

# **The National HE STEM Programme**

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National HE STEM Programme



# Overview



- Established by HEFCE & HEFCW in autumn 2008
- Three-year Programme of activity from August 2009
- £21million investment
- Ten core Partners in consortium
- Wider consortium ~ 85 higher education institutions

National HE STEM Programme

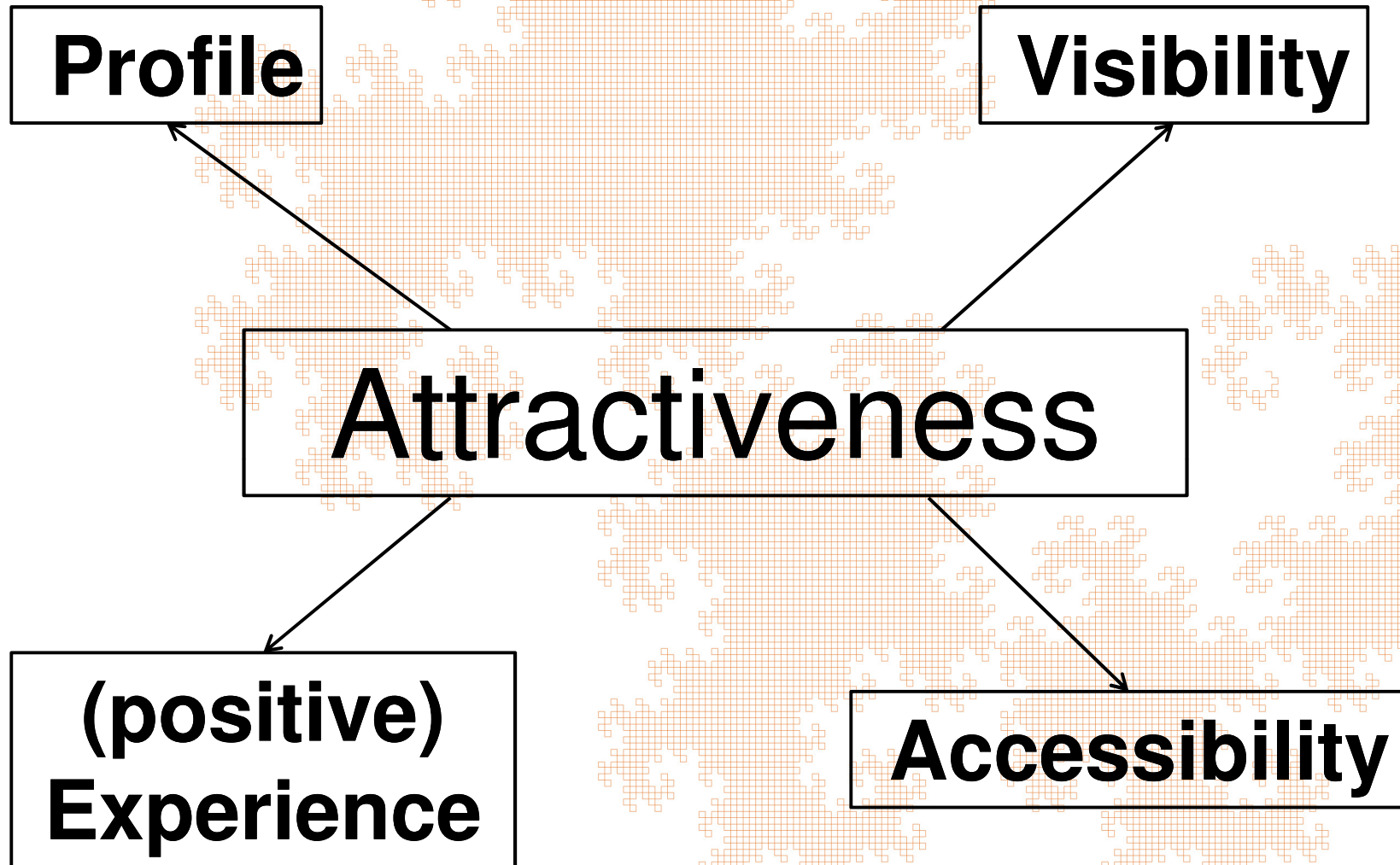


# Mission Statement

*The National HE STEM Programme supports Higher Education Institutions in encouraging the exploration of new approaches to recruiting students and delivering programmes of study within the STEM disciplines. It enables the transfer of best practice across the Higher Education STEM sector, facilitates its wider adoption, and encourages innovation. Through collaboration and shared-working, the Programme focuses upon sustainable activities to achieve long-term impact within the Higher Education sector.*

# Unique & Value Added

*The National HE STEM Programme supports Higher Education Institutions in encouraging the exploration of new approaches to training students and delivering programmes of study within the STEM disciplines. It enables the transfer of best practice across the Higher Education STEM sector, **facilitates its wider adoption**, and encourages innovation. Through collaboration and shared-working, the Programme focuses upon **sustainable activities** to achieve **long-term impact** within the Higher Education sector.*



# Visibility

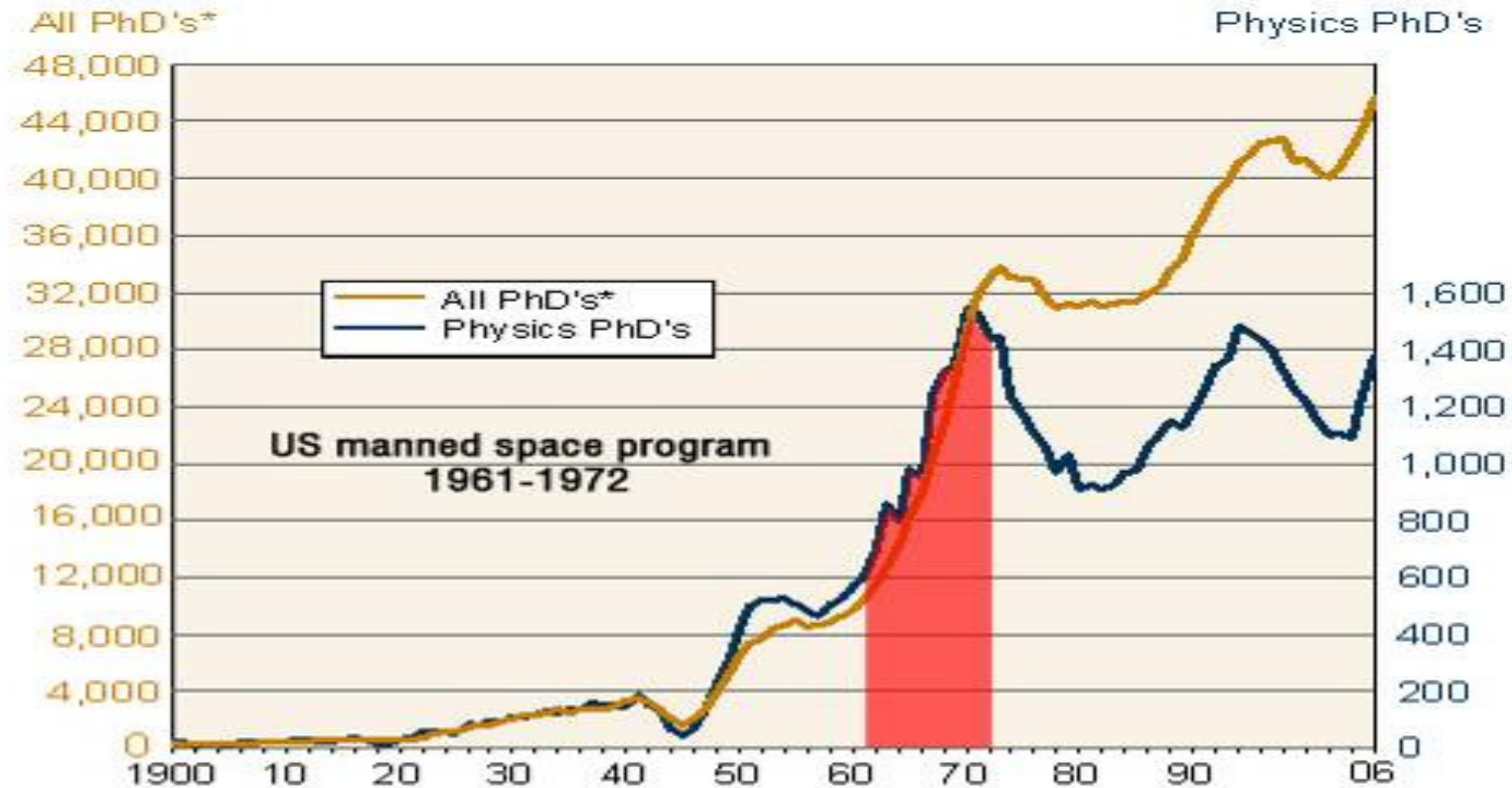


*“I was five years old when I watched Apollo 11 unfold on television, and without any doubt it was a big contributor to my passions for science, engineering, and exploration”*

**Jeff Bezos, CEO Amazon.com**

# Visibility & Growth

Physics PhD's and all PhD's conferred in the US, 1900 to 2006.



AIP Statistical Research Center, Enrollments and Degrees Survey  
\* NSF Survey of Eamed Doctorates

National HE STEM Programme

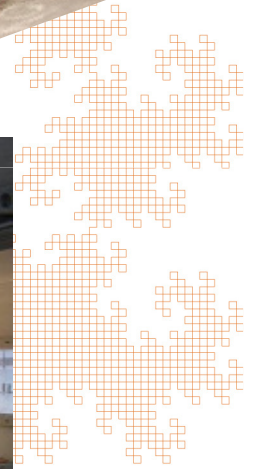




# Profile



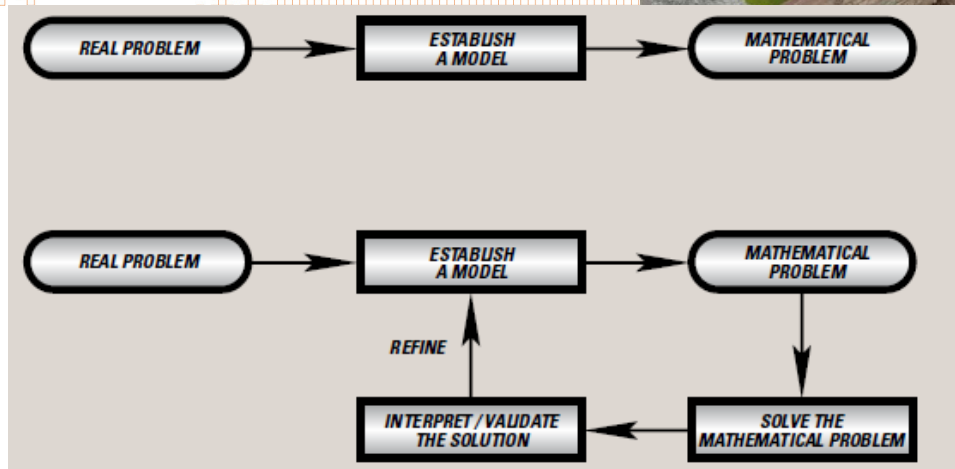
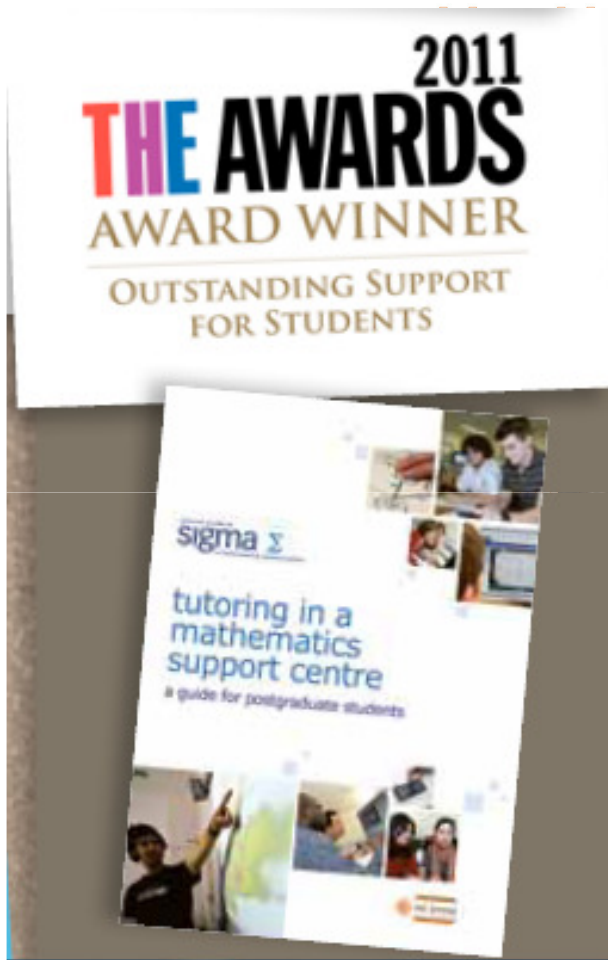
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National HE STEM Programme



# Experience



# Accessibility



Gearing up for Industrial Growth

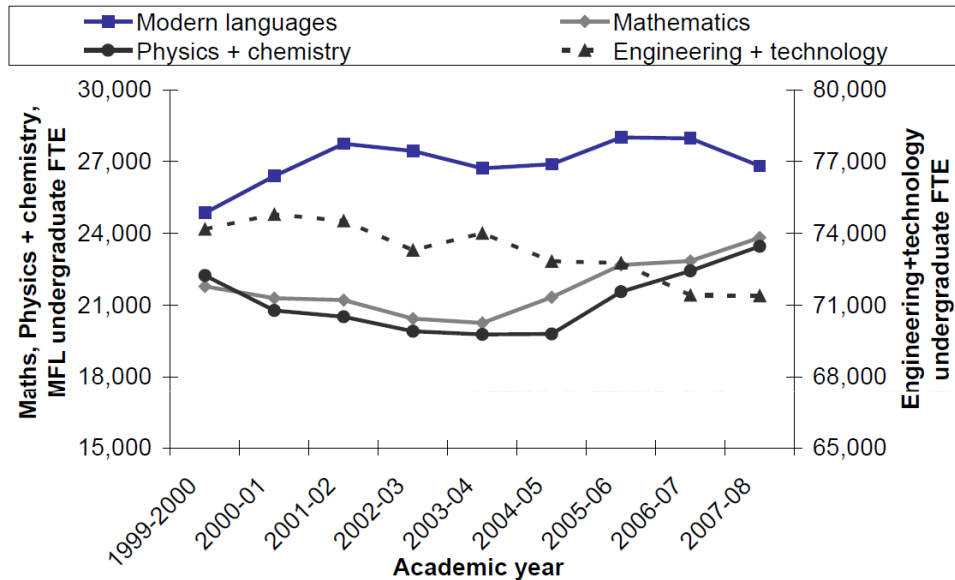


**Wales: fast track flexible progression pathway**  
in engineering science and maths



SWANSEA METROPOLITAN UNIVERSITY  
PRIFYSGOL FETROPOLITAN ABERTAWE

# Evidence & Impact



“Comparing the equivalent period 2005/06 to 2009/10 (HESA, 2011), overall full-time student enrolments within higher education increased by over 11% but growth in the STEM disciplines has, on the whole, greatly exceeded this.

Mathematics increased by over 26% (+5,460 students), physical sciences by 16% (+7,370 students), engineering and technology by 18% (+13,575).”

**Grove & Pearson (2011)**

National **HE STEM** Programme  
**Conference**



# ATTENTION STEM Practitioners!

- Are you involved in the teaching and learning of STEM subjects in HE?
- Do you want to find out about more about the latest developments and best practice?
- Do you want to showcase your work and innovation?

The National **HE STEM** Programme is now accepting submissions for its conference

**When:** Tuesday 4th to Thursday 6th September 2012  
**Where:** University of Birmingham.

The conference will provide the opportunity for all STEM practitioners (physics, chemistry, mathematics and engineering) to find out about the latest developments in the 'learning and teaching' of STEM courses and as well as finding new ways to encourage uptake of these strategically important subjects

We are calling for mixed session types (e.g. paper presentations, hands on active workshops, and panel discussions) focusing around these key areas. In addition we welcome posters displaying work which is underway and short, snappy 3 - 5 minute presentations where inventive performances are encouraged!

Attending the conference will generate:

- **recognition** and interest relating to your practice for those who facilitate,
- **networking** opportunities with project leads from the National HE STEM Programme,
- **inspiration** and ideas to enhance your teaching.

Sign up to the event and submit a proposal for the chance to present at the conference.

<http://www.hestem.ac.uk/conference>.



# Conference

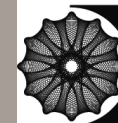
## 4-6 September 2012

## University of Birmingham

## [www.hestem.ac.uk](http://www.hestem.ac.uk)

## Find out More!

National HE STEM Programme



National  
**HE STEM**  
Programme