mastermind EUROPE

Guiding Tools

2 Subject-related Knowledge & Skills

Erasmus+

mastermind EUROPE
Master's admission
for a diverse international classroom

May 2017

Guiding tool 2
Subject-related knowledge & skills

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1. Introduction

Introduction to the Mastermind Europe Toolkit

Mastermind Europe is an initiative to help finding a better way to decide which students are suitable for which Master's programme. With support of the ERASMUS+ programme, the Mastermind Europe Consortium developed and tested a Toolkit and Expert pool that can support academic directors of Master's programmes who wish to improve their admission system. Toolkit and Expert pool were tested, first in eight broad Focus Groups and then in seven pilots at individual Master's level. The E+ project ended in September 2017 and the (slightly revised) Consortium decided to continue the work – on a not-for-profit basis.

This Guiding Tool No 2 "Subject-Related Knowledge & Skills" is part of a set of six Guiding Tools in the Mastermind Europe Toolkit. These Guiding Tools are:

1. Coherent Admission Framework
2. Subject-Related Knowledge & Skills
3. General Academic Competencies
4. Personal Competencies & Traits
5. Language requirements, and
6. Managing Graduate Admission.

The Mastermind Europe Toolkit further contains the Mastermind Europe Manual, the Mastermind Europe Approach and three reports which strengthen the evidence base for Mastermind Europe:

- Report 1. Introduction to the Paradigm Shift: Changing paradigms in admission to Master's programmes in Europe
- Report 2. Admission to English-Taught Programs (ETPs) at Master's level in Europe: Procedures, regulations, success rates and challenges for diverse applicants
- Report 3. Restrictions; real or perceived? Legal obstacles to Master's admission in Europe

All parts of the Mastermind Europe Toolkit are freely accessible on the website www.mastermindeurope.eu, where there is also a repository of relevant literature and an explanation of the Mastermind Europe advisory service.

The set of Guiding Tools builds on the Paradigm Shift report, which shows how Master's programmes in Europe operate in an increasingly diversity environment. Because of this increasing diversity, many Master's programmes experience the need to improve their admission process, as well as the need for more transparent information to prospective students, and feedback loops between admission and curriculum implementation.

Guiding Tool 1 offers a coherent admission framework in which distinct categories of admission criteria are identified: criteria connected to subject-related, academic, personal and linguistic competencies. In addition, the Guiding Tool clarifies the distinction between criteria, norms and testing mechanisms.

Guiding Tool 2, 3, 4 and 5 zoom in on each of these categories of admission criteria. Each offers information on existing practices and research findings, and offers a 'language' to make more explicit the often implicit knowledge of core teachers about what students need to bring.

Guiding Tool 6 focuses on the crucial elements impacting the university's system and procedures in pre-admission communication, application, selection, and enrolment.

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Introduction to this Guiding Tool 2: Subject-Related Knowledge and Skills

As explained in Report 1: "Introduction to the Paradigm Shift", applicants to Master's programmes are increasingly diverse in terms of their discipline, their geographic/cultural background and their mix of educational and experiential learning.

This does not only apply to students transferring from another domestic university or from abroad, but also to students with different academic backgrounds. The student with a Bachelor's in Biology might be applying for a Master's in Neurosciences, a Bachelor's in Psychology for a Master's in Criminology or a Bachelor's in Economy applying for a Master's in International Relations. Many more examples may come to mind.

When the Master's students in a class no longer come from just one preceding Bachelor's programme, the Master's programme can no longer assume that all students will have the same knowledge and skills in subjects related to the Master's programme. When a Master's programme indeed wants to draw students from a variety of backgrounds, it cannot continue to take its own preceding Bachelor's programme as the yardstick by which all applicants are measured. Besides, academics know full well that their own Bachelor's students too will not be fully competent in every subject that they passed.

So: What is it that they must know, that is the question!
What are the subject-related knowledge and skills that students really need to possess when entering a Master's programme, if they are to stand a fair chance of success? What is a better way to find out in the admission process if students indeed have these subject-related knowledge and skills (SRKS) – if 'your own preceding Bachelor's' is no longer a reliable yardstick?

This Guiding Tool provides a step-by-step approach to support Master's coordinators in articulating – independently from their own Bachelor's in the same subject – what subject-related knowledge and skills applicant students need to have; and how to determine if they do.

It starts with a key question for admission:

Key question:
- how can students demonstrate
- that they are good enough
- in the things they need to be good at?

Each academic teaching in a Master's programme has assumptions on what students know and need to know when they enter the classroom for the first time. Of course there is a bandwidth: Academic teachers can address minor deficiencies with some extra attention to these in class – or challenge students to make up for these deficiencies through independent study. But there is a minimum of subject-related knowledge and skills that simply needs to be there.

In this Guiding Tool, we offer a way to make these assumptions explicit. Basically, we do that by offering a set of questions to Master's coordinators and senior academics teaching in the programme. Through their answers to these questions, they will be able to articulate the knowledge and skills that students simply need to have when they start with the programme.

NB We have put 'subject knowledge' and 'subject-related skills' in one category, distinct from 'general academic competencies' and 'personal competencies and traits'. Subject-related skills are tied to the subject and distinct from more generic cognitive skills and personal skills and traits. This distinction is in line with the

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distinction made by the OECD in its labour market skills analysis, where they distinguish *) professional & technical skills, *) generic cognitive skills, and *) socio-emotional skills.

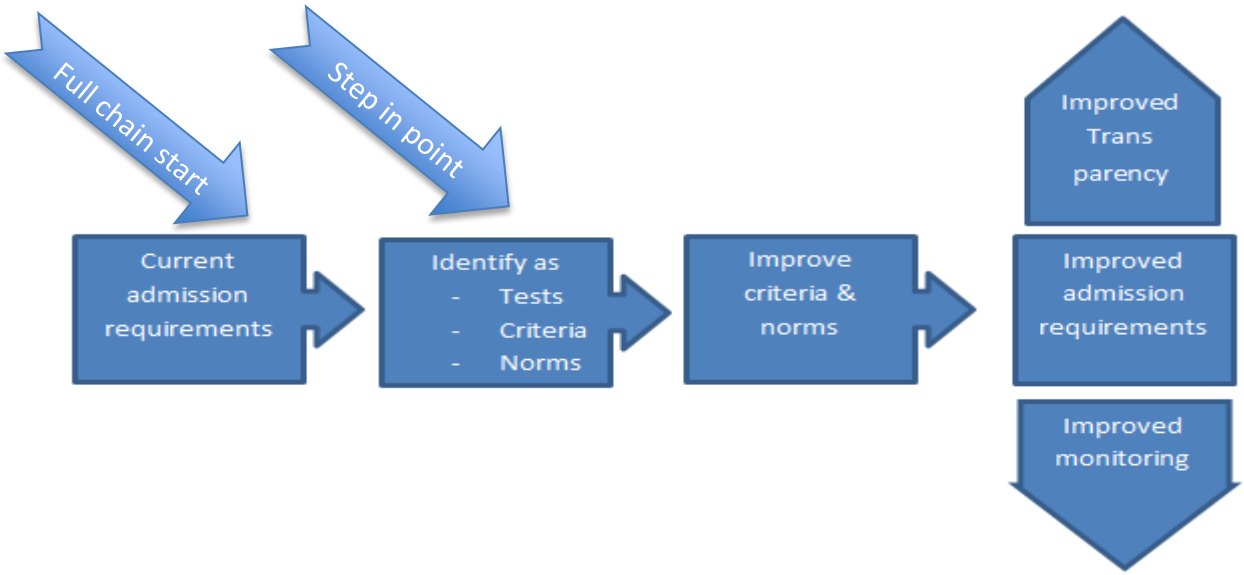
A more precise and complete articulation of the required SRKS is not only helpful to improve admission as such. It helps to increase transparency to applicant students at various stages. Clear information on these SRKS helps students from various disciplines and from other universities and other countries to understand if the programme is suitable for them – and if they are suitable for the programme. At an early stage in their Bachelor's, it may help them to choose their elective subjects to best meet your requirements. It may help them to know what kind of bridging course – or independent study – they must take up to qualify for your programme.

This is not a plea for very lengthy and detailed SRKS. Thinking of what currently enrolled students actually brought in subject-related knowledge and skills – rather than what they ideally should be able to bring on the basis of their Bachelor's – may help to keep the articulated SRKS down to a modest size.

The Tool is based on "full chain / step in" model and on the Coherent Admission Framework developed in Guiding Tool 1.

The "full chain" works for Master's programmes that already have other admission requirements than just a Bachelor's degree. It starts from the left of the visual with current admission requirements. The "step in" works for Master's programmes that still fully rely on diploma-recognition. It starts one step to the right, because no admission requirements other than the Bachelor's degree have as yet been defined.

Figure 1 Full chain / step-in approach



The Coherent Admission Framework allows Master's programmes to analyse the current elements in their admission process in terms of the criteria and norms that are being used (often implicitly). Here, only the subsection for Subject-Related Knowledge & Skills is presented – the full matrix can be found in Guiding Tool 1.

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Table 1 Coherent Admission Matrix

How do you a) know (= assessment mechanisms) if b) students are good enough (= norms-levels) in c) the things they need to be good at. Or, in logical order: 1) criteria, 2) norms/levels, 3) assessment mechanisms[1] with 4) testing scores				
	1 Criteria	**2 Norms/ levels**	**3 Assessment mechanisms**	**4 Assessment scores**
	What you are looking for		**What you are looking at**	
Subject-Related Knowledge & Skills **(Guiding tool 2)**				

It uses the tables of the Coherent Admission Framework to go step by step through the process, which for subject-related knowledge and skills will almost always be the "full chain": from existing requirements to underlying criteria and norms, to improved articulation of their interconnection, to improved transparency (to students) and monitoring potential.

[1] "Assessment mechanisms" or "Testing mechanism" are used in all Mastermind Europe documents in a very broad and non-judgemental way. In includes all and any mechanisms that master's programmes actually use in the admission process – even mechanisms that many observers and researchers would disqualify as unreliable or even perverting. It is precisely part of our objective to stimulate careful reassessment of these mechanisms.

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2. Step-by-step implementation

This paragraph describes the necessary steps in the process to decide upon implementing knowledge and skills criteria as part of the admission process for a specific Master's programme. Let us start with a "quick & dirty" approach:

Table 2 Step by step approach

Step-by-step approach
1. Sit down with senior academics of your programme and discuss which academic knowledge and skills are really required to be able to start with the programme on day one. 2. Set a limit to the body of knowledge and related skills. Feedback from academics from various subject areas and European countries indicate that content which can be covered in one full semester (30 ECTS) seems a reasonable yardstick. Even in monodisciplinary programmes, 30 ECTS could do the trick if you identify content at advanced Bachelor's level. 3. Remember: the knowledge and skills which you require, may themselves require more preceding knowledge and skills, which then come on board automatically. 4. Describe the required body of knowledge. One option would be to refer to specific chapters in key handbook because these adequately reflect the required. 5. Describe the required subject-related skills, eg: • Laboratory skills • Statistical and other quantitative skills • Qualitative research methods and techniques
6. Consider which proofs of adequate Subject-Related Knowledge & Skills you can accept: • Courses at universities you know to be good enough (current method); • A test developed and administered by you; • An existing test (e.g. GRE subject test) with an adequate score; • Completion of a bridging course or MOOC developed and implemented by you; • Proven completion of an existing bridging course or MOOC elsewhere. 7. Give clear information on this to prospective students.

There may be other and better ways, but this is a good start.

NB In this Guiding Tool we will first focus on the process of identifying minimal subject-related knowledge and skills standards with Master's programmes that already exist. It is a more complicated process to start from scratch with a newly designed Master's programme, starting with its overall objectives and "claims to existence" and working backwards through the curriculum design towards the entry requirements on subject-related knowledge and skills. For this more complicated process, the simpler version of the already existing Master's may serve as a model to build upon and an experience to learn from. But basically, the same kind of questions apply to both processes.

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Further explanations and details to the step-by-step approach

A more elaborate approach starts with the matrix, zooming in on subject-related knowledge and skills.

Assuming that a Master's programme has reached an agreement on the – minimal – subject-related knowledge and skills required, then the following table can be used to identify the successive steps in defining the admission process.

Table 3 Coherent admission matrix

	How do you test/ demonstrate			
	and by what testing mechanism	**and with what passing score**	**if students are good enough**	**in the things they need to be good at**
Field of knowledge **Field of Knowledge**				

Working from right to left you fill in:

- the most important fields of knowledge (the column to the right);
- specify the required level of knowledge: basic (first Bachelor year), advanced (second Bachelor year) or specialized (third/fourth Bachelor year);
- whether students need to have high(er) than average grades for a certain field;
- and then answer the question how you can assess whether an applicant fulfils your requirements.

What do students have to be good at

To answer this question you need to define the core curriculum of the programme, not so much in terms of courses but in competency. Please note: competency with respect to subject-related knowledge and skills.

For which part of the programme is there a common base of subject-related knowledge and skills which all applicants simply must have acquired? What essential knowledge and skills are needed to successfully develop the required learning outcomes?

It may help here to distinguish between essential knowledge and essential skills. The knowledge will be about facts and theories, but this quickly becomes much too detailed. It often helps to have a look at the most commonly used standard handbooks in the field. Pointing to the chapters of these books is often an internationally understandable way to articulate required knowledge.

Subject-specific skills may require a different approach. The "quick and dirty" overview already gave some common examples: laboratory skills, skills in qualitative research, skills in quantitative research. Very often, Bachelor's degree programmes at research intensive universities have specific courses in "methods and techniques" or "research methods" or similar titles. If these

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use internationally accepted guidebooks, that already helps to articulate what students have to be good at in a transparent way. If you use self-produced syllabi, looking at their tables of content may help you identify the crucial subject-related skills for a particular Master's course.
Remember: skills that admitted students from your university "should but don't possess" can't in fairness be required from applicants from outside. The key question must remain: are these skills essential for students to succeed in the Master's? It may be tempting to set high bars in statistics because it brings you a Master's class of 'easy' students. But does that conform to the vision and mission of your university and your programme? And how many 'false negatives' (=rejected students who would have made it) does such a policy generate?

The next question might be: must this knowledge and these skills demonstrably have been acquired before the actual start of the programme (conditional admission)? Or are students expected and allowed to resolve deficiencies during the programme?
The challenging question remains: What knowledge is really essential for a prospective student in order to:

a) be able to participate in the learning processes in and outside the class room from the start and
b) to be able to complete the programme successfully and within the allowed time?

Most academic Master's programmes consist of compulsory courses, electives and a final paper based on research (thesis). Often, faculty are well aware which courses most students find difficult. Often, these courses have a high impact on success and completion rates. If these high impact courses are indeed part of the core curriculum of the programme, it makes sense to focus on these courses when defining the subject-related prerequisites.

In continental Europe, entry requirements traditionally are defined in terms of academic content. But an increasing weight is also attached to a number of more generic academic competencies and skills. The capacity to acquire and understand new knowledge by independent learning may compensate for less content knowledge. Certain professional fields like Medicine, Law, Psychology require a broad and sometimes very detailed set of academic topics. Other programmes emphasize demonstrable academic level and research competences, expecting students to be able to gain the necessary subject-related knowledge on the spot. These topics are treated in one of the other Mastermind Europe Guiding Tools: GT 3 General Academic competencies.

How good do they have to be? What are the required levels?

Typical phrasings of the level of general entry requirements could be:

a. The level of knowledge in specific subjects, e.g. 1st, 2nd, 3rd year Bachelor level (100,200, 300). We also found examples describing titles and author names of internationally accepted and easily accessible general textbooks[2].
b. Estimated study load in a Bachelor's programme (in EC: European Credits or ECTS). The number of credits of a course is, or at least is considered to be, an indication of the study load.
c. Examination results (scores) in terms of passed, medium level, top level. Basically a "passed" score should be sufficient, but based on experience one could say that "you have

[2] Often the state of the art basic knowledge is described in standard textbooks. Examples: to be followed

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to be really good" in certain fields, to be proven by high marks for specific topics or in general (GPA)[3].

Towards entry requirements

The results of the exercise described above must then be translated in a language that students from different backgrounds could easily understand. Therefore, the entrance requirements must be described in such a way that they can be understood by prospective students, also from outside the university or even the country, and by students from different academic backgrounds. Searches on the internet for entry requirements of other universities in the same field may be a source of inspiration for this.

By what testing mechanism (knowledge)?

Testing mechanisms may have a dual purpose. A prospective student can estimate whether an application to a certain programme has a reasonable chance of success. The assessors can use the outcomes of a test in their decision whether or not to accept a student in their programme. In all cases, mechanisms should be in place to check whether the information provided by the applicant is reliable.

This paragraph describes tools that can be used to assess an applicant's entry level with respect to subject-related knowledge and skills separate from (any) specific preparatory Bachelor programme. It focuses on tools that can be developed, and/or tools that have been developed by others and might (perhaps altered) be used as an assessment instrument. Handbooks, bridging courses, Massive Open Online Courses (MOOCs), and tests – either developed by the specific Master's programme or already available.

Transcripts

Transcripts of academic records: official documents showing which courses were taken, with what study load and what result, are among the most often used instruments in admission to check if students have the required subject-related knowledge and skills. But the information on these transcripts is very limited. It consists of the title and a crude indication of the level of the course (usually the year of study in the programme). A course called "Biochemistry 2" gives limited information on the topics and the level of detail and complexity – and may vary considerably between universities. A course "research methods" may be more informative, showing that the course indeed includes a focus on research.

Course descriptions

Many Master's programmes required students to send in or upload comprehensive courses descriptions and course catalogues – sometimes even requiring a translation into English. This evidently is a large burden on the applicant and a potential deterrent to apply. It may generate information on many courses that are not relevant for the Master's programme in question. More precise articulation of a) what students have to be good at and b) how good they have to be, may significantly reduce the administrative burden for applicant and programme by limiting the uploading requirement to courses reflecting the essential SRKS.

Handbooks

[3] Scores and grades may be used specifically to assess subject-related knowledge and skills; often it is also used as a general indication of general academic competence, which is treated in Guiding Tool 3. Cultural differences in grading may have to be taken into account.

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In many fields of study, there is a limited number of Standard Handbooks that are widely used by many Bachelor's programmes for lectures and preparation for exams and papers. Even programmes that don't use one of these Standard Handbooks do recognise that they do indeed adequately cover the essential knowledge of the field. Reference to these Standard Handbooks – or to selected core chapters – may be a very effective way to tell prospective students what the required subject-related knowledge is.

Student may be asked to limit the uploading of course description to the relevant courses only. Academics and admission administrators assess whether the course descriptions fit the requirements.

Bridging courses

Some universities and programmes offer so-called bridging courses for students who show potential, but lack specific required subject-related knowledge or skills. The admission process results in a decision that admission to the Master's programme is conditional to successful and timely conclusion of the bridging course. In effect, the selection process shifts from giving access to the Master's programme to giving access to the bridging course.

MOOCs

More and more MOOCs become available for students from all over the world. MOOCs can be used in two ways. They offer potential students an opportunity to acquire the necessary subject-related knowledge and skills. And, once standardized examination procedures in MOOCs will have become available, then successful conclusion of a MOOC may be used of proof of the acquired (level of) knowledge and skills.

Tests

Where specific subject-related tests are available, these can also be used to assess the subject-related knowledge or skills of applicants. Such tests may be developed by the university itself or a university or Master's programme may choose to use a generally available test. An example of such tests is the GRE Subject Test by ETS. The GRE Subject Tests are achievement tests that measure knowledge of a particular field of study. GRE Subject Tests are available in the following disciplines:

- Biochemistry, Cell and Molecular Biology
- Biology
- Chemistry
- Literature in English
- Mathematics
- Physics
- Psychology

Universities and programmes can decided to offer preparatory courses for these tests.

Students can use these tests – and preparatory courses – to improve their knowledge and to demonstrate the acquired knowledge. The Master's programme will have to set the (minimum) standards and to inform the prospective students not only on these standards but also on how the test results will be used in the admission process. For example: "Below a certain level you don't qualify" or "Priority will be given to the highest scores".

By what testing mechanism (skills)?

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Variety and flexibility

We now touch upon another set of questions, relating to the rigidity or flexibility with which subject-related knowledge and skills requirements are applied in the admission process.

We formulate 3 typical positions, but in reality, Master's programmes may define themselves somewhere between two of them:

a. Applicants are required to demonstrate the required (levels of) subject-related knowledge and skills as a part of the application process. Where this approach to admission is taken, students are admitted only with a Bachelor degree and a transcript of records showing courses that attest of courses showing the required knowledge and skills.
b. Applicants may be (conditionally) accepted on the proviso that they demonstrate the required subject-related knowledge and skills before the start of the Master's program. With this approach, deficiencies at the time of application may be overcome before the programme started: conditional admission. This cases like these, universities mey or may not offer bridging courses or pre-Master's courses to help these conditionally admitted students to meet the requirements (admission under conditions).
   This type of admission relates to students whose Bachelor programme lacks certain requirements.
c. Applicants do not demonstrate the required subject-related knowledge and skills, but other qualities (see coherent admission framework) compensate for these gaps (admission based on future perspectives).

Information base

A word of caution:
Getting admitted to a European Masters' programme is highly coveted. Students will do their utmost to prove their "excellence". Assessors are expected to assess large number of student portfolios within a limited amount of time, looking for students that fit in their programme optimally. Assessors are expected to be objective or at least to be intersubjective and to be transparent in their deliberations. The number of appeals against rejected applications is rising every year. Imperfect procedures and unclear entrance requirements are among the most frequent causes of appeal cases that are won by the appealing student.

Students must demonstrate that they fulfil the entry requirements. But often existing guidelines for application are rather unspecific, leaving ample room (and uncertainties) for prospective students. On the other hand, assessors have to gather the information they really need out of a large file with unspecific content, like a CV, extended course descriptions, unspecified motivation letters and letters of recommendation, etc.

Specifying entry requirements may also lead to specifying the information one really needs for assessing applicants. For example: an interdisciplinary Master's programme of Human Movement Sciences requires among other things a (unspecified) Bachelor of Science degree that includes basic knowledge of Anatomy, Physiology and Psychology on the level of Introductory Textbooks, as well as sufficient research skills and knowledge of Mathematics and Physics. So, regarding content, students should send in detailed course descriptions of the mentioned academic fields only, preferably using a prescribed format. By doing so, both students and assessors can concentrate their efforts on the information that really matters.

Such an approach does not exclude the possibility that a selection committee concludes in advance that certain Bachelor programmes cover all content requirements and therefore graduates

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qualify automatically. This may still be the case where for the traditional link between a Bachelor's and a Master's programme still exists.

Real case example

To make this more tangible, below we provide a few samples from Master's programmes that have been analysed with the Mastermind Europe approach. The samples have been anonymised and we give here only the information for the Subject-Related Knowledge & Skills.

These samples have been based on the Coherent Admission Matrix, with one additional column with comments of the Mastermind Europe experts as the starting point for a discussion with the academics and administrators of the programme.

How do you a) know (assessment mechanisms): b) if students are good enough (norms/levels), c) in the things that they need to be good at (criteria). Turned around in logical order: 1) Criteria, 2) Norms/levels, 3) Assessment mechanisms (with 4) assessment scores)					
	1 Criteria	**2 Norms / levels**	**3 Assessment mechanisms**	**4 Assessment scores**	
In plain language:	**What you are looking for**		**What you are looking at**		**Comments**
Subject-related Knowledge and Skills	Knowledge of and insight into the broad field of organization studies and (organizational) culture		- Bachelor's degree in Public Administration and Organization Science, Cultural Anthropology at XX - Pre-Master's programme Cultural, Organization and Management XX - Bachelor's degree in Sociology and Political Science at VUA		Sometimes admitted candidates receive a recommended reading list of titles in organisational theory and culture.
	Knowledge and insight as taught in XX Pre-Master's COM courses: • Core themes organization science • Organizational Culture and Change		Non-XX undergraduate and graduate degree in one of the Social Sciences; a successfully completed specialisation or minor in may be required.		

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How do you a) know (assessment mechanisms): b) if students are good enough (norms/levels), c) in the things that they need to be good at (criteria). Turned around in logical order: 1) Criteria, 2) Norms/levels, 3) Assessment mechanisms (with 4) assessment scores)					
	1 Criteria	**2 levels**	**3 Assessment mechanisms**	**4 Assessment scores**	
In plain language:	**What you are looking for**		**What you are looking at**		**Comments**
Subject-Related Knowledge & Skills			Bachelor's degree in Education or similar discipline (broad range of social science examples)		
			Minimal 3 years, 180 ECTS		
			Academic transcript (30%)		
			– Education Sciences, Social Sciences or equivalent (25%). – Other degrees with connections to development or the international field (20%) – Humanities, Languages, Translation or minors in Social Sciences or Education Sciences (15%) – Others (10%)		What knowledge and specific skills are students expected to all have when they start the programme?
			Relevant academic background in Educational Sciences or in any other relevant field		More generic than on XXX website

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To really analyse what may be open for improvement in specific instances of Subject-Related Knowledge & Skills in the admission for a specific Master's, one has to look in some detail and critically examine what is happening and why.

To help with this process, we have developed a Table which below we have filled with one example of one Master's programme (anonymised). It shows how the analysis may take place.

Table 4 Sample analysis

The subject-related requirement stated	What can you say about it?
A Bachelor's degree in a subject closely related to the MSc with good grades in key courses	It is a statement about subject matter, but of a fairly general nature.
What criterion is involved?	It is unclear what "key courses" are and how broad or narrow "closely related" is interpreted. There is no reference to a specific body of knowledge, e.g. in terms of chapters of handbooks.
What norm is applied?	It is unclear what is meant by "good grades".
How satisfactory is this practice?	Possible answers: "We are satisfied, no change" or "We want to change in some ways; see next rows"
Possible conclusions in terms of articulation of criteria/norms	"We need to define or give examples of key courses. We need to explain ´good grades´. We need to identify the core body of knowledge, and which Handbook chapters (or MOOCs) cover it.` or "We feel unable to articulate precisely what we are looking for; it has to stay (inter)subjective."
Possible conclusions in terms of testing mechanisms	"We add a MOOC or a pre-entry Summer Course to 'having had the course in the Bachelor's'."
Possible conclusions in terms of transparency	"We'll put the info on Handbook chapters (or MOOCs) on our website"
Possible conclusions in terms of monitoring	"We decide to keep track of which is the better predictor: Bachelor's courses, MOOC, or pre-entry Summer Course"

Concluding remarks

In this Guiding Tool 2 on Subject-Related Knowledge & Skills, we have offered the reader a step by step way to either a 'quick-and-dirty' or a more elaborate approach for one key aspect of an improved admission process to enhance Master's admission for a diverse international classroom.

The other Guiding Tools give similar guidance to the other key aspects (GT 3 General Academic, GT4 Personal, GT 5 Language) and to the coherence and manageability of the admission process as a whole (GT 1 Coherence, GT 6 Manageability). A quick summary to the process is found in the Mastermind Europe Manual and the Mastermind Europe Approach description.

In practice, Master's programmes wanting to use the Mastermind Europe toolkit may find it useful to invite one of the Mastermind Europe experts to assist in the process.

Whichever way you proceed, the Mastermind Europe team hopes that our toolkit and its components help Master's programmes in Europe and beyond to reflect on their admission and how to improve it to achieve a diverse and international classroom.

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Annex
Suggestions for further reading

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