

## and Progression of Geomatics Students

Recruitment,

Retention

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#### Overview

- The state we're in
  - Fewer people, fewer courses
  - The Newcastle Situation
- Define the student lifecycle
  - The three stages
- Approaches taken by Newcastle University geomatics group at each stage

# Fewer People; Newcastle Situation

- European and International commentary about low numbers studying geomatics
- UK is no different
- Newcastle University
  - Research
    - Geodesy, Geomatic Engineering, Applied
  - Teaching
    - 2.5 Undergraduate Programmes (≈35-40 students)
    - High level of "service teaching"
  - Outreach, consultancy, etc.







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#### Recruitment

- University-led activities
- Geomatics specific activities
  - Workshops (1hr or 1 day)
    - Fieldwork
    - Google Earth
    - GIS
  - geomatics.org.uk (2000 2006)
    - Online information
    - Free loans of equipment to schools
  - CPD for teachers (2008 )
    - Four courses, one day each
    - Geography; Maths; Physics; Construction





Newcastle

Universitv

#### 10 years work

- Wide range of work
- Classify as one of the following:
- Recruitment
- Retention
- Progression

- Raise awareness
- Geepertatenappithcations
- Socoessipplicationedsafter
  gradulationent
  - Employment
  - Further Study
  - Travelling



### **CPD** for Teachers

- Introduction to geomatics
- Outdoor, practical exercise (GPS and Levelling)
- How to use geomatics more than once in your teaching
- Discussion session
- Free loans of equipment
- VERY positive feedback from school staff
- Based on two big pushes in UK secondary education
  - The outdoor classroom
  - GIS





Newcastle

University

#### Retention (1 of 2)

- Essential to keep the students we do get
- Induction
  - Residential Induction Course
  - Industrial Evening
- Teaching
  - Student voting systems ("clickers")
  - Increasing fieldwork and practical work
  - Study Tour

Progression

Visits by employers

CV and application advice

Strong links with alumni

+ the university careers service!

Online jobs board

Encouragement

Geomatics laboratory

Industrial Evening in induction week



# Vewcastle

#### Retention (2 of 2)

- Pastoral Care and Communications
  - Formal structures
  - Confidential focus groups
  - Buddy system
- Staffing
  - A close relationship with our staff
  - Open Door





## The Process ... but not a lifecycle











#### Virtuous Links and Complex Feedback





#### Is it working?

- We make our quota of 35 students
- High levels of satisfaction amongst students
- We are the only UK undergraduate geomatics courses accredited by the RICS
- We have a very high rate of successful progression
- But we must keep working!
  - Current project: Maths



