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Report of the Chairman of the 2018 European Baccalaureate Examining Board

Board of Governors of the European Schools

Meeting on 4, 5, 6 and 7 December 2018 – OSGES, Brussels

Opinion of the Board of Inspectors

In the absence of presentation of the report, no opinion could be expressed on it.

Opinion of the Joint Teaching Committee

The JTC expressed a favourable opinion on the report and praised Ms Eisenschmidt for her excellent work and valuable remarks and recommendations. The report would be sent forward to the Board of Governors for approval.

Proposal to the Board of Governors

The Board of Governors is invited to scrutinize the present document and to approve it.



REPORT of the Chairman of the 2018 European Baccalaureate Examining Board

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Introduction

In this report, I share an insight into the European Baccalaureate system (EB) that I gained from the observation of exams in European Schools (ES) during the Pre- Baccalaureate (Pre-Bac) examinations in January 2018 and Baccalaureate examinations (Bac) in June 2018. In addition to observations I also analysed examination regulations and different working documents to improve my understanding of the system. The report continues the discussion started in the reports of previous baccalaureate chairmen (2016, 2017) and relies on the analysis of *Follow-up of recent reports of the chairmen of the European Baccalaureate Examining Board* (2008-2016). Comparative external reports (Cambridge 2009 and London 2015) were also helpful to understand the changes in the European Baccalaureate system during the last decade. I tried to avoid discussing aspects of EB system that have already been examined and rather, to find aspects which have not received so much attention. In other words, I tried to look at the same phenomena from different perspective, while keeping in mind the trends in the development of ES.

In order to gain as comprehensive overview of the ES system as possible, I used various information sources. During the visits to EB schools, I carried out interviews with different stakeholders: teachers of the secondary 7 (S7), coordinators of the baccalaureate exams, deputy directors and directors of the schools (see list of activities in Annex). I appreciate the time school representatives devoted to our meetings and their openness when sharing their knowledge, experience and viewpoints.

Extra meetings with directors of schools were organised in February 2018. I also had a meeting with the representative of Interparents, external evaluators of EB and secondary inspectors of the external evaluation in June.

Participation in the meetings of the Board of Inspectors (Secondary) and the Joint Teaching Committee gave me an overview of the current strategic issues and participants' views concerning these issues.

In addition to meetings and interviews, I analysed examination regulations and, examination papers of 2018; different working documents, such as *Harmonisation in the European*

Baccalaureate Cycle, Quality Assurance of the 2018 European Baccalaureate written and oral examination procedure, Draft conclusions of the meeting of the Working Group 'Observatory of the European Baccalaureate Regulations' (January 2018), Arrangements for Implementing the Regulations for the European Baccalaureate (Applicable for the Year 2018 European Baccalaureate session), Memorandum on organisation of the 2018 European Baccalaureate session; several reports by the Office of the Secretary-General of the European Schools etc.

I received a lot of help to understand the EB system from Mrs Carmelina Dispenza, Unit Assistant of the Baccalaureate Unit, as well as from Secondary Inspector Mrs Maie Kitsing, Vice-Chairman of EB, and my companion during the visits to ES.

My detailed working plan is presented in Annex.

1. Focus of the report

The priorities of Estonian Presidency in the academic year 2017/2018 were in line with the main aims of ES. The central focus was on continuous improvement of teaching and learning, which means new perspectives content-wise, i.e. in curriculum development, but also new approaches to learning and teaching. Integration of key competences into curriculum was one of the priorities that emerged in the debates over curriculum development. This means giving more responsibility to the students for raising problems, designing cross-disciplinary solutions to the problems raised (project-based and problem-based learning), managing teamwork and using digital tools and resources. Developing digital competences across all subjects enriches learning process and also allows us to personalise learning process. Every learner can design their own learning path and create their own learning materials by using blogs, videos, 3D-4D objects and other digital tools. Here, the European Schools could be in the front line of innovation in all school systems in Europe.

Digitalisation is important not only in the learning process, but also in school management, if we consider the possibilities provided by digital examination, e-diaries, platforms to communicate with parents etc. Among other advantages, adopting new technology for handling examination documents and arranging meetings online reduces travel expenses (including travel time) to Brussels.

Inspired by these goals, the focus of my chairmanship was to analyse future developments and how long-term strategic planning is used to improve European Baccalaureate by integrating key competences into curriculum and increasing the overall effectiveness of the system.

This report is designed following the principle of harmonisation of the EB system. Harmonisation of the European Baccalaureate starts with the harmonisation of the curriculum and syllabuses, followed by equally high quality in teaching and learning process, and ending with harmonised examination and constant quality assurance and improvement (see Figure 1).

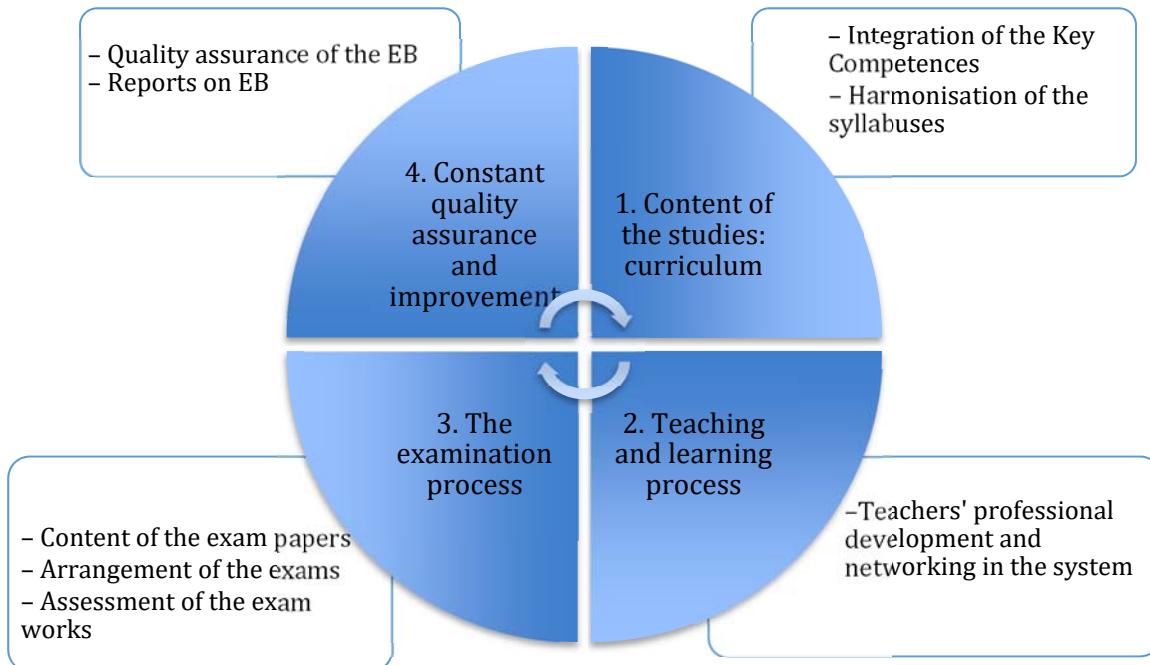


Figure 1. Main elements for analysing the European Baccalaureate.

The main questions this report seeks to answer are the following:

1. What are the aims of curriculum development and how are these aims aligned with developments in the system?
2. How is teachers' professional development supported?
3. How does the content of the examination tasks support the development of students' key competences and higher order thinking skills based on Bloom's taxonomy of cognitive demand?
4. How to improve the effectiveness of the examination system?
5. How is quality assurance of the EB arranged?

2. Development of curriculum and syllabuses

The document *Harmonisation in the European Baccalaureate Cycle* declares that syllabuses are a basic element of harmonisation in the European Baccalaureate cycle.

Harmonised planning will facilitate the harmonisation of assessment, evaluation and examinations in each school in the European Baccalaureate cycle and therefore, teachers of

the same subject in a particular school shall agree on a common agenda for year S7 and ideally also for year S6.

The curriculum development is a continuous process and needs to be very well planned and communicated to reach every teacher in the ES system. During the academic year 2017/2018 several themes were discussed in relation to the curriculum development in European schools (e.g. new language policy, changes in marking system, integration of key competences into the syllabuses etc.). Probably the biggest challenge in curriculum development will be the integration of key competences into learning process – even though this issue has been discussed more than ten years (first key competences were introduced by the European Parliament and the Council 2006), there is still very little progress in this area. The report *External Evaluation of a Proposal for the Reorganisation of Secondary Studies in the European School System* (2015, also known as the London report) stated that the curricula at subject level need to be fundamentally revised in order to support the acquisition of the eight competences. *Recommendation on Key Competences for Lifelong Learning 2018* by European Commission also showed the need to renew the curricula in every national system. ES could be in the front line in this development.

Working group *Pedagogical Reform Task Force* is preparing to include the key competences in the curriculum, a step which was also discussed at the meeting of the Board of Inspectors (Secondary) in June 2018. However, most of the work is going to be done in the coming years. Integrating key competences into curriculum and teaching-learning process means also changes in assessment and final examination. In addition to academic competences, teachers should have knowledge and tools to evaluate students' key competences throughout the study process. Key competences should also be evaluated as part of Pre-Bac and Bac examinations.

Focusing on key competences in the learning process means a radical change in the curriculum and teaching process and thus, needs to be planned very systematically and led strategically. One of the recent examples of change in ES was implementing the new marking scale. There were several activities to support the change, e.g. issuing guidelines with concrete examples, training teachers, circulating materials on the new marking scale on SharePoint, involving parents, sending out a newsletter, posting on the website etc. However,

during the implementation process, there was still a lack of training and schools had to find out themselves how to harmonise the approach to the new marking scale so that everybody in the school understands it in the same way. Not all teachers (nationalities) have the same background, so for some teachers, it was area of confusion, whereas others understood it much better. Profound changes have to be prepared carefully: this includes creating a long-term strategy, mapping the current competences of the teachers, moving step-by-step, creating conditions for learning and disseminating good practices throughout the system.

3. Teaching and learning process

I agree with the EB chairman 2017, who emphasised the need to view teaching practice together with the EB. Without observing and analysing the learning process, we get a partial overview of the whole system. During my visits to schools, I collected information about teachers' possibilities for professional development at school and their networking opportunities in the EB system. These two aspects are also important from the perspective of the harmonisation of teaching, as prof W. Schöderle mentioned: learning together and from each other is particularly important in European Schools where teaching staff from different school systems and teachers who have received very different training work together.

Reading development plans of some schools showed me that enhancing teachers' teaching and learning is one of the priorities, as well as sharing best practices to harmonise teaching, learning and assessment across all sections (cf Brussels IV). Harmonisation starts from the collaboration, joint planning and teaching. Still, even in school canteens, the teachers sit together by language sections, and visiting each other's lessons is very rare.

In the coming years, ES face several serious challenges where success depends directly on teachers' competences and willingness to change their practices. Replacing Pre-Bac with subject-integrative project work requires strong collaboration at school level as well as between the schools to harmonise the new format of the Pre-Bac with the existing system. Thus, the initial and most important task is to strengthen the collaboration in and between

the schools. After that, the new format needs to be worked out and this should be done by teachers themselves.

There are plans to integrate some subjects (cf London report 2015) and close collaboration between the teachers is one of the preconditions for such change. Additionally, the European Commission has recommended that for successful integration of key competences into the curriculum, teachers should be supported in developing competence-oriented approaches in their specific contexts by staff exchanges, peer learning, networking, and by allowing for flexibility and autonomy in organising learning, collaboration and communities of practice. To promote competence-oriented approaches in teaching and learning, the teaching staff should be assisted in introducing innovative practices, taking part in research and making appropriate use of new technologies.

According to recent research, the main responsibility for teachers' professional development lies on schools. It has been found that teachers' professional development is most effective in *professional learning communities* (Hargreaves & Fullan, 2012), during co-teaching (Friend & Cook, 2010) and while working together in design teams (Binkhorst et al, 2015). Teachers' collaboration also has an impact on students learning (Vangrieken et al, 2015). The autonomy of each single school should be supported so that the schools would take more responsibility for improving learning process.

More resources should be found for schools to arrange in-service training for teachers, internal networking, and external networking with teachers from other schools. Member states are in different phases of integrating key competences into learning process and the teachers, who come from different school systems, have diverse competences regarding the key competences. More networking would help to solve this issue. In addition, to integrate key competences, the variety of learning and teaching approaches should be expanded and approaches such as cross-discipline learning, experiential learning, work-based learning, inquiry-based learning, project-based learning and games-based learning should be used to support the development of key competences. Teachers should receive support in focusing on key competences and creating new innovative practices. For harmonising the integration of the key competences into the ES system, the harmonisation of the teachers' competences should take place first order. The first step in this direction could be mapping teachers'

knowledge on key competences. Conducting a survey among teachers would be one way to do it.

However, effective teaching and innovation at schools start from planning. Instead of arranging teachers' in-service training centrally, the Office of the Secretary-General of the European Schools should develop and support schools' strategic planning and self-evaluation.

4. Examination process

In this section, I will discuss the content of examination papers, arrangement of examinations and assessment of examination papers.

4.1 Content of examination papers

Compiling examination papers

As the compilation of Pre-Bac examination has already been thoroughly discussed, I focus here on the Baccalaureate written and oral examination.

The **written examination papers** are the responsibility of secondary cycle inspectors. First, the teachers propose possible examination tasks and then the inspectors responsible for relevant subjects arrange the experts to design examination papers. Inspectors themselves see their role as that of a project manager who organises the work of subject-matter experts, although their role in this process is fairly influential. In February 2018, the positions of inspectors responsible for Math and Physics were still unfilled and the quick solution was found in Board of Inspectors (Secondary).

Although the preparation process of written examinations was very carefully prepared and professionally organised by the Baccalaureate Unit, I still see some challenges in compilation process. As mentioned by several EB chairmen (including the Chairman of 2017), the inspectors have such a wide range of responsibilities and that errors can slip into examination questions. Also inspectors' work time allocated for duties in ES varies among country a lot (from fulltime to limited time only for board meetings). There are at least three possibilities to improve this situation. The first option is to outsource the preparation of

examination papers, including translation, from professional experts. The second option is to appoint extra staff in Bac Unit to have more expertise for the preparation of examination papers. The third option is to put trust in teachers from schools to prepare the examination papers, which also increases teachers' collaboration and networking, but at the same time, can cause problems with quality assurance (the same teachers who teach the subject compile the examination paper).

I see the first option as having the most potential. This of course depends on resources — thus, all costs of the examination should be analysed and optimized in some aspects to improve the quality of examination papers.

Oral examination tasks are prepared by the teachers at schools. The exam questions will be sent to the relevant inspectors by the 15th March of the year of the examination session. Some inspectors and teachers have expressed the opinion that oral exams repeat written exams, an issue that has been also mentioned in the reports of several chairmen. After having observed several oral exams, I found it valuable how students expressed their ideas and presented argumentations for example in history. However, the oral exams are still very resource-consuming part of the examination. As students choose mainly languages as oral exams, then one option is that the exams in non-linguistic subjects would be written only, whereas compulsory language exams would be both written and oral. However, there are also different arguments for having only oral exams in social sciences. This shows again that making changes even in one element of the examination system requires clear concept and long-term planning.

I understand very well the doubts concerning oral practice (Mock orals) after written and before oral exams. I assume it is very human that teachers could use identical or nearly identical questions to those that will be in the examinations. Oral practice should be natural part of the learning process and in the light of the changes in Pre-Bac (e.g. replacing it with project work), it seems reasonable to continue with oral exams only in languages. To summarise, in the discussion about different formats and stages in EB examination, all changes should be considered together as all of these elements are tightly connected. ES should have long-term strategy to modernise the examination system and a clear roadmap how these changes will be made.

External audit

External auditing of draft examination papers is a new initiative which serves as an optional layer of quality assurance. The Board of Inspectors will decide which subjects will be submitted to the auditing. The external auditing of the examination papers will be performed by independent experts with experience in assessment, elaboration of secondary school leaving examinations or entrance examinations to higher education institutions. This process is referred to as "University Observation". After the external auditing, the inspectors (and the main experts) will still have the possibility to adjust the draft papers.

This year, the external audit of examination papers was conducted by the experts from Estonian universities and the subjects audited were Biology, Chemistry, Geography, Math and Physics.

The auditors confirmed that the examination papers covered the knowledge to be tested and that the papers are in line with the syllabus. Several positive comments were made, particularly about the formulation of the questions and the use of technology for two papers. The advice given was that more everyday life situations should be incorporated into the 5-period Math examination paper (part B).

In the *Timeline for the elaboration of European Baccalaureate written examination papers* ("Memorandum on organization of the 2018 European Baccalaureate Session"), an obvious problem appears. Final drafts of the examination papers are ready by 1 February and during the month of February, national experts will revise the different language versions. After that, the papers will be submitted to University Observation. It was highlighted by the Board of Inspectors that feedback comes too late, the deadline should be at early February at the latest to allow the working group on examinations to act on the recommendations.

Unfortunately, the external audit is not able to cover translations. Thus, there was no certainty that linguistic subtleties in the examination papers, which had been produced in 16 languages, had been given across properly.

Content of examination papers in the light of Bloom's taxonomy and key competences

The content of examination papers is based on curriculum, but at the same time, the examination tasks also reflect teaching methodology as in the first round, the teachers propose examination tasks. Characteristics of EB, Pre-Bac and S6 examinations are fixed in order to harmonise the baccalaureate cycle. The characteristics of the examinations agreed are: originality, confidentiality, comprehensiveness, fairness, validity, reliability, absence of choice, clarity and simplicity of the wording of the questions/tasks, and balance. Balance means that the examination should contain the questions that require low-order thinking and questions that require high-order thinking, as described by Bloom's taxonomy (see Figure 2).

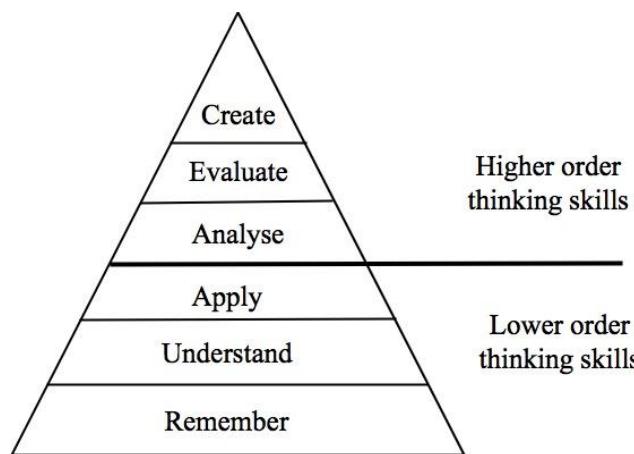


Figure 2. Revised version of Bloom's Taxonomy of cognitive demand. Adapted from Krathwohl, 2002.

The level of difficulty of examination questions and cognitive operations that the students need to perform when answering the questions demonstrate how the tasks support the development of some elements of the key competences such as critical thinking, problem-solving, creativity etc. I analysed four examination papers in accordance to Bloom's taxonomy (see Table 1). Additionally, I was interested in how *Revised European Reference Framework of Key Competences (2018)*¹ or elements of these competences are presented in examination papers.

¹ Literacy competence; languages competence; science, technological, engineering and mathematical competence; digital competence; personal, social and learning competence; civic competence; entrepreneurship competence; cultural awareness and expression competence.

Table 1. *Analysis of four written examination papers according to Bloom's taxonomy and occurrence of key competences.*

	History 4P	English L2	Geography	Economy
Bloom's levels of cognitive demand	Part 1: understand, analyse, evaluate, create Part 2: understand, analyse, evaluate	Part 1 (reading comprehension): understand, analyse Part 2 (written production): analyse, evaluate, create Part 3 (understanding literature): analyse, evaluate, create	Q1: understand, analyse, evaluate Q2: apply, analyse, evaluate, create Q3: analyse, evaluate, create Q4: remember, understand, analyse, evaluate	Q1: understand, analyse, evaluate Q2: understand, analyse, evaluate, create Q3: understand, analyse, evaluate, create
Key competences	literacy, civic competence	language and literacy, civic competences, cultural awareness and expression competence	literacy competence, science and mathematical competence, civic competence, cultural awareness and expression competence	literacy competence, science and mathematical competence, entrepreneurship competence, civic competence, cultural awareness and expression competence

The results of the analysis surprised me positively, as all analysed examination papers included tasks which demand students' high-order thinking skills. There were only few tasks on the lowest level of the cognitive demand (remembering). This provides a solid basis to move towards integrating key competences into the curriculum.

From the perspective of key competences, the results of the analysis were also promising. In the analysed papers, the competences that the examination tasks most frequently helped to develop were civic competence, cultural awareness and expression competence. One of the fundamental principles of ES is to develop cultural awareness and expression competence — studying in international community helps to understand different cultures and acquire the knowledge of local, national, European and global cultures and expressions, including their languages, heritage and traditions. It means that ES follows its principles and this is also reflected in examination papers.

Math and science examination papers were not analysed using this framework, as they had been evaluated by external audit. The external expert found that more problems of everyday life should be used to develop the skills in applying mathematical principles in everyday context at home and work.

Although the examination itself supports the development of personal and learning competences (effectively managing time and information, remaining resilient and managing one's own learning, coping with uncertainty and complexity), this area still needs to be improved. Personal, social and learning competences need to be integrated into curriculum more systematically. Students should learn to know their own learning strategies, organise their own learning and analyse their development needs. Personal, social and learning competence should be translated into frameworks of learning outcomes and suitable tools for diagnosis and assessment should be developed.

More effort should be put into integrating entrepreneurship competence into learning process, including examination. It means creating ways how to develop creativity, critical thinking and problem solving, taking initiative and perseverance, and the ability to work collaboratively to plan and manage projects of cultural, social or commercial value.

The development of digital competence was not supported by the current examination works, although information and data literacy, online communication and collaboration, and digital content creation (including programming) are important competences in our everyday life.

During the preparation of examination papers, special attention should be paid to the linguistic adequacy of translations and conceptual compliance of different language versions of the same examination paper, an issue that has been already highlighted in several reports. The problem of linguistic adequacy of examination tasks has emerged from discussions with external examiners as well as some concerns from the students and Interparents. As mentioned by the chairman of 2017, the only possible – although expensive – solution to the problem is to have the translations double-checked by bilingual experts.

Examination papers' layout varies and the problems with the layout were also mentioned by the external audit. One option is to create a stylebook for examination papers to have similar style and layout for the papers in all subjects. However, it was mentioned in one of the regulations that some templates for examination papers (though probably in different layouts) can already be found in a secure e-platform. Thus, another option is to harmonise and develop these electronic templates further into templates that all compilers of examination papers should use.

4.2 Arrangement of examinations

The basis for the examinations is provided in the *European Baccalaureate Memorandum*, a framework document gathering all organisational aspects of the European Baccalaureate session. Examination process is described in this document in a very detailed manner. Below, I will analyse some of the crucial aspects of examination.

Pre-Bac examination

The challenges with Pre-Bac and its arrangement were already analysed in many reports. Recent discussion in Joint Teaching Committee (in February 2018 offered three choices to address these challenges (see 2018-01-D-47-et-1): 1) Pre-Bac will not be part of final mark; 2) Pre-Bac will be already in S6; and 3) Pre-Bac will be replaced with project which also allows the evaluators to assess key competences. Project work was found as a must by both the Board of Inspectors (Secondary) and of the Joint Teaching Committee.

It was a detailed discussion to reach a shared understanding and I recommend to start preparations for replacing Pre-Bac with project work as soon as possible together with integrating key competences into teaching and learning process. Piloting project-like Pre-Bac examination should start as soon as possible in one or two schools. First, the understandings of teachers about project work should be mapped to get an overview of the context of implementation. Support measures and careful monitoring should be planned.

Meanwhile (for the coming 2-3 years), a way to harmonize the Pre-Bac throughout the EB system should be found. The EB Unit drew attention to this issue in order to start reflection on the actual purpose of uploading the Pre-Bac examinations on the EB SharePoint. The EB

Unit underlined that the current deadline to upload the examinations did not allow the inspectors and experts to perform in-depth analysis of the examinations, only to react afterwards. In order to leave the inspectors sufficient time to read the Pre-Bac examinations before the exams, the deadline for uploading the examinations should be earlier, but at the same time, the workload of the teachers related to examinations in S5 and S6 should also be taken into consideration.

Digitalisation of examination process

There have been first steps towards an electronic examination system, but the students still write their exams on paper and development of the students' digital competences is not equally supported. Taking into account that digitalisation and developing digital competences is one of the aims for the future, plans should be made to replace paper-based examination system with an electronic one. There are several challenges and risks to consider when moving towards digital examination and therefore, very careful preparation and long-term planning is required. If it is decided to start using electronic examinations, a detailed project plan and roadmap should be made. A realistic time span for replacing the present system with electronic exams is four to five years. I advise ES to learn from EU member states who already have electronic exams, plan for teachers' professional training and then, conduct small scale piloting by schools and subjects. First, in every school, changes in learning process should be made as the students need to be familiar with electronic testing and online assignments already during their studies. Second, technological environment should be improved: internet connection, computers and software solutions should be prepared and tested. Financial resources are needed to build up a reliable IT system. During the transition period, teachers' professional development programmes should be arranged and monitoring mechanisms implemented to find the weaknesses on the spot.

4.3 Assessment of examination papers

Assessment is one of the most challenging aspects in the harmonisation of EB. Previous EB Chairmen repeatedly stated that the EB assessment was too internal (e.g. continuous assessment, Pre-Baccalaureate and EB 1st corrections). Although there are external

evaluators as second correctors, the marking grids and instructions for evaluators to guarantee equal treatment of students, the teacher of the students taking the exam still has a strong influence on the assessment.

One solution that has been discussed is that teachers would not correct their pupils' EB papers, but papers of other students in ES as the online correction system Viatique allows for random allocation of examination papers. This idea is also supported by Interparents, who also find that written examinations should be independent from the students' own teachers. If the teachers should correct the papers of pupils who they do not teach, they would actually become their "external correctors". They would thus be invited to the correction centres where they could exchange views about their practices as the current external examiners do. This could be considered as a very useful in-service training which also supports networking among schools and harmonisation of the learning process.

Working Group 'Observatory of the European Baccalaureate Regulations' prepared the survey in January 2018 to find out teachers' opinions about the random allocation of the examination papers, i.e. that the teachers will be correcting the papers of other than their own class/school (from other classes and/or schools, whether European Schools or European Accredited Schools). The survey also included questions about which advantages/benefits and disadvantages/difficulties teachers see in correcting the papers of pupils who they do not teach. I would recommend use this survey to analyse teachers' readiness and willingness to change correction system.

During my visits to schools, I discussed this possibility with deputy directors, directors and teachers. The idea was welcomed as the online correction system allows the organisers to share examination papers and as the system is easy to manage, then it is realistic to change the assessment already next year.

The online correction system Viatique has been in use only two years, but there are virtually no problems anymore. The system is highly valued by teachers and heads. 1240 people have used the platform and more than 10 000 papers have been scanned this year. All correctors (teachers and external) complete the correction of each individual paper with a commentary justifying the mark awarded (i.e. explaining how the mark awarded is in compliance with the

marking criteria, whether specifically referring to a question and/or to the examination paper as a whole). While observing how the correction system functions, I noticed that only few comments were added by both the teachers and the external evaluators. Feedback and comments are valuable for both – students and teachers, therefore evaluators should pay more attention to commenting on the papers and formulating the marks.

It is questionable whether external correctors should come together physically for marking when all papers are available online. The explanation from external correctors was that they use face-to-face meeting to harmonise marking. This actually shows that marking schemes are not clear enough, or that the external correctors are simply used to come together for marking and it is not easy to break the habit. I would recommend to continue with online correction and use technological possibilities for discussions among experts (e.g. Skype, Zoom etc). This helps to save resources for other even more important activities, such as teachers' professional development, digitalisation of the examinations, translation of the examination papers etc.

I would conclude this part by saying that during the examination process, schools could have more autonomy and freedom to arrange the examination process. Autonomy starts from small details; for example, during the examination, managerial issues should be solved at school level (situations with students arriving late, cases of cheating, extra time etc.). This gives the signal that we trust the school leaders and respect their competence. Autonomy empowers the school leaders to take initiative and in turn, empower the teachers in their schools.

5. Quality assurance of EB

European Schools is a consortium and it is governed jointly by all member states. This creates the situation where reporting is very important. Quality assurance of the EB is regulated by the document *Quality Assurance of the 2018 European Baccalaureate written and oral examination- procedure*. This document states that the presence of inspectors during the written and oral examinations is a central aspect of the quality assurance framework of EB. Inspectors also perform a series of assessment and evaluation tasks.

Inspectors lead curriculum development in a chosen area. The appointment of the inspectors responsible for each subject does not guarantee equal quality of curriculum development, examination preparation etc. For example, during the spring semester there were many changes in inspectors' team and none of the inspectors volunteered to lead some subject areas (e.g. Physics). Inspectors have influential role in ES system (their duties include for example whole school inspection), but there are no measures for ensuring that the member states appoint the inspectors while keeping in mind the needs of ES i.e to have subject-matter experts from all areas. Hence, the situation is somewhat problematic from the quality assurance perspective: inspectors' activities have strong influence, but their expertise and the quality of their work is not monitored, harmonised and their professional development is not supported.

Secondly, external experts also have a strong impact on EB. They are in charge of the elaboration of written examination papers under the guidance and coordination of the inspectors responsible for each subject. There is a pool of experts, but in many cases, external experts are recommended by national inspectors. Experts produce a detailed report in order to give feedback to the teachers concerning the quality and suitability of their proposals. At the end of the examination session, the external experts write a report containing comments on the written and oral questions in the subjects they have examined.

There are several reports compiled for the quality assurance of EB:

- Individual reports of the inspectors and an annual joint report
- External experts' reports
- Director's minutes of the European Baccalaureate session in his/her school
- Annual report on European Baccalaureate compiled by Baccalaureate Unit
- Annual Report of the Chairman of the Complaints Board Of The European Schools
- Report of the Chairman of the European Baccalaureate Examining Board
- Annual Report Of The Secretary-General Of The European Schools
- ICT reports, internal audits, financial reports etc.

For an outsider, such abundance of reports may seem confusing and not really necessary. Large number of reports could also lead to a situation where the proposed conclusions and recommendations are not taken seriously. This means that valuable recommendations or

findings will be lost in the deluge of information. I would recommend analyse which reports are really needed and used to improve the system. Sometimes less is more!

Concerning the reports, there is another issue that catches the eye. With the exception of director's minutes, all the reports are compiled centrally, from outside the schools. In addition, the reports tend to describe the situation without actually analysing the situation or proposing solutions. This kind of situation reduces the responsibility of schools for analysing their examination results and planning for improvements. In order to decrease the inspectors' workload and give more responsibility to the schools, implementing a self-analysis of Bac examinations for the schools should be considered. This should be followed by Annual report on European Baccalaureate compiled by Baccalaureate Unit. Reports of the schools would include comparative analysis with previous year's results, benchmarking with other schools, and a plan for improvements based on the analysis. Also, what might be considered is compiling thematic reports which systematically analyse cause and effect relationships, for example, in case of poor results or fail grades in some subjects.

6. Reflection on chairman duties

I would like to reflect on the role of the chairman, a task which is also part of quality assurance system of ES, and what should be modified based on the changes in the ES system. *Guidelines for the member states holding the chairmanship of the European Baccalaureate* describe the duties and powers of the Chairman of the European Baccalaureate Examining Board. Table 2 gives an overview of these duties and my comments on their relevance.

Table 2. Duties of the Chairman of the European Baccalaureate Examining Board

Duties of the Chairman of the European Baccalaureate Examining Board	Reflection and recommendations
Opens the examination session	This is not relevant, as there is no official opening or any procedures to fulfill.
Ensures quality control of the organisation of the European Baccalaureate. To that end, a structure of the organisation of the European Baccalaureate	At the moment it is not relevant, the chairmanship is taken quite formally, chairman is not involved in any

is put in place annually on a proposal from the Secretary-General, prepared by the European Baccalaureate Unit (<i>European Baccalaureate Memorandum</i>) and approved by the Board of Inspectors (Secondary).	preparation or discussions concerning <i>European Baccalaureate Memorandum</i> , exam papers etc. The main role is the observation of the Pre-Bac and Bac exams.
May at any moment during the session have access to documents relating to the candidates.	This is a right, not a duty. I did not have any need to ask these documents.
Convenes the Examining Board at his/her convenience.	There was no information about the meetings of the Examining Board during this examination period, seems that it only exists on paper or Chairman's participation is not relevant.
Adjudicates on matters where disputes arise, in the context of complaints and appeals.	This is not relevant, 1-year rotation system of the chairman does not allow the chairman to gain an in-depth knowledge of the system, which is necessary for seeing all the nuances and replying to the complaints. At the moment, the replies to the complaints are sent in the name of the chairman, but in reality, it is the European Baccalaureate Unit who compiles these replies.
Ensures standardised assessment (moderation) of the European Baccalaureate written examinations.	Not relevant at all, as the chairman is not involved in the preparation of examination papers and marking schemes.
Takes the decisions which he/she deems fair and equitable, including in cases of cheating, attempted cheating or clear mismatch between a question and the syllabus of a subject.	This is partly relevant, but it should be clarified how the chairman is working in the system: e.g. which of these tasks are the sole responsibility of the chairman and which tasks the chairman shares with external experts.
Closes the European Baccalaureate examination session.	Not relevant, as there is no official closing.
Sends the Secretary-General of the European Schools a detailed report on the European Baccalaureate session which he/she chaired.	This needs to be clarified. Also, the focus of the report needs to be agreed upon. Reading predecessors' reports, I understood that every chairman chose the style and focus of the report based on personal preferences.

As the vagueness of the chairman's role was also mentioned by several of my predecessors, then I propose to analyze the needs of the ES system to have external expert as Chairman of the European Baccalaureate Examining Board and clarify the duties of this role.

I propose to specify the chairman's role as external academic expert on education who is: 1)

analyzing the examination process from the perspective of quality assurance, starting from the compilation of examination papers and ending with the assessment; 2) analyzing the content of the examination papers, involving subject-matter experts for external audit (i.e. University Observation) based on the decision of Joint Teaching Committee; 3) observing debates in the main boards (BoI, JTC) and analysing documents (including working documents) to evaluate emerging trends and correspondence between the examinations, learning objectives, and teaching practices in ES; 4) proposing innovations to the European Baccalaureate system based on recent research and latest trends in educational systems.

All managerial issues should be solved at the school level (situations with students such as arriving late, cheating, being absent etc.) or in some cases by the Baccalaureate Unit (e.g. complaints and appeals).

7. Conclusion and recommendations

European Schools is a tightly regulated organisation that provides education following a curriculum agreed by the Member States of the European Union.

Baccalaureate examinations of 2018 were arranged in accordance with the *Regulations for the European Baccalaureate, Arrangements for Implementing the Regulations for the European Baccalaureate* and with the *Memorandum on organisation of the 2018 European Baccalaureate session*.

I would like to acknowledge the following in EB system:

1. Willingness of all parties (teachers, directors, inspectors, specialist in Office of the Secretary-General) to improve Pre-Bac by replacing it with project work
2. Continuous curriculum development and preparation for integration of the key competences into syllabuses
3. Well compiled examination papers, tasks which demand students' high-order thinking skills are included
4. Well-arranged preparation of Baccalaureate examination papers and smooth logistics in distributing the papers to schools
5. The online correction system Viatique had been in use only two years, but it is functioning well and all actors appreciate it
6. Open communication and effectiveness of the Bac Unit in responding to requests and students' appeals.

However, there are still several ways to improve the ES and EB system:

1. The principles of change management should be used to keep up constant improvement process – creating long-term strategy, mapping the competence of the actors, moving step-by-step, piloting in small scale, creating conditions for learning and disseminating good practices throughout the system. A strategy is needed to implement a digital examination system and to integrate key competences into the curriculum and teaching-learning process etc. Moreover, as European Schools as an organisation has expanded in recent years (several new accredited school) and there are many external and internal expectations to the organization, long-term strategy

is needed to agree on development priorities and to communicate these priorities to all stakeholders.

2. Schools should have more autonomy and responsibility. To support implementing changes in the system, the schools should take responsibility for analysing their examination process and results, organising teachers' professional development etc. Responsibility means also more resources to use. The schools should also have more autonomy in arranging examination. For example, autonomy in the arrangement of SEN students' examination or special conditions during the examinations. It does not seem reasonable, that all cases have to be analysed by inspectors and approved by the Board of the Inspectors. Special cases, for example when the student arrives late to the exam due to accident or sickness, a new examination time should be found — this kind of cases should be under the authority of the school director and should be solved at the school level.
3. ES should have long-term strategy to develop the examination system and a clear roadmap how these changes will be made as all elements are tightly connected and a change in one aspect influences other components. Different scenarios for examination system should be designed and evaluated from quality assurance perspective (e.g. examination papers should not be compiled by the same person who will assess them later) and from the cost effectiveness perspective (e.g. outsourcing examination papers versus cost of oral exams).
4. Paper-based examination system should be replaced with an electronic system. ES is advised to learn from EU member states who already have electronic exams and conduct small scale piloting by schools and subjects. In every school, changes in learning process should be made to integrate ICT in learning process. Technological environment should be improved, e.g. internet connection, computers and software solutions should be prepared and tested.
5. Teachers would not correct their pupils' EB examination works, as the online correction system Viatique allows for random allocation of examination papers among teachers from all schools. If the teachers correct the papers of pupils who they do not teach, they will actually become their "external correctors".

6. The role of the inspector is influential in ES system. The Board of Governors should discuss how to find a balance between subject areas among inspectors. In addition, the Board of Governors could communicate to member states what kind of subject matter expertise the inspectors' team is lacking and the member states should take this into account when appointing the inspectors.
7. The effectiveness of the present quality assurance system should be analysed to consider who should collect data and who should report to whom. Large number of reports could lead to a situation where the proposed conclusions and recommendations are not taken seriously. More research-based approach could help to reduce reporting and at the same time, would allow for evidence-based improvement of the system (e.g. integrating key competences into learning process would be preceded by a survey into teachers' knowledge and competences).
8. The chairman's role should be specified based on the needs of the quality assurance of the system. One option is to have the chairman as an external academic expert on education who (a) analyses the examination process from the perspective of quality assurance, starting from the compilation of examination papers and ending with the assessment; and (b) proposes innovations to the European Baccalaureate system based on recent research and latest trends in educational systems.

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Annex. Table of activities

Date	Location	Activity
19 June 2017	Brussels central office	Participation in Joint Teaching Committee
12-13 October 2017	Brussels central office	Participation in Joint Teaching Committee
23 January 2018	Brussels I	Observation of Pre-Bac exam Meeting with Deputy-Director Secondary
24 January 2018	Brussels II	Observation of Pre-Bac exam Meeting with Deputy-Director Secondary and pedagogical adviser
25 January 2018	Luxembourg II	Observation of Pre-Bac exam Meeting with Director, Deputy-Director Secondary and ICT manager
7-8 February 2018	Brussels central office	Participation in Board of Inspectors (Secondary)
Observation of the Baccalaureate examination period		
04 June 2018	Helsinki (accredited school)	Observation of L1 written exam Discussions with Deputy-Director Secondary and Director on possible ways of optimising the examination system
9 June 2018	Brussels II	Observation of Art exam Discussions with Deputy-Director and coordinator of the examination on possible ways of optimising the examination system
11 June 2018	Varese	Observation of Math exam Discussions with Director, Deputy-Director Secondary and, Deputy-Director Primary on possible ways of optimising the examination system
18 June 2018	Brussels central office	Participation in Board of Inspectors (Secondary)
19 June 2018	Brussels IV	Observation of correction of written exams Discussions with external evaluators and inspectors of Biology, Math and with Director of Brussels IV
26 June 2018	Brindisi (accredited school)	Observation of oral exams (L2 English) Discussions with Director and Deputy-Director Secondary
27 June 2018	Parma (accredited school)	Observation of oral exams (L2 English) Meeting with Director, Deputy-Director Secondary, Vice-Chairman of the examination and EB coordinator
29 June 2018	Frankfurt	Observation of oral exams (History, Geography) Discussions with Director and Deputy-Director Secondary