

# Developing the STEM Talent Pipeline

- High level consultancy
- Intervention with students
- Teacher professional development
- Linking private and public sector priorities to STEM in schools
- Innovative products and resources for STEM

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# Consultancy

- STEM focused
- MOET pilot Programme in Vietnam
- STEM competition support in Indonesia
- STEM lab development

"With new activities, we act sometimes like students, sometimes like teachers doing research and experiments on our own. In the usual way in learning science, we act like parrots that only learn by heart all theories but don't know how to apply to reality". Pilot school student.



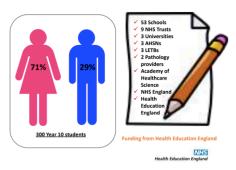
## **Student Intervention**

- Thematic programmes
- Hands-on activities
- Vacation camps
- STEM lab programmes

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NHS Health Education England

#### **Reach Out for Healthcare Science**











## **Public and Private Sector STEM Initiatives**

- BG Group -
  - Development of global strategic plan for education engagement
  - Oil, gas, earth science and marine related STEM programmes for schools
- GSK National Schools' Challenge
- University outreach programmes
- STEM lab development and operation











# **ASSMBLR**DESIGN CONSTRUCT CONTROL

'What makes ASSMBLR unique is that it is not just designed to build set models, tools are used to cut components to any length which allows for unlimited design possibilities, and it exposes students to real world tools and engineering processes and components; this helps learning in design (often CAD), prior to build-test-improve engineering design iteration processes"

[Richard Palfrey BEng and Inventor]



## **INNOVATE** > Many components that can be cut

Create robust meaningful objects + real-world engineering design + real-world engineering parts and processes + construct + test + refine





### **INTEGRATE >**

ASSMBLR platform + CAD + 3D printing + motors & control platforms









### **EDUCATE >**

Training workshops + teacher presentations + lesson plans + how2 videos + spotlight-on documents + student worksheets





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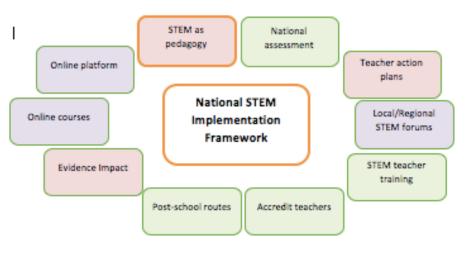






# **Proposed VN Implementation through STEM CPD**







- Initiate STEM Teaching approaches
- Develop collaborative working

Short Term

- · Teacher action plans
- · Gather data on impact

#### Medium Term

- Build local relationships
- Links between schools
- Local/Regional STEM Forum
- Wider use of platforms offering STEM materials and Training

#### Longer Term

- · Review of National Curriculum in line with MOET 10 Plan
- Assessment regimes
- · Teacher Training · Teacher CPD
- · Informed by evidence of Impact

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