

The value of engineering students' mobility and its impact on their future life/career: Cross-continental perspectives

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Engineering students' mobility: Impact on future life/career

- Context – limited data/studies available
 - Large-scale study done in the U.S. by IES
 - Erasmus program study done in Europe
- Surveys and interviews –small scale at our own institutions
 - INSA
 - Swanson School of Engineering (Pitt)

First, what do you know?

Group exercise – 15 minutes:

- In small groups, please indicate what you believe are the four most important factors that impact a student's future life and career path
- These factors do NOT have to be only a result of mobility/abroad programs – can also include other experiences
- Report back your four most important factors – please ensure that at least two factors are a result of mobility/abroad programs

Discussion

- Factors that impact students' life and career paths

Data from large-scale studies

- IES conducted survey of 17,000 participants of programs from 1950-1999
- 25% response rate – representative sample achieved (95% statistical confidence)
- Limitations – no control group, self-reported data, results infer correlation, not causation (non-experimental design)

Data from large-scale studies

(continued)

- Erasmus study VALERA* Survey
2000/01

Target	Number of responses	Response rate
Former mobile Erasmus students	4589	45
University leaders	626	44
Employers	312	6
Experts	67	43

***VAL**ue of **ER**asmus mobility

IES study (U.S.)

- Study looked at alumni who work internationally vs. domestically and the mobility/abroad factors that affected them
- Most significant factors impacting those who work internationally: Full year of study abroad, host university course enrollment, internship participation, and host family living arrangements

Erasmus study (Europe)

- Experts, univ. leaders, employers note **a higher professional value** than the former Erasmus students themselves

academic knowledge, **general intellectual competences**, work-related values, **socio-communication skills**, problem-solving, **adaptability**, foreign language proficiency

- Employers rate young graduates with international experience by far more superior to those without

Erasmus study/ Europe (continued)

- Former mobile students can count on **higher status and income** than their non-mobile peers.

Horizontal professional value is impressive

- Mobility = a decisive impact on 1st job:
the advantage declines



- Business and engineering studies: International competences necessary even for position in national companies

Pitt small-scale study

- Conducted by graduate student – semi-structured interviews of current students (seven students interviewed for 40-60 minutes each)
- Students had studied in a foreign language environment for a full semester
- Students saw **long-term professional benefits** from studying abroad, although some gained important academic experience (i.e. alternative elective courses, senior design projects) that helped them greatly in the short-term.

Pitt small-scale study (continued)

- Communications skills improved not only through foreign language learning. At least 3 students noted they learned to be **clearer and more succinct, to be better listeners**, how to talk about cultural differences, and/or to enjoy interacting with people even when they *couldn't* speak the same language.
- Regarding changed **career goals, 4 of 7 students now see working abroad as a more viable option than they did pre-study abroad**; 2 stated that being abroad gave them “time and space” to think more deeply about their plans, both deciding to attend graduate school

INSA Lyon study

Survey done in 2010/11

Target	Number of responses	Response rate
INSA mobile students	446	67
Exchange students	105	48
Alumni 2000, 2004, 2008	465	29
INSA non mobile students (focus group)	50	100
Non mobile former students	167	100

INSA Lyon study (continued)

International mobility = an added –value on
personnal/professional life?

Target	Personnal life (%)	Professional life (%)
International exchange students	98	96,2
Outgoing students	99	86,3
Alumni 2000	98,5	80
Alumni 2004	96,4	73
Alumni 2008	98,3	68

INSA Lyon study (continued)

INSA former mobile students

International mobility has a decisive impact on 1st job?

Year	%
2000	80
2004	73
2008	67



INSA former mobile students
Self-assessment Competences gained

Competences	Ranking
Language proficiency	1
Openness & adaptability	2
Autonomy	3

Discussion: What does this all mean for us?

- In small groups, discuss and create strategies for enhancing impact on career and life goals of students participating in mobility/abroad programs
- Report one of your strategies to all

Conclusion

- What factors matter the most in terms of impact on future career paths?
- Do we offer programs that consider the future career path of our students?
- What are other issues we need to consider to help our students move towards future career paths impacted by mobility/abroad experiences?

Conclusion

Thank you!

Merci!

Study information can be provided to those who are interested upon request