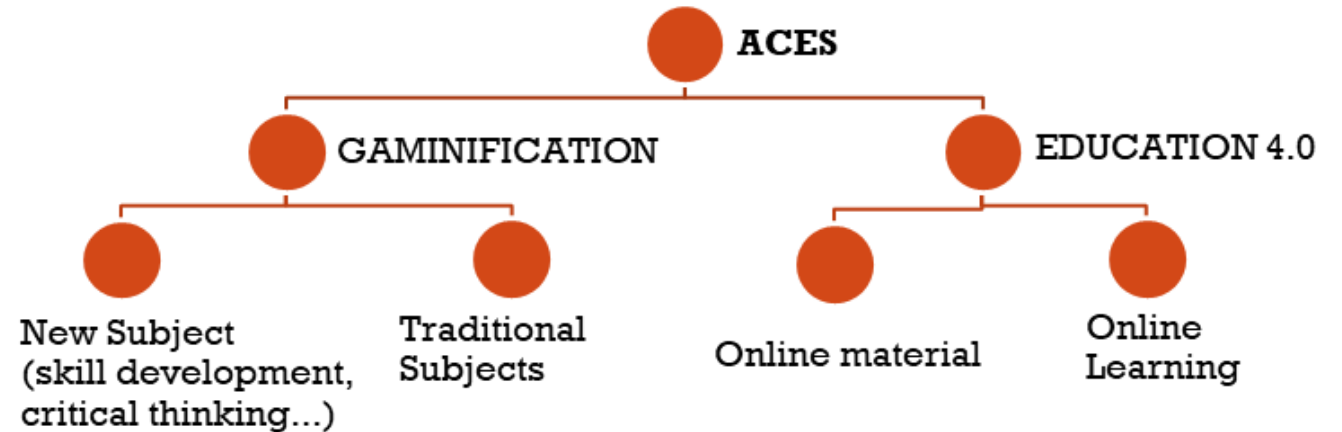
# ACES MODEL IN VIETNAM

## Outcome:

- Opensource material.
- Human resource ([Ambassadors & Impact group](#)).

## Benefits:

- Engage with young people in **marginalised** rural areas or deprived sections of urban through this **transformative** model of education and inquiry.
- ACES will **equip school teachers** in the design and facilitation of collaborative, active and playful/creative 21st-century pedagogies
- **Teachers from public school** will slowly transform traditional subjects using gamification under Ambassador's instruction to improve students skills
- **Students form the universities** will be able to gain skills to adapt to the 4.0 revolution: innovation and entrepreneurship,



# Choice of sites

## Secondary schools

- ✓ Public schools,
- ✓ Local community,
- ✓ STEM/STEAM,
- ✓ Low income.



## Universities

- ✓ Student teachers,
- ✓ Ambassadors.



# SECONDARY SCHOOLS – HOA BINH

- Mountainous
- Area: **4,662.5 km<sup>2</sup>**
- Population: **854,131**
- Per capita income: **USD 2,179**
- Poverty rate: **24.38%**
- Ethnicity: **Kinh, Muong, Tay, Tai, Dao.**
- **13 schools for ethnic minorities:** 2 primary schools, 5 lower secondary schools, 6 mixed schools. Total **2,477** students (2018-2019 year)
- The first mountainous area having a fully equipped school for STEM.
- Teaching on TV and online during COVID-19 pandemic.



# SECONDARY SCHOOL - QUANG NINH

- Northeastern, mountainous and coastal province
- Rich natural mineral resources of coal, limestone, clay, kaolin, white sand, granite, etc.
- Area: **6,102.3 km<sup>2</sup>**
- Population: **1,414,633**
- Per capita income: **USD 6,135**
- Poverty rate: **4.56%**
- Ethnicity: Kinh, Tay, Dao, San Chay, San Diu, Hoa.
- 181 primary schools, 189 secondary schools. Total **338,000** students for all schools in 2018-2019 year.
- STEM in some lower and upper secondary schools.

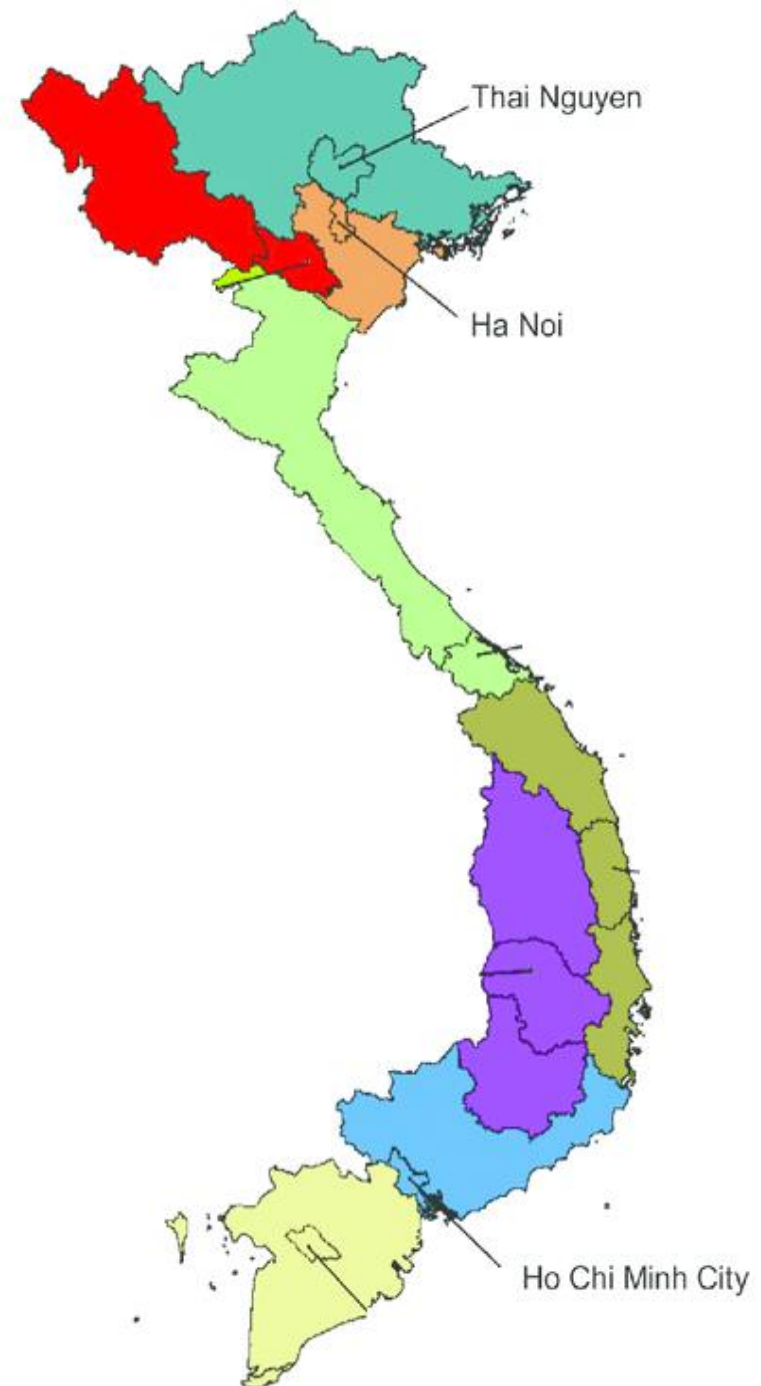


# HIGHER EDUCATION (UNIVERSITIES)

**Hanoi**  
**Thai Nguyen**  
**Ho Chi Minh City**

## ACES Engagement:

- ✓ Student teachers,
- ✓ Ambassadors.



# Hanoi University of Science and Technology

## Facts and figures

Established in 1956, HUST is the largest and most well-known technical university in Vietnam

## Admission 2019



**22.3%** Female students



**80%** students are in the top **11.4%** nationwide



Among the top 1% **highest-scored** students nationwide, HUST makes up **27.4%**





**THANK YOU FOR LISTENING!**