LABOUR MARKET POSITION

ALUMNI SCIENCE & INNOVATION

Copernicus Institute of Sustainable Development, Utrecht University
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Utrecht University has asked I&O Research to conduct research amongst recent alumni of the following study programmes:

- Bachelor NWI (Natuurwetenschap en Innovatiemanagement)
- Master Science and Innovation Management
- Master Innovation Sciences
- Master Energy Science

In this report, these programmes together will be referred to as Science & Innovation.

The main question of the study is as follows:

"What is the current labour market position of (recent) alumni of Science & Innovation of Utrecht University?"

To answer this question, an online survey was carried out covering alumni who graduated between 2008 and 2014. For this purpose, email addresses were used that had been made available by the faculty. In total, more than 700 alumni were invited.
In total, 150 alumni participated in the study. Some of them fell outside the target group, for example because they graduated too long ago or because they are still following education and have no job. The useful response consists of 131 respondents.

Most respondents (69%) indicated that they have completed the Bachelor NW&I. A group of 44% have completed the Master Science and Innovation Management.

Most of the alumni in the survey graduated between 2011 and 2014 (about three-quarters of the respondents).

Two-thirds of the alumni only followed education at the University of Utrecht. Over one quarter (27%) already had a university degree and seven percent an HBO (higher professional education) degree, prior to their studies at Utrecht University.

**Figure 1.1**
Which degree(s) did you complete at Utrecht University?

- Bachelor NW&I: 69%
- Master Science and Innovation Management: 44%
- Master Innovation Sciences: 2%
- Master Energy Science: 23%

**Figure 1.2**
When did you graduate? (most recent completed programme)

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>23</td>
</tr>
<tr>
<td>2013</td>
<td>26</td>
</tr>
<tr>
<td>2012</td>
<td>27</td>
</tr>
<tr>
<td>2011</td>
<td>21</td>
</tr>
<tr>
<td>2010</td>
<td>10</td>
</tr>
<tr>
<td>2009</td>
<td>12</td>
</tr>
<tr>
<td>2008</td>
<td>12</td>
</tr>
</tbody>
</table>

**Figure 1.3**
Did you gain a degree from any other institute of higher education apart from the one from Utrecht University?

- Yes, a university degree: 27%
- Yes, a vocational degree (Dutch: HBO): 7%
- No: 66%
2. EMPLOYMENT

Three-quarters of the surveyed alumni (73%) have paid work for 36 hours or more a week. 9% currently have no job, and 18% work part time. 11% of the alumni have their own business or are freelancing. However, the majority (84%) are employed.

Of the 131 surveyed alumni, 119 are in paid employment and 12 alumni don’t have a job at the moment. Of the alumni who are in paid employment, 94 indicate that they have a relevant job, of which 58 alumni indicate that they have this job since graduation. A group of 36 alumni have had multiple jobs after graduation. Of the alumni who are in paid employment, 25 do not have a job that is related to the content or the level of their education. Four of them indicate that they did have a relevant job at some point.

**Figure 2.1**
Are you in paid employment at the moment?
- Paid work for less than 12 hours a week
- Paid work for 12 to 35 hours a week
- Paid work for 36 hours a week or more
- No paid work at the moment

**Figure 2.2**
What kind of paid work do you do at the moment?
- I am employed
- I have my own business/work freelance
- I am both employed and I have my own business/work freelance

**Figure 2.3**
Response overview
- 131 total
  - 119 paid work
  - 94 relevant job
  - 58 1st job after graduation
  - 36 multiple jobs after graduation
  - 25 no relevant job
  - 12 no paid work
  - 4 had paid work
  - 8 never had paid work
  - 4 had a relevant job
  - 21 never had a relevant job
  - 2 relevant + 2 non-relevant
Of the 119 alumni who have paid work, 79% indicate that their current job is related to their education.

The alumni who indicate that their current job is not related to their education were asked if they have had a job related to their education since graduating. One in six (16%) have had a job that matched their education, the rest didn’t.

The 94 alumni who have a relevant job, were asked whether or not their current job is also their first relevant job. For six out of ten alumni, their current job is the first job after graduation. The other alumni have had multiple jobs after graduating.
3. FINDING A JOB

First relevant job

Figures 3.1 to 3.3 are related to the group of alumni that had a job in the past, which was different to the current job, and to the group that doesn’t have a relevant job now but did have one in the past. This group consists of 42 alumni.

Two-thirds of these alumni found their first relevant job within 3 months. It only took 2% longer than a year. The majority of the groups that weren’t actively looking for a job or gave a different answer, already had a job before graduating.

Half of the alumni knew somebody at the company that hired them.

Most alumni found their first relevant job through personal contact (26%) and/or through an internship (24%). In the category ‘Other’, multiple alumni indicated that they were approached by a recruitment agency.
3. FINDING A JOB

**Current job**

Figures 3.4 to 3.6 are related to the group of alumni that have a relevant job at this moment. This group consists of 94 alumni.

Half of the alumni in this group found their current job within three months of searching. It only took 2% longer than a year. 14 percent indicate that they have not been looking for a job. Part of the 11% that give a different reason have transferred from another position internally.

Exactly half of the alumni in this group also knew somebody at the company that hired them.

The current job was mainly found through personal contact (30%), through a vacancy on the internet (27%) and through internships (18%). In the category 'Other', multiple alumni indicated that they were approached by a recruitment agency or that they were found by the employer via their LinkedIn-profile.
4. CAREER SO FAR

First relevant job

Figures 4.1 to 4.5 are related to the group of alumni that had a job in the past, which is different to the current job, and to the group that doesn’t have a relevant job now but did have one in the past. This group consists of 42 alumni.

Two fifth of this group previously worked in the commercial sector. Followed by education/research (17%) and health care industry (12%).

More than four out of five alumni worked in the field of study in which they graduated.

Half of these alumni (52%) had a permanent contract at their first relevant job. Four-fifths (43%) had a temporary contract and 5% were employed on a freelance basis.
4. CAREER SO FAR

The first relevant job of almost all alumni (95%) was a job at university level. For the other part it was a job at higher professional education (HBO) level.

Almost half of the alumni (45%) had a net starting salary of between 1,500 and 2,000 euros per month and 21% had a net starting salary of between 2,000 and 2,500 euros per month.

The respondents were also asked if they had an executive function at their first relevant job. This was only the case for a few of them: two alumni had one staff member working under them, one alumnus was in charge of five staff members and one alumnus was in charge of ten staff members.
4. CAREER SO FAR

**Current job**

Figures 4.6 to 4.11 are related to the group of alumni that has a relevant job at this moment. This group consists of 94 alumni.

Half (49%) of the respondents that currently have a relevant job work in the commercial consultancy sector, 13% work in the non-commercial consultancy sector and 12% in education/research.

Four-fifths of the alumni with a relevant job work in the field of study in which they graduated.

Almost two-thirds of these alumni (61%) were given a permanent contract. Three out of ten have a temporary contract and 10% have their own business.
4. CAREER SO FAR

Almost all alumni that have a relevant job at this moment (96%) work at university level.

Four-fifths do not manage other staff members in their current job. 14 percent have one to five staff members working under them and five percent have six to fifteen people working under them.

31% of the alumni with a relevant job have a net monthly salary of between 2,000 and 2,500 euros. 20% have a net monthly salary of between 2,500 and 3,000 euros.
This chapter covers the following question: to what extent is the alumni’s education in line with their job?

Figure 5.1 is related to the group of alumni whose current job is not the first relevant job after graduating (42 alumni).

60% of these alumni think that the work they are doing in their first relevant job is in line with the education they followed. One-third have a neutral standpoint and 7% think that the work they are doing is not in line with the education they followed.

**Figure 5.1**
Please indicate to what extent you agree with the statement below: *The activities in my first job matched well with my education.*

- 0% (completely disagree)
- 5%
- 10%
- 15%
- 20%
- 25%
- 30%
- 35%

1 (completely disagree) 2 3 4 5 (completely agree)
According to the alumni, the following aspects are important in their first job:
- Self-management skills
- Intellectual qualities (e.g. analysing, reasoning)
- Communicative skills
- Interdisciplinary skills
- Team work skills
- The experience that I acquired in project-based activities.

Least important are:
- Knowledge of research methods
- Professional knowledge (knowledge related to professional fields like Energy or Life Sciences)
- Knowledge of the social sciences

5. MATCH BETWEEN EDUCATION AND JOB

Figure 5.2
For each of the aspects mentioned below, indicate whether this aspect was important for your first relevant job. n=100

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Low (0-20%)</th>
<th>Medium (21-40%)</th>
<th>High (41-100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self management skills</td>
<td>16%</td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Intellectual qualities (e.g. analysing, reasoning)</td>
<td>18%</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary skills</td>
<td>21%</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Communicative skills</td>
<td>23%</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Team work skills</td>
<td>31%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>The experience that I acquired in project-based activities</td>
<td>35%</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>The broad and integral character of the education</td>
<td>13%</td>
<td>27%</td>
<td>60%</td>
</tr>
<tr>
<td>Networking and convincing skills</td>
<td>8%</td>
<td>33%</td>
<td>59%</td>
</tr>
<tr>
<td>ICT and numeric skills</td>
<td>17%</td>
<td>34%</td>
<td>49%</td>
</tr>
<tr>
<td>The feeling that I acquired for administrative relations, commercial interests and how social organisations function</td>
<td>15%</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>Professional knowledge (knowledge related to professional fields like Energy or Life Sciences)</td>
<td>26%</td>
<td>32%</td>
<td>42%</td>
</tr>
<tr>
<td>Knowledge of the natural sciences</td>
<td>25%</td>
<td>43%</td>
<td>32%</td>
</tr>
<tr>
<td>Knowledge of research methods</td>
<td>28%</td>
<td>42%</td>
<td>30%</td>
</tr>
<tr>
<td>Knowledge of the social sciences</td>
<td>25%</td>
<td>53%</td>
<td>22%</td>
</tr>
</tbody>
</table>
According to the alumni, the following aspects were sufficiently covered during their studies:
- The broad and integral character of the education
- Intellectual qualities (e.g. analysing, reasoning)
- Interdisciplinary skills
- Team work skills
- Knowledge of research methods
- Knowledge of the social sciences

The aspects that, according to the alumni, were not sufficiently covered during their studies:
- Networking and convincing skills
- ICT and numeric skills
- The feeling that I acquired for administrative relations,
- commercial interests and
- how social organisations function

Figure 5.3
For each of the aspects mentioned below, indicate whether enough attention was given to this aspect in your studies. n=100

- The broad and integral character of the education
- Intellectual qualities (e.g. analysing, reasoning)
- Interdisciplinary skills
- Team work skills
- Knowledge of research methods
- Knowledge of the natural sciences
- Professional knowledge (knowledge related to professional fields like Energy or Life Sciences)
- Knowledge of the social sciences
- The experience that I acquired in project-based activities
- Self management skills
- Communicative skills
- The feeling that I acquired for administrative relations,
  commercial interests and how social organisations function
- ICT and numeric skills
- Networking and convincing skills

0% 20% 40% 60% 80% 100%

[Bar chart showing the percentage of alumni who felt too little, adequate, or too much of each aspect was covered during their studies]
5. MATCH BETWEEN EDUCATION AND JOB

Current job

The surveyed alumni were given a proposition about their current job (the group of 94 alumni; Figure 5.4). More than two-thirds of the alumni think that the work they are doing at their current job is in line with the education they followed. 14% think that it is not.

They were also asked if the job vacancy for their current job specifically asked for people with an academic degree with the same background that the alumni had. 35 percent of the alumni state that this was not specifically stated in the text of the vacancy. 35% state that there was no job vacancy published.

About half of the surveyed alumni (48%) work at an organisation where there are no other employees with the same degree. 37% work at an organisation with colleagues that completed the same master, and 31% have colleagues that did the same bachelor.
5. MATCH BETWEEN EDUCATION AND JOB

Some of the terms mentioned that are of value during the career:
- Analytical skills
- Interdisciplinary / multidisciplinary

Some of the terms mentioned that were missed during the studies:
- Networking
- Programming
- Communication & Presentation skills
- Soft skills

Figure 5.7
What aspects of your education were most valuable, looking back at your career up till now (name three if possible)?

Figure 5.8
Looking back at your career up till now, what aspects that were not included in your education, did you miss?
Six out of ten alumni that are currently unemployed state that the reason for their unemployment is that they have continued studying.

**Figure 5.9**
What is the reason you are not working at the moment? (n=10)
79% of the surveyed alumni are male and 21% are female.

The surveyed alumni are between 26 and 30 years old. 15 percent is older than 30 and 17% is younger than 25.
Two-thirds of the alumni are not a member of a LinkedIn alumni organisation. 39 percent of the alumni are a member of a LinkedIn alumni organisation.

The top 3 alumni organisations of which the alumni are members:
- Universiteit Utrecht (University of Utrecht)
- NRG Energy Science
- NWSV Helix

**Figure A3**
Are you a member of one of the LinkedIn alumni communities?

- Yes: 39%
- No: 61%

**Figure A4**
Yes; which one: Are you a member of one of the LinkedIn alumni communities? (has been mentioned several times, n=50)

<table>
<thead>
<tr>
<th>Alumni organisation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni of YLL</td>
<td>1</td>
</tr>
<tr>
<td>alumni NWI</td>
<td>1</td>
</tr>
<tr>
<td>Alumni of Utrecht University</td>
<td>14</td>
</tr>
<tr>
<td>Don’t know the name...</td>
<td>7</td>
</tr>
<tr>
<td>General</td>
<td>1</td>
</tr>
<tr>
<td>Industria</td>
<td>1</td>
</tr>
<tr>
<td>Linked-in</td>
<td>1</td>
</tr>
<tr>
<td>NRG Energy Science</td>
<td>14</td>
</tr>
<tr>
<td>NWSV Helix alumni</td>
<td>10</td>
</tr>
<tr>
<td>SIM alumni</td>
<td>9</td>
</tr>
<tr>
<td>USE Alumni community</td>
<td>1</td>
</tr>
</tbody>
</table>
76 percent of the alumni have never attended an alumni activity organised by the University of Utrecht. A quarter indicate that they did attend an activity.

The alumni activities that the alumni attended are:

- Alumni lectures
- JAN Pub quiz
- Helix alumni day

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**ANNEX- BACKGROUND INFORMATION OF RESPONDENTS**

**Figure A5**
Have you ever joined any alumni activities organised by Utrecht University?

- Yes: 24%
- No: 76%

**Figure A6**
Yes; which ones? Have you ever joined any alumni activities organised by Utrecht University (n=31)?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni Seminar organized by Jacco Farla</td>
<td>1</td>
</tr>
<tr>
<td>Alumni symposium on the Dutch Labour Market</td>
<td>1</td>
</tr>
<tr>
<td>Alumni lezing deeleconomie</td>
<td>1</td>
</tr>
<tr>
<td>Alumni lezing Innovatie over de deeleconomie - 3 februari 2015</td>
<td>1</td>
</tr>
<tr>
<td>Alumni lezingen</td>
<td>4</td>
</tr>
<tr>
<td>Alumni lezingen vanuit SIM</td>
<td>1</td>
</tr>
<tr>
<td>cant remember exactly</td>
<td>4</td>
</tr>
<tr>
<td>Couple of alumni lectures with network drinks at Academiegebouw</td>
<td>1</td>
</tr>
<tr>
<td>Helix</td>
<td>2</td>
</tr>
<tr>
<td>Helix Alumni lezing (2015)</td>
<td>1</td>
</tr>
<tr>
<td>JAN filmavond in juni 2012</td>
<td>1</td>
</tr>
<tr>
<td>JAN Pubquiz</td>
<td>3</td>
</tr>
<tr>
<td>NRG</td>
<td>1</td>
</tr>
<tr>
<td>numerous.</td>
<td>1</td>
</tr>
<tr>
<td>Pubquiz, Beer tasting</td>
<td>1</td>
</tr>
<tr>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SIM meeting</td>
<td>1</td>
</tr>
<tr>
<td>Sollicitatie training</td>
<td>1</td>
</tr>
<tr>
<td>Speaker: Utrecht University Alumni Event</td>
<td>1</td>
</tr>
<tr>
<td>Symposium on Sustainability last year</td>
<td>1</td>
</tr>
<tr>
<td>the one that is being organized on the 24th of april 2015</td>
<td>1</td>
</tr>
<tr>
<td>zeepkist in Zwolle</td>
<td>1</td>
</tr>
</tbody>
</table>
The alumni that have had a relevant job worked as consultant - advisor (45%) or as Researcher/analyst (21%).

The majority had a fulltime job of 36 hours or more (88%). A small group of alumni (10%) worked 24 to 35 hours per week.

**Figure A7a**
At which company/organization and in what job did you work after graduating? - First relevant job
Function (n=42, number of respondents)

- **consultant/advisor**: 45%
- **manager**: 5%
- **researcher/analyst**: 21%
- **teacher**: 5%
- **other**: 24%

**Other:**
- business developer: 1
- innovation adviser: 1
- management trainee: 2
- Project Management Officer (PMO): 1
- Project manager and technical consultant: 1
- Regulatory Intelligence & Policy: 1
- Researcher, analyst, programmer: 1
- Technical Traineeship: 1
- Traineeship: 1

**Figure A7b**
At which company/organization and in what job did you work after graduating? - First relevant job
Hours p/week (n=42, number of respondents)

- 1 to 11: 2%
- 12 to 23: 10%
- 24 to 35: 88%
- 36 or more: 0%
ANNEX- CHARACTERISTICS OF THE FIRST JOB

The majority of the alumni that have a relevant job at this moment work as consultant/advisor (51%) or as researcher/analyst (17%).

Of this group, twelve alumni work abroad (13%).

Figure A8
At which company/organization and in what job do you work at the moment?
Function (n=94)

<table>
<thead>
<tr>
<th>Function</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>consultant/advisor</td>
<td>51%</td>
</tr>
<tr>
<td>researcher/analyst</td>
<td>17%</td>
</tr>
<tr>
<td>manager</td>
<td>10%</td>
</tr>
<tr>
<td>policy advisor</td>
<td>2%</td>
</tr>
<tr>
<td>teacher</td>
<td>1%</td>
</tr>
<tr>
<td>other</td>
<td>19%</td>
</tr>
</tbody>
</table>

Other:
- Biologics Strategy Team (Regulatory Affairs)
- Developer
- Editor
- Functional Lead designer
- Product Management Officer
- Project assistant
- Project Developer Windenergy
- project leader
- project manager
- Project manager of the European project
- OceaNET and researcher in the field of public policies
- Quality Engineer
- Recruiter
- Shareholder
- Software developer / project manager
- Technical Specialist
- technical trainee
- Therapeutic Specialist (commercial function)
- Trainee Project Management