Focus group meeting Barcelona 21-22 April 2015

A new approach to find out if applicants to your master's programmes are suitable





Rationale Paradigm shift

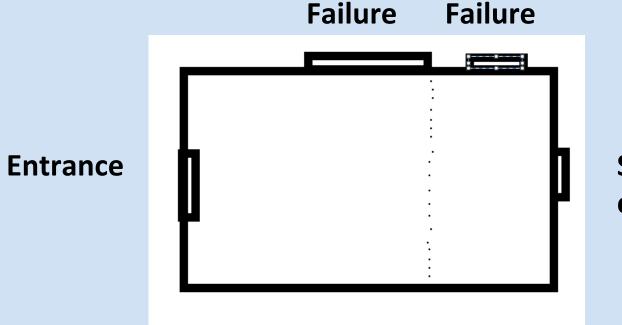
- Bologna changes
- Master's changes
- Admission's changes

Rationale Before Bologna One degree HE in continental Europe

Entrance Failure

Successful completion

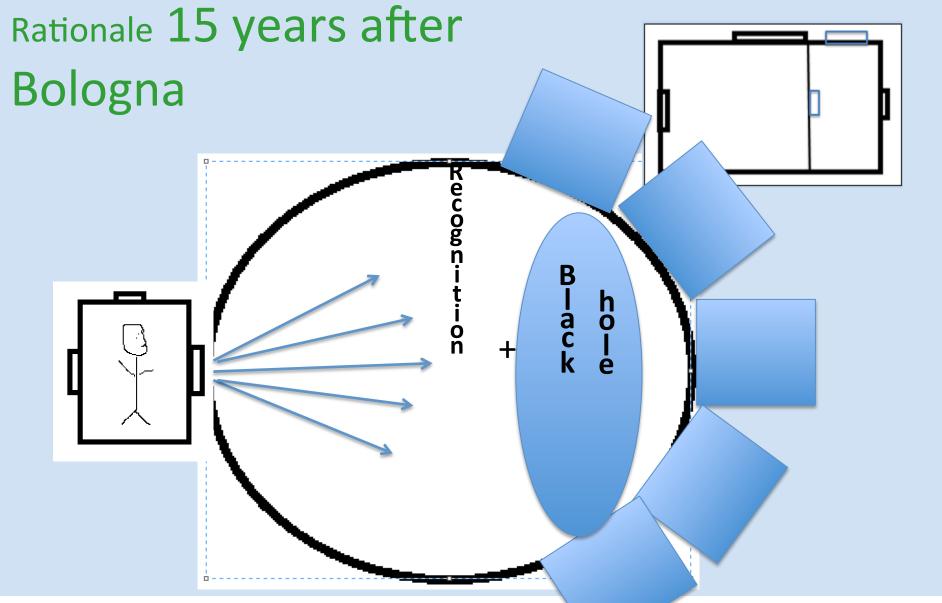
Rationale Shortly after Bologna



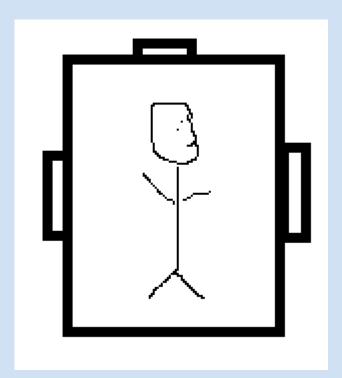
Successful completion

Rationale 5 - 10 years after Bologna

Entrance Failure Successful completion



Rationale Master's expected learning outcomes and exit competencies

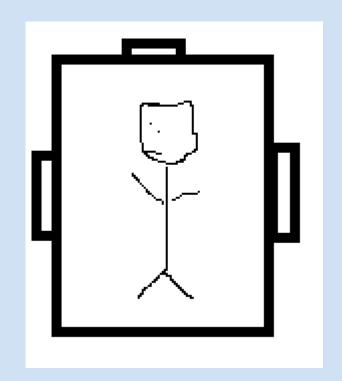


- Research skills
- Expertise
- Employment skills
- Soft skills
- International skills

EVERYTHING CHANGES

Rationale Diversity among Master's applicants

- Your own
- From China or Italy
- From PolSci, Math, or History
- Directly from undergrad or first work or family



Rationale Recognition approach to diversity

- Lisbon Convention etc; automatic recognition
- Tuning, Qualifications Frameworks, Degree profiles:
- Attempt to agree on mutually recognizable outcomes: content, education, politics
- Unspecific compromises

Rationale Add "new admission approach"

- With increasing diversity at B and M
- When outsiders are no longer exception
- To assess students from "unknown" universities
- To create classroom diversity
- To benchmark individual learning paths

Rationale by stakeholder

- Europe wants more mobility
- Students want easy access
- Employers want 21st century skills
- Countries want to compete for talent
- Universities want excellent students

Rationale Competency-based approach Key questions

- What do applicants have to be good at?
- How good do they need to be at it?
- How do you know they are?
- How do you organise transparent answers?

Rationale Three categories of criteria

- Substance-related Knowledge & Skills
- General academic competencies
- Personal / interpersonal competencies



Rationale Holistic approach

Good enough to graduate?

- Good enough to succeed afterwards?
- Fit in the diverse classroom?

Fit in the school culture?

Subject Related Knowledge and Skills

Guiding Tool 1
Draft april 2015





Knowledge requirements to be successful in your specific program

- Which bachelor degrees give <u>right of admission</u>?
- Do students really need <u>all the knowledge</u> of these preceding degree programs to be successful in your programs?
- If the answer is "NO", what knowledge is really essential?
- To what extent can students with other academic backgrounds be admitted to your program?

Entry requirements in context

- They are program-specific, no one-size-fits-all
- They are often based on experience of academics
- Can deficiencies be overcome:
 - Before entering the program (conditional admission)?
 - During the program (responsibility of the student) ?

Design process to identify key knowledge

- Based on engagement of key academics
- Iteration between
 - (re) formulation of the academic goals of a program,
 - length of a program and accepted study-load (EC),
 - admission criteria
 - Possibilities to address deficiencies
 - As part of the program (electives)?
 - As add-on to the programs?
 - By formal learning including examinations or testing?



EXAMPLES (1)

VU MSc Honours Programme in Business Research.

This prestigious programme (20 ECTS in addition to the 120 ECTS MSc) offers students the opportunity to look beyond their own specialization and to tackle and experience a broad variety of organisational and managerial issues.

Specific admission requirements: A bachelor's degree in Business Administration or related field. High motivation and interest in research, 7.5 GPA or higher.

Also see www.abri.vu.nl





EXAMPLE 2

Duisenberg Honours Programme in Quantitative Risk Management

To enter the Duisenberg honours track, students need a Bachelor degree in Econometrics, Economics with a demonstrated quantitative interest, or Applied Mathematics. The programme also invites applications of students in Mathematics, Physics, or related sciences with a strong emphasis on quantitative methods and modeling. Students from other universities are encouraged to apply as well. In all cases, however, it is important that you meet the entry requirements in the different formulated subfields of the programme. All students should meet mathematics, econometrics, and statistics and probability theory standards, as well as knowledge of basic investment theory. Also: students should be familiar with a theorem-proof type teaching style for some of the more mathematical courses. The entry level is indicated by the following standard text books (or equivalents):

Calculus

Edwards, C.H., and D.E. Penney (2002), Calculus with analytic Geometry (with early transcendentals, matrix version). Prentice Hall

Investments

Bodie, Kane, Marcus (1996), Investments. [integral]

Statistics

Rice, J. (1995, 2nd ed.), Mathematical Statistics and data analysis. Duxbury Press

Probability

Ross, S.M. (2002), A first course in Probability. Prentice Hall

Ghahramani, S. (2005), Fundamentals of Probability with Stochastic Processes

Econometrics

Stock & Watson (2010), Introduction to Econometrics

Programming Language

knowledge of Matlab and/or Gauss and/or C++ and/or Ox etc.

Plus: Some programming experience is needed, e.g., in C(++), JAVA, Ox (preferred), Matlab, Gauss, Visual Basic or any other suitable programming language.

Students should show that their curriculum has brought them to this level. In case of deficiencies, the admissions board decides whether the programme may be entered conditional on a timely and successful completion of specific additional (deficiency) course material, or whether a complete deficiency programme has to be completed before entrance is allowed.

Experience in writing a financial research paper, for example in a seminar class or thesis project.





Biomolecular Sciences (*Vrije Universiteit*, Amsterdam

- 1) a minimum of 24 EC in Biochemistry/Molecular Cell Biology level 300 (last year's Bachelor's level)
- 2) Bachelor grade average at least 7.0 out of 10, or equivalent (US: GPA at least 3.0 our of 4.0, UK: second class upper or higher)
- 3) Bachelor internship in a relevant field (Biochemistry/ Cell Biology) with a minimum grade of 7.5 out of 10 or equivalent
- 4) experience in practical laboratory techniques gained in courses and the internship
- 5) competence to function at academic MSc level and motivation for a career in research evaluated during an interview.

Direct Admission

Bachelor's degree from a Dutch university in Biomedical Sciences, *Gezondheid en Leven* (major *Biomedische Wetenschappen*), Biology, Medical Natural Sciences, Pharmaceutical Sciences, Molecular Life Sciences, (Bio)chemistry or related studies



Law & politics of international security

The LPIS Admission Board will select on merit among students:

- With a Bachelor's degree or equivalent in Law, Social Sciences, or Liberal Arts, plus a basic knowledge of international law or theory of international relations
- a sound academic background and considerable experience in the field of Law, Social Sciences or Liberal Arts.

Selection criteria include:

 GPA or an overall grade average, experience and cv, motivation letter, letters of recommendation, writing sample.

In addition, the Admission Board will also look at:

- talent and motivation;
- experience;
- demonstrated academic excellence.



Relevant steps

- 1. Bring together core lecturers
- 2. Select core courses/activities (most critical for overall success)
- 3. Articulate necessary knowledge (and skills)
- 4. Specify:
 - Academic level (100,200,300)
 - Course weights (ec's/ects)
 - Grades



Steps 2

- 5 Translate into entry requirements (understandable for future students)
- 6 Specify how a student can prove that he possesses the required skills
- 7 Organize the assessment process
 - Selection committee
 - Admission Office

General Academic Competence & Potential

Guiding Tool 2
Draft february 2015





What if all your students would...

- have excellent writing skills?
- be able to express themselves in a clear, concise and convincing way when talking about the latest trends and topics in their academic field, regardless of their audience being experts or laymen in the field?
- be critical thinkers, have strong analytical skills?
- be strong quantitative reasoners?

General Academic Competence

Recurrent elements in tests:

- critical thinking
- analytical writing
- verbal reasoning
- quantitative reasoning
- diagrammatical reasoning (by means of visual representation understanding of concepts and ideas)

General Academic Competence

Key questions:

Q1: What academic competence is required from any student, regardless of subject matter or discipline?

Q2: What academic competence can be taught / learned?

Q3: What academic competence is a decisive factor for study success (in correlation with subject-specific knowledge and skills, and with personal characteristics)?

22-abri-15

General Academic Competence analytical framework?

	Textual data & information	Numerical data & information	Diagrammatical & symbolic data & information
Create			
Evaluate			
Analyse			
Apply			
Understand			
Remember			

From: Revised Bloom Taxonomy, which has another second axis:

Factual → Conceptual → Procedural → Metacognitive



GAC Selection process

- Does your admissions process require proof of an applicant's general academic competence?
- Have you formulated criteria against which to determine whether they are sufficient for enrolment?
- Did you ever encounter difficulties in assessing them?
- Do you experience difficulties with the general academic competence of students currently enrolled in your Master's programme?

Personal/Interpersonal competencies

Guiding Tool 3

Draft february 2015





The use of personal characteristics

Do we really need them?

- ➤ To what extent are personal characteristics/ facets important for success within the programme?
- ➤ Do you wish to use the personal characteristics for admission or to develop their potential during their studies

Personal characteristics in practice

- Motivation Letter
- Personal statements
- Reference letters
- Personality/competence tests

The choice of personal characteristics

Personal vs interpersonal

- Competencies vs personality traits
- Big Eight /NOA ←→ Big 5 / 6 Hexaco

Master's admission

for a diverse international classroom

Big 5/6 personality traits

- 1 Emotionality
- 2 Extraversion
- 3 Agreeableness (versus Anger)
- 4 Conscientiousness
- 5 Openness (to Experience)

6 Honesty- Humility



for a diverse international classroom

Master's admission

Description of the personality traits

Extraversion		
(big 5)		
Warmth	Friendliness	make friends easily/am hard to get to know
Gregariousness	Gregariousness	love large parties/prefer to be alone
Assertiveness	Assertiveness	take charge/wait for others to lead the way
Activity	Activity level	am always busy/like to take it easy
	Excitement-	
Excitement-seeking	seeking	love excitement/dislike loud music
Positive Emotions	Cheerfulness	radiate joy/am seldom amused

Extraversion (big 6)

High: Self confident enjoy addressing groups and social gatherings, feelings of enthusiasm and energy.

Low: feel unpopular, awkward under social attention, less lively and optimistic.



Great 8 (work related) Competences

Table 1

Titles and High-Level Definitions of the Great Eight Competencies

Factor	Competency domain title	Competency domain definition	Hypothesized Big Five, motivation, and ability relationships ^a
1	Leading and Deciding	Takes control and exercises leadership. Initiates action, gives direction, and takes responsibility.	Need for power and control, extraversion
2	Supporting and Cooperating	Supports others and shows respect and positive regard for them in social situations. Puts people first, working effectively with individuals and teams, clients, and staff. Behaves consistently with clear personal values that complement those of the organization.	Agreeableness
3	Interacting and Presenting	Communicates and networks effectively. Successfully persuades and influences others. Relates to others in a confident, relaxed manner.	Extraversion, general mental ability
4	Analyzing and Interpreting	Shows evidence of clear analytical thinking. Gets to the heart of complex problems and issues. Applies own expertise effectively. Quickly takes on new technology. Communicates well in writing	General mental ability, openness to new experience
5	Creating and Conceptualizing	Works well in situations requiring openness to new ideas and experiences. Seeks out learning opportunities. Handles situations and problems with innovation and creativity. Thinks broadly and strategically. Supports and drives organizational change.	Openness to new experience, general mental ability
6	Organizing and Executing	Plans ahead and works in a systematic and organized way. Follows directions and procedures. Focuses on customer satisfaction and delivers a quality service or product to the agreed standards.	Conscientiousness, general mental ability
7	Adapting and Coping	Adapts and responds well to change. Manages pressure effectively and copes well with setbacks.	Emotional stability
8	Enterprising and Performing	Focuses on results and achieving personal work objectives. Works best when work is related closely to results and the impact of personal efforts is obvious. Shows an understanding of business, commerce, and finance. Seeks opportunities for self-development and career advancement.	Need for achievement, negative agreeableness



Competencies in summary

- 1. Leading and deciding
- 2. Supporting and cooperating
- 3. Interacting and presenting
- 4. Analyzing and interpreting
- 5. Creating and conceptualizing
- 6. Organizing and executing
- 7. Adapting and coping
- 8. Enterprising and performing

Study related Competences

Analysing and Devising	Realising and Evaluating	Communicating and Influencing	
 Vision Conceptual capacity Analytical capacity Inventivity Capacity to learn Environment orientation 	16. Planning and Organising17. Monitoring18. Result orientation19. Cost-consciousness20. Commitment to the client21. Accuracy22. Initiative23. Entrepreneurship	7. Empathy 8. Persuasiveness 9. Cooperating 10. Networking skills 11. Organisational sensitivity 12. Written fluency 13. Verbal communication 14. Presenting 15. Negotiating	
Managing and Supervising	Personal Effectiveness		
24. Managing for results25. Coaching26. Binding leadership27. Delegating28. Decisiveness	29. Flexibility30. Integrity31. Stress-resistance32. Self-reflection		



Measure these characteristics subjective intersubjective objective

- Tests, indicators, and proxies
- Questions that raise when you measure these:

For example:

- Can you measure personal characteristics in an international context?
- > Can the characteristics compensate one another?



Holistic approach to competence-based admission

Guiding Tool 5

Draft





Practice Holistic approach

- Good enough to graduate?
- Good enough to succeed afterwards?

Rationale

Fit in the diverse classroom?

Fit in the school culture?

Practice Holistic & Transparent

- 1. What is important and why?
- 2. How do you prove that it is there?

3. Is your approach transparent and valid?

Practice Key questions 1

- What do applicants have to be good at?
- How good do they need to be at it?
- How do you know they are?
- How do you organise transparent answers?

Practice Kinds of criteria

Substance-related knowledge & skills

- General Academic Competence
- Personal Skills

Practice Key questions 2

Good for graduation

- Good for society
- Good for the classroom

Fit in School culture



Practice Tools

- Standard tests
- Transcripts / diploma supplements / course catalogs
- GPA / grade; rank of university
- Interviews / motivation statement / reference letters
- Prior / extracurricular experience

Practice Testing

- Objective
- Subjective
- Intersubjective
- How the separate elements add up:
 - Independent values
 - Triangulation
 - Holistic aproach

Practice Procedure

- Recruitment ~ admission
- Admission ~ guidance & counselling
- Graduate student ~ Alumnus
- Institutional research: validity
- A model for comprehensive Graduate Enrolment Management

Nuts & Bolts Procedure

NAGAP



Practice Obstacles

- Law
- University regulation
- Faculty regulation
- Perceived / imagined obstacles
- The lawyer's question