



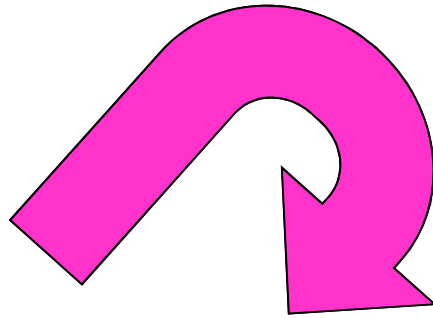
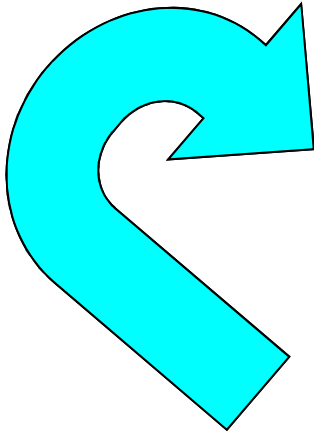
**Workshop of China – EU Joint Tuning study on  
Business**

**Outcomes of the  
Generic Competences and  
Subject Specific Competences  
consultation in China**

**Pablo Beneitone**

Xi'an, 30<sup>th</sup> August 2013

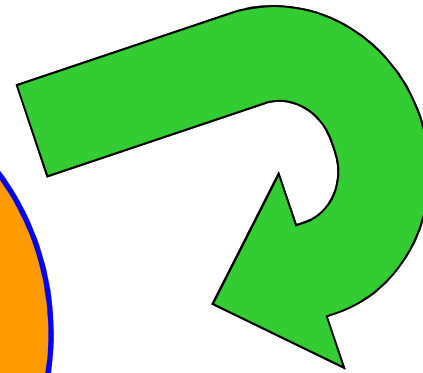
**ENHANCING**



**CONSULTING**

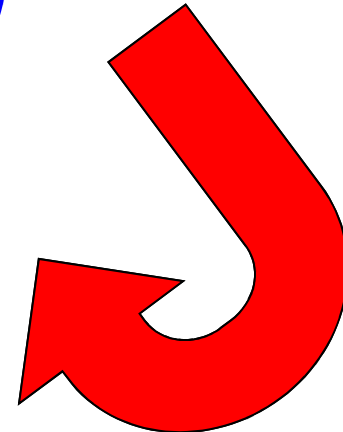
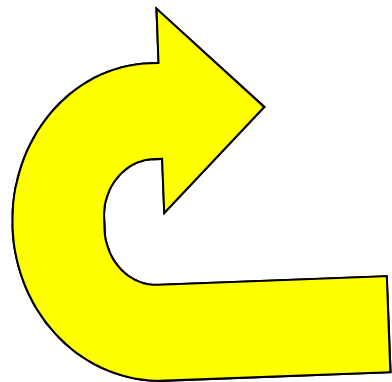


**PROFILING**



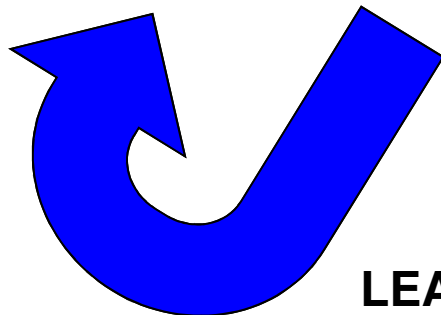
**STUDENT  
CENTRED  
LEARNING**

**DESIGNING**



**EVALUATING**

**LEARNING**



## **WHY a CONSULTATION?**

- **To initiate joint reflection from updated information**
- **To contrast first agreements with society**
- **To start debate**
- **To offer TWO levels of analysis:**
  - GENERAL
  - SUBJECT AREA

## **WHAT was CONSULTED?**

- **GENERIC Competences**  
**(33 competences)**
- **SUBJECT SPECIFIC Competences**  
**(26 competences)**

## **4 Groups to be considered:**

- **ACADEMICS**
- **EMPLOYERS**
- **GRADUATES**
- **STUDENTS**

## 3 Variables to be considered:

- IMPORTANCE

- ACHIEVEMENT

For both a scale of 1 to 4:

- 1 = none
- 2 = weak
- 3 = considerable
- 4 = strong

- RANKING

# Analysis



Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

# Data

<b>GENERIC COMPETENCES</b>				
	<b>Business</b>	<b>Education</b>	<b>Civil Engineering</b>	<b>Total</b>
<b>Academics</b>	107	66	134	307
<b>Employers</b>	143	230	109	482
<b>Students</b>	152	138	184	474
<b>Graduates</b>	149	213	123	485
<b>Total</b>	551	647	550	1748

<b>SPECIFIC COMPETENCES</b>				
	<b>Business</b>	<b>Education</b>	<b>Civil Engineering</b>	<b>Total</b>
<b>Academics</b>	107	61	108	276
<b>Employers</b>	141	196	98	435
<b>Students</b>	150	122	166	438
<b>Graduates</b>	144	188	119	451
<b>Total</b>	542	567	491	1600



# Analysis



Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

# Data

3 SUBJECT AREAS

Total number of respondents 1748:

- 485 Graduates
- 482 Employers
- 307 Academics
- 474 Students

# ACADEMICS

## RATING – Importance vs. Achievement



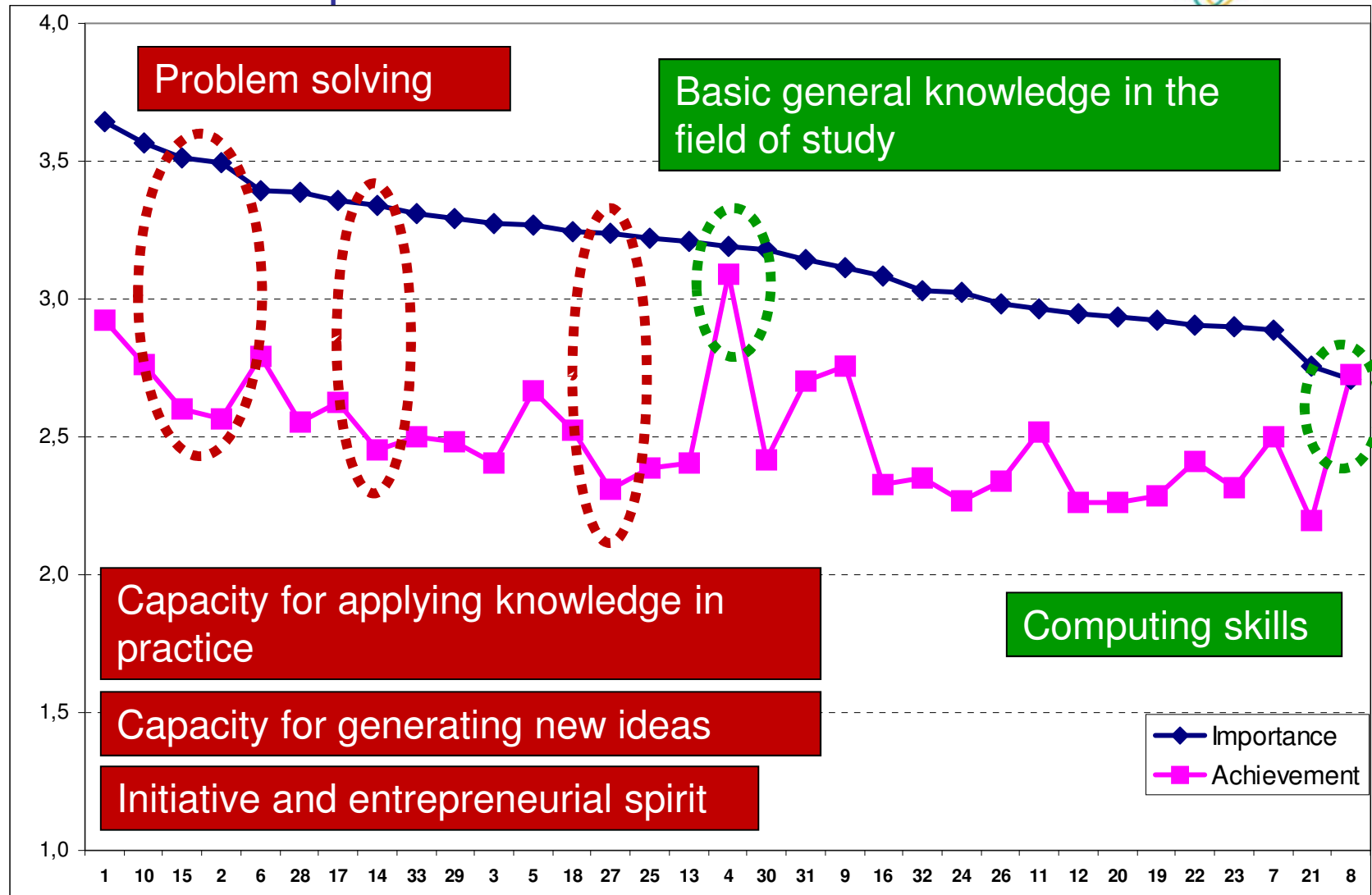
#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,64	2,92
10	Capacity to learn Actively	3,56	2,76
15	Problem solving	3,51	2,60
2	Capacity for applying knowledge in practice	3,49	2,57
6	Oral and written communication in your native language	3,39	2,79
28	Ethical commitment and professional attitude	3,38	2,56
17	Teamwork	3,36	2,62
14	Capacity for generating new ideas	3,34	2,45
33	Ability of self-management	3,31	2,50
29	Social responsibility and civic awareness	3,29	2,49
3	Planning and time management	3,27	2,40
5	Grounding in basic knowledge of the profession in practice	3,27	2,67
18	Interpersonal skills	3,24	2,52
27	Initiative and entrepreneurial spirit	3,24	2,31
25	Ability to work autonomously	3,22	2,38
13	Capacity to adapt to new situations	3,21	2,41
4	Basic general knowledge in the field of study	3,19	3,09
30	Concern for quality	3,18	2,42
31	Will to succeed	3,14	2,70
9	Research skills	3,11	2,76
16	Decision-making	3,08	2,33
32	Environment awareness and commitment to sustainable development	3,03	2,35
24	Commitment to health and safety	3,02	2,27
26	Project design and management	2,98	2,34
11	Information management skills	2,97	2,52
12	Critical and self-critical abilities	2,95	2,26
20	Ability to work in an interdisciplinary team	2,93	2,26
19	Leadership	2,93	2,29
22	Appreciation and understanding of culture diversity	2,91	2,41
23	Ability to work in an international context	2,90	2,32
7	Capacity to communicate with a second language	2,89	2,50
21	Ability to communicate with non-experts in the field	2,76	2,20
8	Computing skills	2,71	2,72

23 competences over 3

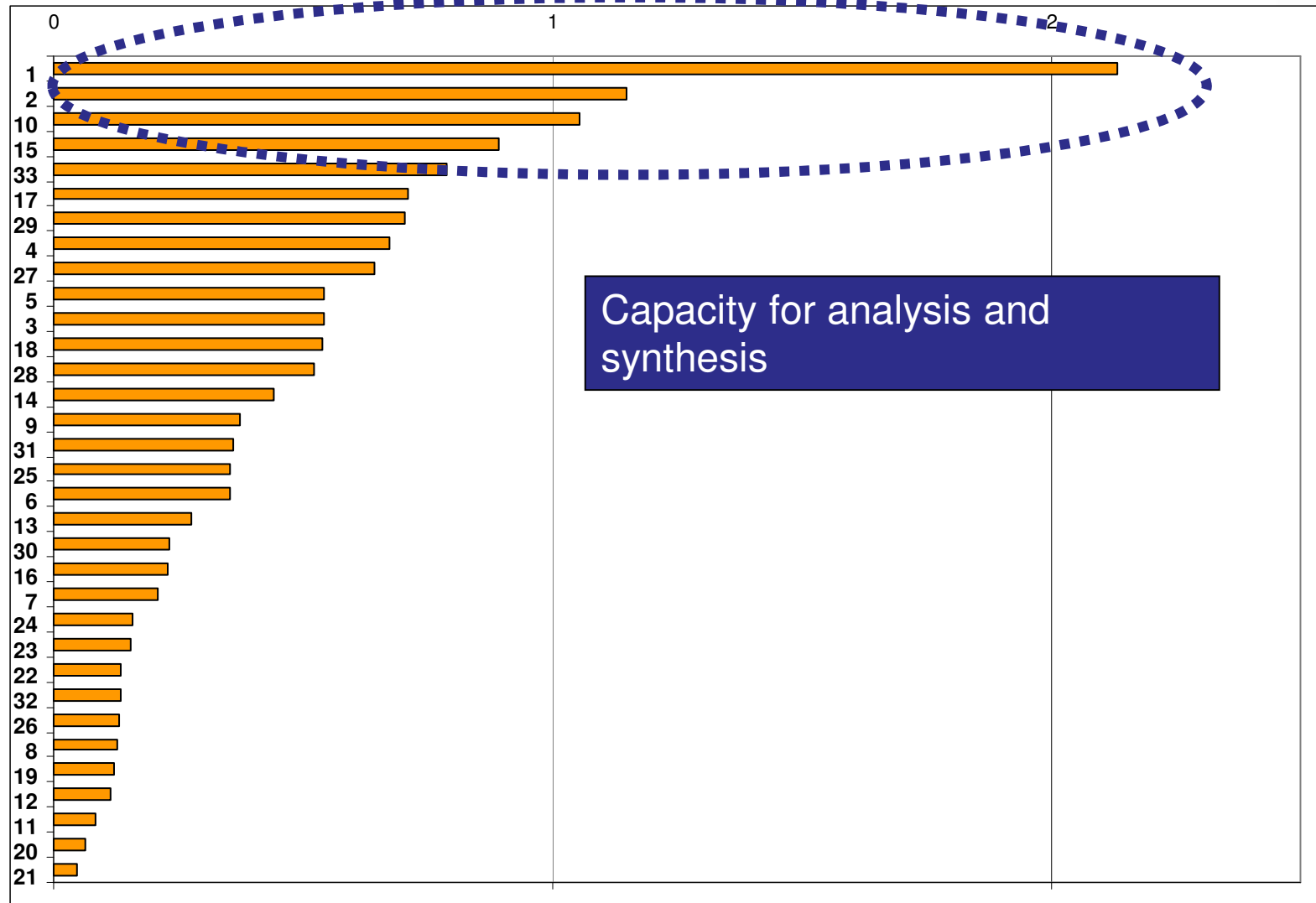
1 competence over 3

# ACADEMICS

## RATING – Importance vs. Achievement



# ACADEMICS RANKING



# EMPLOYERS

## RATING – Importance vs. Achievement



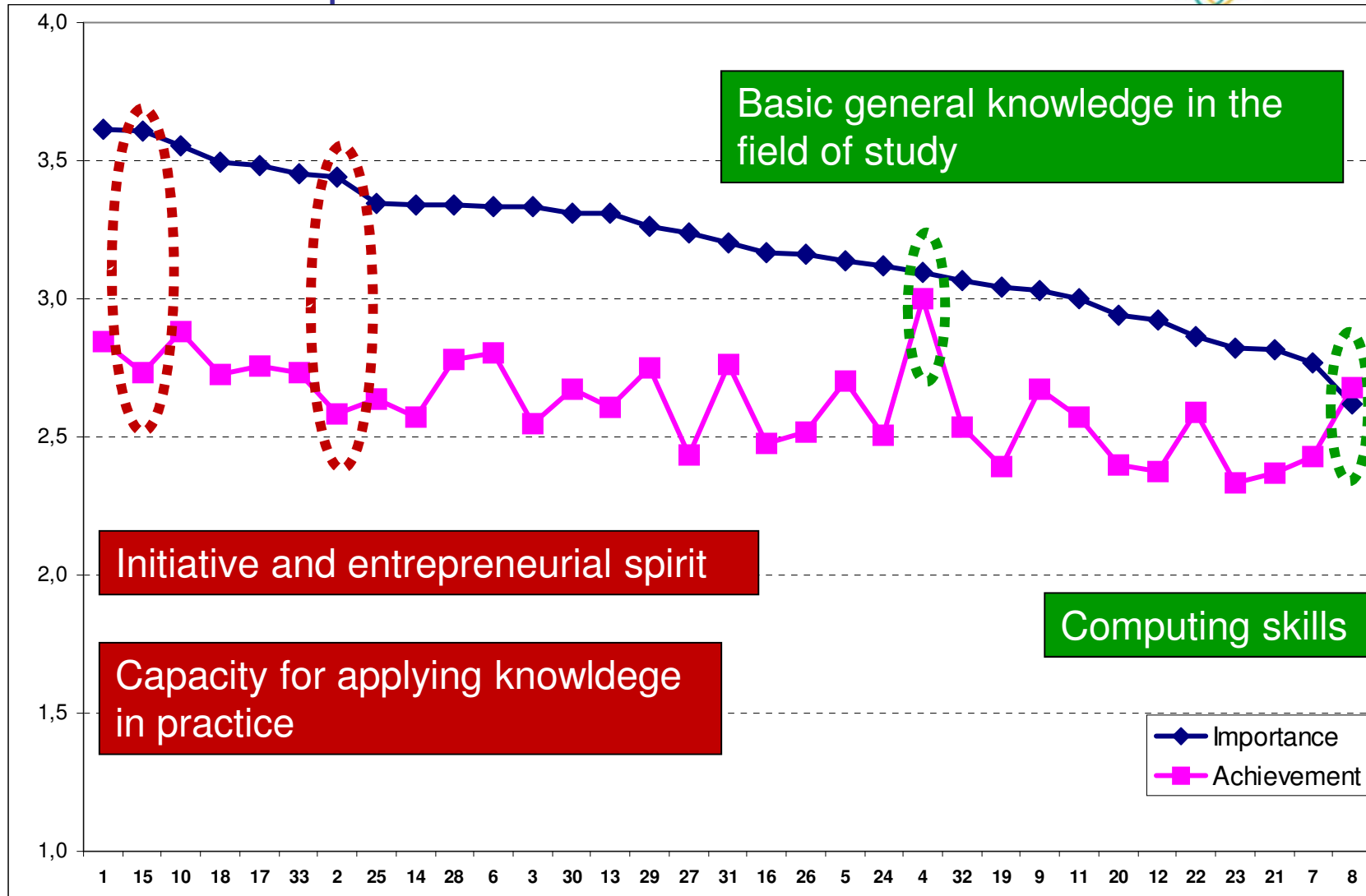
#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,61	2,85
15	Problem solving	3,60	2,73
10	Capacity to learn Actively	3,55	2,88
18	Interpersonal skills	3,49	2,73
17	Teamwork	3,48	2,76
33	Ability of self-management	3,45	2,73
2	Capacity for applying knowledge in practice	3,44	2,58
25	Ability to work autonomously	3,34	2,64
14	Capacity for generating new ideas	3,34	2,57
28	Ethical commitment and professional attitude	3,34	2,78
6	Oral and written communication in your native language	3,34	2,81
3	Planning and time management	3,34	2,55
30	Concern for quality	3,31	2,67
13	Capacity to adapt to new situations	3,31	2,61
29	Social responsibility and civic awareness	3,26	2,75
27	Initiative and entrepreneurial spirit	3,24	2,44
31	Will to succeed	3,20	2,76
16	Decision-making	3,17	2,47
26	Project design and management	3,16	2,52
5	Grounding in basic knowledge of the profession in practice	3,14	2,70
24	Commitment to health and safety	3,12	2,51
4	Basic general knowledge in the field of study	3,09	3,00
32	Environment awareness and commitment to sustainable development	3,06	2,54
19	Leadership	3,04	2,39
9	Research skills	3,03	2,67
11	Information management skills	3,00	2,57
20	Ability to work in an interdisciplinary team	2,94	2,40
12	Critical and self-critical abilities	2,92	2,37
22	Appreciation and understanding of culture diversity	2,87	2,59
23	Ability to work in an international context	2,82	2,33
21	Ability to communicate with non-experts in the field	2,82	2,37
7	Capacity to communicate with a second language	2,77	2,43
8	Computing skills	2,62	2,68

26 competences over 3

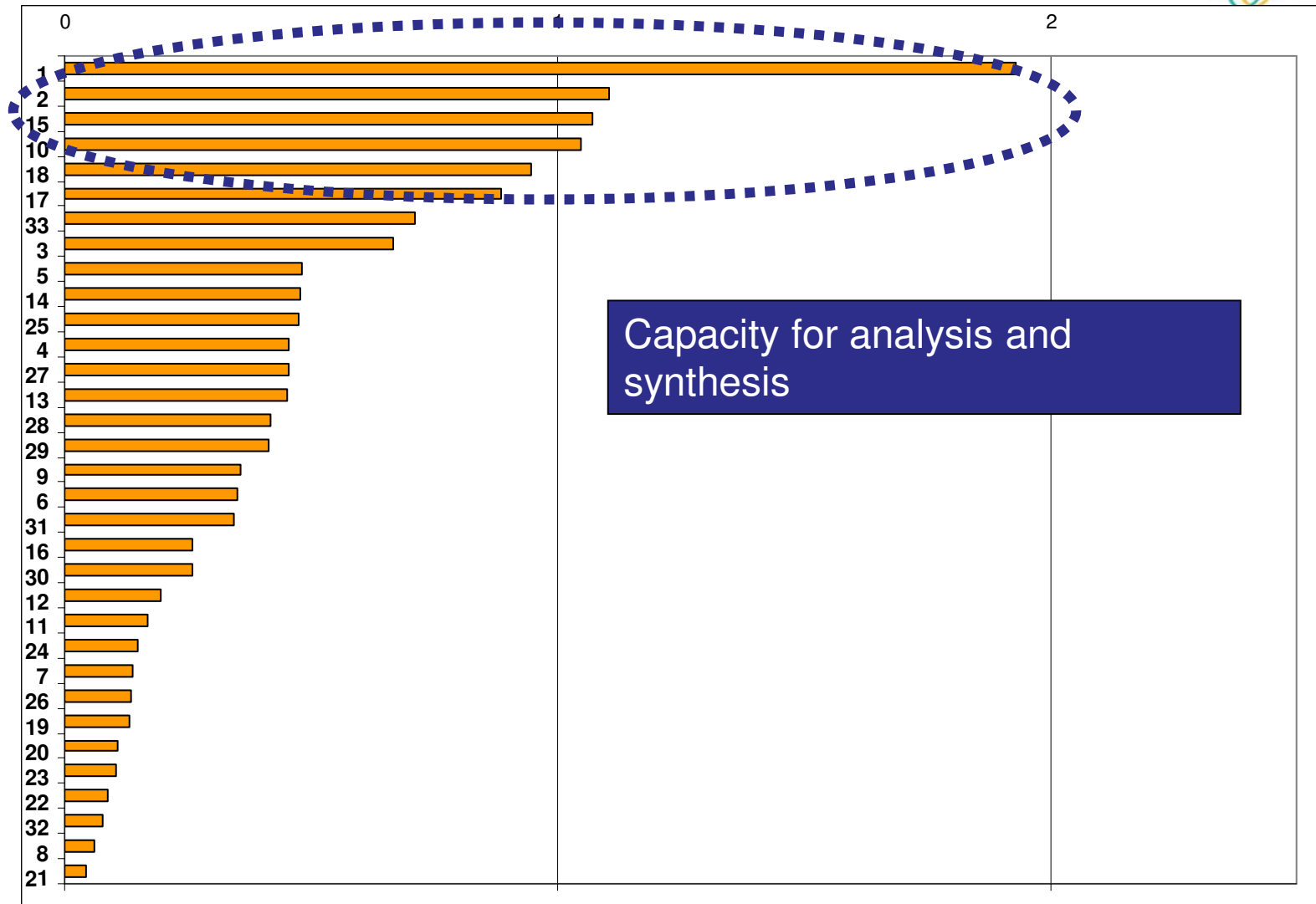
1 competence over 3

# EMPLOYERS

## RATING – Importance vs. Achievement



# EMPLOYERS RANKING





# STUDENTS

## RATING – Importance vs. Achievement



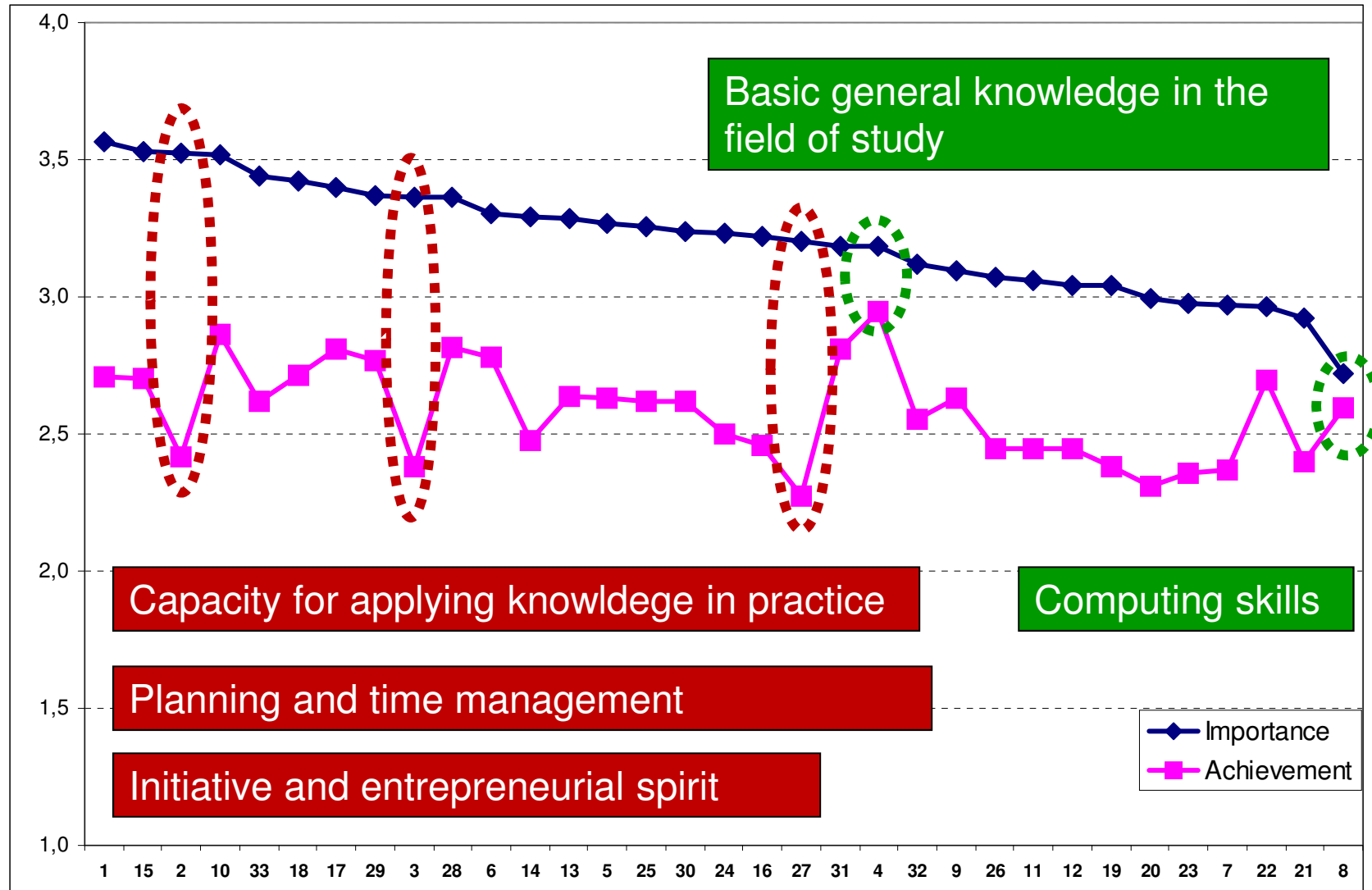
#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,57	2,71
15	Problem solving	3,53	2,70
2	Capacity for applying knowledge in practice	3,52	2,42
10	Capacity to learn Actively	3,52	2,87
33	Ability of self-management	3,44	2,62
18	Interpersonal skills	3,42	2,71
17	Teamwork	3,40	2,81
29	Social responsibility and civic awareness	3,37	2,77
3	Planning and time management	3,36	2,38
28	Ethical commitment and professional attitude	3,36	2,82
6	Oral and written communication in your native language	3,30	2,78
14	Capacity for generating new ideas	3,29	2,48
13	Capacity to adapt to new situations	3,29	2,63
5	Grounding in basic knowledge of the profession in practice	3,27	2,63
25	Ability to work autonomously	3,26	2,62
30	Concern for quality	3,24	2,62
24	Commitment to health and safety	3,23	2,50
16	Decision-making	3,22	2,46
27	Initiative and entrepreneurial spirit	3,20	2,27
31	Will to succeed	3,19	2,81
4	Basic general knowledge in the field of study	3,18	2,95
32	Environment awareness and commitment to sustainable development	3,12	2,56
9	Research skills	3,10	2,63
26	Project design and management	3,07	2,45
11	Information management skills	3,06	2,45
12	Critical and self-critical abilities	3,04	2,44
19	Leadership	3,04	2,38
20	Ability to work in an interdisciplinary team	2,99	2,31
23	Ability to work in an international context	2,98	2,35
7	Capacity to communicate with a second language	2,97	2,37
22	Appreciation and understanding of culture diversity	2,97	2,70
21	Ability to communicate with non-experts in the field	2,92	2,40
8	Computing skills	2,72	2,60

27 competences over 3

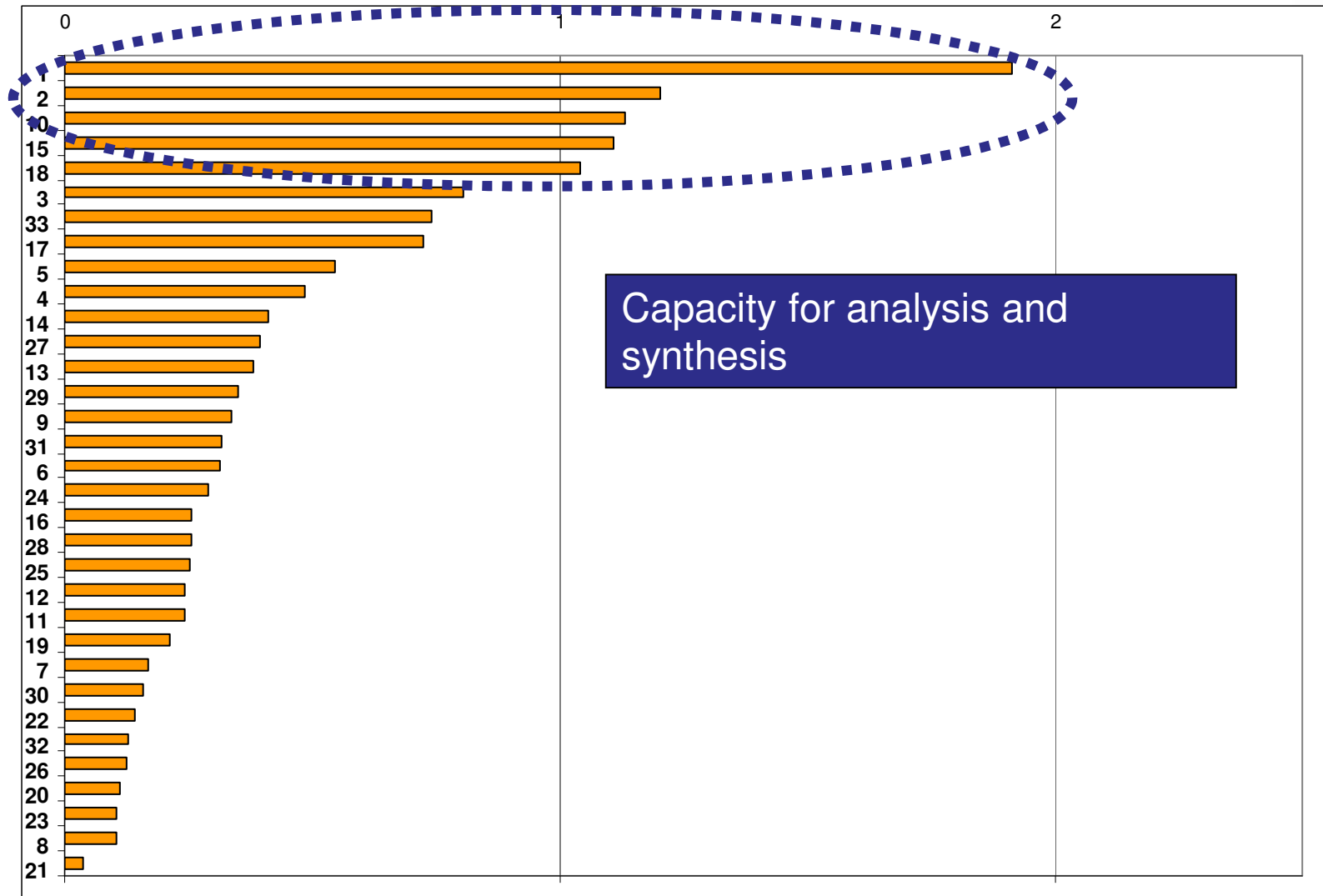
ALL competences below 3

# STUDENTS

## RATING – Importance vs. Achievement



# STUDENTS RANKING



# GRADUATES

## RATING – Importance vs. Achievement



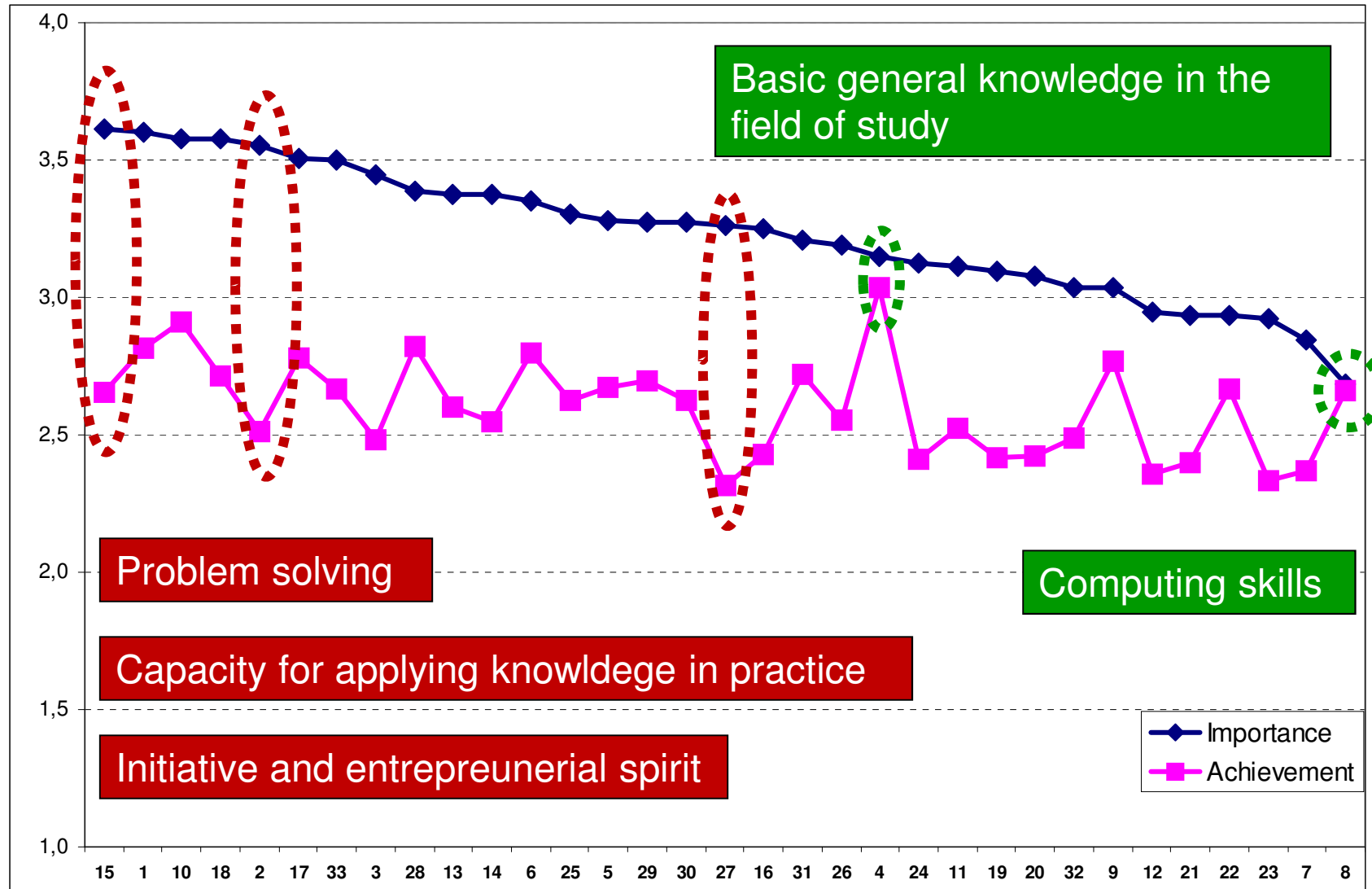
#	Description	Importance	Achievement
15	Problem solving	3,61	2,65
1	Capacity for analysis and synthesis	3,60	2,81
10	Capacity to learn Actively	3,58	2,91
18	Interpersonal skills	3,58	2,72
2	Capacity for applying knowledge in practice	3,56	2,51
17	Teamwork	3,51	2,78
33	Ability of self-management	3,50	2,67
3	Planning and time management	3,45	2,49
28	Ethical commitment and professional attitude	3,39	2,82
13	Capacity to adapt to new situations	3,37	2,60
14	Capacity for generating new ideas	3,37	2,55
6	Oral and written communication in your native language	3,35	2,79
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29	Social responsibility and civic awareness	3,27	2,70
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27	Initiative and entrepreneurial spirit	3,26	2,31
16	Decision-making	3,25	2,43
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26	Project design and management	3,19	2,56
4	Basic general knowledge in the field of study	3,15	3,04
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11	Information management skills	3,11	2,53
19	Leadership	3,10	2,42
20	Ability to work in an interdisciplinary team	3,08	2,42
32	Environment awareness and commitment to sustainable development	3,04	2,49
9	Research skills	3,04	2,77
12	Critical and self-critical abilities	2,95	2,36
21	Ability to communicate with non-experts in the field	2,94	2,40
22	Appreciation and understanding of culture diversity	2,93	2,67
23	Ability to work in an international context	2,92	2,34
7	Capacity to communicate with a second language	2,85	2,37
8	Computing skills	2,68	2,66

27 competences over 3

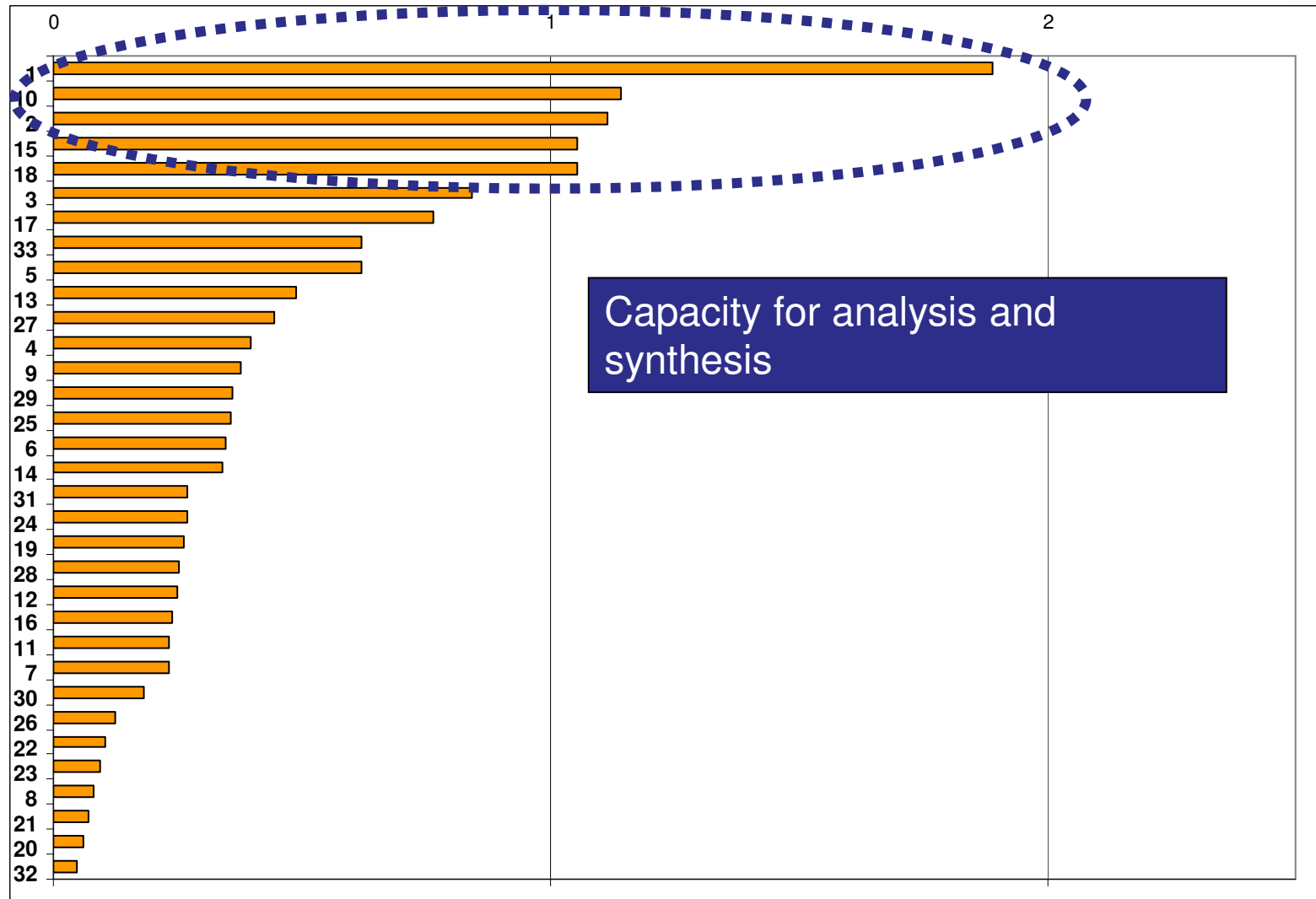
1 competence over 3

# GRADUATES

## RATING – Importance vs. Achievement



# GRADUATES RANKING

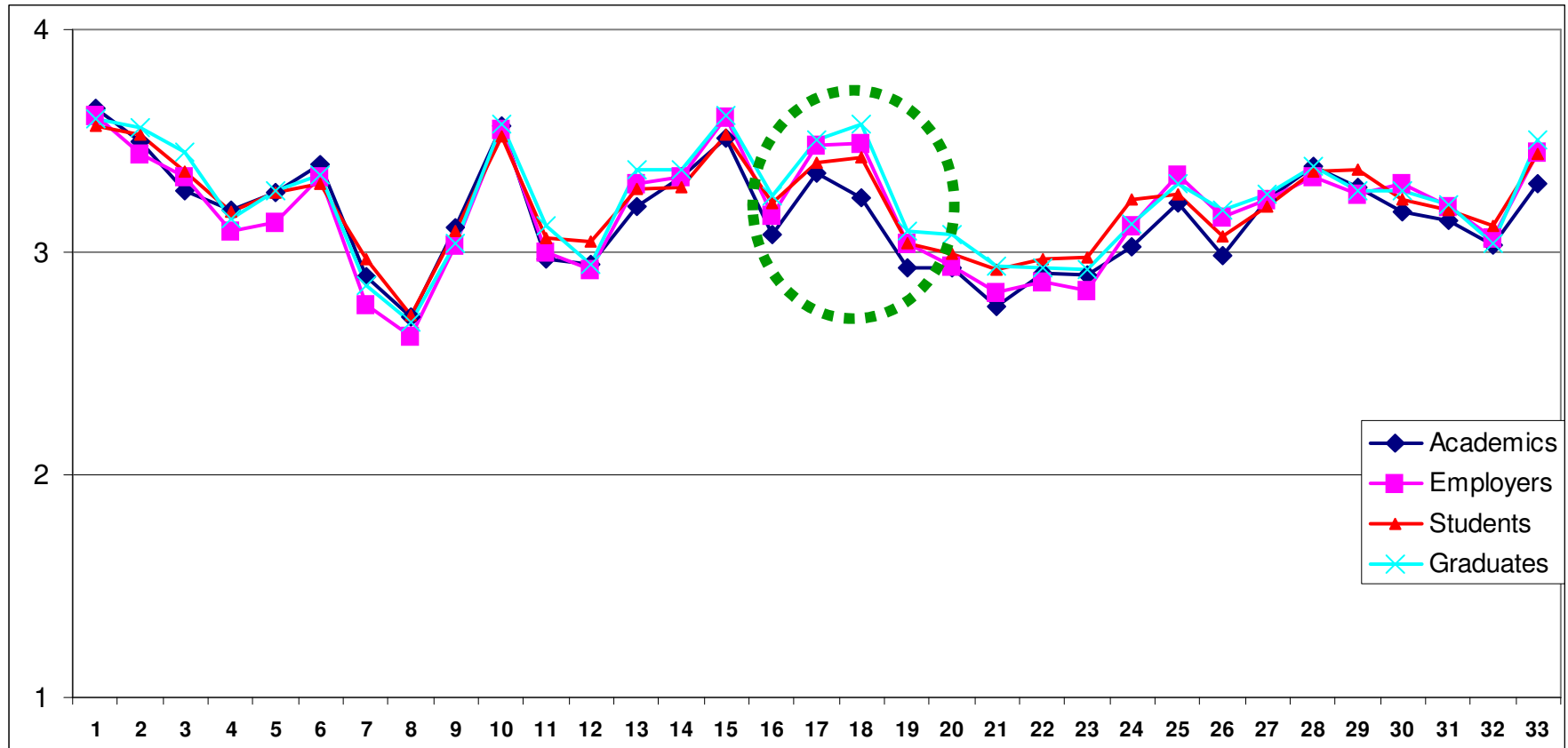


# Analysis



Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

# Importance





## Importance

### 3 Common Competences in Top 5:

Capacity for analysis and synthesis

Capacity to learn actively

Problem solving

### 5 Common Competences in Bottom 5:

Computing skills

Ability to communicate with non-experts in the field

Capacity to communicate with a second language

Ability to work in an international context

Appreciation and understanding of culture diversity

## Importance

Much higher for academics than employers and students:

Oral and written communication in your native language

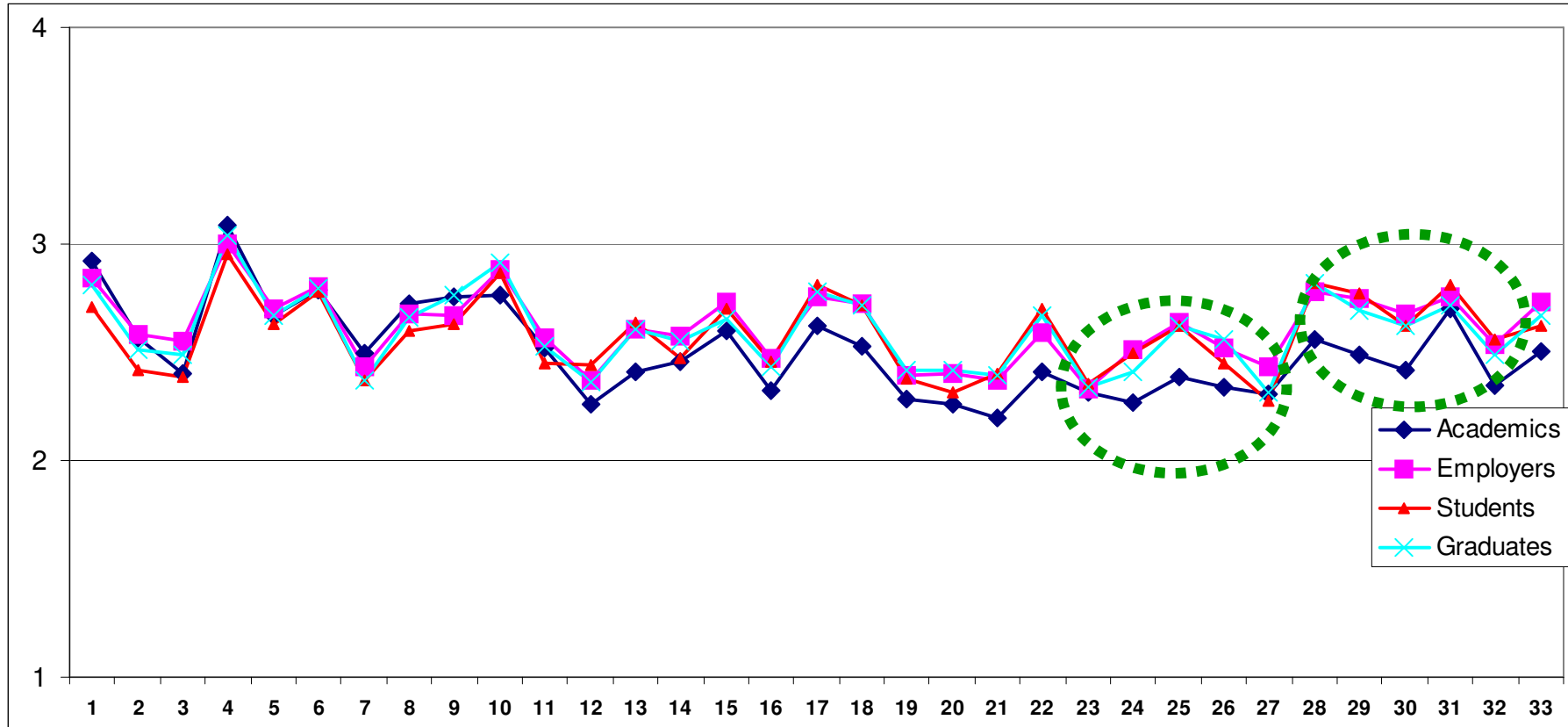
Much higher for graduates and employers than academics:

Interpersonal skills

# Importance

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,9312	1,0000		
<i>Student</i>	0,9543	0,9633	1,0000	
<i>Graduate</i>	0,9200	0,9814	0,9637	1,0000

# Achievement



## Achievement

### 3 Common Competences in Top 5:

Basic general knowledge in the field of study

Oral and written communication in your native language

Capacity to learn actively

### 1 Common Competence in Bottom 5:

Ability to work in an international context

## Achievement

Lower for academics than graduates and students:

Ethical commitment and professional attitude

Much higher for graduates than academics:

Ability to work autonomously

# Achievement

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,8674	1,0000		
<i>Student</i>	0,7336	0,9173	1,0000	
<i>Graduate</i>	0,8514	0,9615	0,9350	1,0000

# Importance vs. Achievement

- As usual, Achievement lower than Importance
- Employers, Students, Graduates and Academics: one of the greatest gaps between Achievement and Importance corresponds to:

Capacity for applying knowledge in practice

Initiative and entrepreneurial spirit

High importance, low achievement



# Ranking

## 4 Common Competences in Top 5:

Capacity for analysis and synthesis

Capacity for applying knowledge in practice

Capacity to learn actively

Problem solving

## 1 Common Competence in Bottom 5:

Ability to communicate with non-experts in the field

# Ranking

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,9503	1,0000		
<i>Student</i>	0,9268	0,9796	1,0000	
<i>Graduate</i>	0,9150	0,9787	0,9913	1,0000

# Analysis



Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
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	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

**EUROPE 2008**

**CHINA 2013**

**Comparison**

## EUROPE

## CHINA

### Graduates: Top 5 competences

- 1 Ab. to apply knowledge in practical situations
- 2 Ab. for abstract thinking, analysis and synthesis
- 3 Ab. to identify, pose and resolve problems
- 4 Knowledge and und. of the sub. area and und. of the prof.
- 5 Cap. to learn and stay up-to-date with learning

- 1 Capacity for analysis and synthesis
- 2 Capacity to learn actively
- 3 Capacity for applying knowledge in practice
- 4 Problem solving
- 5 Interpersonal skills

## EUROPE

## CHINA

### Graduates: Last 5 competences

27 Ab. to act with soc. responsibility and civic awareness

28 Ap. of and respect for diversity and multiculturality

29 Commitment to the conservation of the environment

30 Commitment to safety

31 Ab. To show awareness of equal opportunities and gender issues

29 Ability to work in an international context

30 Computing skills

31 Ability to communicate with non-experts in the field

32 Ability to work in an interdisciplinary team

33 Environment awareness and commitment to sustainable development

## EUROPE

## CHINA

### Employers: Top 5 competences

1

Abil. to appl. knowledge in practice

2

Ability for abstract thinking, analysis and synthesis

3

Ability to identify, pose and resolve problems

4

Knowledge and und. of the subject area and und. of the prof.

5

Ability to work in a team

1

Capacity for analysis and synthesis

2

Capacity for applying knowledge in practice

3

Problem solving

4

Capacity to learn actively

5

Interpersonal skills

## EUROPE

## CHINA

### Employers: Last 5 competences

27

Ab. to act with social resp. and civic awareness

28

Ab. to work in an international context

29

Ab. To show awareness of equal opportunities and gender issues

30

Commitment to the conservation of the environment

31

Ap. of and respect for diversity and multiculturality

29

Ability to work in an international context

30

Appreciation and understanding of cultural diversity

31

Environment awareness and commitment to sustainable development

32

Computing skills

33

Ability to communicate with non-experts in the field



## EUROPE

## CHINA

### Academics: Top 5 competences

1 Ab. for abstract thinking, analysis and synthesis

2 Ab. to apply knowledge in practical situations

3 Knowledge and und. of the subject area and und. of the profession

4 Ab. to identify, pose and resolve problems

5 Cap. to learn and stay up-to-date with learning

1 Capacity for analysis and synthesis

2 Capacity for applying knowledge in practice

3 Capacity to learn actively

4 Problem solving

5 Ability of self management

## EUROPE

## CHINA

### Academics: Last 5 competences

27 Ab. to communicate with non-experts of one's field

28 Commitment to the conservation of the environment

29 Spirit of enterprise, ability to take initiative

30 Commitment to safety

31 Ab. To show awareness of equal opportunities and gender issues

29 Leadership

30 Critical and self-critical abilities

31 Information management skills

32 Ability to work in an interdisciplinary team

33 Ability to communicate with non-experts in the field

## EUROPE

## CHINA

### Students: Top 5 competences

1 Ab. to apply knowledge in practical situations

2 Ab. for abstract thinking, analysis and synthesis

3 Ab. to identify, pose and resolve problems

4 Knowledge and und. of the subject area and und. of the profession

5 Ability to work in a team

1 Capacity for analysis and synthesis

2 Capacity for applying knowledge in practice

3 Capacity to learn actively

4 Problem solving

5 Interpersonal skills

## EUROPE

## CHINA

### Students: Last 5 competences

27

Ab. to act with soc. responsibility and civic awareness

29

Project design and management

28

Commitment to the conservation of the environment

30

Ability to work in an interdisciplinary team

29

Ab. To communicate with non-experts of one's field

31

Ability to work in an international context

30

Commitment to safety

32

Computing skills

31

Ab. To show awareness of equal opportunities and gender issues

33

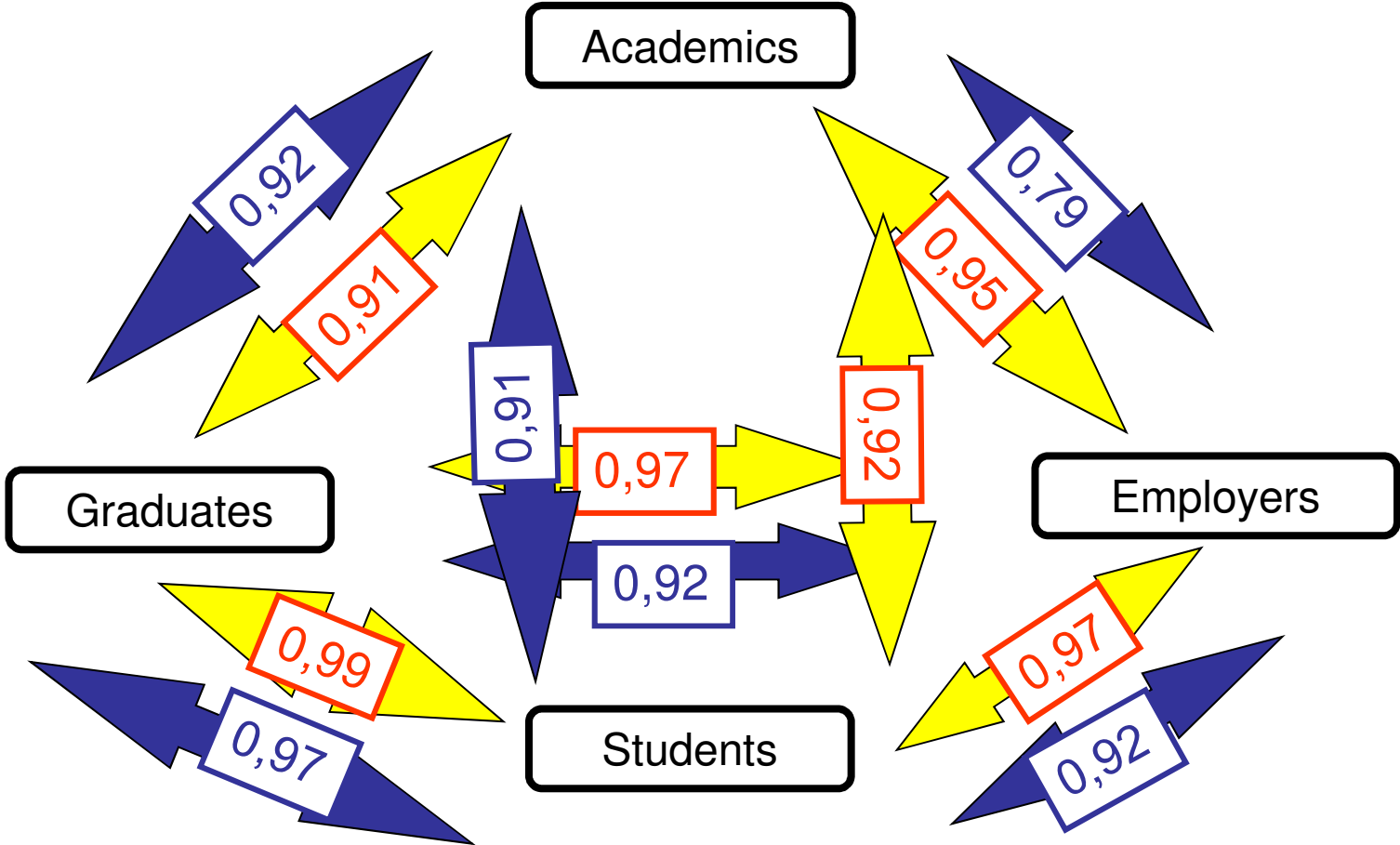
Ability to communicate with non-experts in the field

Correlations



EUROPE

CHINA



**EUROPE**

**CHINA**

**ALL GROUPS: Ranking, Top 5**

**Common 3 competences equal:**

**Capacity for analysis and synthesis**

**Capacity for applying knowledge in practice**

**Problem solving**

**CHINA**

**EUROPE**

**AFRICA**

**LATINAMERICA**

**ALL GROUPS: Ranking, Top 5**

**Common 2 competences equal:**

**Capacity for analysis and synthesis**

**Capacity for applying knowledge in practice**

## Some provisional conclusions ...



- 1) ALL GENERIC Competences rated almost 3 in the 4 groups (**VALIDATION**)
- 2) Rating (Importance) and Ranking, similar results (**CONSISTENT**)
- 3) Wide consultation process (**OPENNESS**)
- 4) High correlation between 4 groups (**COMPATIBILITY**)
- 5) Similar results in other regions ... (**COMPARABILITY**)
- 6) Gap between Importance and Achievement (**NEED OF FURTHER ANALYSIS AND INTERPRETATION ....**)



# BUSINESS



## Analysis

Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

## Data

Total number of respondents 551:

- 149 Graduates
- 143 Employers
- 107 Academics
- 152 Students

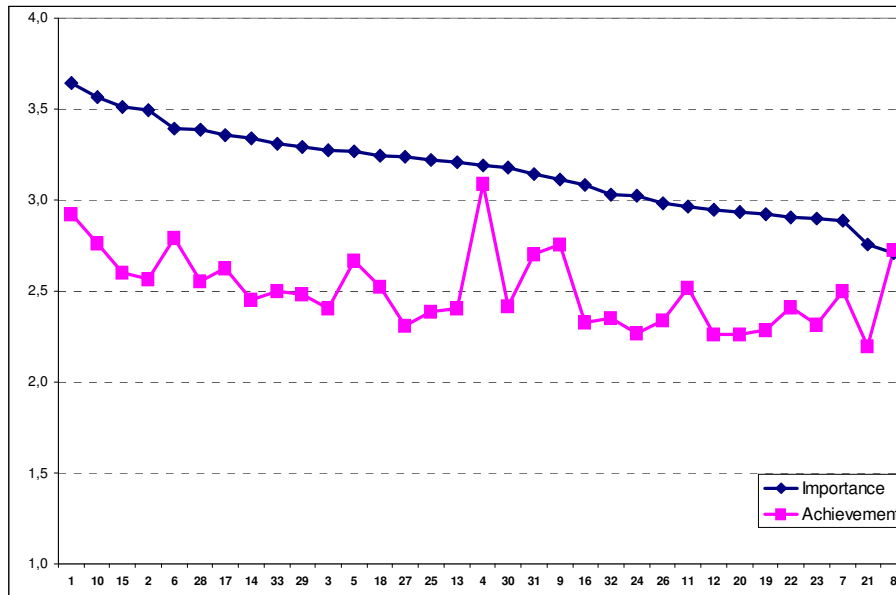
## BUSINESS



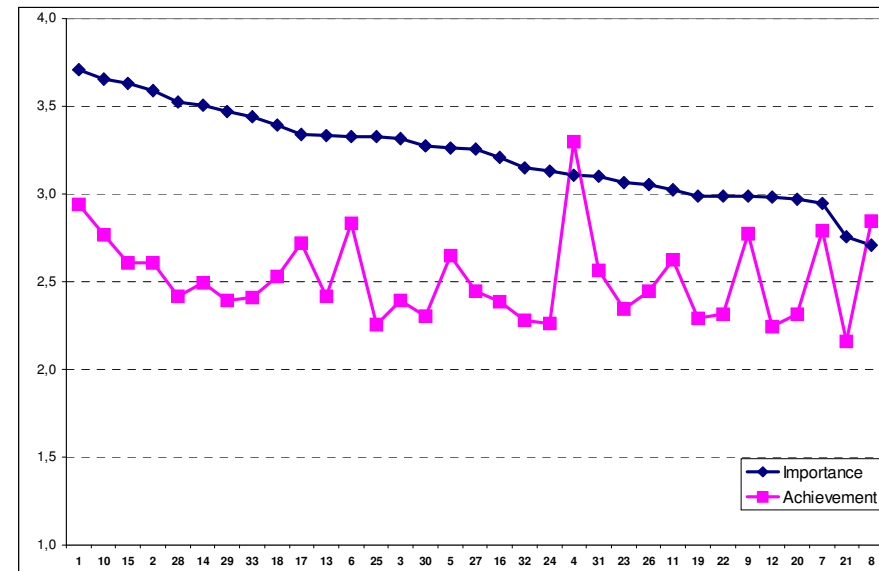
## ACADEMICS

### RATING – Importance vs. Achievement

#### ALL Subject Areas



#### BUSINESS



Similar behaviour in both variables in Business and ALL subject areas

# BUSINESS



## ACADEMICS

### RATING – Importance vs. Achievement

#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,71	2,94
10	Capacity to learn Actively	3,65	2,77
15	Problem solving	3,63	2,61
2	Capacity for applying knowledge in practice	3,59	2,61
28	Ethical commitment and professional attitude	3,52	2,42
14	Capacity for generating new ideas	3,51	2,50
29	Social responsibility and civic awareness	3,47	2,39
33	Ability of self-management	3,44	2,41
18	Interpersonal skills	3,39	2,53
17	Teamwork	3,34	2,72
13	Capacity to adapt to new situations	3,33	2,42
6	Oral and written communication in your native language	3,33	2,83
25	Ability to work autonomously	3,33	2,26
3	Planning and time management	3,32	2,39
30	Concern for quality	3,27	2,30
5	Grounding in basic knowledge of the profession in practice	3,26	2,65
27	Initiative and entrepreneurial spirit	3,26	2,45
16	Decision-making	3,21	2,39
32	Environment awareness and commitment to sustainable development	3,15	2,28
24	Commitment to health and safety	3,13	2,26
4	Basic general knowledge in the field of study	3,10	3,30
31	Will to succeed	3,10	2,57
23	Ability to work in an international context	3,07	2,34
26	Project design and management	3,05	2,45
11	Information management skills	3,02	2,63
19	Leadership	2,99	2,29
22	Appreciation and understanding of culture diversity	2,99	2,31
9	Research skills	2,99	2,77
12	Critical and self-critical abilities	2,98	2,24
20	Ability to work in an interdisciplinary team	2,97	2,32
7	Capacity to communicate with a second language	2,94	2,79
21	Ability to communicate with non-experts in the field	2,76	2,16
8	Computing skills	2,71	2,85

25 competences over 3

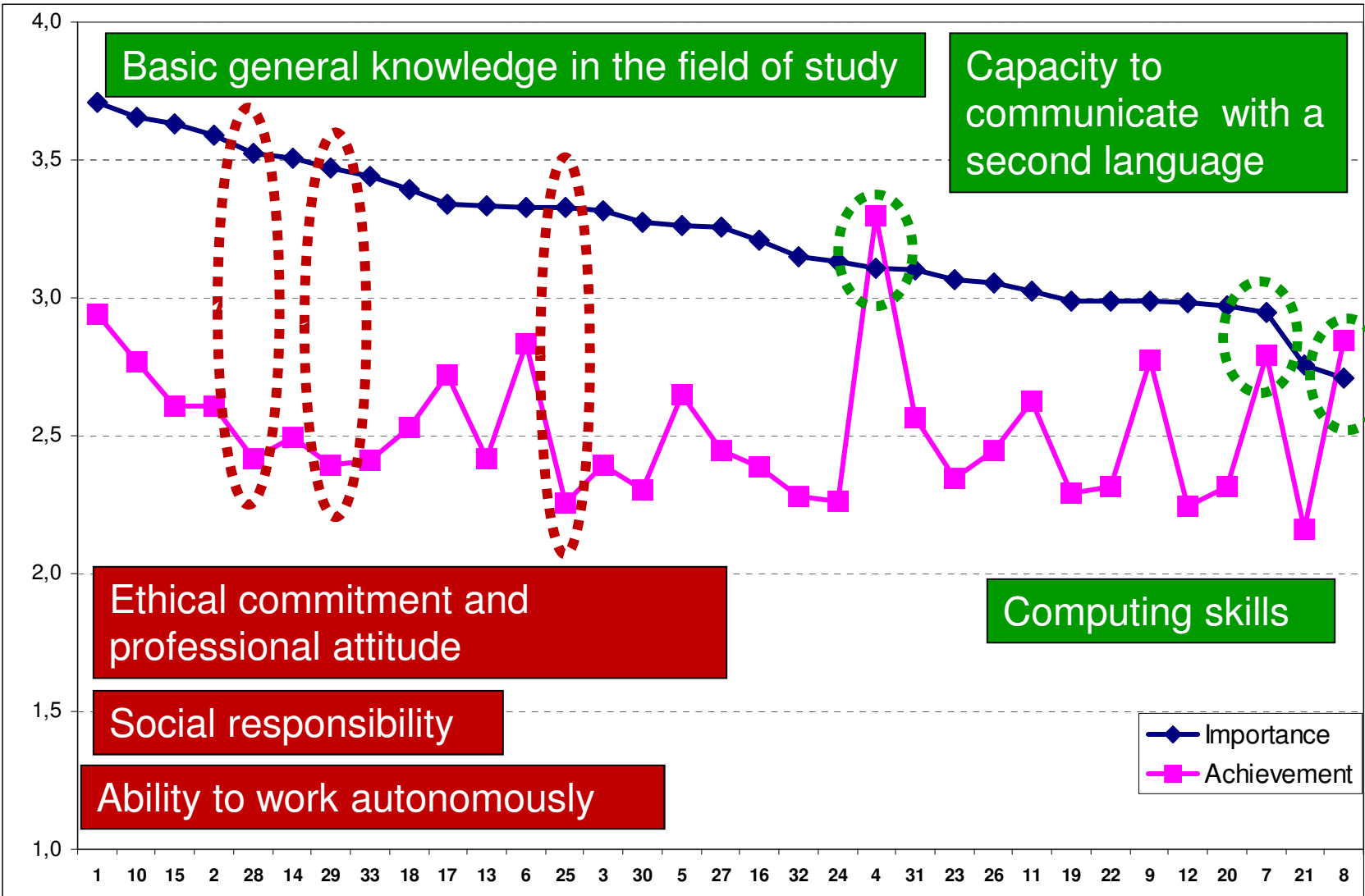
1 competence over 3

**BUSINESS**



**ACADEMICS**

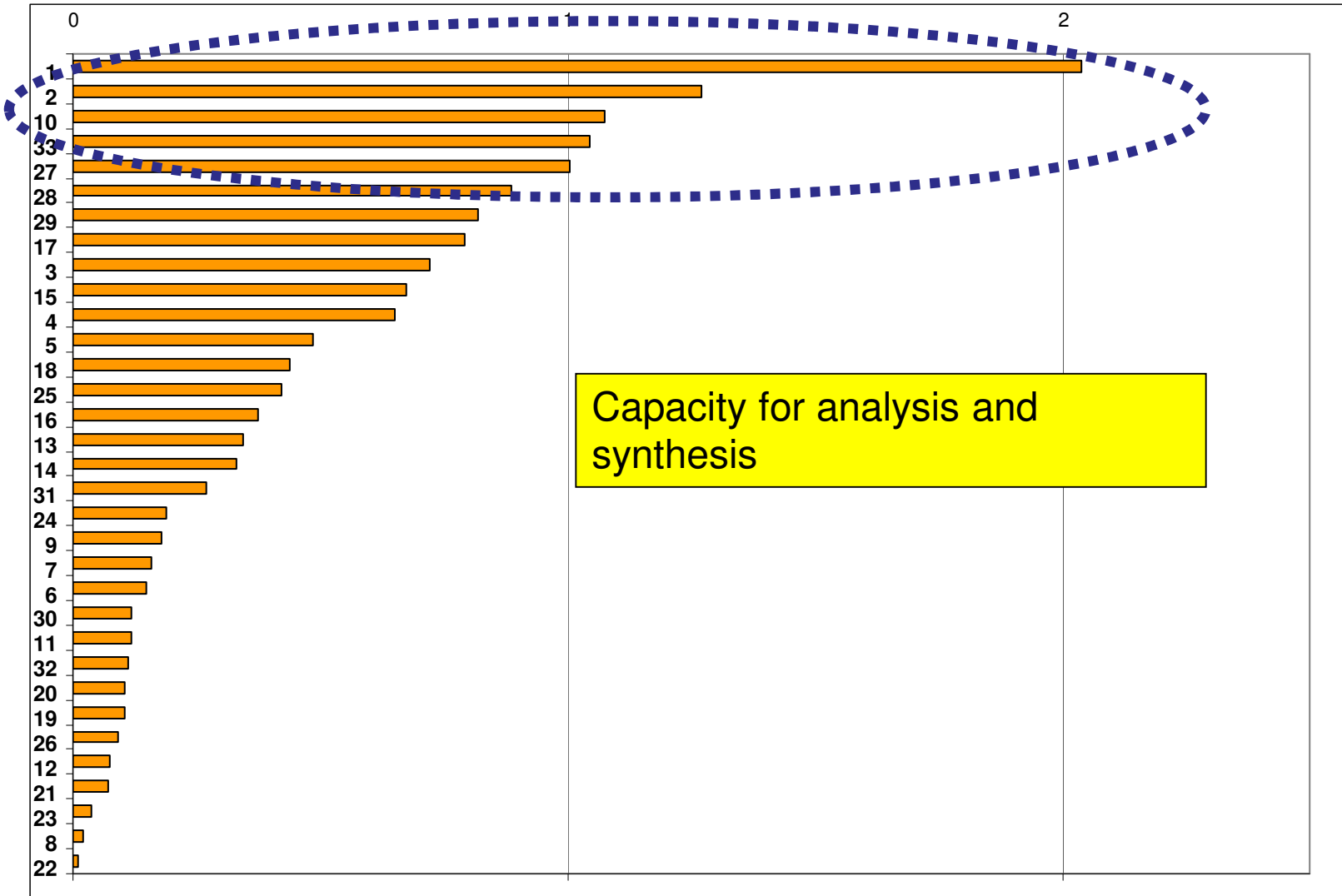
**RATING – Importance vs. Achievement**



# BUSINESS



## ACADEMICS RANKING



Capacity for analysis and synthesis

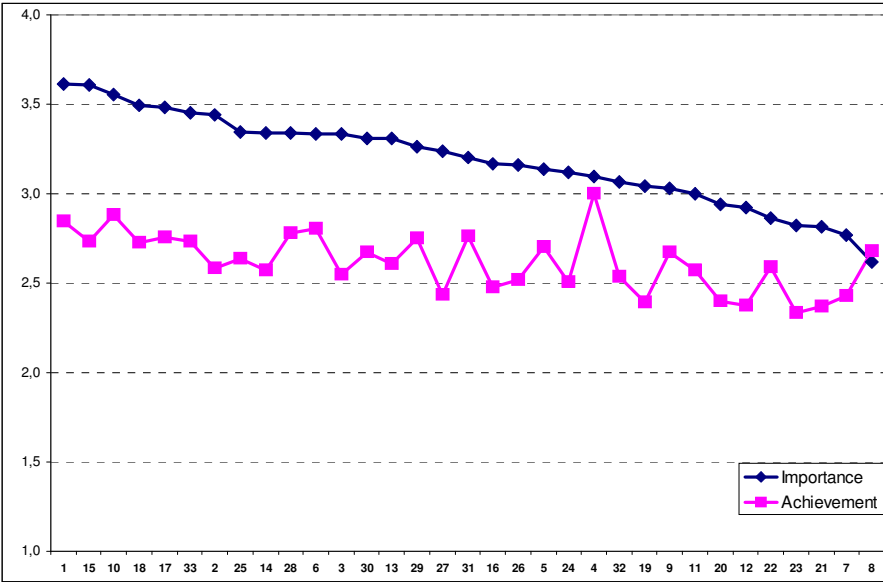
**BUSINESS**



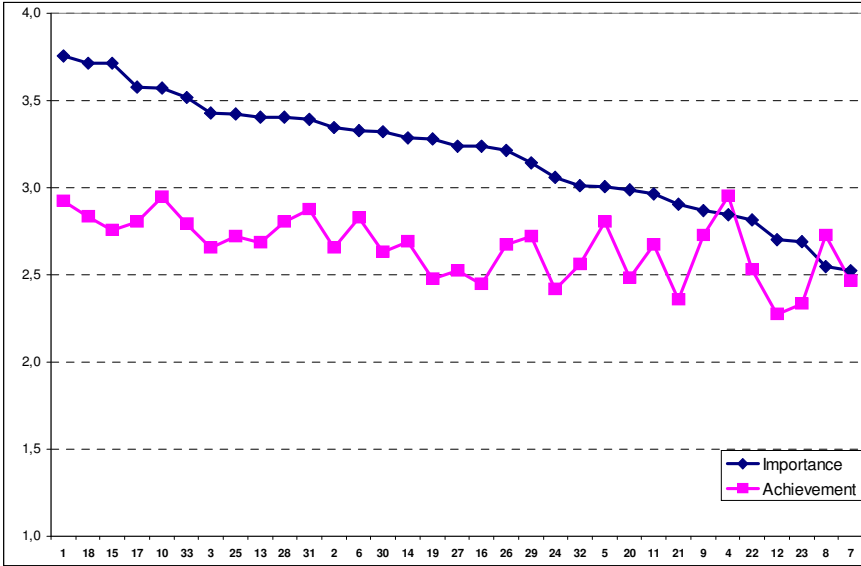
**EMPLOYERS**

**RATING – Importance vs. Achievement**

**ALL Subject Areas**



**BUSINESS**



**Similar behaviour in both variables in Business and ALL subject areas**

# BUSINESS

## EMPLOYERS

### RATING – Importance vs. Achievement



#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,76	2,92
18	Interpersonal skills	3,72	2,83
15	Problem solving	3,71	2,76
17	Teamwork	3,58	2,80
10	Capacity to learn Actively	3,57	2,95
33	Ability of self-management	3,52	2,79
3	Planning and time management	3,43	2,66
25	Ability to work autonomously	3,42	2,72
13	Capacity to adapt to new situations	3,41	2,69
28	Ethical commitment and professional attitude	3,41	2,80
31	Will to succeed	3,39	2,88
2	Capacity for applying knowledge in practice	3,35	2,65
6	Oral and written communication in your native language	3,33	2,83
30	Concern for quality	3,32	2,63
14	Capacity for generating new ideas	3,29	2,69
19	Leadership	3,28	2,48
27	Initiative and entrepreneurial spirit	3,24	2,52
16	Decision-making	3,24	2,45
26	Project design and management	3,22	2,67
29	Social responsibility and civic awareness	3,14	2,72
24	Commitment to health and safety	3,06	2,42
32	Environment awareness and commitment to sustainable development	3,01	2,56
5	Grounding in basic knowledge of the profession in practice	3,01	2,80
20	Ability to work in an interdisciplinary team	2,99	2,48
11	Information management skills	2,96	2,67
21	Ability to communicate with non-experts in the field	2,91	2,36
9	Research skills	2,87	2,73
4	Basic general knowledge in the field of study	2,85	2,95
22	Appreciation and understanding of culture diversity	2,82	2,53
12	Critical and self-critical abilities	2,70	2,27
23	Ability to work in an international context	2,69	2,34
8	Computing skills	2,55	2,72
7	Capacity to communicate with a second language	2,52	2,46

23 competences over 3

ALL competences below 3

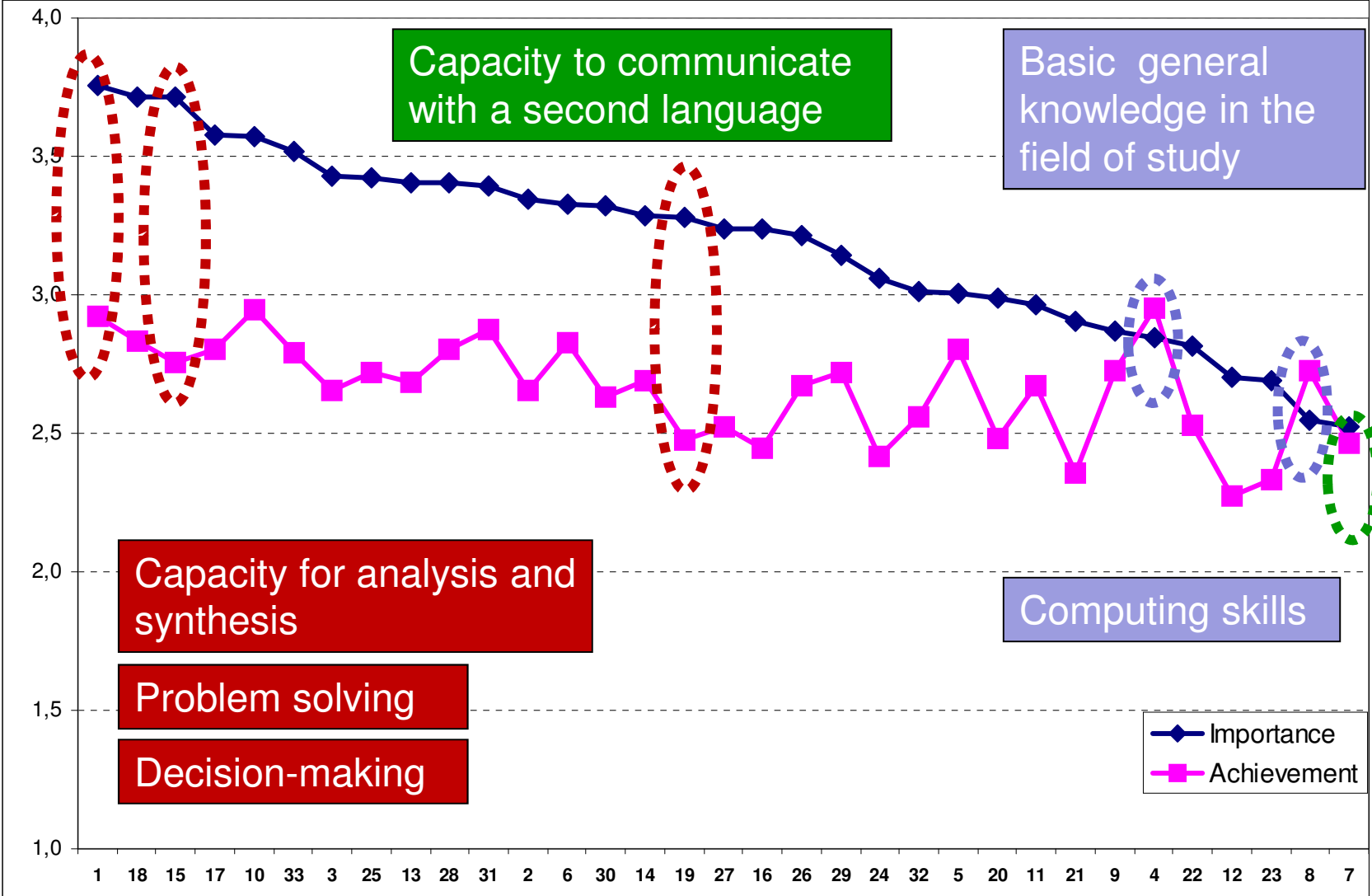


**BUSINESS**



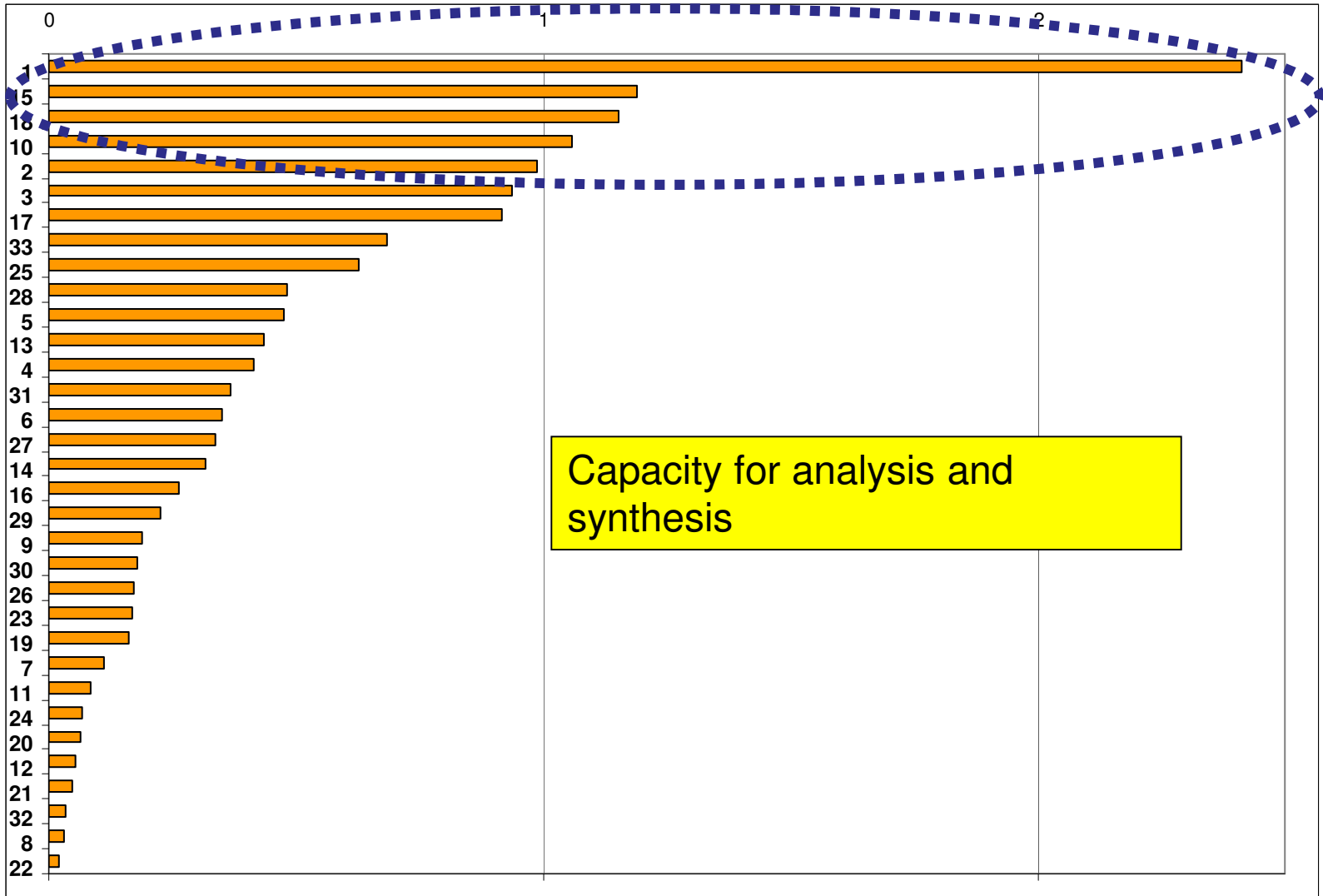
**EMPLOYERS**

**RATING – Importance vs. Achievement**



# BUSINESS

## EMPLOYERS RANKING



Capacity for analysis and synthesis

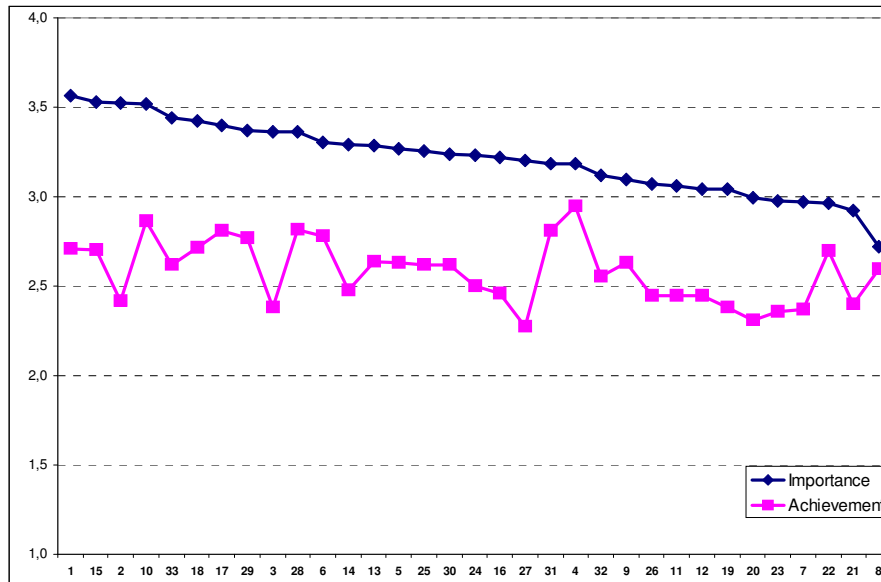
## BUSINESS



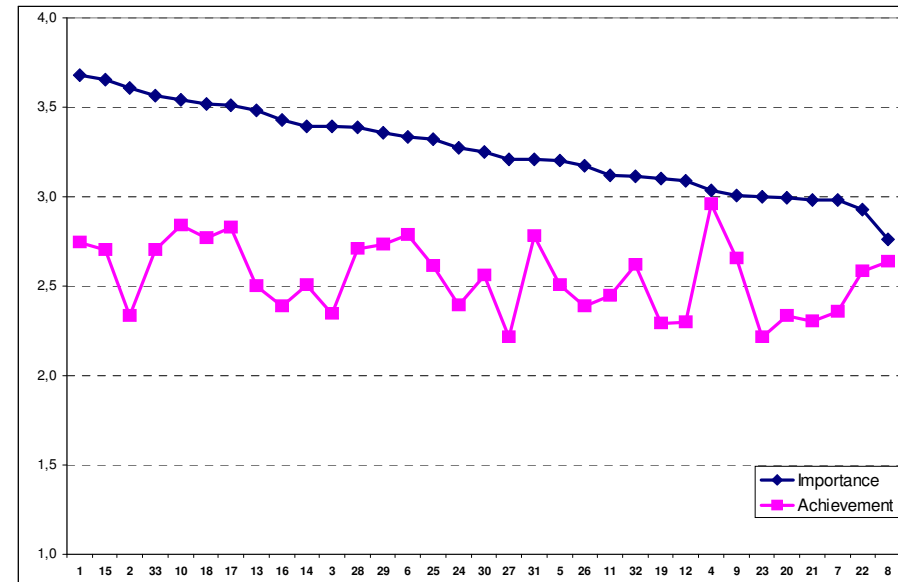
## STUDENTS

### RATING – Importance vs. Achievement

#### ALL Subject Areas



#### BUSINESS



Similar behaviour in both variables in Business and ALL subject areas

# BUSINESS

## STUDENTS

### RATING – Importance vs. Achievement



#	Description	Importance	Achievement
1	Capacity for analysis and synthesis	3,68	2,74
15	Problem solving	3,66	2,70
2	Capacity for applying knowledge in practice	3,61	2,33
33	Ability of self-management	3,57	2,70
10	Capacity to learn Actively	3,54	2,84
18	Interpersonal skills	3,52	2,77
17	Teamwork	3,51	2,83
13	Capacity to adapt to new situations	3,48	2,50
16	Decision-making	3,43	2,39
14	Capacity for generating new ideas	3,39	2,51
3	Planning and time management	3,39	2,34
28	Ethical commitment and professional attitude	3,39	2,71
29	Social responsibility and civic awareness	3,36	2,73
6	Oral and written communication in your native language	3,33	2,78
25	Ability to work autonomously	3,32	2,61
24	Commitment to health and safety	3,28	2,39
30	Concern for quality	3,25	2,56
27	Initiative and entrepreneurial spirit	3,21	2,22
31	Will to succeed	3,21	2,78
5	Grounding in basic knowledge of the profession in practice	3,20	2,51
26	Project design and management	3,17	2,39
11	Information management skills	3,12	2,45
32	Environment awareness and commitment to sustainable development	3,11	2,62
19	Leadership	3,10	2,29
12	Critical and self-critical abilities	3,09	2,30
4	Basic general knowledge in the field of study	3,04	2,96
9	Research skills	3,00	2,65
23	Ability to work in an international context	3,00	2,22
20	Ability to work in an interdisciplinary team	3,00	2,34
21	Ability to communicate with non-experts in the field	2,98	2,30
7	Capacity to communicate with a second language	2,98	2,36
22	Appreciation and understanding of culture diversity	2,93	2,58
8	Computing skills	2,76	2,64

29 competences over 3

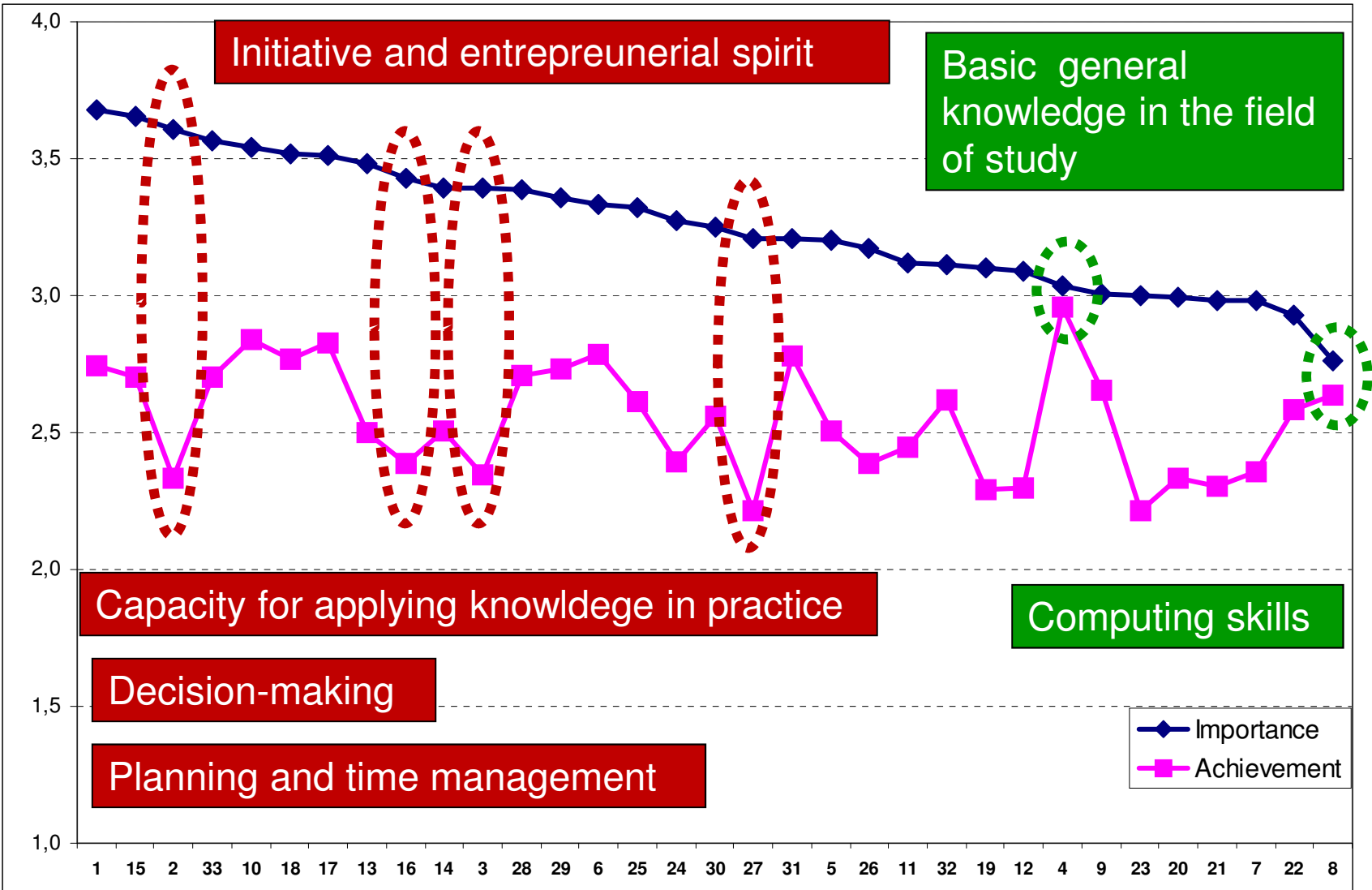
ALL competences below 3

**BUSINESS**



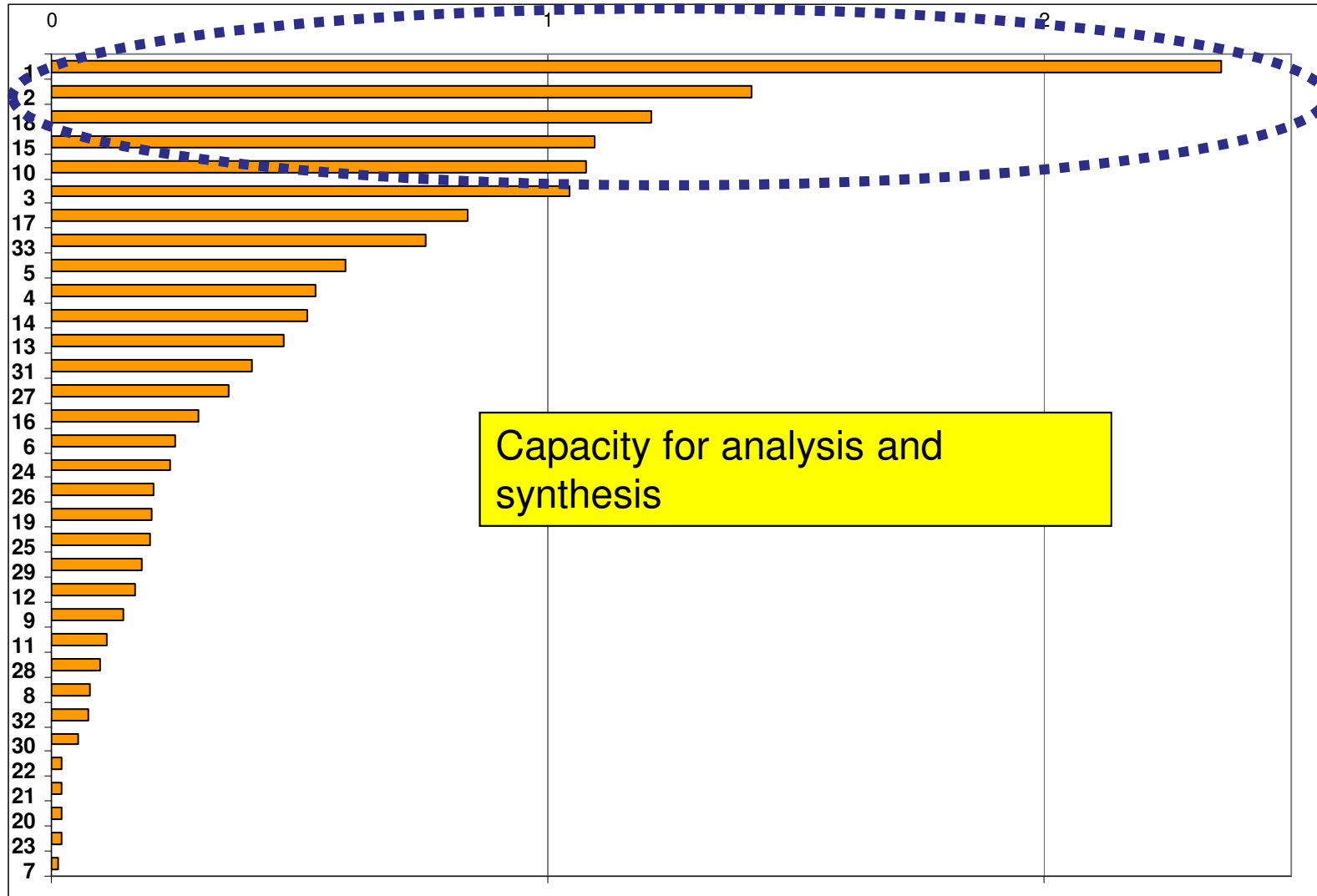
**STUDENTS**

**RATING – Importance vs. Achievement**



# BUSINESS

## STUDENTS RANKING



Capacity for analysis and synthesis

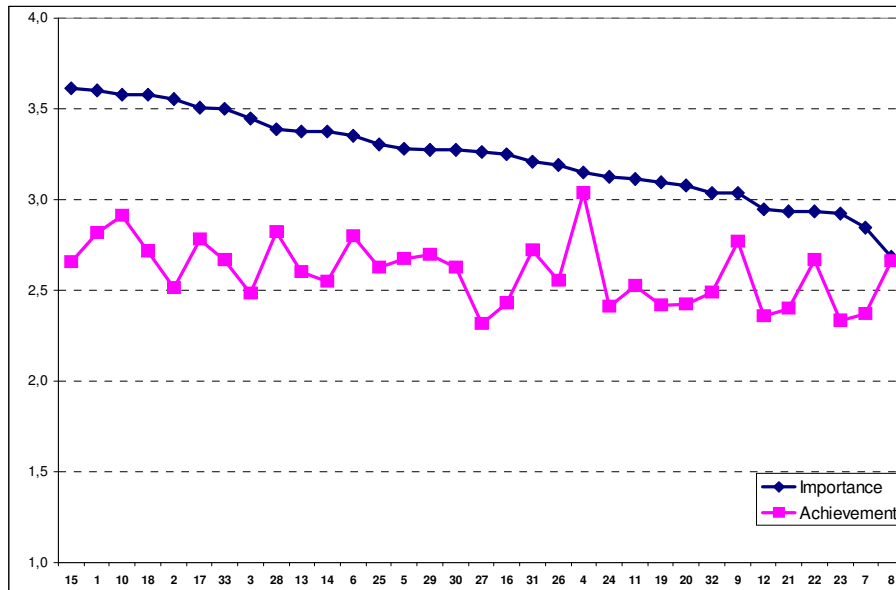
## BUSINESS



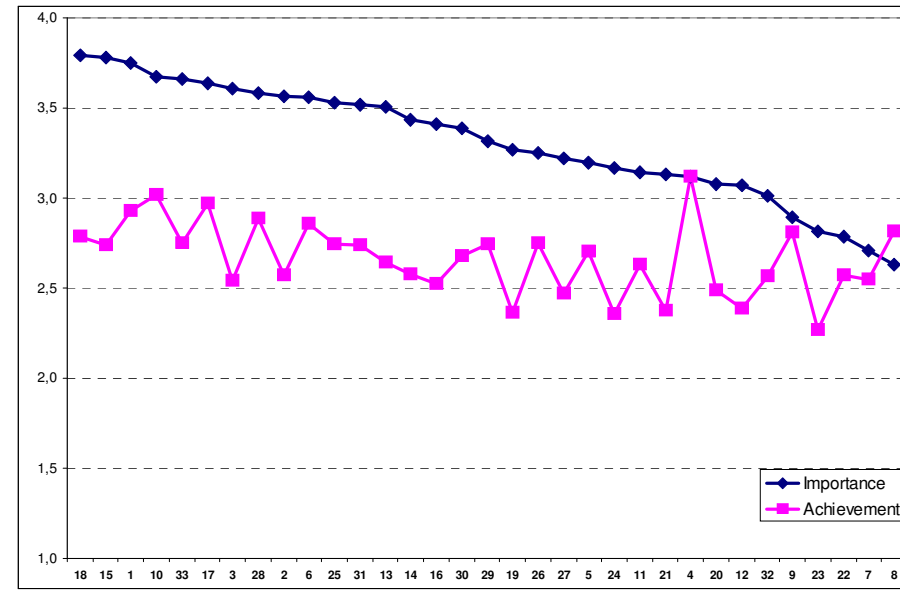
# GRADUATES

## RATING – Importance vs. Achievement

### ALL Subject Areas



### BUSINESS



**Similar behaviour in both variables in Business and ALL subject areas**

# BUSINESS

## GRADUATES

### RATING – Importance vs. Achievement



#	Description	Importance	Achievement
18	Interpersonal skills	3,79	2,79
15	Problem solving	3,78	2,74
1	Capacity for analysis and synthesis	3,75	2,93
10	Capacity to learn Actively	3,67	3,02
33	Ability of self-management	3,66	2,75
17	Teamwork	3,64	2,97
3	Planning and time management	3,61	2,54
28	Ethical commitment and professional attitude	3,58	2,89
2	Capacity for applying knowledge in practice	3,56	2,57
6	Oral and written communication in your native language	3,56	2,86
25	Ability to work autonomously	3,53	2,74
31	Will to succeed	3,52	2,74
13	Capacity to adapt to new situations	3,50	2,64
14	Capacity for generating new ideas	3,43	2,58
16	Decision-making	3,41	2,52
30	Concern for quality	3,39	2,68
29	Social responsibility and civic awareness	3,32	2,75
19	Leadership	3,27	2,37
26	Project design and management	3,25	2,75
27	Initiative and entrepreneurial spirit	3,22	2,47
5	Grounding in basic knowledge of the profession in practice	3,19	2,70
24	Commitment to health and safety	3,17	2,36
11	Information management skills	3,14	2,63
21	Ability to communicate with non-experts in the field	3,13	2,37
4	Basic general knowledge in the field of study	3,12	3,12
20	Ability to work in an interdisciplinary team	3,08	2,49
12	Critical and self-critical abilities	3,07	2,39
32	Environment awareness and commitment to sustainable development	3,01	2,56
9	Research skills	2,89	2,81
23	Ability to work in an international context	2,82	2,27
22	Appreciation and understanding of culture diversity	2,79	2,57
7	Capacity to communicate with a second language	2,71	2,55
8	Computing skills	2,63	2,81

28 competences over 3

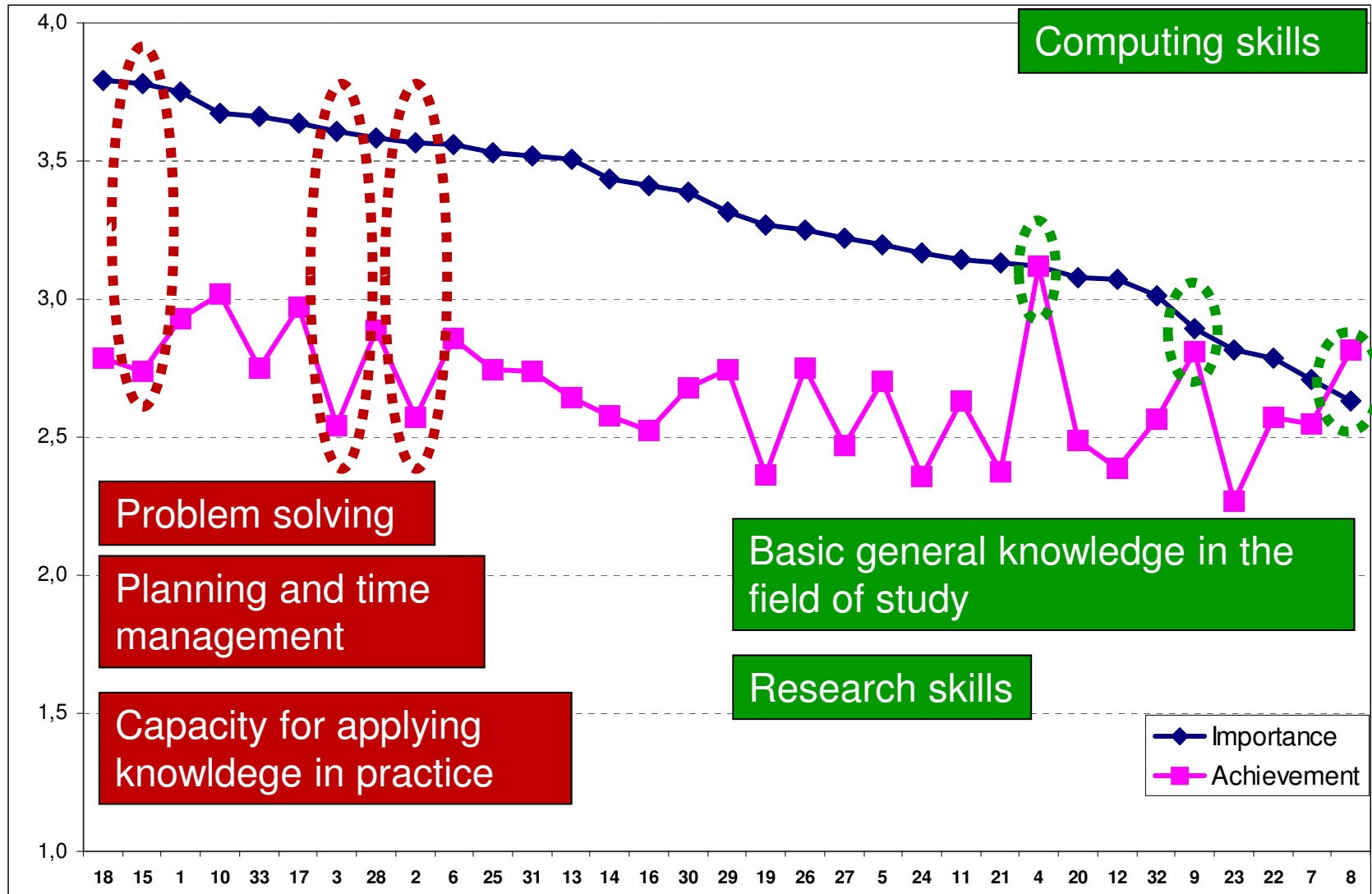
2 competences over 3



# BUSINESS

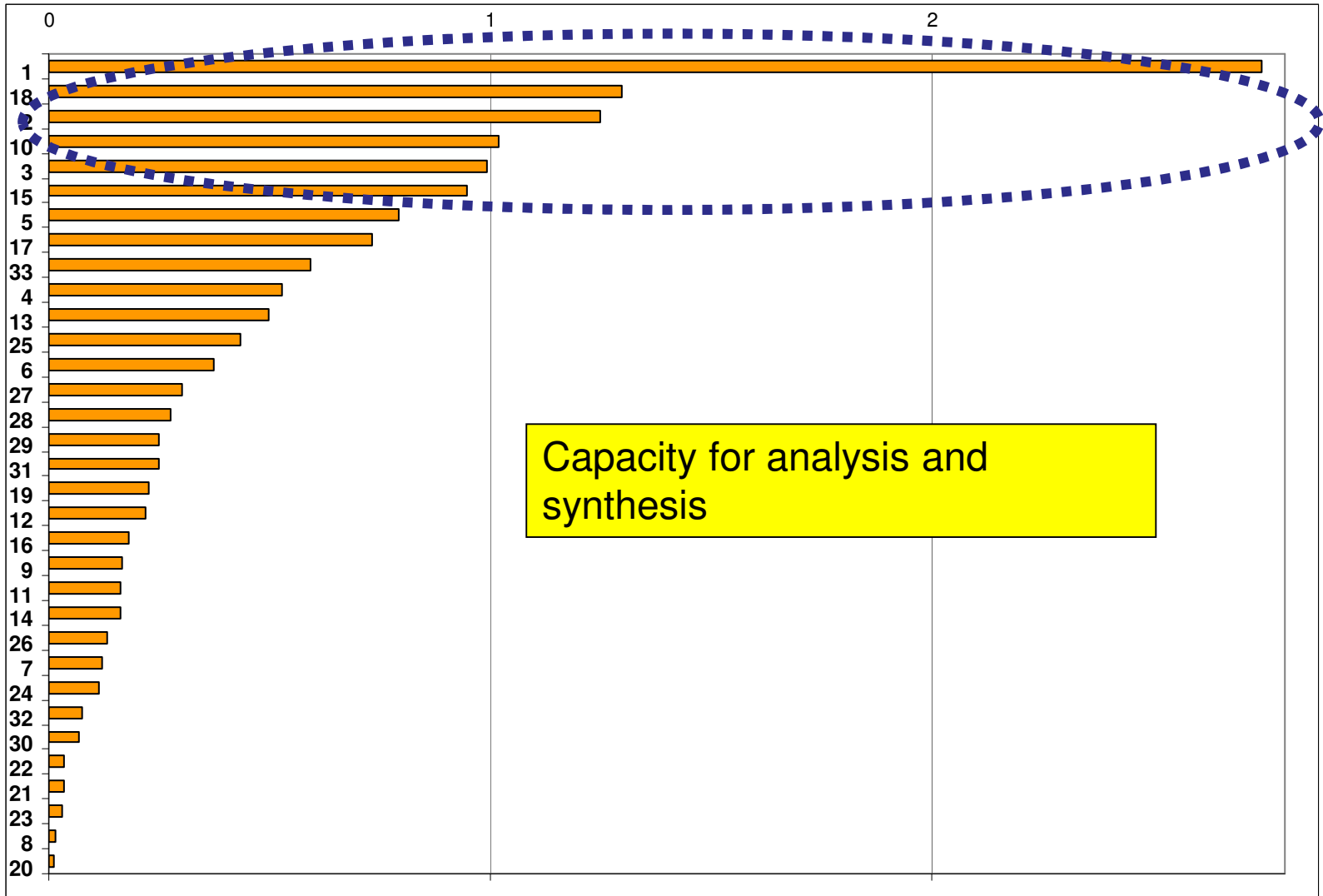
## GRADUATES

### RATING – Importance vs. Achievement



# BUSINESS

## GRADUATES RANKING



Capacity for analysis and synthesis

# BUSINESS



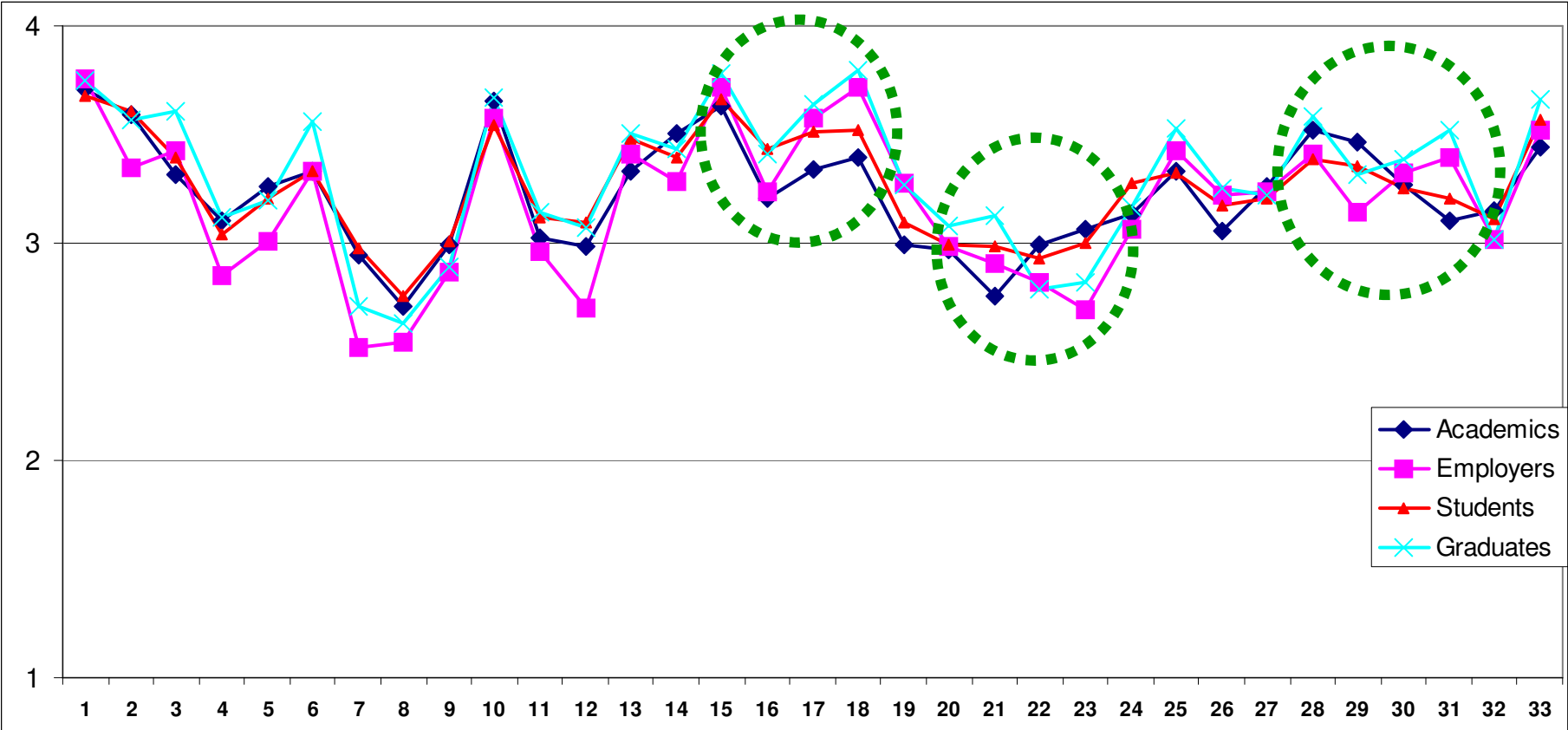
## Analysis

Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

**BUSINESS**



# Importance



## 3 Common Competences in Top 5:

Capacity for analysis and synthesis

Problem solving

Capacity to learn actively

3 common competences  
as in general analysis for  
ALL subject areas

## 2 Common Competences in Bottom 5:

Computing skills

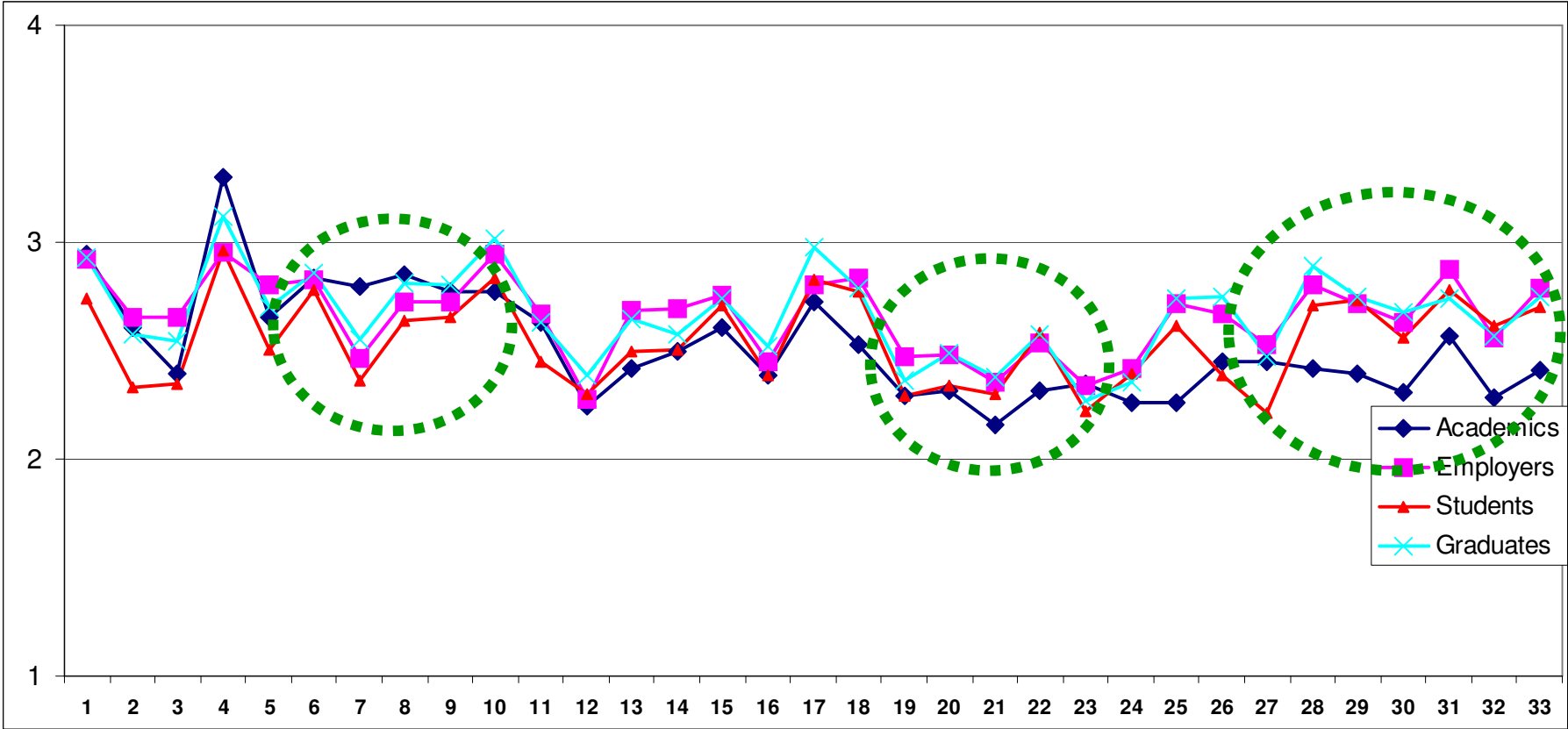
Capacity to communicate with a second language

As in general  
analysis for ALL  
subject area

# Importance

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,8108	1,0000		
<i>Student</i>	0,9206	0,8946	1,0000	
<i>Graduate</i>	0,8255	0,9621	0,9227	1,0000

# Achievement



## **Achievement**

### 1 Common Competence in Top 5:

Basic general knowledge in the field of study

As in general analysis for  
ALL subject areas

### 1 Common Competence in Bottom 5:

Capacity to communicate with non-experts in the field



# Achievement

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,6697	1,0000		
<i>Student</i>	0,5842	0,8498	1,0000	
<i>Graduate</i>	0,7324	0,9173	0,8964	1,0000

## Importance vs. Achievement

- Achievement lower than Importance
- Employers, Students, Graduates and Academics: one of the **GREATEST** gaps between Achievement and Importance corresponds to:

Problem solving

High importance, low achievement

## Importance vs. Achievement

Employers, Students, Graduates and Academics:  
one of the **LOWEST** gaps between Achievement and  
Importance corresponds to:

Computing skills

Research skills

Basic general knowledge in the field of  
study

# Ranking

## 3 Common Competences in Top 5:

Capacity for analysis and synthesis

Capacity for applying knowledge in practice

Capacity to learn actively

Behaves the same as in  
general analysis for ALL  
subject areas

## 2 Common Competences in Bottom 5:

Ability to communicate with non-experts in the field

Appreciation and understanding of culture diversity

1 common  
competence as in  
general analysis for  
ALL subject areas

# Ranking

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,8421	1,0000		
<i>Student</i>	0,8282	0,9569	1,0000	
<i>Graduate</i>	0,8266	0,9696	0,9686	1,0000

## **SUBJECT SPECIFIC COMPETENCES**

**BUSINESS**

# Analysis



Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

# Data

3 SUBJECT AREAS

Total number of respondents 542:

- 144 Graduates
- 141 Employers
- 107 Academics
- 150 Students



# ACADEMICS

## RATING – Importance vs. Achievement



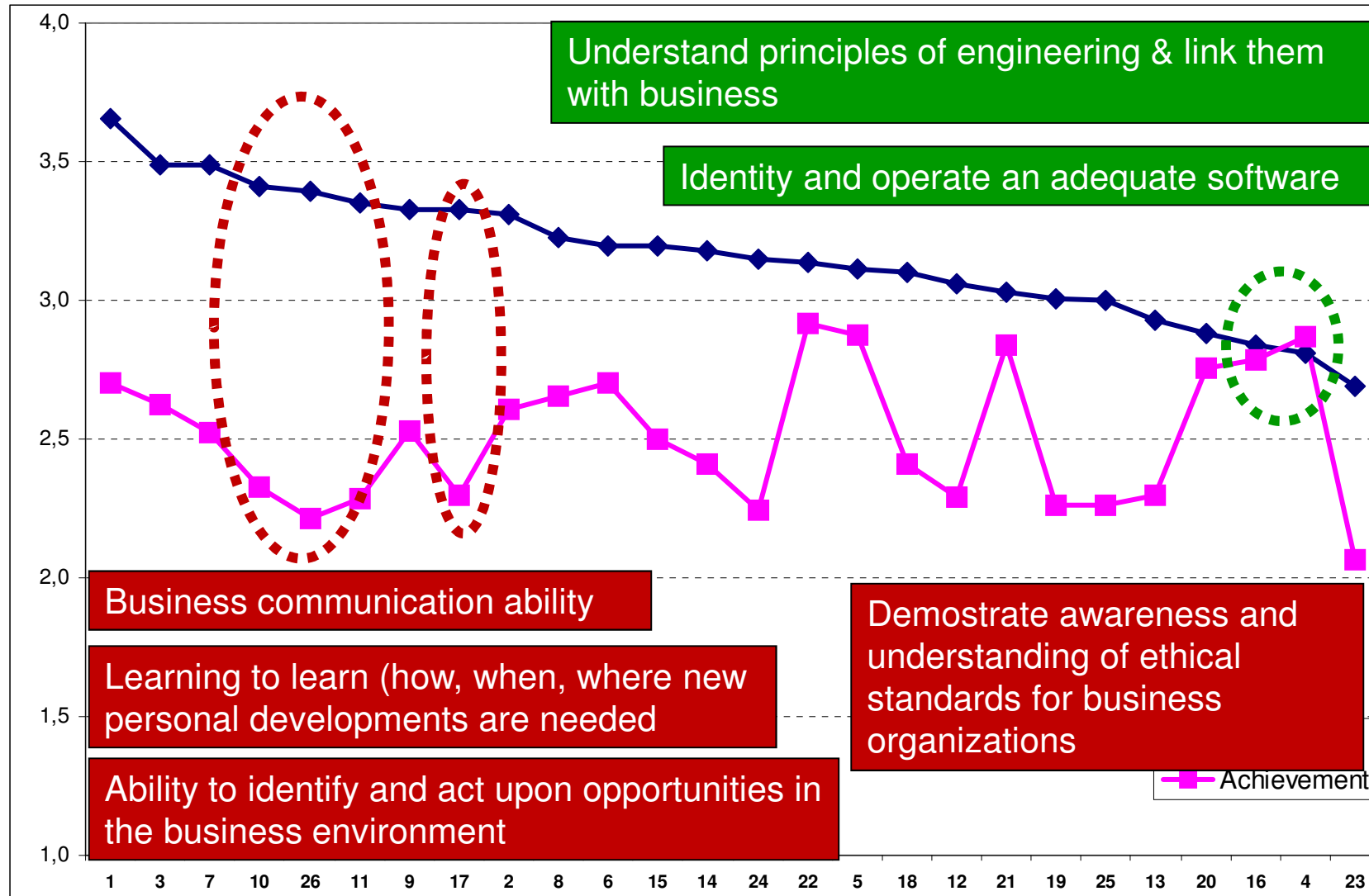
#	Description	Importance	Achievement
1	Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)	3,65	2,70
3	Apply and transfer business knowledge to the work environment and provide practical solutions	3,49	2,63
7	Business communication ability	3,49	2,53
10	Learning to learn (how, when, where new personal developments are needed)	3,41	2,33
26	Ability to identify and act upon opportunities in the business environment	3,39	2,21
11	Ability to suggest solutions to and adapt to change	3,35	2,29
9	Identify impact of macro & microeconomic elements on business organizations	3,33	2,53
17	Demonstrate awareness and understanding of ethical standards for business organizations	3,33	2,30
2	Audit an organization and design consultancy plans	3,31	2,61
8	Identify the functional areas of an organization and their relations	3,22	2,65
6	Identify the constitutional characteristics of an organization	3,20	2,70
15	Understand and apply existent & new technology & its impact for new / future markets	3,20	2,50
14	Understand details of business functions, size, sectors & link with theories	3,18	2,41
24	Business negotiation ability	3,15	2,24
22	Ability to conduct a business environment analysis using suitable instruments	3,14	2,92
5	Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)	3,11	2,88
18	Understand principles of law & link them with business / management	3,10	2,41
12	Ability to apply business and managerial concepts in different organizational settings	3,06	2,29
21	Written and oral communication in a foreign language	3,03	2,84
19	Understand the principles of psychology, identify implications for organizations	3,01	2,26
25	Identify the cultural difference and cross-cultural communication in commercial activity	3,00	2,26
13	Use university knowledge to identify impact of different cultures on business	2,93	2,30
20	Understand & use bookkeeping and financial systems	2,88	2,76
16	Understand principles of engineering & link them with business	2,84	2,79
4	Identify and operate adequate software	2,81	2,87
23	Work assignments abroad (e.g. work experience for 20 weeks)	2,69	2,07

21  
competences  
over 3

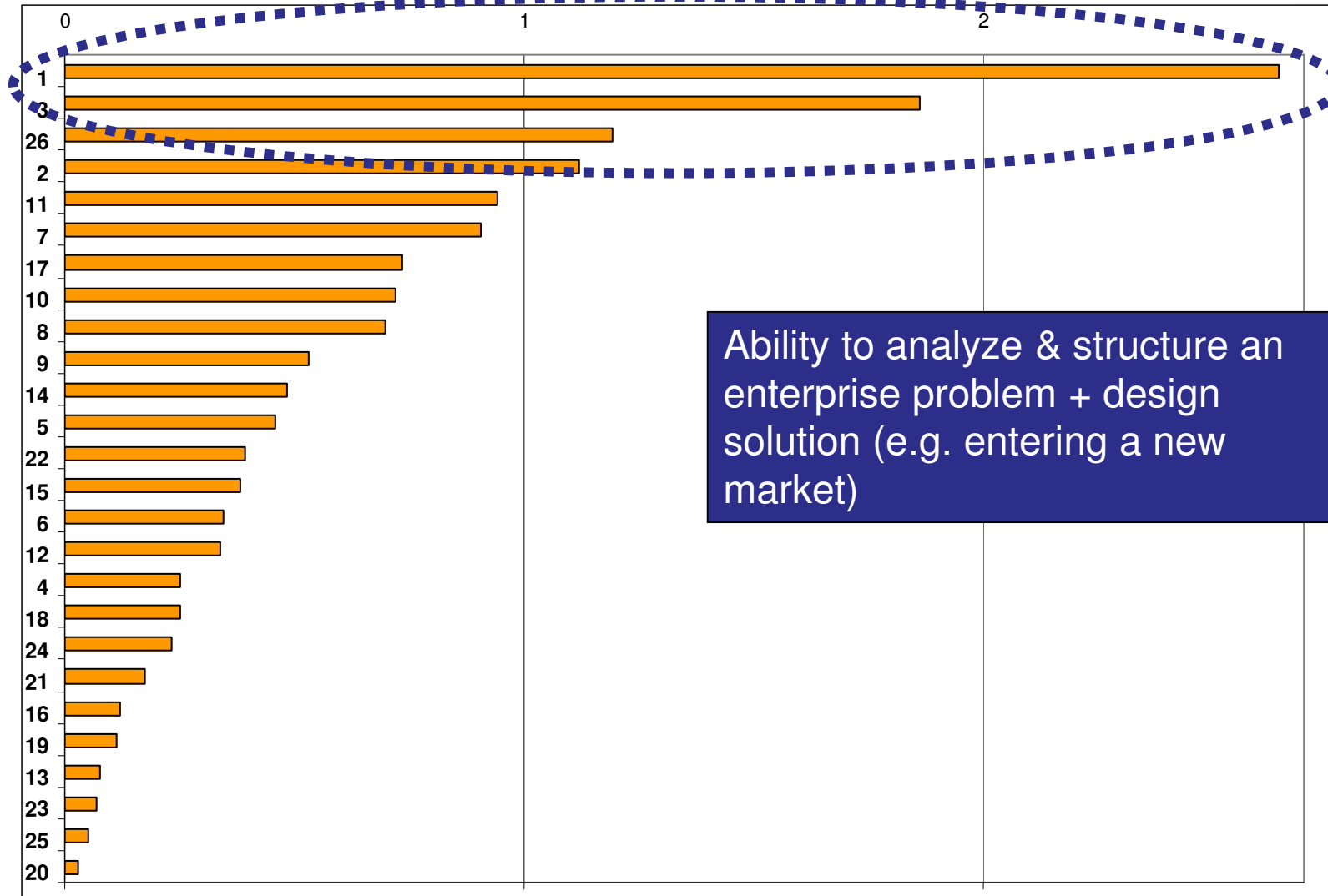
ALL  
competences  
below 3

# ACADEMICS

## RATING – Importance vs. Achievement



# ACADEMICS RANKING



Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)

# EMPLOYERS

## RATING – Importance vs. Achievement



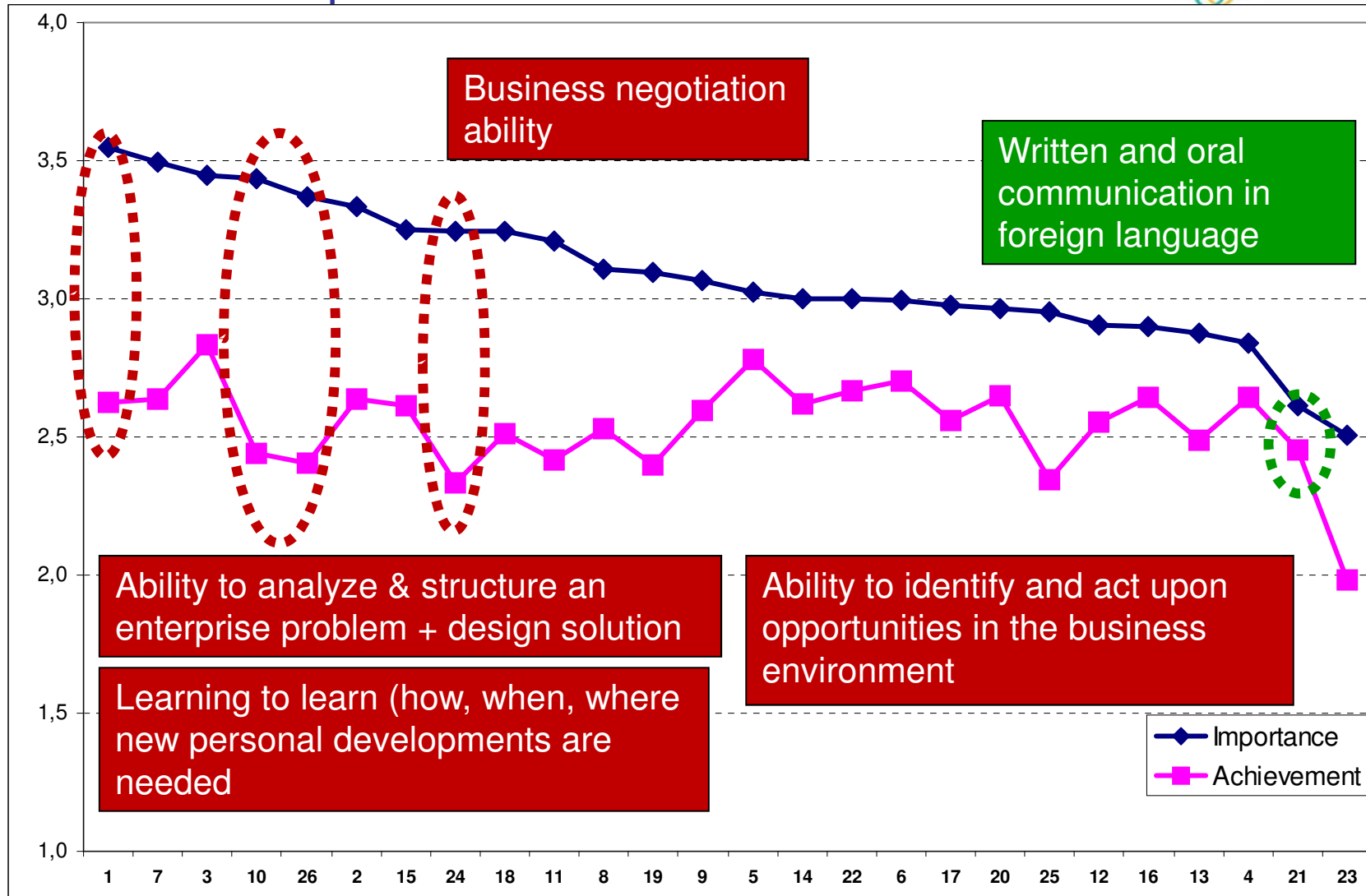
#	Description	Importance	Achievement
1	Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)	3,55	2,63
7	Business communication ability	3,50	2,64
3	Apply and transfer business knowledge to the work environment and provide practical solutions	3,45	2,84
10	Learning to learn (how, when, where new personal developments are needed)	3,43	2,44
26	Ability to identify and act upon opportunities in the business environment	3,37	2,41
2	Audit an organization and design consultancy plans	3,33	2,64
15	Understand and apply existent & new technology & its impact for new / future markets	3,25	2,61
24	Business negotiation ability	3,24	2,33
18	Understand principles of law & link them with business / management	3,24	2,51
11	Ability to suggest solutions to and adapt to change	3,21	2,42
8	Identify the functional areas of an organization and their relations	3,11	2,53
19	Understand the principles of psychology, identify implications for organizations	3,09	2,40
9	Identify impact of macro & microeconomic elements on business organizations	3,06	2,59
5	Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)	3,02	2,78
14	Understand details of business functions, size, sectors & link with theories	3,00	2,62
22	Ability to conduct a business environment analysis using suitable instruments	3,00	2,67
6	Identify the constitutional characteristics of an organization	2,99	2,70
17	Demonstrate awareness and understanding of ethical standards for business organizations	2,98	2,56
20	Understand & use bookkeeping and financial systems	2,96	2,65
25	Identify the cultural difference and cross-cultural communication in commercial activity	2,95	2,34
12	Ability to apply business and managerial concepts in different organizational settings	2,91	2,55
16	Understand principles of engineering & link them with business	2,90	2,64
13	Use university knowledge to identify impact of different cultures on business	2,88	2,49
4	Identify and operate adequate software	2,84	2,65
21	Written and oral communication in a foreign language	2,61	2,45
23	Work assignments abroad (e.g. work experience for 20 weeks)	2,51	1,98

16  
competences  
over 3

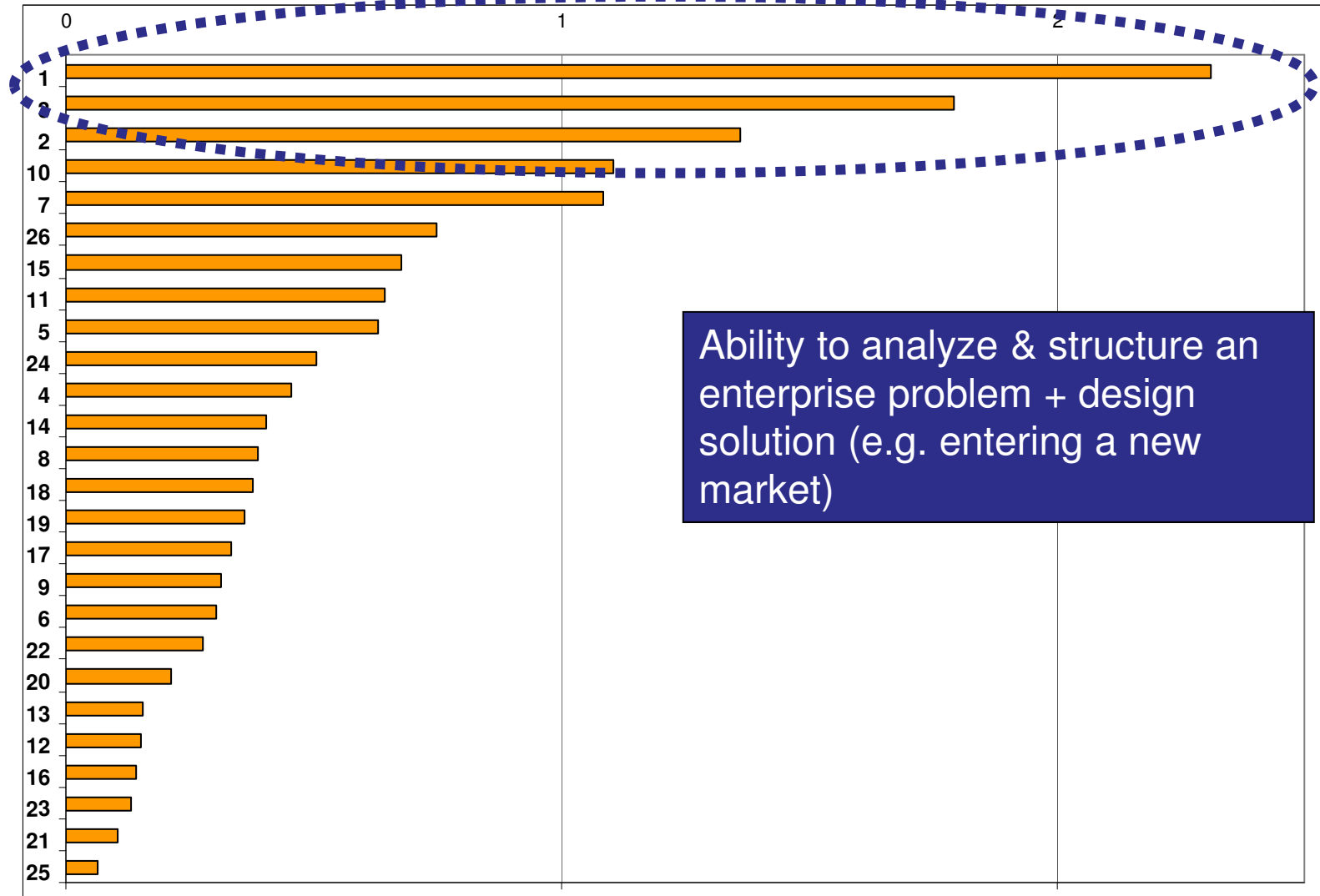
ALL  
competences  
below 3

# EMPLOYERS

## RATING – Importance vs. Achievement



# EMPLOYERS RANKING



# STUDENTS

## RATING – Importance vs. Achievement



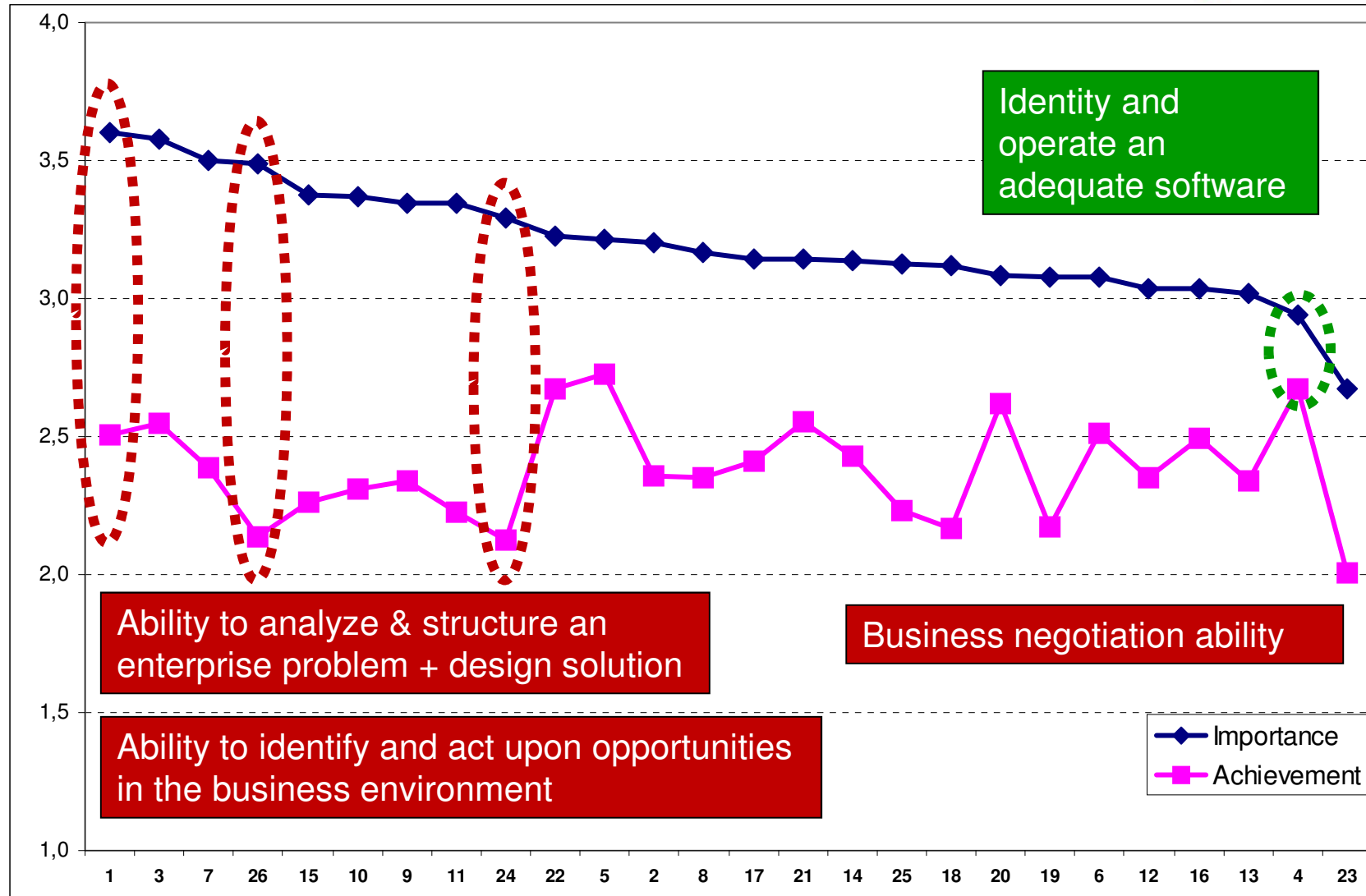
#	Description	Importance	Achievement
1	Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)	3,60	2,51
3	Apply and transfer business knowledge to the work environment and provide practical solutions	3,58	2,55
7	Business communication ability	3,50	2,39
26	Ability to identify and act upon opportunities in the business environment	3,49	2,13
15	Understand and apply existent & new technology & its impact for new / future markets	3,37	2,26
10	Learning to learn (how, when, where new personal developments are needed)	3,37	2,31
9	Identify impact of macro & microeconomic elements on business organizations	3,35	2,34
11	Ability to suggest solutions to and adapt to change	3,35	2,23
24	Business negotiation ability	3,29	2,13
22	Ability to conduct a business environment analysis using suitable instruments	3,23	2,68
5	Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)	3,21	2,73
2	Audit an organization and design consultancy plans	3,21	2,35
8	Identify the functional areas of an organization and their relations	3,17	2,35
17	Demonstrate awareness and understanding of ethical standards for business organizations	3,14	2,41
21	Written and oral communication in a foreign language	3,14	2,55
14	Understand details of business functions, size, sectors & link with theories	3,14	2,43
25	Identify the cultural difference and cross-cultural communication in commercial activity	3,12	2,23
18	Understand principles of law & link them with business / management	3,12	2,17
20	Understand & use bookkeeping and financial systems	3,08	2,62
19	Understand the principles of psychology, identify implications for organizations	3,08	2,18
6	Identify the constitutional characteristics of an organization	3,08	2,51
12	Ability to apply business and managerial concepts in different organizational settings	3,04	2,35
16	Understand principles of engineering & link them with business	3,04	2,49
13	Use university knowledge to identify impact of different cultures on business	3,02	2,34
4	Identify and operate adequate software	2,94	2,67
23	Work assignments abroad (e.g. work experience for 20 weeks)	2,67	2,01

24  
competences  
over 3

ALL  
competences  
below 3

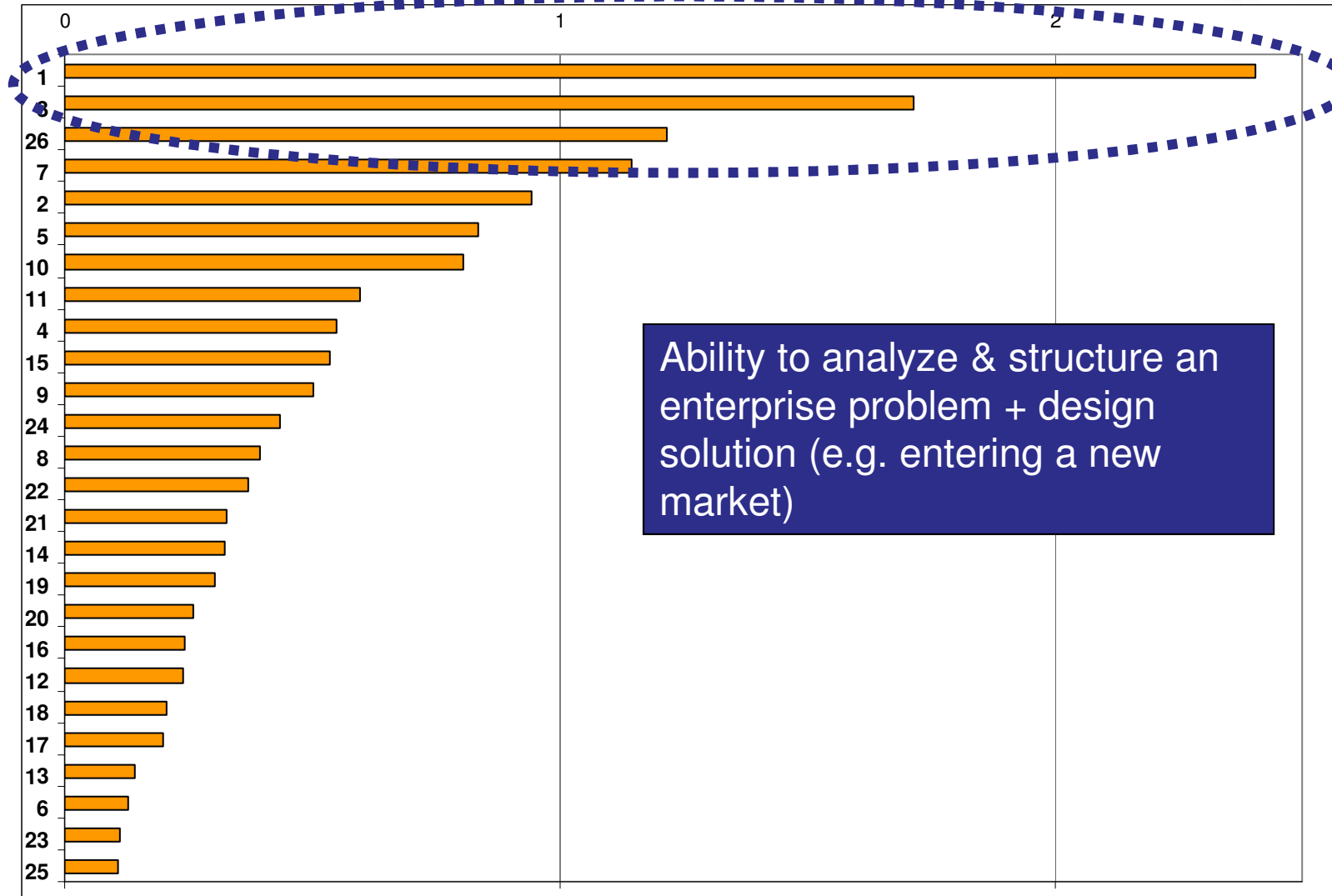
# STUDENTS

## RATING – Importance vs. Achievement





# STUDENTS RANKING



Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)

# GRADUATES

## RATING – Importance vs. Achievement



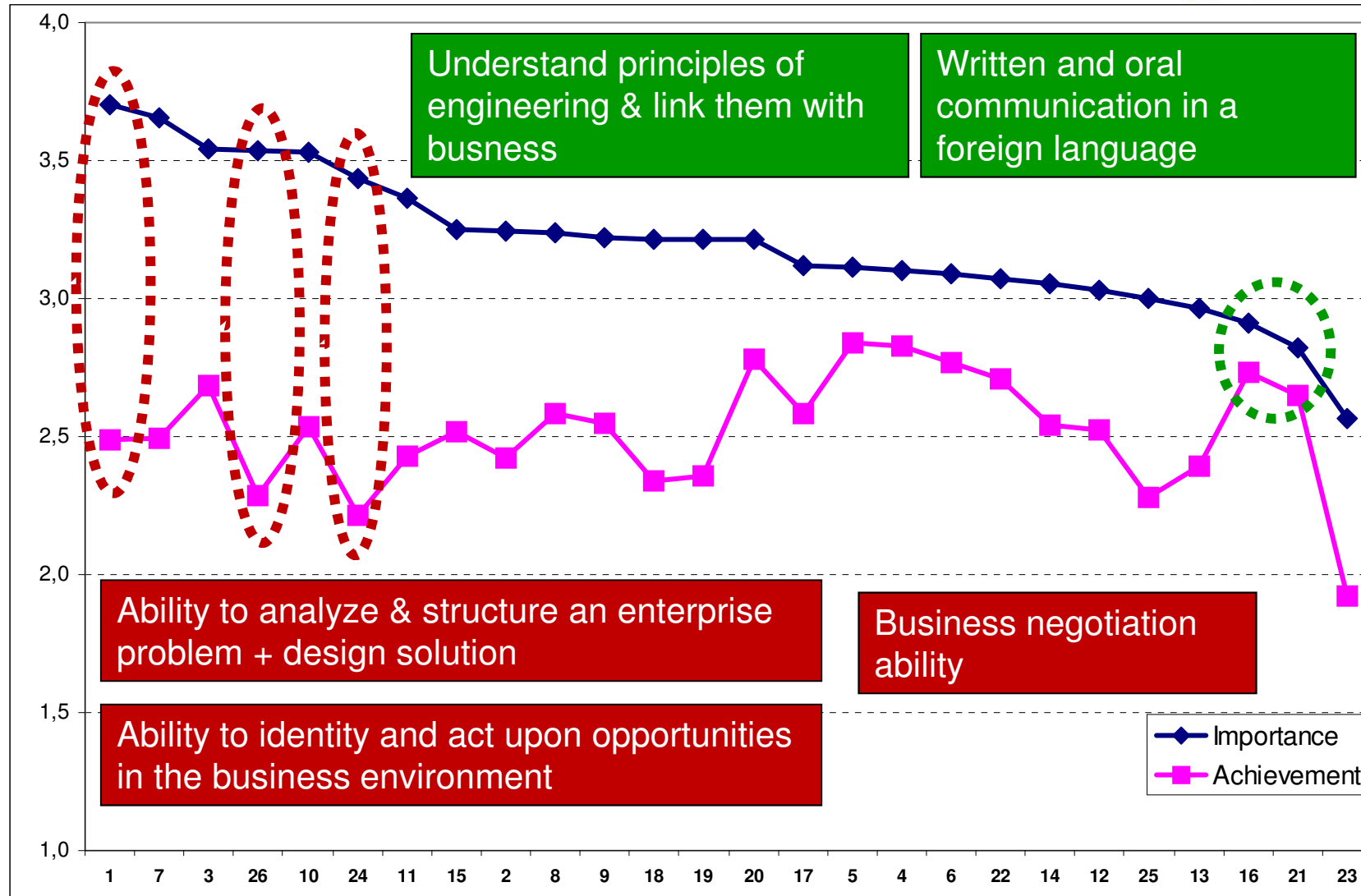
#	Description	Importance	Achievement
1	Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)	3,70	2,49
7	Business communication ability	3,65	2,49
3	Apply and transfer business knowledge to the work environment and provide practical solutions	3,54	2,69
26	Ability to identify and act upon opportunities in the business environment	3,54	2,28
10	Learning to learn (how, when, where new personal developments are needed)	3,53	2,54
24	Business negotiation ability	3,43	2,22
11	Ability to suggest solutions to and adapt to change	3,36	2,43
15	Understand and apply existent & new technology & its impact for new / future markets	3,25	2,52
2	Audit an organization and design consultancy plans	3,24	2,42
8	Identify the functional areas of an organization and their relations	3,24	2,58
9	Identify impact of macro & microeconomic elements on business organizations	3,22	2,55
18	Understand principles of law & link them with business / management	3,22	2,34
19	Understand the principles of psychology, identify implications for organizations	3,22	2,36
20	Understand & use bookkeeping and financial systems	3,22	2,78
17	Demonstrate awareness and understanding of ethical standards for business organizations	3,12	2,58
5	Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)	3,11	2,84
4	Identify and operate adequate software	3,10	2,83
6	Identify the constitutional characteristics of an organization	3,09	2,77
22	Ability to conduct a business environment analysis using suitable instruments	3,07	2,71
14	Understand details of business functions, size, sectors & link with theories	3,06	2,54
12	Ability to apply business and managerial concepts in different organizational settings	3,03	2,52
25	Identify the cultural difference and cross-cultural communication in commercial activity	3,00	2,28
13	Use university knowledge to identify impact of different cultures on business	2,96	2,39
16	Understand principles of engineering & link them with business	2,91	2,73
21	Written and oral communication in a foreign language	2,82	2,65
23	Work assignments abroad (e.g. work experience for 20 weeks)	2,57	1,92

22  
competences  
over 3

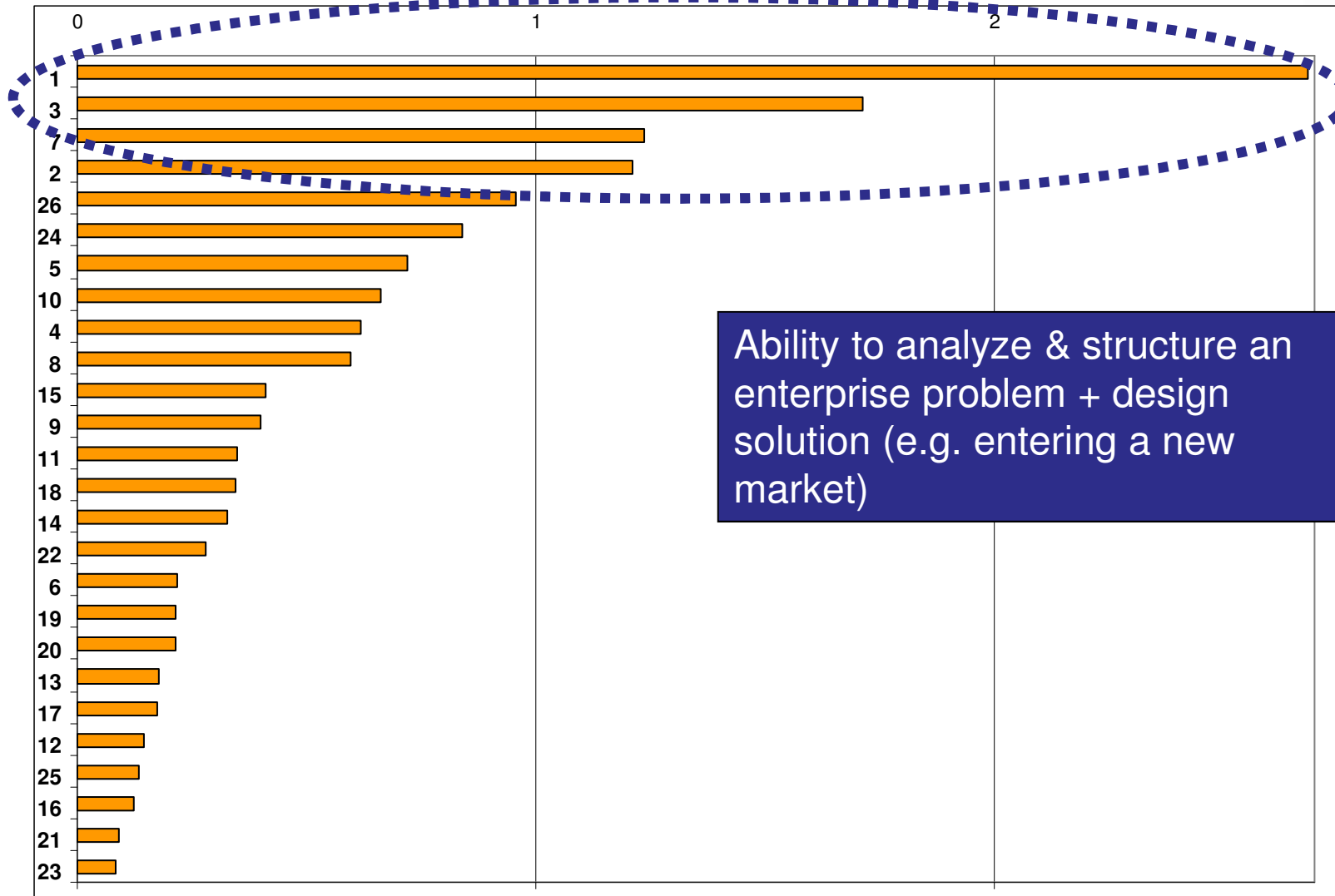
ALL  
competences  
below 3

# GRADUATES

## RATING – Importance vs. Achievement



# GRADUATES RANKING

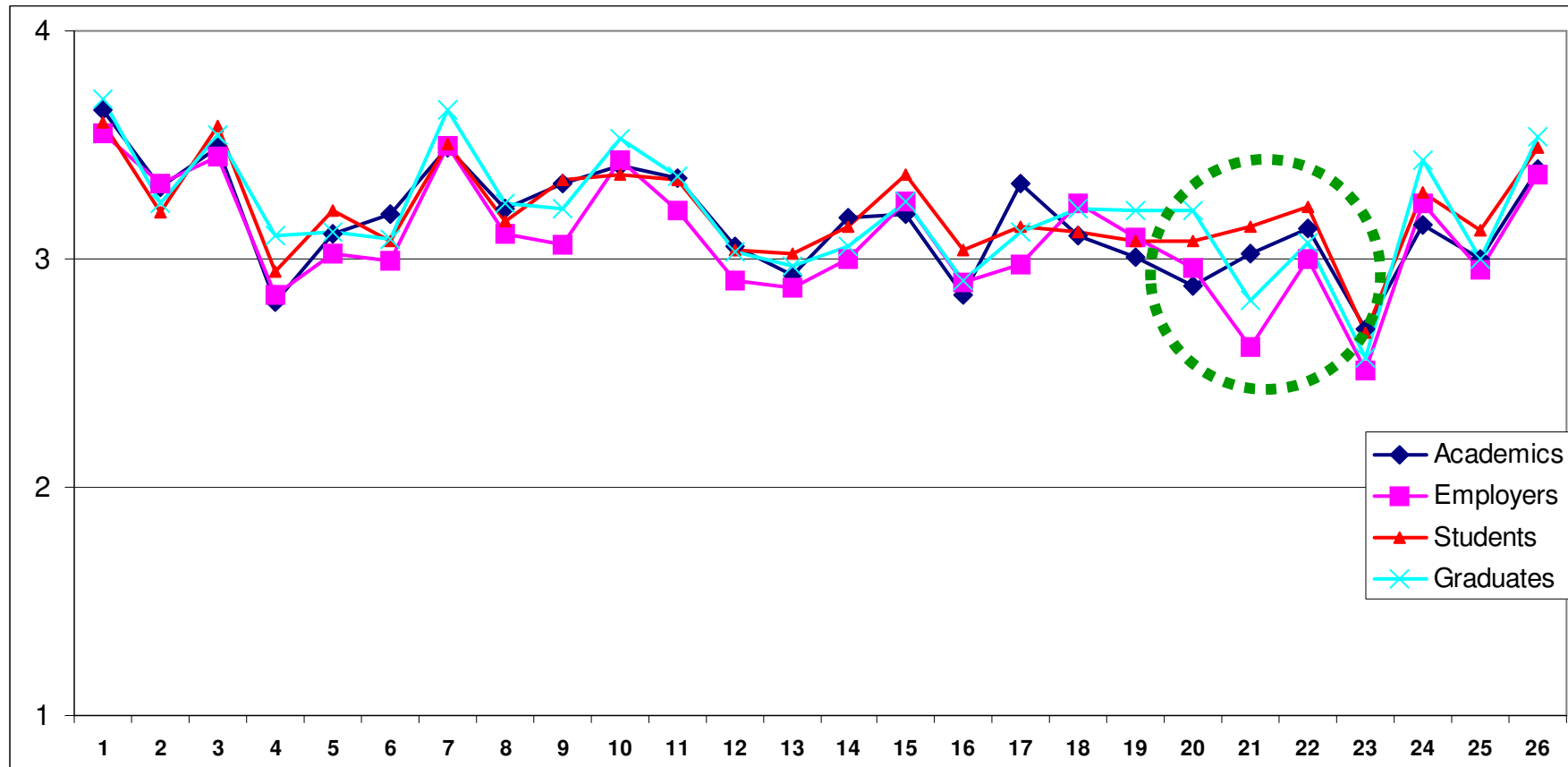


# Analysis

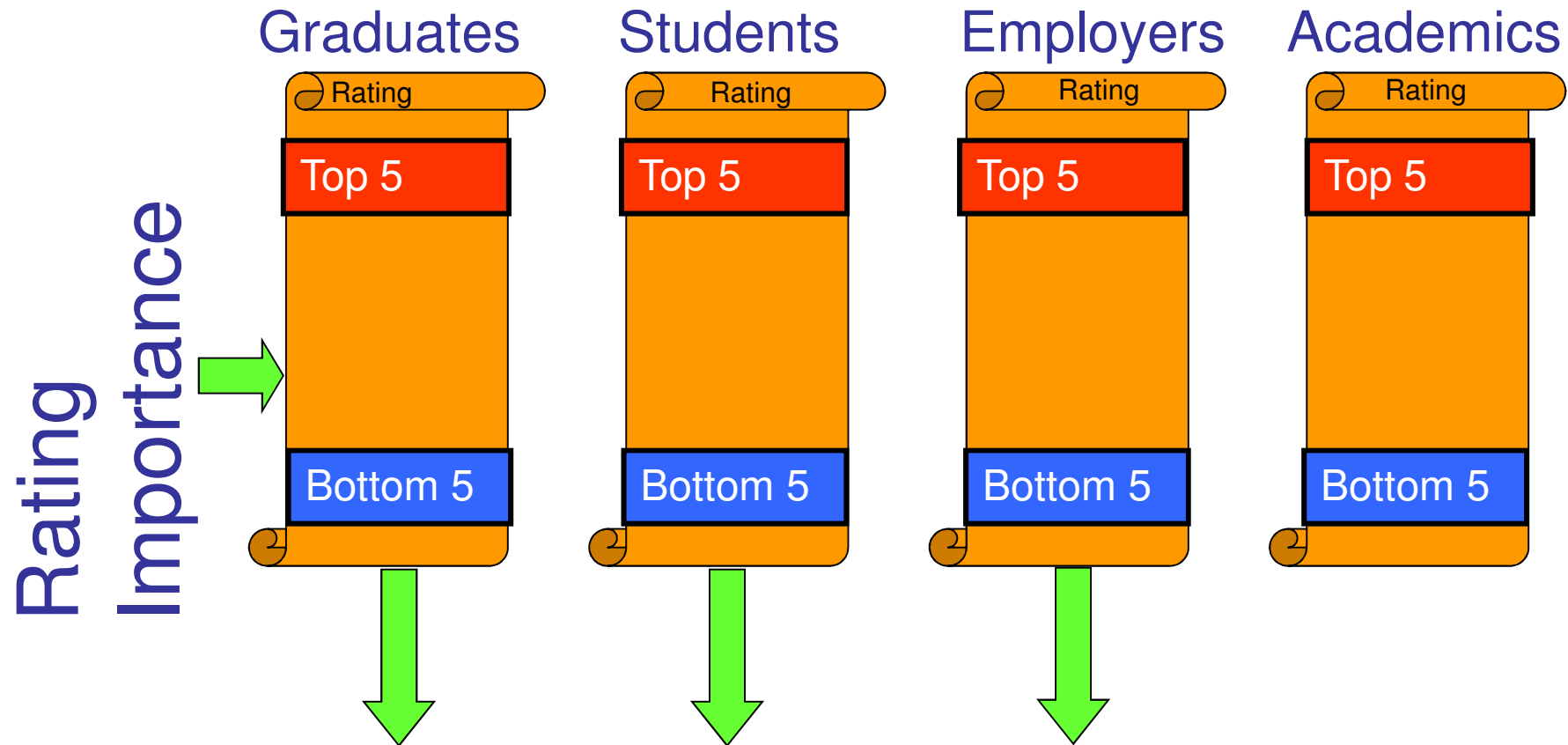


Generic competences	General analysis (common for 3 Subject Areas)	In relation to the 4 groups
		In relation to the 3 variables
		In relation to other regions
	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables
		In relation to general results
Subject Specific competences Business	Analysed from the perspective of Business	In relation to the 4 groups
		In relation to the 3 variables

# Importance

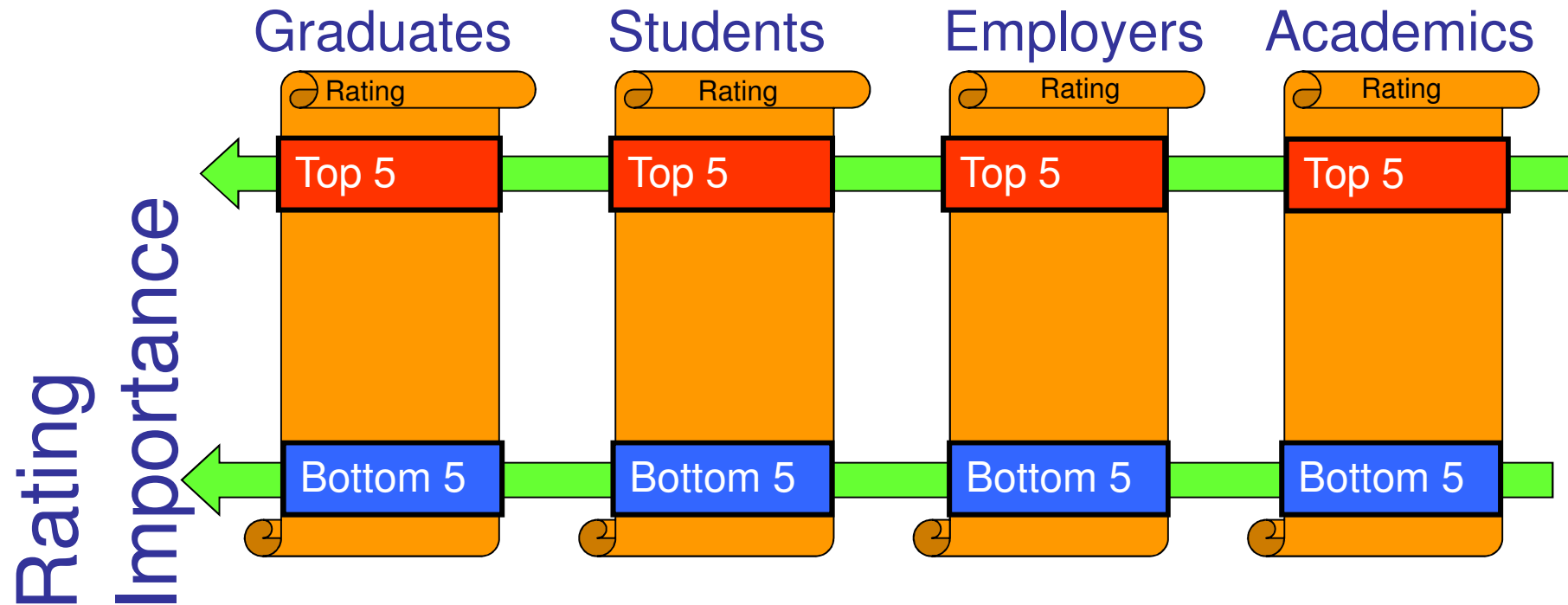


# Importance



Then ordered according to one of the groups

# Importance



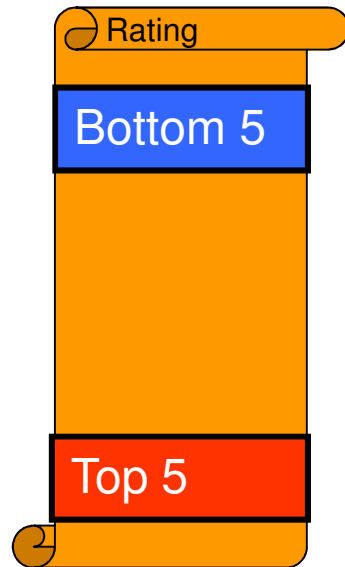
If groups are similar then  
similar competences  
in five top and five bottom groups



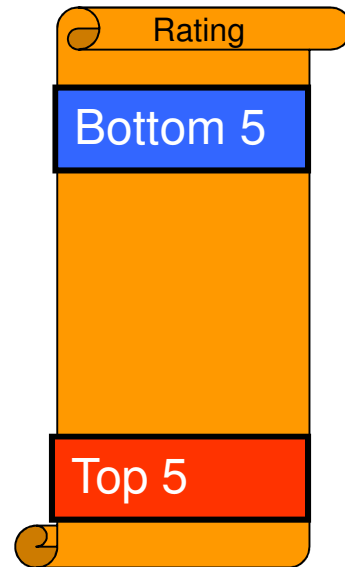
# Importance

Rating  
Importance

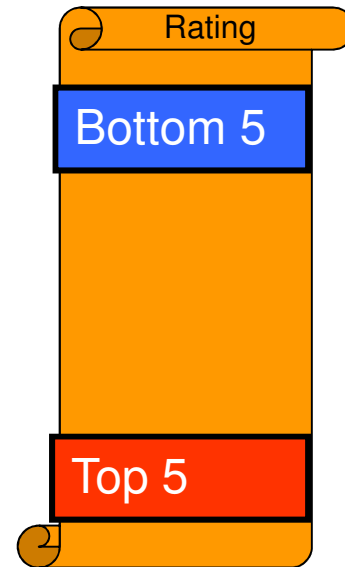
Graduates



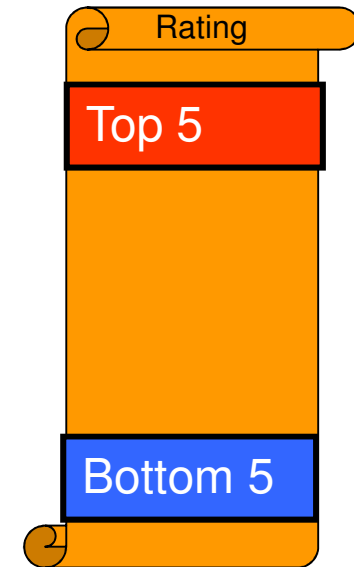
Students



Employers



Academics



If groups are very different then  
similar competences in opposite groups

# Importance



Competencia	ACA	EMP	STU	GRA
1. Ability to analyze & structure an enterprise problem + design solution (e.g. entering a new market)	1	1	1	1
7. Business communication ability	2	2	3	2
3. Apply and transfer business knowledge to the work environment and provide practical solutions	3	3	2	4
10. Learning to learn (how, when, where new personal developments are needed)	4	4	6	5
26. Ability to identify and act upon opportunities in the business environment	5	5	4	3
11. Ability to suggest solutions to and adapt to change	6	10	7	7
17. Demonstrate awareness and understanding of ethical standards for business organizations	7	18	14	15
9. Identify impact of macro & microeconomic elements on business organizations	8	13	8	13
2. Audit an organization and design consultancy plans	9	6	11	9
8. Identify the functional areas of an organization and their relations	10	11	13	10
15. Understand and apply existent & new technology & its impact for new / future markets	11	7	5	8
6. Identify the constitutional characteristics of an organization	12	17	20	18
14. Understand details of business functions, size, sectors & link with theories	13	15	15	20
24. Business negotiation ability	14	8	9	6
22. Ability to conduct a business environment analysis using suitable instruments	15	16	10	19
5. Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)	16	14	12	16
18. Understand principles of law & link them with business / management	17	9	17	11
12. Ability to apply business and managerial concepts in different organizational settings	18	21	22	21
21. Written and oral communication in a foreign language	19	25	16	25
19. Understand the principles of psychology, identify implications for organizations	20	12	19	12
25. Identify the cultural difference and cross-cultural communication in commercial activity	21	20	18	22
13. Use university knowledge to identify impact of different cultures on business	22	23	24	23
20. Understand & use bookkeeping and financial systems	23	19	21	14
16. Understand principles of engineering & link them with business	24	22	23	24
4. Identify and operate adequate software	25	24	25	17
23. Work assignments abroad (e.g. work experience for 20 weeks)	26	26	26	26

AGREE

DISAGREE

AGREE

# Importance



## 4 common Competences in Top 5 for 4 groups

Ability to analyze & structure an enterprise problem + design solution

Apply and transfer business knowledge to the work environment and provide practical solutions

Business communication ability

Ability to identify and act upon opportunities in the business environment

## 3 Common Competences in Bottom 5:

Use university knowledge to identify impact of different cultures on business

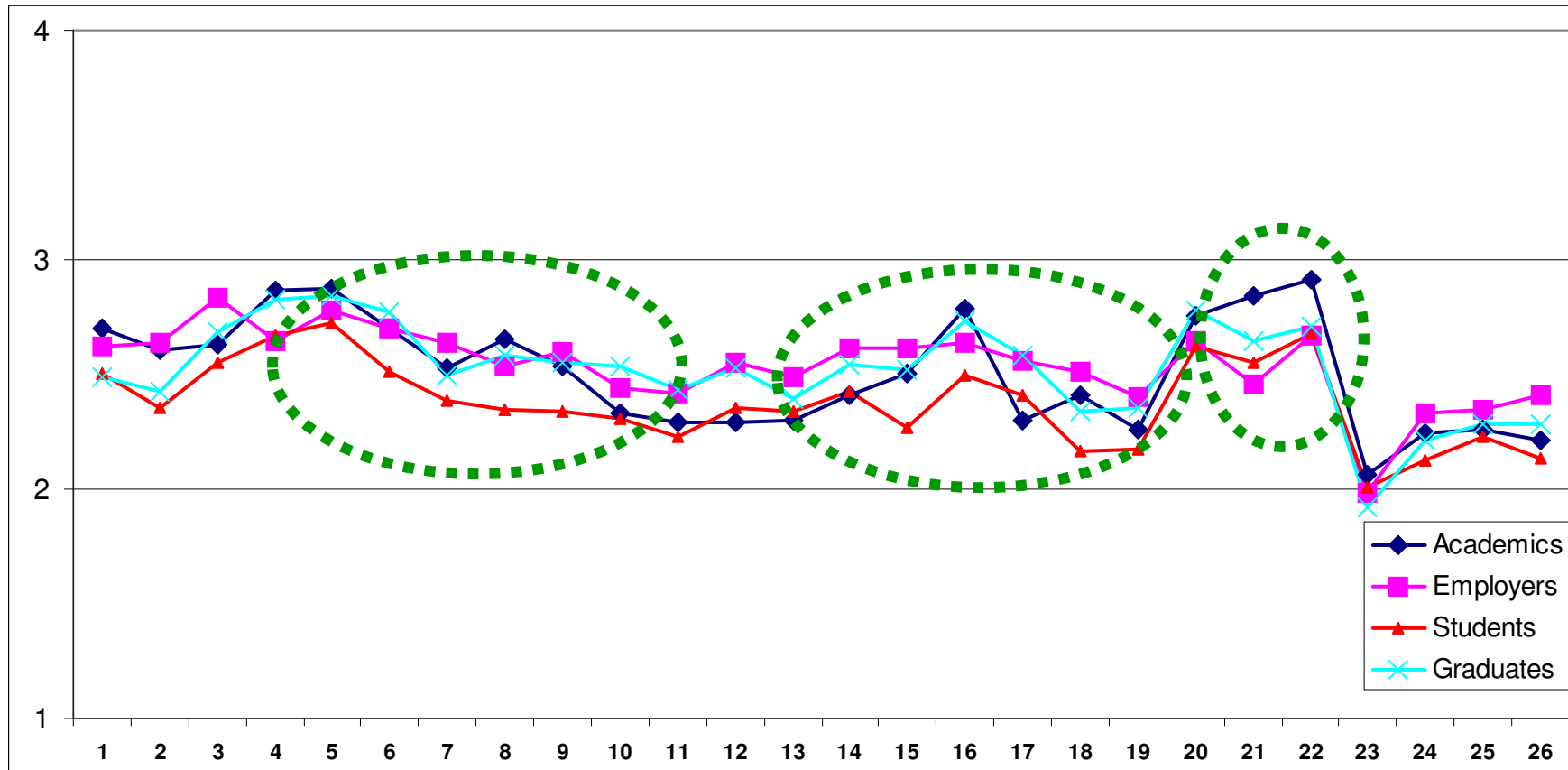
Understand principles of engineering & link them with business

Work assignments abroad (e.g. work experience for 20 weeks)

# Importance

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,8450	1,0000		
<i>Student</i>	0,9009	0,8679	1,0000	
<i>Graduate</i>	0,8327	0,9515	0,8853	1,0000

# Achievement



# Achievement

## 1 Common Competences in Top 5:

Identify & use adequate tools (e.g. market research, statistical analysis, comparative ratios)

## 3 Common Competence in Bottom 5:

Work assignments abroad (e.g. work experience for 20 weeks)

Business negotiation ability

Ability to identify and act upon opportunities in the business environment

# Achievement

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,7310	1,0000		
<i>Student</i>	0,8913	0,7924	1,0000	
<i>Graduate</i>	0,8410	0,8536	0,9164	1,0000

# Importance vs. Achievement

- Achievement lower than Importance
- Employers, Students, Graduates and Academics: one of the greatest gaps between Achievement and Importance corresponds to:

Ability to identify and act upon opportunities in the business environment

Business communication ability

High importance, low achievement



# Ranking

## 3 Common Competences in Top 5:

Ability to analyze & structure an enterprise problem + design solution

Apply and transfer business knowledge to the work environment and provide practical solutions

Audit organization and design consultancy plans

## 2 Common Competence in Bottom 5:

Identify the cultural difference and cross-cultural communication in commercial activity

Work assignments abroad (e.g. work experience for 20 weeks)

# Ranking

	<i>Academic</i>	<i>Employer</i>	<i>Student</i>	<i>Graduate</i>
<i>Academic</i>	1,0000			
<i>Employer</i>	0,9222	1,0000		
<i>Student</i>	0,9329	0,9469	1,0000	
<i>Graduate</i>	0,9094	0,9512	0,9621	1,0000

## **Some conclusions ...**

- **Big gaps between importance and achievement**
- **High level of correlation between the groups**
- **Consistency between importance and ranking**
- **Subject specific competences strongly linked to generic competences**



非常感謝