# Student Experience: A New Approach to Evaluating the Quality of Erasmus Mundus Joint Master Degrees through Survey Research

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**Abstract.** Student perspectives and quality assurance have been prominent policy topics in the European policy landscape. Student surveys conducted by tertiary education institutions, national agencies, and independent student organizations have systematically provided feedback to stakeholders about numerous aspects that are in need of improvement. Adding to the existing literature, the Course Quality Advisory Board (CQAB)

of the Erasmus Mundus Student and Alumni Association (EMA) launched the Course Quality Student Services (CQSS) survey in the fall of 2013. Unlike existing data collection mechanisms, the CQSS survey focuses on capturing the comparative experience that students undergoing an Erasmus Mundus Joint Master Degree (EMJMD) are well positioned to provide. This paper reports on the methodology and the research instrument behind the second wave of the CQSS survey, with data collected between the 1st of June and the 20th of July 2015. CQSS amassed 2131 responses from students in 167 programs and 128 countries. Seventy-eight programs managed to obtain 10 or more responses. Information produced with the CQSS survey can be used to improve student experiences and enhance the quality of programmes under the Erasmus Mundus umbrella. Lessons learned can also be used to enhance the provision of educational services in other internationally focused programs.

**Keywords:** student experience, survey research, course quality evaluation, EMJMD.

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Initiated in 2003 by the European Commission, Erasmus Mundus Master Courses (EMMC) offered students the unique learning opportunity of studying in multiple countries as part of their degrees, culminat-

Introduction

ing in a joint or dual master's certificate upon completion. Since its inception in 2004, Erasmus Mundus has provided more than 15,000 scholarships for students from every corner of the world to study at more than 200 different joint programs. The concept of EMMC continued as EMJMDs under the Erasmus+ educational programs of the European Commission. Students of EMJMDs continue to experience at least two different tertiary education institutions in two different national tertiary education systems. This *multi-institutional* experience, intrinsic to the EMJMDs, is precisely what positions its students in a pivotal position to provide meaningful comparative feedback concerning their participation in distinct higher education systems, and also to identify areas for improvement in higher education across Europe and beyond, particularly in the emerging educational ventures offered in association with multiple tertiary education institutions—an intensifying and growing phenomenon supported by increasing investment in the internationalization of education [Altbach, Knight, 2007].

In the increasingly borderless and global tertiary education land-scape, students no longer solely rely on their national institutions for enrolment. At the same time, several universities in Europe have been reshaping their strategies to increase the number of international students [European Migration Network, 2012]. There is a growing number of degrees offered in association that in turn lead to longer and more frequent mobility periods experienced by students. As a result the number of institutions attended during a single degree is also increasing. Additionally, educational environments entail student populations that are becoming more diverse in terms of ethnicity, culture, religion, previous educational experiences, etc. Therefore, as tertiary education institutions evolve to become more collaborative and international, there is an urgent need to develop sound quality assurance mechanisms that support the development of the internationalization trend without disregarding the quality of education being provided.

Even though studies about student feedback are abundant, past research lacks empirical studies that explore in depth the challenges faced by students attending several institutions as part of the same degree and as part of different tertiary education systems. This study therefore aims to examine the merits of the CQSS survey as a tool that was designed to offer individual EMJMD courses comprehensive student feedback, but also to offer additional stakeholders, including students, aggregated information about the experience of a mobile, academically focused student. This closes the feedback loop for students [Powney, Hall, 1998], and helps to establish "organisational structures and cultures to make their desired intentions a living reality" [Fielding, 2004. P. 202].

The following section of this paper provides a description of the context in which the CQSS survey emerged, which is followed by a literature background identifying other studies that assessed student feedback. The paper then describes the CQSS survey methodology,

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explaining how the survey was designed and administered, and introducing selected preliminary results. The paper concludes with an indepth discussion about the ways in which the CQSS survey data will and can be used.

CQAB is an independent advisory body that operates on a voluntary basis: its members have not and do not receive financial benefits for their CQAB-related activity. Membership in CQAB is assured through a competitive recruitment process among EMA members. Internally, CQAB has two main separate structures: 1) Management of em. feedback@em-a.eu, which assists students with pressing quality issues; 2) the Survey Team, which is tasked with conducting the CQSS survey. CQAB maintains its autonomy in research and data analysis tasks, but cooperates with external actors in the survey distribution process.

CQAB was created as a result of the pressing and constant concerns of EMA members about the quality of student experiences during Erasmus Mundus (EM) courses. Internally, CQAB has a variety of tools to capture student concerns and to interact with student representatives from various programmes, but the CQSS survey represents its most comprehensive and systematic initiative focused on quality assurance. The inception and design of CQSS is rooted in the complexity of the EMJMD student experience and driven by two distinct factors: the perceived systemic issues around quality across courses, and the general underrepresentation of students in evaluating the EMJMD programme.

Throughout the work of CQAB on quality assurance, it became apparent that students across different courses, fields, and countries faced similar concerns. At the same time, these concerns were different from those experienced by traditional students that work towards a master's degree within one institution and contingent on the multi-level, multi-institutional, and multi-geographic dimensions of EMJMDs. Both the first wave of the CQSS survey, which was launched in the fall of 2013, and the second wave convey these key differences.

The first key difference is that students made a clear separation between their overall EM course and the tertiary education institution they were studying at. Students would signal that they enjoyed their course experience, but felt disappointed or underserviced by one of the universities they attended, or they would praise one particular institution, while suggesting an overall level of dissatisfaction with their entire course. Different from traditional courses, the consortia within the EMJMD framework become a standing distinguishable pillar separate from all partner institutions. The complex *multi-level* student experience at established tertiary education institutions and under the umbrella of a consortium determined the choice of CQAB to design questions that separately evaluate the entire EMJMD course experi-

Context

ence associated with a consortium on the one hand, and the institutional experience on the other hand. Second, evaluations by students traditionally speak directly and exclusively about different aspects of one identifiable tertiary education institution. Again, the experience of EMJMD students is *multi-institutional*. As part of the CQSS survey, respondents evaluate each tertiary education institution they attended separately. Third, EMJMD students highlight issues of mobility, derived from their *multi-geographic* experience. These issues connect to the legal, logistical and cultural aspects of mobility and are unique to internationally mobile students.

According to recommendations and best practices of the European Commission, most EMJMD programmes should involve students in quality assurance mechanisms at the course level, and students from a specific course should be consulted during external evaluation visits [EACEA, 2015]. However, through the constant monitoring of student concerns, CQAB perceives a lack of involvement by EMJMD students in the process of evaluating the entire EMJMD experience. At the same time, there is rich potential in the involvement of EMJMD students to understand the challenges of higher education institutions across Europe and beyond. Their awareness illuminates the challenges of an increasingly globalized higher education experience, with growing numbers of internationally mobile students—a reality that will become evermore present in the higher education landscape.

## Literature review

As students started to be perceived as customers, the academic literature on student satisfaction boomed. Student perceptions are seen more and more as both valuable and valid [Hu, Kuh, 2003]. National governments, tertiary education institutions, and other stakeholders frequently use interviews, focus groups, and surveys to improve the quality of the student experience. The National Student Survey in the UK, the Australian Course Experience Questionnaire, the Canadian National Survey of Student Engagement, and the widespread media circulations of their results are examples of the prominence of information on student satisfaction. In addition, in 2015, the Government of Finland implemented a new funding scheme for universities that allocates 3% of funding in contingency with student feedback—an initiative that cogently illustrates the importance of student feedback as an indicator of educational quality (Ministry of Education and Culture, 2014). Student satisfaction data collection became specialized for institutions [Petruzzellis, D'Uggento, Romanazzi, 2006; Douglas, Douglas, Barnes, 2006], disciplines [Al Kuwaiti, Subbarayalu, 2015; Gibson, 2010; Narang, 2012], and capture the experience of various student subpopulations including by degree of dissatisfaction [Bennett, Kane, 2014] and subcomponents of the institutional experience such as laboratory conditions [Nikolic et al., 2015] and online learning [Venter, 2006]. Most data collection endeavours on student feedback and satisfaction focus on the various key factors identified by Gatfield [2000]: 1) academic instruction; 2) campus life; 3) recognition by government, institutional partners, and potential employers; 4) institution guidance.

Often student organizations collect survey information from their constituencies measuring several aspects of the student experience. Recently, the European Student Union conducted the QUEST survey a pan-European study focused on identifying the views of students on the quality of higher education [European Student Union, 2013]. The Erasmus Student Network has launched a survey to its members almost every year since 2005. Each year, the survey focus has changed. The most recent study targeted the international experiences of students and language learning [Erasmus Student Network, 2014]. Students seeking mobile degrees in EU funded programmes (including EMJMDs) are surveyed through the Erasmus Mundus Graduate Impact Survey [Erasmus Mundus, 2014]. The survey focuses on the post-graduation employability impacts for students. The Graduate Impact Survey, however, does not focus on the experiences students have during their course. To our knowledge, with the exception of the CQSS survey, to this date, no initiative captures the unique comparative experiences of mobile students in providing student feedback.

The CQSS survey also matches the recommendations given by the inter-governmental document Standards and Guidelines for Quality Assurance in the European Higher Education Area [Ministerial Conference in Yerevan, 2015] as it measures and advocates for the following: 1) student-centred learning, teaching, and assessment; 2) learning resources and student support; 3) information management; 4) public information; 5) on-going monitoring and periodic review of programmes.

The CQSS survey was created and designed by CQAB. SurveyMonkey was used as a tool to disseminate the CQSS survey and to collect responses. Participation in the survey was anonymous and voluntary. Participants did not receive any rewards to increase the number of responses. Branch structures in the survey allowed for a customized experience for respondents. This included the ability to properly identify their EMJMD course, the name of the tertiary education institutions attended, and the order of attendance between various institutions. Pertinent and distinct questions were displayed for first year students, second year students, and alumni of EMJMD programs. Subpopulations, such as internship takers, students that relocated with their family, students with self-identified disabilities, and students that reported cases of sexual harassment were asked additional questions.

In contrast to surveys for students enrolled in only one institution, the CQSS survey has a dynamic structure, which includes multiple sections that are presented repeatedly in order to compare the same dimensions across all institutions attended (e.g. library services for

Methodology

first university attended, for second university attended, and third university attended). On the other hand, other sections of the survey target the experience of students within the EMJMD course as a whole (e.g. impact on employability). Traditional student surveys would only capture the second aspect.

# Survey design

In order to achieve the goals of CQAB (i.e., improve quality of EMJMDs and the quality of the student experience), the CQSS survey was designed to assess all major topics that influence the quality of education provided by those programs. A special focus is placed on areas that are particularly relevant for multi-level, multi-institutional, and multi-geographic educational programmes, including aspects regarding mobility, diploma and certification, etc. CQSS included both academic (e.g. curricula, assessment) and non-academic elements (e.g. accommodation, visa issues).

In line with other surveys that evaluate student experience (National Student Survey, UK; National Survey of Student Engagement, US and Canada), this survey included the traditional areas of analysis deemed as indispensable to examine student experience: *Support services* (e.g., international office, support on financial and administrative issues); *Pedagogical issues* (e.g., curricula, thesis supervision, grading criteria, student feedback mechanisms, internships) and *Satisfaction*. In addition, the survey was structured such that each university from the consortium could be evaluated separately (facilitating inter-institutional comparisons). On the other hand, some sections of the survey were especially created to evaluate the EMJMD as a whole (i.e. considering the collective experience at all partner universities in the consortium).

All the items that were included in the final version of survey resulted from a thorough three-step validation strategy:

- Analysis by CQAB members that scrutinized all questions (language, purpose) in order to reach consensus on the validity and relevance of each question.
- 2. After refinement of the previous draft version of the CQSS survey, a pilot version of the questionnaire was introduced on SurveyMonkey. The pilot was sent to EMJMD programme representatives (student or alumni of course that represent the course at the level of EMA) and all CQAB members. Fifty-one respondents completed the pilot version of the CQSS survey. This step proved useful in finding mistakes, incoherencies, and areas that required improvement and clarification. Furthermore, it allowed for a fair prediction of the time needed to complete the survey. The CQSS survey pilot included an additional field where respondents were asked to report any problems or suggestions.
- 3. The feedback gathered from the pilot exercise was used to improve and reach the final version of the CQSS survey.

This process allowed CQAB to create a survey that was comprehensive across multiple variations and levels of English-language ability, thus increasing the reliability of incoming data. Further analysis of the reliability of constructs will be presented in the Results section of this paper.

Questionnaire items were formulated through Likert-scale queries ("Very satisfied", "Somewhat satisfied", "Somewhat unsatisfied", "Very unsatisfied") and open-ended questions. On questions where students were asked about their agreement on certain issues, a similar scale was used: "Agree", "Somewhat agree", "Somewhat disagree", "Disagree". There is no definitive strategy to create a Likert-scale and researchers suggest that Likert-scale use is contingent on the goals of the study [Matell, Jacoby, 1971]. In this particular study, CQAB decided to use a 4-point Likert-scale with no neutral option, but instead included the possibility for respondents to select the option N/A ("Not Applicable"). This step contributed to a more reliable data collection procedure, since it reduced the probability of occurring missing data, at the same time as making the deferral of answers possible. The CQSS survey aims to provide a comparability assessment tool for EMJMDs. To this end, it is imperative to gain indicative assessments from as many students, pertaining to as many courses as possible.

In compensation, open questions were used to examine issues that were perceived as more complex or nuanced. Throughout the survey, the possibility to provide open answers was instrumentally inserted in order to complement the responses obtained through quantitative items (more focused on trends and measurement) with more in-depth information (to explore a respondent's reasons and rationales). This approach gave respondents the space to more comprehensively voice their concerns and recommendations.

The survey included six thematic areas, as illustrated in Table 1. Respondents were instructed to first answer survey items considering their EMJMD experience as a whole, and then in relation to the experience respondents had at each university. Some questions only targeted certain respondent subgroups (e.g. alumni, second year students). Appendix 1 covers all the items included in each thematic area.

Structure of the survey

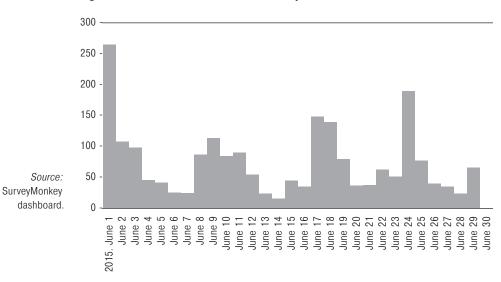
The CQSS survey was distributed through multiple channels to facilitate a higher response rate, but EMJMD course coordinators and staff represent the main partners of CQAB in the dissemination process. Additionally, members of EMA received reminders via the internal communication channels of the association. The European Commission representatives aided the distribution process by encouraging courses to forward the CQSS survey to students. Additional distribution channels, such as directly targeting programme Facebook pages, were used for courses with a low response rate.

Survey dissemination

Table 1. Thematic areas of the CQSS survey

Thematic areas	Scope and level of evaluation Target		
Background information		All respondents	
Supporting Services	EMJMDs as a whole; each tertiary education institution attended	All respondents	
Teaching, Learning and Supervision	Each tertiary education institution attended	All respondents	
Assessment and feedback	EMJMDs as a whole; each tertiary education institution attended	All respondents	
Internship/Fieldwork, Personal development, Career	EMJMDs as a whole	2nd year students and alumni	
Satisfaction	EMJMDs as a whole; each tertiary education institution attended	All respondents	
EMA	Survey relevance, role of EMA	All respondents	

Figure 1. Distribution of collected responses



In order to motivate EMJMD programmes to distribute the survey, CQAB published the response rates per course each week during the data collection process. Each update was used as an opportunity to remind course administrators about the CQSS survey and to forward it to their students. The results of the success of each survey distribution strategies are evident from Figure 1.

Table 2. **Distribution of responses for** the 2015 CQSS survey by subcontinent

Sub-continent	Number of respondents	% of total number
Australasia	13	0.61
Caribbean	12	0.56
Central America	113	5.30
Central Asia	18	0.84
East Asia	317	14.88
Europe	852	39.98
North Africa	41	1.93
North America	103	4.84
South America	157	7.37
South Asia	272	12.76
South Africa	96	4.50
West Africa	48	2.25
West Asia	67	3.15
Other	22	1.03

The second wave of the CQSS survey was open for 7 weeks from the 1st of June 2015 until the 20th of July 2015. During this period, 2139 complete survey responses were collected. Eight survey responses were excluded from further analysis as the same respondent submitted them twice. For these cases, only the second completed response was kept for future analysis.

Students from 167 courses from 128 countries completed the survey (Table 2). There were 977 females (46%) and 1135 males (54%) among the survey respondents. Scholarships for their EM studies were awarded to 1674 (79%) respondents, and 457 (21%) respondents were not recipients of scholarships. Seventy-eight courses had 10 or more respondents. R software was used for the data analysis presented in this paper (R Core Team, 2015).

Students that started their Erasmus Mundus program between 2012–2014 accounted for 1600, or 75%, of responses. The survey response rate for these academic years for scholarship holders is on average 24% (Table 3). The response rate is calculated only for scholarship recipients, as no official accurate data on the total EMJMD population is available. Similar response rates are reported for other online surveys with a comparable structure that offer no material incen-

Results

Start year	Other	2010	2011	2012	2013	2014
Total number of students enrolled and awarded with EU scholarship <sup>a</sup>	-	2141	1917	1923	1966	1379
CQSS responses in 2015 (% of total number of students) <sup>b</sup>	284	94 (4.39)	111 (5.79)	226 (11.75)	535 (27.21)	466 (33.79)

Table 3. Response rate of CQSS survey

tives for participants [Nulty, 2008]. This means that the CQSS survey managed to achieve good coverage and is likely free of distribution and completion biases. The response rates for the most recent years have been similar with the final year's CQSS survey, but there is a noticeable drop for students who enrolled in earlier years. For example, the 2013 CQSS survey wave managed to gather 471 responses from students enrolled in 2010, yet this edition of the survey managed to obtain only 112 responses from the 2010 cohort. Such a drop in responses is not surprising since current students are expected to be more willing to allocate time to complete a lengthy survey about their programme.

Issues of validity are especially important in online surveys since researchers have very little control over the quality and accuracy of responses they receive [Wright, 2005]. There are several indirect measures that help ensure that responses collected through the CQSS survey are completed by actual former and current EMJMD students in an accurate manner. In order to allow the completion of the survey during multiple sessions, SurveyMonkey requests respondents to create and input a unique identifier upon the beginning of the survey. This step helps ensure that a single individual filled each response. Altogether, 2124 respondents entered unique identifying codes, with only 7 respondents copying the identifier that is given as an example in SurveyMonkey. A further analysis of demographic characteristics, such as age, sex, and nationality, showed that, indeed, these completed responses might be attributed to unique respondents. Similar analysis of IP-addresses recorded by SurveyMonkey confirmed the above conclusions. There were 1981 unique IP-addresses. An investigation of demographic information and response inputs for the 150 duplicate IP's showed that all originated from different individuals.

An additional way to gauge whether respondents devoted sufficient attention to questions asked in a survey is to analyse the length of time spent on completing the survey. The pilot testing of the CQSS survey showed that 20–25 minutes are required to mindfully complete the survey. The median time to complete the CQSS survey is 26.7

<sup>&</sup>lt;sup>a</sup> European Commission, 2013.

<sup>&</sup>lt;sup>b</sup> Numbers indicate only students with scholarships.

minutes, illustrating that respondents spent considerable and sufficient time for its completion.

Cronbach's alpha is a commonly used measure to evaluate the reliability of underlying constructs and scales [Cronbach, 1951]. In the case of multiple constructs studies, it is recommended to calculate the Cronbach alpha coefficient for each of those constructs [Tavakol, Dennick, 2011]. Similarly, in this case the CQSS survey questions were divided into sets of indicators measuring satisfaction for each type and dimension of service. There is no definitive scale indicating acceptable levels of alpha. However, Tavakol & Dennick suggest that an acceptable range starts with a minimum of 0.70 and a maximum of 0.90. Considering the CQSS survey, there were 32 distinct sets of questions and indicators, with only two scoring below 0.80. This result is promising, but should be treated with caution. As Sijtsma showed, Cronbach's alpha may be a poor indicator of the reliability of underlying constructs or even the internal consistency of concepts [Sijtsma, 2009]. Moreover, 20 sets of questions received alphas higher than 0.90. This result might be an indicator for the redundancy of some questions in their respective sets. For the purposes of this study, alpha is used in conjunction with other measures to ensure the validity of data. A more rigorous analysis of validity and reliability on underlying or latent constructs is not a focus of this paper and will be performed in forthcoming studies.

Finally, 1909 respondents (91%) indicated that they are either "somewhat satisfied" or "satisfied" with the content of the CQSS survey, with only 181 (9%) of respondents indicating otherwise. Such an overwhelming positive reaction, combined with all other measures, is at least indicative of the fact that students were satisfied with the content of the CQSS survey.

CQSS follows a rich tradition of measuring student satisfaction and elements of the student experience, as illustrated in the literature review. At the same time, the CQSS survey brings novel and unique contributions. First, the CQSS survey is the only tool available to transversely measure student satisfaction of and across EMJMDs. Second, the survey covers the distinct multi-level, multi-institutional and multi-geographic experience of EMJMD students.

While to this date there is no evidence on the actual impact of the CQSS survey, results of the survey can be used in multiple and complementary ways. First, individual survey reports are being generated for and distributed to EMJMD courses with 10 or more responses. Feedback provided by university consortia after receiving the reports corresponding to the first CQSS survey edition allowed CQAB to improve the clarity and relevance of course reports. At the request of courses, current reports include the distribution of means for all EMJMD courses with 10 or more responses. For each indicator,

**Discussion** 

Table 4. Example of a comparative table

	Mean for all Quartile distribution of means for all EMJN courses				EMJMD			
Course X	n	Mean n Cours X		0%	25%	50%	75%	100%
Course content	23	3.13	3.19	2.54	3.03	3.23	3.38	3.70
Enrolling in classes	23	3.85	3.42	2.57	3.25	3.44	3.62	3.92
Evaluation methods	23	2.74	3.03	2.23	2.88	3.06	3.22	3.76
Information about fieldwork	23	3.00	2.95	2.00	2.80	3.00	3.18	3.57
Standards of behaviour	23	3.55	3.44	2.77	3.28	3.42	3.63	3.90
Timetable	23	3.22	3.13	1.75	2.99	3.20	3.33	3.80

the course mean is provided, as is the aggregated mean and the distribution of means for all EMJMD course. By providing the mean distribution, stakeholders are better able to evaluate their position when compared to other programmes under the Erasmus Mundus umbrella. Table 4 provides an example and contains information about the number of respondents from the course (n), the average score that the specific dimension received (Mean), the mean on the same dimension for all respondents (i. e., 2131 respondents), and a quartile distribution of results for all EMJMD courses with more than 10 responses. A calculation of means is based on the aforementioned Likert-scale. Each option corresponds to a numeric value in the following way:

- "Very unsatisfied" or "Disagree"= 1.
- "Unsatisfied" or "Somewhat disagree"= 2.
- "Satisfied" or "Somewhat agree" = 3.
- "Very unsatisfied" or "Agree" = 4.

Therefore, the average score for any given dimension in Table 4 ranges from a minimum of 1 to a maximum of 4, with 4 being a perfect score for each dimension. Using the Likert-scale in such a way is another debatable topic in psychometrics and is usually not recommended [Boone, Boone, 2012]. At the same time, using means to construct tables such as the one below provides stakeholders with an interesting outlook and increases the impact of the data. Other reputable instruments, such as the U-Multirank use a similar approach.

In the table below, for the dimension "Course content" we see that the mean of Course X is 3.13. This places Course X in between the 25%\_50% quartile among the mean scores for the dimension "Course content" of all other courses with 10 or more responses. That means that at least half of other courses scored higher on the di-

mension "Course Content" than Course X and that at least 25% of courses scored lower. It should be noted that the average score is "noisy", meaning that the real value of the mean of the course might be slightly different from the ones reported in the table. Therefore, it makes sense to look at this table as an exercise of placing courses in one of the corresponding four categories: (1) 0%–25%; (2) 25%–50%; (3) 50%–75%; and, (4) 75%–100%. These indicate the relative position of a given course among other EMJMD courses. CQAB decided to use a table representation over graphic representation (e.g., boxplot) in order to provide a facile way to compare a course with its counterparts and to balance the data representation in a report that does not overwhelm stakeholders with excessive visual information.

Policy actors can also use data from the CQSS survey in order to detect areas that might need improvement on a broader policy level.

The CQSS survey results may also serve as an accountability tool for EMJMDs. Since most programmes receive funding for a relatively short period of time (5 years), it is in the best interest of courses to provide the highest quality education as early in the programme as possible. By being able to highlight the success of courses using the CQSS survey results, their sustainability beyond EMJMD funding can potentially increase.

Prospective students can also use results of the CQSS survey in order to evaluate their programmes of interest. This is not a ranking *per se* since CQAB does not provide stakeholders with tables of courses that are "best" or "worst" on any given dimension. But information from CQSS can at least provide students with a deeper understanding of what kind of domains are strongest and weakest in their chosen programme. Making this information available to students has the main purpose of allowing them to prepare in advance for challenges they might face throughout their EMJMD experience. In order to facilitate access to CQSS survey results, CQAB has decided to make the results freely available online.

Finally, reports can be used internally by each EMJMD as they provide information on each individual university in the consortia. This information may be used to steer evidenced-based change and improvement across aspects of any given university. This means that efforts of administrators and course coordinators may be targeted towards key challenges, thus facilitating an effective and efficient decision-making process. To illustrate, Figure 2 and Figure 3 provide information on two universities in the same consortia on the same set of indicators. Figures were created using a "likert" package in R [Bryer, Speerschneider, 2014].

The discrepancy in dimensions between the two figures is due to the fact that not all students replied to every question in the survey. In the case of Figure 3, there were less than 10 respondents on the dimensions "Buddy or tutor system", "Student organizations", and "Health services".

Figure 2. Results on selected indicators for one university in a consortium (%)

(Rate the helpfulness of the following units of people at the second university)

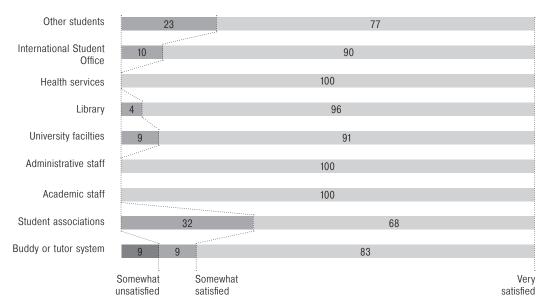
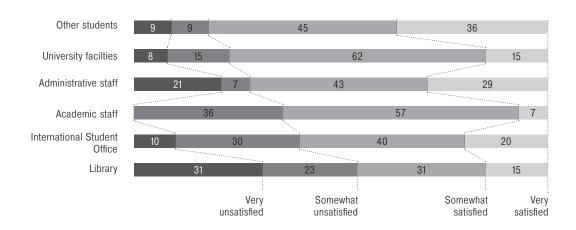


Figure 3. Results on selected indicators for a second university in a consortium (%)

(Rate the helpfulness of the following units of people at the third university)



Nevertheless, it should be noted, that each EMJMD is unique in multiple significant ways (e. g. student and consortia characteristics). Therefore, it is rather difficult to capture this uniqueness through standardized surveys. For that reason, CQSS results should be used with caution and with cross-validation from other channels (e. g., financial reports, interviews, and focus-groups). Besides the quantitative approach, open questions included in the survey (e. g. "How could the orientation and integration experience have been improved?") allowed for the collection of numerous systematic recommendations and suggestions from students. This information can provide instrumental support for EMJMD coordinators to change and enhance their courses.

In lieu of these considerations, the CQSS survey is deliberately not used to produce ranking tables for courses. This choice is a relatively uncommon one, since ratings became a go-to tool for comparing universities. Yet, the philosophy of CQAB is to respect the complexity and peculiarities of any given programme and to defer decision-making to the stakeholders of courses. CQAB desires to concentrate on gathering and providing descriptive data that summarizes and highlights the major observed trends among EMJMD courses, both positive and negative.

Exploring the perceptions of student experiences is an important step in understanding the overall quality of a course. This is especially important for EMJMD students, as they have less time than traditional masters students to accommodate to any given country and any given institution. The CQSS survey provides stakeholders with a tool to address this issue, while at the same time capturing the comparative experience of EMJMD students. Through the CQSS survey, policy makers may become aware of the transversal issues across all EMJMD courses. Programme representatives will in turn receive feedback about all institutions in their consortia and have access to comparative information about all other EMJMD courses. Ultimately, the CQSS survey was designed and implemented by CQAB to aid in closing the feedback loop between students and other stakeholders of EMJMD courses. The lack of a clear feedback loop is often associated with an "apathy cycle" [Maxwell Stuart, 2015] or alienation [Mann, 2001], detrimental to everyone involved in a course. As such, the CQSS survey is an important tool to increase the involvement of students in the life of EMJMD courses.

# Conclusion

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Appendix 1
List of indicators
measured through
the CQSS survey

Background information: demographic data, professional status, EMJMD, and universities attended (including dates and if respondents had received scholarship).

Supporting Services: for family relocation; to accommodate disabilities; with financial, health, or inappropriate conduct/sexual harassment issues; information received before the beginning of EMJMD (e.g., enrolling in classes, standards of behavior, timetable, course content); orientation activities at the beginning of EMJMD; support from academic and administrative staff, student unions, tutors, specific unities (international office, library, etc.). Additionally, some items only addressed each university: accommodation, visa, banking, language courses, health insurance, living expenses, local transportation, and extracurricular activities.

Teaching, Learning, and Supervision: workload modules, skills development, use of innovative technology in lectures, use of student-centered learning strategies, academic support, and advice from lecturers (particularly support from thesis supervisors).

Assessment and feedback: module assessment, evaluation and grading criteria, feedback on evaluation, student feedback mechanisms, course coordinator availability and helpfulness, and information about certificates and transcripts.

Internship/Fieldwork, Personal development, Career: respondents were asked to evaluate their experience during their Internship/Fieldwork (e.g. duration, supervision, logistic support, and value for career). Furthermore, they rated the contribution of their EMJMD for their personal development (preparation for career/job market, soft skills, and counselling).

Satisfaction: academic satisfaction, overall EMJMD satisfaction. *EMA*: knowledge about EMA (including the role of EMA course representatives), suitability/quality of the CQSS.