

Changing the paradigm of Master's admission in Europe

General introduction

Master's programmes in Europe are becoming increasingly diverse in terms of their students' disciplinary and national backgrounds, the nature and function of the degree profiles, the intended cognitive and meta-cognitive learning outcomes, and the potential careers available to their graduates.

This diversification initiative requires more sophisticated approaches to the admission processes than simply assessing the legitimacy or accreditation of "external" degrees. Mastermind Europe is an action research project, developing and testing a toolkit to support a Master's admission process geared more towards assuring a diverse, international classroom. This paper was written for the conference "Competence 2016 Wageningen"¹; it addresses the overall approach of the project, the evidentiary baseline for all key assumptions (i.e. through a conducted survey), and two case studies of testing methods at different universities' Master's programmes.

1. Development and testing of competency-based admission

By Kees Kouwenaar²

This chapter follows the structure requested for Conference submissions: problem domain, practical & theoretical background, questions & purpose, development of the argument, case description, analysis, conclusions, and implications.

1. Problem domain

This chapter addresses the structural problems with the selection and admission practices in Master's programmes. The constellations of this particular section can be connected with organisational theory and applied educational studies, as well as organisational and social psychology.

2. Practical and theoretical background

A broad array of developments have precipitated the increasing diversity of students, contents, and purposes of Master's programmes in universities in Europe (Kouwenaar 2015 p 100-101): The most noteworthy of these developments are: the internationalisation of higher education, globalisation as a more general phenomenon, the Bologna and post-Bologna reforms, and increasing focus on meta-cognitive dimensions of curricula and learning outcomes.

The new attention towards diversity challenges the traditional approach to admission into Master's programmes in continental Europe – an approach that has been hitherto based on recognition. In this approach, admission is automatic and non-selective for students who hold a designated Bachelor's degree from the same university; and the admitting students outside applicants is largely based on judging the applicant's Bachelor's degree based on its capacity to compare with the designated degree. Proponents of the recognition approach have adapted to the changing world by seeking to harmonise both the educational contents as well as the assessment/recognition methods. The Lisbon Recognition Convention is a landmark document in this approach, later followed by the development of Fair and Automatic Recognition (Jenneke Lokhof, p 19), and the production of the European Recognition Manual (Nuffic). The Tuning and ECTS instruments are also moving in the

¹ <http://www.competence2016.nl/>

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same direction: to achieve clarity and harmonise Bachelor's degree learning outcomes to enable smoother recognition.

Outside continental Europe, selective admission and elaborate methods to assess every individual applicant's eligibility have become more pronounced. NAGAP³ – formerly known as National Association of Graduate Admission Professionals – has developed an extensive, foundational expertise on selective admission, playing a key role in producing “An Essential Guide to Graduate Admission” for the Council of Graduate Schools. Educational Testing Service (ETS) has produced robust research on various aspects of standardized testing in education (i.e. in the domain of general academic competencies and in the domain of subject specific knowledge). With respect to personal competencies, the Great Eight theory is well-established (see Bartram), and so too is the Big Six theory for underlying personal traits.

The Mastermind Europe project⁴ has composed a toolkit for continental European Master's programmes to re-evaluate the substance of their admission practices (and underlying assumptions) in view of the changing paradigm, urging them to adapt their admissions alongside the existing theories and practices of selective admissions. Experience in the project has shown that such adaptation must be locally-contextualised. “Graduate admission” covers a wide range of aspects: from hybrid to clearly distinct Master's ↔ PhD admission, pure research to practical orientation, to monodisciplinary or multi-/inter-/transdisciplinary programmes (see Posselt).

The complexity of the problem domain calls for an action research approach, urging the key experts in the Mastermind Europe project to collect and examine data from theory and practice, and, from there, develop tentative models and tools, using the Focus Group meetings to test and refine these tools in close interaction with the stakeholders.

3. Questions and purpose

The key questions addressed in the Mastermind Europe project (and in this paper) are:

- How is graduate education changing in response to Bologna and Globalisation?
- What does that mean for the current ways in which departments/faculties select and admit students into their Master's programmes?
- What new possibilities can academic coordinators imagine for their Master's programme admission and selection?

The key purpose of the project is to develop, test, and disseminate a toolkit for Master's programme coordinators so they can analyse their current admission practices in terms of substance, in response to external and internal developments. The key purpose of introducing the combined papers for the seminar is to describe, reflect on, and account for the ways in which the toolkit has been developed and how it is tested.

4. Development of the argument

The first step in developing such a toolkit for a more robust Master's admission procedure is to analyse and deconstruct of the key question in admission, which may be phrased as: “*Is the applicant admissible*” or alternatively as “*Does the applicant have what is necessary for admission with a fair chance of success*”? This question be bracketed into various categories of admission criteria: How can a distinction be made between a) what a student has to be good at, b) how good s/he has to be in it,

³ NAGAP: <http://www.nagap.org/>

⁴ Supported by the European Commission in the ERASMUS+ programme

and c) the admission procedure that is actually able to show whether individual applicant meets these conditions.

Analysing core elements of the admission question assures the next step of looking at relevant practical and research experience regarding these various core elements. Practical- and research-based knowledge can then be applied toward a conceptual framework for each core element. With these conceptual frameworks, we can discuss each core element in the context of the specific Master's programme, while still utilising a common terminology derived from a comparative analysis among a wide variety of Master's programmes.

The deconstruction of core elements and the conceptual framework/terminology still have limited currency in the real experience of European Master's programmes; there is limited practical experience with this approach in Europe, while the most relevant research has been done in a North American or British context. To make up for this lack of European experience, tools need to be tested: first in Focus Groups that bring together academic Master's coordinators from various fields and national contexts; and, later, through pilots at the level of individual Master's programmes.

Focus Groups and pilots can only cover a relatively small proportion of Master's programmes and academic Master's coordinators in Europe. Therefore, a survey among both academic Master's coordinators and the Focus Group sheds additional light on the core assumption: that traditional diploma-based admission retains a bias against the 'outside' applicants and is thus detrimental to the creation of a diverse international Master's classroom.

5. Case description

The Mastermind Europe project was developed and proposed in support of the Strategic Partnership in Higher Education, as part of the ERASMUS+ programme of the European Commission. The project – approved in August 2014 for the period between September 2014 and September 2017 – consists of the following components:

- Produce the 6 Guiding Tools that solidify an analytical and conceptual framework, as well as additional strategies to analyse and improve Master's admission at individual Master's programmes.
- Implement 8 Focus Group meetings in the four corners of Europe, each with a variety of academic Master's coordinators from various universities and disciplines.
- Conduct a survey among academic Master's coordinators and prospective students, enabling an analysis of existing and perceived obstacles towards admission 'outsiders' for a diverse international classroom, as well as a survey of legal and regulatory obstacles.
- Build a Pool of Experts to offer assistance and advice beyond the timespan of the subsidized project.

This paper describes, analyses, and reflects on the progress and achievements of the project in the first two years – until September 2017.

In brief:

- To date, the project has produced 7 Guiding Tools with the intention of producing one more. The existing Guiding Tools are available at the Mastermind Europe⁵ website: GT0 Paradigm Shift, GT1a Internally Coherent Admission Framework, 1b Externally Coherent Admission Framework, 2 Substance-Related Knowledge & Skills, 3 General Academic Competencies, 4 Personal Competencies & Traits, 5 Language requirements. A final Guiding Tool will be added on the existing software that accommodates a competency-assessment based admission.
- 6 out of 8 Focus Group meetings have been held, each with 12-20 participants from a variety of universities and disciplines: two meetings in Barcelona, one in Helsinki, Amsterdam, Milano,

⁵ www.mastermindeurope.eu

and Vilnius. Two more will be held (with a narrower bandwidth of academic disciplines) as a platform for more in-depth discussions.

- A report has been published on the two surveys among academic Master's coordinators and applying students. This report was analysed during another part of the Wageningen Competency seminar for which this paper was written.
- A first Experts Training Day has been held and a second one is being planned for January 2017.

In addition:

- A number of pilots have been planned for the last year of the project to test the Mastermind Europe Toolkit at the level of individual Master's programmes. To date (September 2016) more pilots have been planned for Master's programmes at Vilnius University, Vrije Universiteit Amsterdam, the University of Ljubljana, the Politecnico di Milana, the University of Graz and one or two universities in Barcelona.
- Because the project has fostered considerable attention, a significant number of additional presentations/discussions has taken place, thereby significantly broadening the feedback from the academic community. Seven such external events took place in 2015, and twelve in 2016.
- As the project has led to a substantial collection of literature (published and grey) on various aspects of Master's admission and related issues, a repository of literature has been created⁶.

6. Analysis

After 2 years (of the 3-year project), the toolkit's development has progressed significantly in virtue of a somewhat action research approach, despite the project not being set up as research, but rather as a practical development effort. A fruitful outcome has developed from having combined data collection and analysis (plus initial toolkit construction by experts) with the interactive testing in the Focus Groups (as well as other external events). Any clear idea of what the value of these instruments is will not appear during the 3-year project. The project is now developing post-project services at a cost-recovery fee, and the success (or failure) of these services will be what determines its value. If several Master's programmes procure or make use of these services, foundational data will be used to research their impact.

In conceptualizing and framing the main categories of admission criteria – based on practice and literature – the project has identified a common terminology to describe “learning incomes” in a manner applicable and comparable across national systems, disciplines, and multidisciplinary areas. This may be of specific value in the context of Tuning and CALOHEE.

7. Conclusions

The hypothesis is formulated as follows: several Master's programmes need to improve their admission process and criteria in response to the increasing diversity of students, and to accommodate the content and purpose of Master's programmes. This hypothesis was corroborated through interaction with a wide variety of academic Master's coordinators and administrators throughout Europe.

The core conceptual framework (based on practice and literature) for a competency-based Master's admission could hopefully be met with considerable interest and appreciation in the field. At this phase, it is still unclear whether the toolkit can enable of Master's programmes to improve their admission process and criteria. The pilots at individual Master's levels (during the last year of the

⁶ <http://mastermindeurope.eu/repository/>

project) and the post-project services will further demonstrate the toolkit's value. The common terminology can potentially add to the ongoing discourse on comparability in higher education.

8. Implications

If, indeed, significant numbers of Master's programmes use and profit from the toolkit, the project itself will affect the use of a competency-approach in European higher education. If the terminology gain's currency (in e.g. Tuning and CALOHEE), it will also significantly impact efforts to enhance the SMART comparability of content, purpose and learning outcomes in European higher education.

2. Evidence base of Master's admission: facts and perceptions on Master's admission for internal, domestic, and foreign Applicants

by Irina Ferencz

2.1 Purpose, context and problem statement

This chapter outlines a survey among academic Master's coordinators, as well as among applicants, about admission practices for and perceptions of English-taught Master's programmes in Europe.

This empirical research relies on the assumption that current admission practices at Master's level are not suitable for fostering a diverse, international classroom; and, specifically, this assumption includes the proviso that these processes are currently more restrictive towards the 'outsider' applicants, (i.e. applicants with a Bachelor's or equivalent degree from another institution) than the one who offers a Master's.

2.2 Research questions and design

As specified above, the aim of this research (carried out in the framework of the Mastermind Europe project) is to empirically test the project's main hypothesis: that current admission procedures at Master's level in Europe are generally more restrictive for external applicant students than they are for internal students, thus making admission more difficult for external students.

Concretely, evidence was produced to confirm or nullify three related sub-hypotheses, namely:

- that, because of prevailing admission processes and practices in Europe, the handling of files from external applicant students poses more challenges for admission officers than those from internal candidates, making fair evaluation of external students more cumbersome.
- that the challenges of 'making sense' of the external students' result in these students having a lower application success rate than internal candidates, and
- that, because the application process may be more cumbersome for external students, this experience also impacts the way external students' perceive the Master's level admission process, leading them to a more negative assessment of the admission process than their internal student counterparts

Testing these hypotheses was done via two online surveys in 2015. The three assumptions (or sub-hypotheses) listed above informed the design and structure of the two surveys; so, too, was a core distinction made between internal applicants on the one hand, and external ones on the other.

For purposes of this research, the category of external applicants was broken down into two sub-categories based on the nationalities within the applicants. The surveys were, therefore, framed based on an essential distinction between three types of external applicants:

- Internal external applicants – the Master's candidates who applied to the same institution from which they acquired their Bachelor's degree.
- Domestic external applicants – the Master's candidates who are applying to another institution in the same country as the institution from which they acquired their Bachelor's degree..
- Foreign external applicants – the Master's candidates holding a Bachelor's degree from abroad (i.e. granted by a higher education institution from another country).

2.3 Data collection and analysis

The core hypothesis was tested via two online surveys. The first survey targeted a cross-section of English-taught Master's programmes in Europe, specifically addressing the programme coordinators. It was sent to 1180 coordinators in total, and 363 full responses were received, yielding a response rate of 31%.

The second survey targeted a recent Master's applicants, acting as a counterbalance to the first survey. The survey reached a total of 7130 recipients via the StudyPortals database, of which 2242 responded (31% response rate; partial responses were not analysed in either of the surveys).

2.4 Results

Most Master's programmes (almost 70%) have selective admission, while less than a third of programmes operate on open admission. Therefore, two-thirds of Master's programmes are more likely to experience the biggest challenges related to the admission of a diverse pool of applicants; This challenge is especially pronounced since, from within this diverse candidate pool, admission officers had to not only accept "all candidates that qualify" (open admission); they had to find the "best candidates *amongst all* that qualify" (selective admission).

We also learned that Master's admissions in Europe are primarily based on "diploma recognition". Most programmes designate prior degree (94.7%) and the transcript of records (68.4%) as part of their top 3 admission criteria. These criteria also seem to have the most impact in the selection process (i.e. the requirements for which higher scores give applicants a more competitive advantage); most common being the GPA (in 42.5% of programmes), the prior degree (35.8%), and the transcript of records (33.5%).

At the same time, clearly the admission criteria most often used at the Master's level – the prior degree and the grades (the transcript of records) – are also the requirements that are the most problematic when assessing and selecting foreign applicants and, to a lesser extent, domestic applicants. Coordinators often struggle to make sense of external candidates' prior education (the Bachelor's or equivalent degree) and educational performance (grades), especially from those in the foreign applicants. Only 14.0% of coordinators claimed to encounter no challenges at all in processing the application files of foreign students.

The frequency with which coordinators referred to "compare" (and related notions) when discussing the admission processes and challenges seems to indicate that Master's degrees are strictly designed upon what the curriculum is at the preceding Bachelor's degree in the same institution. In other words, admission committees use the institution's own Bachelor's degree, curriculum, and student profile as baselines for assessing the external degrees and students from the external applicants.

As a result, almost two thirds of coordinators (63.8%) stated that it is "more difficult for students to be accepted to my programme if their prior qualification (Bachelor or equivalent) is from an institution abroad than it is for those whose degrees are awarded by my institution". In almost a third of programmes this difficulty is also encountered with applicants in the domestic. This shows that very often the admission committees are using the institution's own Bachelor's degree, curriculum, and student profile as baselines for assessing the fitness of external degrees and applicants (30.0%). At the same time, for almost half of the programmes, the internal applicants – those with a Bachelor's degree from the same institution – are automatically admitted to the Master's (46.2%). This is while, on average, for about half of the programmes, more than half of the Bachelor's graduates continued on to a Master's in the same institution, further proving that, in many institutions, the Master's is the natural continuation from the preceding Bachelor's.

Given these challenges, it is perhaps not surprising that the more external a candidate is, the lower his/her admission success rate. The average application success rate for the internal applicants is 72.0%; that rate decreases to 64.5% for domestic applicants; and reduces further to 53.5% for foreign applicants (with variation also by region).

At the same time, coordinators are quite positive in how they assess their application process (although they generally lack comparative information from similar programmes). Additionally, they maintain positive views towards national and institutional admission regulations, pointing to the fact that regulations don't necessarily hinder admission processes.

Furthermore, we do not find any striking differences in how internal, domestic, or foreign students rate the fairness, clarity, and ease of interaction with staff from the Master's programme during the admission process. All three categories of students have offered an overtly positive assessment of the admission processes; and we believe this is self-evident (and therefore that our last sub-hypothesis was unrealistic), as students tend to only reflect on their own experience and would rarely, if at all, have any comparative insights on how easy or difficult it is for other types of applicants.

At the same time each applicant group does advance quite a number of proposals for improving the admission procedures; and a large share of the applicants questions the use of grades as the best criterion for assessment. In general, however, applicants show great trust in the capacity of staff at the programme level to select the best candidates.

2.5 Conclusions and implications

These findings largely validate our hypothesis, confirming the fact that, because most English-taught Master's programme comply with the "diploma recognition" model, foreign applicants have lower chances of being admitted to Master's level programmes compared to those from internal and domestic applicants – although, for most programmes, foreigners represent the primary (if not the exclusive) target group. We thus, see, further scope and need for substantial changes in Master's level admission practices. Programme coordinators are urged to move their strategies towards more competency-based admission; we would argue this could ease the processing burden of coordinators and admission officers, making the selection process fairer for external applicants.

3. Developing tools to support Master's admission for a diverse classroom in the Lithuanian Higher Education system

This chapter reports on a case study: a pilot with a Master's in Marketing and Integrated Communication at Vilnius University, Lithuania. Key academics and administrators of this Master's programme tested the concepts and tools of the Mastermind Europe project in a one-day pilot for their usefulness in identifying ways to improve the admission system of the Master's programme.

Inez Meurs

3.1 Introduction - What did we plan and why

The Mastermind Europe project started from the assumption that increased diversity in the Master's classroom enhances the programmes' quality and relevance. The project set out to offer support to Master's coordinators and directors in considering possible changes and improvements to their admission process in order to better cater for graduate mobility within and towards Europe and to accommodate more diverse applicants: with more diverse academic knowledge and skills; with diverse national and cultural backgrounds; with diverse levels of maturity and work experience. At the start of the project the assumption was that the key issue would be to avoid rejection of suitable applicants, since Master's programmes have a lower dropout rate than Bachelor's.

The Mastermind Europe project planned to develop the tools and expertise Master's coordinators need to match increasingly diverse applicants with their degree programmes. Complementary to existing "recognition" instruments the project aimed to offer an alternative option for Master's programmes with a greater need for innovation, while adding value and quality to the existing recognition process.

In order to do so, the Mastermind Europe project planned to develop a package of five guiding tools, and a pool of experts to offer hands-on support in the implementation of the changes. This was planned as an ongoing action-learning process involving Master's programmes at the six universities that were consortium partners in the project, using surveys on the restrictiveness of Master's admission, on types of admission criteria at Master's level, on legal and regulatory obstacles to competence-based admission, and on perceptions concerning Master's admission.

The tool package planned consisted of an introductory note on the paradigms of recognition and competence-based selection in Master's admission, three guiding tools on areas of entrance requirements (subject-related knowledge and skills, general academic competence, and personal characteristics and traits), a guiding tool on assessment mechanisms and a guiding tool on automated Graduate Admission-Enrolment Management systems (software packages). Focus group discussions in several European regions were planned to ensure a transnational dimension to the development of the tool package by bringing in more diverse expertise and more creativity, and possibly support the willingness to change.

The Mastermind Europe project aimed to contribute to improved quality and relevance of European higher education by supporting a better match between increasing diversity in Master's study programmes and increasing diversity in Master's classrooms. The project set out to enhance transparency of qualifications and the importance of learning outcomes, by facilitating the validation of non-formal, informal, and experiential and adult learning, and in doing so support improvements to the professional quality of the selection and admission process.

3.2 Methodology - What did we develop and how

The immediate target group for the Mastermind Europe project consisted of Master's coordinators and directors responsible for English-taught Master's programmes. Apart from practical reasons to do so (related to the international character of the project team), English-taught programmes have a clearer focus on the international (diverse) student population.

The package of guiding tools had to assist Master's coordinators in considering the following questions for their own programme:

1. Which admission criteria are relevant?
2. Which level must students meet on that criterion?
3. How can we assess if they do?
4. How can we ensure transparency for applicants? And
5. How do we monitor predictive value?

At an early stage in the project it was decided that the tools ought to be produced according to – at least – the following criteria:

- In order to be really effective, the tools would have to be ready-to-use, practical, hands-on tools, rather than extensive full-fledged research papers;
- They would not set out to convince any readers to change their standing procedures, but rather provide information for those readers who had reasons to believe their admission process might be improved.

The Mastermind Europe project kicked off in the fall of 2014. Early 2015 the first very basic drafts of the introductory note and the three guiding tools on areas of entrance requirements were produced, the project's website was launched (www.mastermindeurope.eu) and the first focus group sessions were prepared.

The first two Focus group sessions took place in Barcelona (April 2015) and Helsinki (May 2015). The set criteria for the guiding tools were confirmed by the participants, as well as the suggested division between subject-related knowledge and skills, general academic competence and personal characteristics and traits. The need was expressed to add a guiding tool to the tool package focusing on language requirements. And one of the possibly more striking outcomes of these sessions was that the assumption of the key issue being to avoid rejection of suitable applicants, was wrong.

The key issue for Master's coordinators turned out to be strongly depending on their individual (programme's) situation. Master's coordinators respectively felt the need to attract more students, attract more qualifying students, attract less un-qualifying students, or attract a more diverse group of applicants. And some Master's coordinators aimed for a change in their admission process because the current process allowed for admitting students who later on dropped out, or who required too much support to be successful.

And most coordinators felt a strong need to limit the time needed for the admission process (either by themselves, by the administrative staff, and/or for the applying students).

The next version of the guiding tools included a tool on language requirements. Although this was the first area of entrance requirements added to the originally solely used requirement of recognition and validation of Bachelor's diplomas, the implementation was clearly at different stages of development in different parts of Europe, or, more specifically, different Master's programmes. The tool on language requirements offered an overview of available standardised tests, and an overview of possibly required levels relating those to the various available tests and to the Common European Framework of Reference.

Further development of the Guiding Tools

The introductory note was further developed, describing the Paradigm Shift from diploma recognition to the recognition of competences. The next version of the other three guiding tools was produced taking into account the remarks that had been made during the focus group sessions, and were developed using a single format for all three.

The guiding tool on subject-related knowledge and skills used a different angle than the other two. Where a focus on general academic competence and personal characteristics and traits was felt to be an addition to the admission criteria in most cases, subject-related knowledge and skills was considered to be more in line with the original approach of diploma recognition. This tool focused more on the process of limiting the required subject-related knowledge and skills, establishing the so-called 'core curriculum' that was essential for an applying student to successfully participate in the Master's programme. Interesting detail is that when testing this tool in focus group sessions the overall shared conclusion was that this core curriculum on subject-related knowledge and skills would entail around 30 ECTS, regardless of the academic field.

The guiding tool on general academic competence and potential described the underlying categories of analytical skills, verbal reasoning, quantitative reasoning, adding diagrammatic reasoning to this. It introduced already available standardised tests, but also other means of testing potential students, and provided examples of Master's programmes already using one or more of these tests in their admission process.

The guiding tool on personal characteristics and traits explained the dilemmas in using these elements as part of their admission process. The validity and reliability of the instruments that are available are highly debatable; legal issues may arise when applying them without diligence; there is the risk of bias against certain groups and also the risk of a fundamental conflict with the core vision and mission of the programme and the university. The guiding tool provided information on competence models and classifications for personal traits, and suggested in the consideration to use these elements as part of the admission process to not use them to select, but rather as a tool for advising (potential) students.

The new version of the guiding tools was discussed at project meetings, focus group sessions and sessions at international higher education conferences within and outside Europe. Following the focus group sessions in Amsterdam (September 2015) and Milan (November 2015) again an adapted format for the tools was developed. The (now) four tools on areas of entrance requirements were developed into tools describing a step-by-step approach for Master's coordinators wishing to implement changes in their admission process to increase diversity in their classroom. Including suggestions on whom to get involved, sets of questions to facilitate the process, and so-called 'quick-and-dirty' overviews.

A result of these sessions was the decision to use a slightly different approach to the originally planned guiding tool on assessment mechanisms. A framework was developed to support the coherence in adapted admission processes. In two parts, one on internal coherence (focusing on the relation between university and student) and one on external coherence (focusing on the relation between Master's programmes and the world outside the university).

Additional Instruments, pool of experts

These sessions also initiated the development of instruments (forms, questionnaires) to be used separately by Master's coordinators in different stages of adapting their admission process. These instruments were then framed by two different versions of an overall process description: a very practical hands-on Mastermind Manual, and a more detailed Mastermind Approach. The focus group sessions in Barcelona (April 2016) and Vilnius (May 2016) were used to test these instruments.

At the same time preparations began to set up a pool of experts who would be available for on-call support in adapting admission at individual Master's programme level, during the project but also after the project will have formally ended. Following the focus group session, an expert training session was organised in Barcelona (April 2016) for potential experts from the consortium partners. This session was set up in a train-the-trainers format, outcomes were a shared vision on intended target group approaches and a detailed programme for support sessions.

Following up on the feedback received during the focus group sessions, the instruments were further developed into materials to be used in pilot sessions. These pilot sessions are scheduled to

take place at all universities that are consortium partners in the project, the first one took place at Vilnius University in September 2016.

3.3 Implementation – Pilots at the level of individual Master’s programmes

Higher education in Lithuania

Before zooming in on the specificities of the pilot session at Vilnius University, some background information the Lithuanian higher education is provided here.

The Soviet occupation of Lithuania (1944 – 1990) obviously had an impact on higher education, which was moulded to Soviet standards until 1991. There were two types of higher education institutions: universities and specialised higher education institutions (e.g. for engineering, medicine, education, arts). Both types of higher education institutions had equal status in terms of academic standards, admission requirements, awarded qualifications. In most fields of study, the nominal duration of the programmes was 5 years, in 2002 equated to the level of a Master’s degree.

Nowadays, Lithuania is considered a small state (most commonly defined by population size, in Lithuania just over 3 million) with a mass higher education system (defined by Gross Enrolment Rate, in Lithuania above 50%). A range of coercive, normative and mimetic influences have pushed most small states with mass or universal higher education systems to embrace the concept of internationalisation to improve the quality of higher education, with the Bologna Declaration probably being the most powerful coercive pressure that has influenced higher education policy and practice at both national and institutional levels. One of the means by which the Lithuanian government stimulates internationalisation is the support for joint programmes, mostly funded through European structural funds.

Lithuanian higher education now distinguishes between universities (offering all three cycles from Bachelor up to Doctoral studies) and colleges (offering only Bachelor’s level). For admission to Master’s programmes, Bologna led to the following regulations in Lithuania:

Second-cycle (Master’s) studies admit persons:

- who have graduated from first-cycle university studies and fulfil the requirements set by the university;
- who have graduated from first-cycle studies and have finished additional courses and fulfil the requirements set by the university.

Additional courses are required when a student has graduated from college studies or when the chosen field of second-cycle (Master’s) study does not correspond to the major or minor study field of the first-cycle university studies. Exceptions can be made by the university’s senate for entrants with relevant work experience, the shortest duration of the required work experience being one year.

An ongoing reform of higher education and research in Lithuania since the year 2000 led to a new systematic restructuring of the nation’s higher education system, which is a market-oriented model of governance in higher education. Recent changes included making all state institutions public entities, allowing them greater freedom in decision-making and introduced a new funding mechanism which is tied to the student, so that funding goes where the best students choose to go.

Mastermind Europe Pilot

The pilot at Vilnius University was held with the Master’s in Marketing and Integrated Communication, a programme offered both in Lithuanian and in English, as a joint programme with the Università Parthenope in Naples, Italy. About half of the students in the English programme are international students, the other half are Lithuanians.

The pilot session took place with representatives of both academic staff and administrative staff; the academic staff being responsible for programme design and setting criteria for admission, the

administrative staff being responsible for the practical organisation and implementation of the admission process, for this and other Master's programmes. Also present was the Vice Dean of the Faculty of Economics, initiator of this pilot session.

The pilot aimed at establishing a shared view on the need to change the admission process; determine the key areas of change; specify these and create a detailed planning, including an overview of tasks and responsibilities, to implement the desired changes. The participants had received the document Mastermind Europe Approach beforehand, and the two experts involved had previously looked at obtained information on the Master's programme and its current admission requirements.

The biggest challenges that the current admission process created were mentioned by the Master's representatives to be:

1) the time-consuming nature of dealing with applications (more specific the comparison between subjects studied at different universities to assess the required subject-related knowledge and skills);

2) admission of candidates who would drop out of the programme prematurely (relating to unawareness and underestimation of personal characteristics and traits needed to complete the programme);

3) admission of candidates who required too much support in order to be successful in the programme (relating to a perceived lack of knowledge in specific subjects, but also of general academic potential to compensate for this);

4) not attracting enough applicants (related to – amongst other things – the programme's marketing and communication).

The language requirement set at a central university level turned out to be fairly unknown to the Master's representatives, but was obviously adequate in the sense that language skills of students were not posing any problem.

A number of specific steps were determined by the participants to improve the admission process with respect to the issues mentioned:

In the field of subject-related knowledge and skills: the pilot showed that there are 9 relevant subject areas for the Master's; the participants concluded that they will communicate these 9 subjects more clearly to potential Master's students.

In the field of general academic competence and potential: the pilot showed that there are two tell-tale subjects for general academic competence in the verbal and numerical domain: marketing and statistics. The pilot participants concluded that they will include an option in the admission process to schedule an interview with candidates who seem to lack in the fields of marketing and/or statistics. Not so much to test their subject knowledge in these fields, but to assess the general academic competence.

In the field of personal characteristics and traits: the pilot helped to identify the personal traits/competencies that were found most problematic: being a self-starting learner, being proactive, being autonomous. The pilot participants concluded that the programme will add a feature on its website to clearly point out to students that these personal characteristics and traits are important for successful in study and graduation.

The additional benefit of these steps acknowledged by the participants was the possibility to attract more applicants by providing a clearer image of the Master's programme in addition receiving a higher quality of applications (better-prepared students).

The pilot concluded with planned actions for the participants. The supporting experts will produce a report on the outcomes and will follow up on the planned actions.

3.4 Results - Where do we go from here

Several pilots are scheduled to take place at universities that are consortium partners in the next few months. These pilots will all test the feasibility of the Mastermind Europe approach on the level of individual Master's programmes.

In addition, two transnational focus group sessions will be arranged to test the instruments with a group of Master's coordinators working within the same academic field in different parts of Europe. A final conference before the Summer of 2017 will allow for further dissemination of the project's results.

In the meantime the consortium partners are setting up arrangements to continue their work approach after the project has formally ended – a sign that the consortium partners received sufficient feedback supporting their firm belief the Mastermind Europe approach effectively fills a gap.

4. Case study *Vrije Universiteit* Amsterdam

Adrian C.L. Verkleij

1. Practical and Theoretical Background

The Bachelor-Master structure in the Netherlands was introduced in 2002, just three years after the Bologna Declaration. Over the past 15 years Dutch universities have struggled with the assumed concept of selectivity in the transition from Bachelor's to Master's programmes. In this case study we report about the development at the *Vrije Universiteit* Amsterdam with implementing the two cycle system. Our observations are based on a long standing consultancy practice of the first author with the implementation of the Bachelor-Master structure and with our first experiences with the Mastermind Europe project.

2. Question and purposes

We focus on the step by step introduction of the concept of selective admission to Master's degree programmes. We end this case study by analysing the VU practice, including two initial cases with the Mastermind Europe approach resulting in some "lessons learned".

3. Case description

The basic principles of this two cycle structure were laid down in the 2002 version of the Law of higher education¹. For all academic disciplines a three year Bachelor's cycle has been introduced as a standard for research universities. No exceptions are allowed. This principle holds up until now.

The length of Master's courses depends from 1 year (60 ec) in the humanities and social sciences and two years in natural sciences and engineering sciences⁷. In the period of the introduction of the two cycle structure, Dutch research universities negotiated with the government about the accessibility of the newly formed Master's programmes. There were, and still are, great doubt whether a 3 years Bachelor's programme could be developed into a complete first degree with a value on its own on the labour market. There also was a funding issue. Fear existed, and still exists that it could become very attractive for a future government (and the Dutch tax-payer) to skip government funding for Master's programmes. Both arguments: doubt about the civil effect of a three years Bachelor's degree and fear of privatising Master's programmes lead to a basic right granted to all university Bachelor's graduates to start without further selection a Master's degree at the same university and in the same field. As a consequence there was no general need to develop selection processes in the transition from Bachelor's to Master's programmes.

In the past decades this situation of free access to Master's programmes gradually changed. Step by step Dutch universities, including the VU, moved towards a clear distinction between Bachelor's education and Master's education. This process is still going on.

⁷ An exception has been made for research Master's in the social sciences and the humanities. Such -selective- research Master's programmes needed approval by a Committee of the Royal Academy of Arts and Sciences based on the research quality of the supporting research groups. Selection processes for these research Master'ss were derived from the existing practices in the selection of PhD-candidates. Most of these research attracted only small numbers of (Dutch) students.

At first in 2002 the Bachelor-Master structure at Vrije Universiteit Amsterdam was organised simply by cutting the existing academic programmes in two. The first three years were named Bachelor's programmes, the last one or two years, which often included large research activities or internships, were called Master's programmes. By doing so, most Dutch universities complied to the law. As a consequence the boundaries between Bachelor's programmes and the successive Master's programmes remained rather fluid. It became common practice that students start Master's courses before they had obtained their Bachelor's degree. In this period selection was no policy issue. Admission remained a purely administrative process. As a consequence at Vrije Universiteit Amsterdam, the advantages of a two tier system were not fully explored and the prospected student mobility after Bachelor's graduation started very slowly, both between fields and between universities.

This practice gradually changed. It started with newly designed, often interdisciplinary Master's programmes, catering for students having different academic backgrounds started to use more specified entry requirements. Gradually existing programmes were more and more challenged to work on further articulation of their entry requirements. We mention the major reasons for this change:

1) The introduction of University Colleges first in Utrecht (1997) later followed by other universities. The Amsterdam University College was founded in 2008 by the University of Amsterdam and the Vrije Universiteit Amsterdam. In 2011 its first graduates having a Liberal Arts and Sciences Bachelor's degree, often had problems to get admission to traditional mono-disciplinary Master's degree programmes at VU and UvA as well as to other Dutch universities while at the same time they were welcomed by prestigious universities in the Anglo Saxon world. This led to intensive debates about entry requirements at the VUA, especially could the –supposed - lack of academic specialised knowledge and skills be compensated by demonstrated general academic competences and skills gained in a competitive academic environment.

2) Debates about student completion rates. Completion rates in Dutch universities were considered to be too low and time to degree was seen as too long. It was not uncommon for students to use 4 to 5 or even six years to complete their Bachelor's programme and then finish their Master's degree in a couple of months. In 2012-13ⁱⁱ, so almost 10 years after the introduction of the Bachelor-Master structure, by law a clear cut "*harde knip*" (strict cut) was introduced between the Bachelor's programme and the start of a successive Master's. Students were no longer allowed to start with Master's courses before they have obtained their Bachelor's degree. This change of law opened the opportunity to Dutch universities to introduce fixed starting dates for their Master's programmes. This step created a further impulse for organizing Master's degree programmes as autonomous entities and for moving away from the proceeding Bachelor's programmes. This is seen as a necessary prerequisite for selection of students at the transition from Bachelor's to Master's programmes. In the same period the practice was skipped in which each student could start at any moment with his Master's program. Most VU Master's programmes then introduced fixed starting dates at the 1st of September or the 1st of February. By doing so, students were stimulated to improve the planning of their study to finish in time for the start of a Master's program.

3) Skipping the right of students to start with at least one Master's programme without further selection (automatic admission to a "*doorstroom master*")ⁱⁱⁱ. The next step towards a full grown Bachelor-Master structure, again by law took place in 2014 when the right of graduate Bachelor's students to be admitted to a consecutive Master's programme was abolished by law. This was a final and major breakthrough towards the introduction of selectiveness in the Dutch Bachelor-Master structure.

The VU reacted in 2015 to this new opportunity by introducing the concept of a "portfolio of Master's programmes"^{iv}. Each faculty was challenged by the Board of the University to develop a set of Master's programmes on which some remained open to the general students (automatic

admission) and some become more selective. Some focussed on close relation to the labour market; others towards further careers in research or in a specific profession. The basic idea behind the portfolio was not to select the better student and leave the not-so-good students to other universities, but to “sort students out” according to their individual qualities and ambitions. This brought a wider perspective for the concept of selectiveness in Master’s programmes. Each Faculty was asked to formulate entrance requirements in terms of “knowledge and skills” for each (redesigned) Master’s programme from 2017 on^v.

However, this did not mean that selectiveness was widely embraced at the Vrije Universiteit. The main reason is that unless these changes in the system, student mobility in the Netherlands remained rather modest. On average around 20 percent of our home grown students leave our university after their Bachelor’s graduation to study at other universities in the Netherlands. This percentage is growing slowly by 1 or 2 percent per year. So, from the national perspective there is no urgent need to pay much attention to selection of the majority of Dutch students entering Master’s programmes at their own university or at other Dutch universities.

As a consequence the admission process for home grown students and other Dutch students remained mainly an administrative process organised by and in the hands of non-academics stationed in Faculty Offices.

3.1. Other sources of prospective student

Directly from the start of the Bachelor-Master structure in 2002 two other sources for student mobility arose. At the Vrije Universiteit we have seen that most graduate programmes at VU in the natural sciences; the humanities and social sciences cater only for 40-60 percent for home grown students. The other 60-40% come from universities of applied sciences in the Netherlands (ca 30%), from other Dutch Universities (10-15 percent) or from abroad 10-20%). More than average percentages of foreign students are found in the natural sciences, mathematics, computer sciences and economics; most students with a higher vocational background are to be found in the social sciences, health sciences and, again, in economics.

3.2. Changes in the admission process for students with a Bachelor’s degree from Dutch Universities of Applied Sciences

Our earliest experiences with selection processes therefore go back to students from universities of applied sciences and students from abroad. These are two different groups of students, each having their own problem and challenges. The common ground however is that selection was directed towards determining minimal standards for admission.

The admission of students from universities of applied sciences into academic research based Master’s at research universities was and still is a politically sensitive issue. In the Netherlands the binary system still holds. Research universities offer publicly funded Bachelor’s and Master’s programmes. Universities of applied sciences offer publicly funded Bachelor’s programmes only. The license to offer Master’s degrees is restricted towards privately funded Master’s programmes. According to the Bologna declaration 4-years Bachelor’s degrees from universities of applied sciences were seen as equivalent to 3-years Bachelor’s degrees from research universities. In practice they were not. Nevertheless universities of applied sciences plead for direct admission of their Bachelor’s graduates to research university’s Master’s degrees. If not they demand the right to offer government funded Master’s degrees on their own.

This continuous debate led to continuous political pressure on the conditions for research universities to offer “bridging” courses (schakelprogramma’s) for students from the higher professional

sector. Over time these bridging courses were reduced from 2 years, to one year (60 ECTS) and nowadays to 30 ECTS. So instead of carefully looking for deficiencies in student's knowledge and skills, it became a matter of setting financial and educational rules derived from the overall concept of politically demanded open access and non-selectivity of the higher education system in the Netherlands.

Within the VU the character of the debate about entree requirements and selection changed gradually as well. At first the intention was to bring students from the higher vocational sector up to the same level of knowledge and skills as the end terms of our own Bachelor's degrees. Which in some cases was assumed to take bridging courses of at least two years; later on one discovered, due to earlier mentioned political pressure, that one year could be sufficient as well. Later on the approach was changed. We moved away from describing formal prerequisites defined in length of courses and numbers of ECTS credits towards the question: "What knowledge and skills are really necessary to be successful in the Master's program? Surprisingly it came out that in most cases bridging courses of 30 ECTS credits were sufficient. Reduction of the set of entree requirements was sought in the necessary academic knowledge. Academic skills, including methodology and academic reasoning and English language proficiency became the major part of the 30 ECTS programmes.

In terms of selection it still was an hybrid situation. To be admissible to a Master's degree the pre Master's programme had to be completed successfully. So entree requirements for a Master's programme were still defined in formal terms (having completed a premaster programme successfully) instead of general entrée requirements for the Master's programme described in terms of essential knowledge and skills.

For this group of students the admission process for an academic Master's moved towards the admission process of the pre-master. In line with the non-selective character of the Master's programmes, also pre-master programmes did not have strictly defined selection criteria. Having a Bachelor's degree in a related field should be sufficient. However, having been confronted with large numbers of dropouts in the premaster programmes the central question became, how can we inform prospective individual students about the gap between their knowledge and skills gained in their specific Bachelor's programme and the requirements to be successful in the pre-master and afterwards in the Master's program.

The first experiences at the Vrije Universiteit with a kind of standardised testing originated from this admission process for the premaster. Again, in line with the still existing political opposition against selection the admission process to the Master's programme became a self-selection process. The Vrije Universiteit offered a locally developed standard set of academic tests (pre-master assessment) to test especially mathematics, academic reasoning, and English language skills. Participation in the test was obligatory, but students themselves could decide whether or not to go on with the Master's programme itself. Later on some Master's programmes defined minimal scores on these tests.

Since 2014 the Faculty of Economics replaced the VU premaster assessment by a GMAT test, and required minimum rates of this test, which brought the admission process more in line with international practices. Although some other faculties have shown interest in the experience of the Economic Faculty, no other faculty followed as yet. As for Dutch student the admission process for student from the higher professional sector remained an administrative process organised and carried out by specialised non-academics.

3.3. *International students*

The other group of students that became interested in the VU University's Master's programmes came from abroad. The VU welcomed foreign student for different reasons. They were seen as a source of income, they could fill empty places in – often the more specialized- Master's programmes and they could contribute to the international character and prestige of English taught Master's programmes. Due to "Bologna", EER students should be treated in the same way as Dutch student.

So at the start of the Bachelor-Master structure emphasis was laid on the equivalence of diplomas and on diploma recognition. Non-EER students were treated in the same way. Gradually other elements were added, like scores and marks, and language skills and it became common practice to ask for CV's, letters of recommendations, motivation letters, course descriptions, copies of papers, etc. This information was used to assess whether a student could be admitted or should be refused. It was, and often still is, an (inter)subjective process. Criteria and standards remained rather vague and not very specified.

The selection and admission of foreign students however lead to three major innovations in the admission policy of the Vrije Universiteit Amsterdam:

- 1) Admission based on general –administrative -rules as were common for Dutch academic students were replaced by assessing foreign students individually, based on the files they had produced, and sometimes completed by (Skype) interviews.
- 2) The involvement of academics in the admission process increased. Academic staff and Master's programme directors often showed direct interest and got intensively involved in the selection process. Often specialized selection committees were formed in which individual files of foreign students were discussed and assessed; administrative support came from specialized internationalization officers.
- 3) English language requirements were added as a criterion. For the first time no longer only academic knowledge and skills were assessed, but also a competencies. This competency was well defined in terms of testing mechanisms (TOEFL, IELTS, etcetera) and (minimum) standards. This lead to huge debates between programme directors, admission officers and the International Office about the necessity of setting standards at the university level or per program, and how to deal with exceptions.

3.4. *Integration*

Due to historic reasons admission processes at VU University Amsterdam differ by target group. The admission process of "home grown" student and other Dutch students from the same academic field has its roots in the automatic admission (doorstroommaster) of al Bachelor's graduates in a subsequent Master's program. Student from the higher vocational sector are automatically sent towards a bridging programme in which they can qualify for their Master's program. International students are quite intensively assessed based on the information they are required to present.

Already in 2013 the Board of the University has challenged the faculties and the Master's programme directors to work towards one uniform set of integral entry requirements for each Master's programme in its portfolio, which hold for all three groups of prospective students (home grown, international higher vocational sector). These requirements should be defined in terms of academic knowledge and skills^{vi}. The can no longer only be based on the end goals (eindtermen) of their own Bachelor's program, but should be based on "what is really needed to complete the specific Master's programme successfully within reasonable time". The next step could be to inform students how they can demonstrate that they are, to their opinion, eligible to that Master's and which information they have to provide. Here differentiation comes in. The information to be provided by "home grown" students could be less than the information to be provided by i.e. foreign students. Faculties are still "working on these challenge".

4. Analysis and implications

Over the past years we discussed the improvement of the admission processes during a number of gatherings ,workshops and one –to- one meetings with programme directors. There we explained the systematic approach by the Mastermind project. With two programme directors, who

are willing to experiment with the Mastermind tools we talked more intensively. See blocks. Both are good examples of the complexity of the discussion about entry requirements. Both programmes cater for a large variety of Bachelor's students. Both programme directors mentioned the importance of academic skills and personnel competences, including language skills for successful completion of the programme offered. Their remarks about competences closely relate to remarks made by directors in other, even specialised fields. For example: a director of a Master's programme in economics stated that 30 ECTS of relevant knowledge in the field of economics should do for an Master's in economics as long as ones academic skills are up to standard. However this may vary from field to field and depend for example on the demands from professional organisation.

In both pilots a direct link was made between the specialization within a Master's course and the admission criteria. In the Theology case an accepted practice exists in which a student is admitted to the programme assuming that this student is going for a predetermined specialization, while he or she should certainly fail when going for another specialisation. We also see that students are recommended to do some further study themselves, before starting with the official program, without making this a formal entrée condition. These and other examples we heard in the Vrije Universiteit Amsterdam and at other universities illustrate the flexibility needed in Master's admission. In the end it counts whether a student fulfils the end qualification of a program. The entrée requirement should may be from second importance.

VU University Amsterdam aims at "portfolio of Master's programmes". This ambition influences stresses the need of defining specific entry requirements per programme instead of general criteria per faculty or per university. At Vrije Universiteit Amsterdam capacity planning for Master's programmes is still in its infancy. Most programmes are looking for more and for better students: more for budgetary reasons, better for the sake of academic prestige. Both aims can easily conflict. Up until now most prospective students at the Vrije Universiteit does not have to compete for a place in a Master's program. As long as one fulfils the basic entry requirements, which may be high or low, specific or general, one is accepted. It is up to the student to qualify himself or herself.

5. Pilot 1: A broad interdisciplinary Master's programme in the Social Sciences (1 year, 60 ECTS)

This programme recruits and admits students from a broad range of Bachelor's programmes, obtained at research universities as well as at universities of applied science (HBO), which leads to an heterogeneous student body. Admission is handled in part by academic with longstanding (>25 years) of experience, and in part by the admission officers in the International Office responsible for this program.

Problems arise during the second semester of this one year program, during the preparation of the research based Master's thesis. Student should be able to reflect on their previous experience, should be able to link the newly gained knowledge with their past experience and combine both in their thesis research and in thesis writing in which the "narrative is an important aspect; not just quantitative data handling. English language proficiency is often problematic; criteria in the domains of subject related knowledge & skills, general academic competencies, as well as personal competencies and traits ("resilience" seems of particular importance) often remain implicit. The assessment if criteria are met, often depends on the personal insights and experience of the academics involved. The programme director clearly sees the need to improve the transparency of the programmes entry requirements and other core characteristics: students do not always find the programme to be what they had expected.

6. Pilot 2: A broadly accessible Master's programme in the field of religious studies (1 year, 60 ECTS)

The programme includes five specializations which have a common first semester followed by five specific specialisations. The Faculty decided to open up the programme for all students with a university Bachelor's degree from an accredited research university. A Bachelor's degree in theology or a related subject is no longer seen as necessary. It was recognized that personnel competences and traits are relevant to be successful both for the study programme as well as for professional careers, but difficult to be put in practice in a selection process in advance. Especially the ability to reflect on one's own behaviour and one's own religion in and after classes where sensitive religious or societal topics are discussed are seen as to be critical to complete the programme successfully.

The draft Mastermind Guidelines are seen as a source of inspiration. They were helpful to get an overall view of the scope of the restructuring process and to work on a more systematic way. The selection process focused on academic knowledge and skills (basis requirement a Bachelor's degree in Theology or an Theology related subject), and in some –implicit- way on general academic competences, and on language requirements (for foreign students only).

The application process includes interviews, face to face or by skype by a key professor of a course specialization. The main purpose of these interviews is to discuss the relevance of the student's (professional) experience, his motivation and his expectation for a (further) professional career and bringing these in line with the desired specialization. Recommendations are given about literature or courses to be completed before the start of the program. Then it is the student's responsibility to follow these recommendations. As long as a student fulfils the basic requirement of a Bachelor's degree the admission is - in formal terms - unconditional.

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ⁱⁱⁱ Wetsvoorstel Kwaliteit en Verscheidenheid Hoger Onderwijs, July 2014

^{iv} Adrian Verkleij and Gerhart van der Bunt: Towards a portfolio of master programmes (in Dutch). Presentation at VU_OPDO Workshop dd April 16, 2015

^v Onderwijsagenda Vrije Universiteit; a further elaboration of the VU Strategic Plan for 2015-2020

^{vi} Richtlijn masteronderwijs VU, College van Bestuur, herziene versie dd 11 november 2013