GOFE
Global Outlook on Forest Education

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IUFRO-IFSA Joint Task Force (JTF) on Forest Education
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Rationale & Background

- Globalization
- Green economy / Bioeconomy
- Information technology
- Structure of forest education
Globalization

Population growth
Emerging economies
Scarcity
Env. degradation

e.g. Nikolakis & Innes (2014)
Green economy / Bioeconomy

BEFORE

- Forestry
- Agriculture
- Energy

NOW / FUTURE?
Information technology

BEFORE

University
Local physical place

NOW / FUTURE?

MOOC
Distance programs

Standiford (2015)
Structure of Forest Education

**BEFORE**
- Forestry curriculum

**NOW / FUTURE?**
- Forest Science curriculum (FS)
- Natural resources (NR)

**FORESTRY curricul**um

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*e.g., O’Hara and Salwasser (2015)*
Aim of the Global Outlook on Forest Education (GOFE)

1. To analyse competences from forest science (FS) centred curricula and natural resources curricula (NR)
2. To make a comprehensive gap analysis of an international scale using up-to-date scientific methods
3. To analyse the possibilities of new learning methods and approaches, especially those related to e-learning and LLL.
Curriculum

Subject specific competences
General competences

Working life

Subject specific competences
General Competences
...
Gap analysis

Differences between competences earned from education and needed in working life
FS vs. NR Curriculum

Forest related vs. Other jobs

Subject specific competences

General competences

Gap analysis
Differences between competences earned from education and needed in working life
A new way in forestry to analyse competences

Behavioral Event Interview (BEI)

How to distinguish between competencies of average and top performers?

Criterion sampling using Behavioral Event Interviews:

„I know it when I see it.“
Behavioral Event Interview

• Procedure:
  – Panel to determine top performers (5-10%) from average = typical (subsequent 10-25%)
  – BEI interviews (15-25) are held
    • Identify three professional successes and three failures
    • ”Situation, hindrances, action, result, evaluate”
  – ”Blind” coders assess frequency and complexity to form data driven competency criteria
  – Statistical analysis for model construction based on combinations of various competencies
Behavioral Event Interview

- Previous validations have found:
  - Strong validity across different regions
  - Reducing the effect of ethnic or cultural biases
  - Effective in predicting long-term life outcomes
  - Competencies accumulate into ”tipping points”

Table 2. Association of executive success with a competency algorithm based on Behavioral Event Interviews

<table>
<thead>
<tr>
<th>Performance predicted by competency algorithm</th>
<th>U.S. samples(^a)</th>
<th>Overseas samples(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial</td>
<td>New</td>
</tr>
<tr>
<td></td>
<td>Top performer (%)</td>
<td>Top performer (%)</td>
</tr>
<tr>
<td>High(^c)</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Lower</td>
<td>17</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: McClelland 1998
GOFE Process

- Recruitment of teams (professors and students)

- Kick-off meeting, June 14, 2016 (Physically in Helsinki, Finland + webinar)

- Data gathering and literature review

- Interview and surveys

- Communication of final results at IUFRO 125th Anniversary Congress
Need for global understanding about forest education

Who is representing your country or region?

Local teams are called for: Supervisors/professor(s) + student(s)
Instructions for student

1. Contact a suitable professor (Human resources / leadership, education dean or equivalent)
   - Introduce the GOFE project to your professor, he/she may contact IUFRO coordinator (Mika Rekola, mika.rekola@helsinki.fi)
   - **Project has no salary budget**, an option is thus to prepare MSc thesis using interview data during the project
   - On the need base some travel grants are available
   - Contact also IFSA representative (Lena Lackner lena.ifsa@gmail.com)

2. Data and analysis
   - See instruction for supervisors

3. Timing
   - Collect data during August-December 2016
   - Do analysis during August 2016 – February 2017
Instructions for supervisors/professors

1. Recruit a researcher(Student)
   - Project has no salary budget
   - Option 1: use *MSc thesis* work as a research resource
   - Option 2: organize *student assignment* during a class (HR, career planning, leadership, or survey method course etc) so that students interview recent graduates (alumni) and do data analysis
   - There might be already some interested students in your university. Information about GOFE has been delivered to students through IFSA network

2. Data
   - Collect a sample of 100 graduates/programme from your university so that graduates have competed their studies in 2013 (if needed 2012, 2011…). Programmes are:
     1. Forestry/forest (FS) sciences or equivalent
     2. Natural resource (NR) management, environmental management or equivalent
Instructions for supervisors/professors

3. Recruit an expert panel
   • Panel consist of professors and human resource experts outside university
   • Panel is to determine from the list of 100 graduates who are a) top (5-10%) and b) average = typical performers

4. BEI interviews
   • Researcher is going to do BEI interviews
   • At minimum 15 interviews so that 10 are top performers
     • Identify three professional successes and three failures
     • ”Situation, hindrances, action, result, evaluate”

5. Analysis
   • After interviews do data coding
   • Interviewer and coder are not allowed to know ranking of graduates
   • Do statistical analysis for model construction
Thank you for your attention!

GOFE
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More information / join the team:
www.iufro.org/science/task-forces/forest-education/
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