

Rethinking Lebanese Higher Education

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Introduction

About a decade ago the strategy for the education sector has been issued in Lebanon. The strategy has guided a lot of developments in the higher education sector in the past years. During this decade the Higher Education Reform Experts (HEREs) were supporting the modernisation of the Lebanese Higher Education inspired from the Bologna Process. The HEREs team was first designated in the European Tempus Programme about a decade ago and operates at present within the Erasmus+ Programme. This past decade the higher education sector has largely evolved globally, and major changes have marked its evolution. All these facts push towards rethinking, at the strategic level, the evolution of the Lebanese Higher Education and the pathway forward.

A roundtable is organised for this purpose by the Erasmus+ HEREs at ALBA¹ on November 9, 2017. The present reader aims to provide background information for this roundtable. It presents the Lebanese Higher Education Strategy and the major achievements during the past decades. The HEREs' activities during the past decade and mainly the two national consultations about the priorities are provided afterwards. In this presentation, the analysis of the latest survey and outcomes is given for the first time.

Afterwards, the main challenging strategic dimensions of higher education, both globally and locally, are presented. These dimensions are grouped under three titles:

- New paradigm for higher education and research
- New paradigm for internationalisation and competitiveness
- Main challenges for the Lebanese higher education

The reader ends with the major conclusions.

¹ ALBA: Académie Libanaise des Beaux Arts

Lebanese Higher Education Strategy and Achievements

A decade ago, in 2007, a strategy has been issued for the education sector in Lebanon in general with a large part dedicated to higher education. At the beginning of the present document, it is worth recalling the major strategic axes and identifying the progress on each of them.

The strategy for higher education in Lebanon starts with a section enumerating the issues and challenges the sector is facing. These were defined as:

1. Regulations

It was noted that the main law regulating the higher education had more than 40 years as well as the law regulating the Lebanese University.

2. Lebanese University

The Lebanese University has known an unplanned evolution during the war, where branches have been created and the number of students has increased largely. The modernisation of the governing structure as well as the existing infrastructure and resources was identified as a major challenge.

3. Quality standards in higher education

The large increase in the number of private higher education institutions and in the number of students opens the crucial question of quality and its assurance.

4. New roles of higher education

As in most countries, there is a societal expectation for having higher education involved in socio-economic development.

5. Knowledge based economy

A need was identified to prepare the higher education to play its role in transforming the economy towards a knowledge based economy.

6. Recognition of degrees

7. Research

The document notes the regression in research activities and outcomes in Lebanon which is a major challenge.

8. Levels in higher education

Restructuring the qualifications and degrees and the adoption of credit systems to facilitate mobility between programmes and sectors have been identified as challenges.

9. Diversification of programmes in higher education institutions
10. Governing bodies and committees

The committees were enumerated and the weaknesses were identified. Empowering the Higher Education Higher Council² was formulated as a necessary action. The capacity of the Technical Committee³ to follow all the files of an extending higher education was very limited. Similarly, the limits of the Equivalence Committee⁴ were put forward. Modernising the processes of the Engineering Committee and the Colloquium Committee was also presented as a important need to cope with existing weaknesses.

Strategic framework

Nine strategic development axes have been defined in 2007. These axes are presented in the following together with the progress and achievements on each of them:

1. Adopting a national charter for higher education

The document defines the major elements of such a charter. It mainly includes elements relative to the social dimension of the higher education.

Progress: Recently interest in the social dimension of the higher education has increased. In addition to several projects done in different institutions⁵, the directorate general in collaboration with the Erasmus+ HERE⁶ team have organised recently a workshop on civic engagement where a charter has been suggested. Work is continuing in this direction.

2. Building the capacity of higher education administration

- a. Establish a structural for the General Directorate of Higher Education

The Directorate General of Higher Education has no proper administrative structure till now.

Progress: A draft law has been developed and is still waiting in the Lebanese parliament to get approved.

² The highest body governing the Higher Education in Lebanon

³ In charge of reporting technically on licensing files

⁴ In charge of recognition of degrees within the system or cross systems

⁵ E.g. the project led by LAES

⁶ HERE: Higher Education Reform Experts

- b. Re-examine the bodies governing higher education and modernize its legislation

As mentioned earlier the governing bodies need to be either empowered or restructured to face the increasing challenges.

Progress: The new law (285/2014) regulating the higher education has restructured the Higher Council and empowered it. It becomes the ruling body of higher education. It has restructured the different committees and précised their roles. In addition to the Technical Committee, several programme specific committees have been defined in order to assist in the evaluation of academic programmes and activities.

- c. Building an information base for higher education

There is no information base defined for higher education in Lebanon.

Progress: This point has been discussed at several occasions but no real progress in this direction so far.

3. Updating legislation governing higher education

The following updates have been recommended in the strategic plan:

- a. Updating the law of private higher education issued on 26/12/1961;
- b. Preparation of the regulatory decrees of the new special education law and the removal of ambiguities and contradictions from the current decrees;
- c. Drawing up a charter for the rights of students in higher education;
- d. The establishment of a new Basic Law for the Lebanese University and the amendment of all laws and decrees that may conflict with the provisions of the new law;
- e. Establish regulations that clarify the powers, rights and duties within private higher education institutions and safeguard the rights of the groups involved (management, staff, professors, administrators) and determine the assets of their application and control;
- f. Equivalence system for university degrees

Progress: A new law governing the higher education has been issued in 2014 (law 285/2014). It covers some of the previous points, but more executive decrees still need to be issued.

4. Strengthening the capabilities of the Lebanese University

The following points have been covered under this strategic axis:

- a. Developing general principles for the new structure of the Lebanese University;
- b. Drafting a new law for the Lebanese University;
- c. Fortifying the independence of the Lebanese University;
- d. Developing the educational and research resources, and their management system;
- e. Expanding university enrolment opportunities;
- f. Improving the learning environment and learning conditions;
- g. Openness to society;
- h. Accountability of the Lebanese University

Progress: Efforts have been spent in the past decade to develop the governance structure of the Lebanese University. Deans have been appointed and specialised committees have been set. This has had an impact on the reform conducted at all level. Typically, a central committee for quality assurance has been established and deals with quality matters. New programmes have also been introduced and several existing programmes have been updated.

5. Ensuring quality and quality standards in higher education

Progress: Several projects have been executed in this domain. A law for the establishment of the Lebanese Quality Assurance Agency is in the parliament waiting to be voted.

6. Developing new tasks for higher education

Progress: Several meetings have been conducted in this direction in addition to several Erasmus+ projects.

7. Placing higher education in Lebanon in the course of the knowledge economy

Progress: Several meetings have been conducted in this direction in addition to several Erasmus+ projects.

8. Organising the recognition of university degrees

Progress: Several meetings have been conducted in this direction in addition to several Erasmus+ projects. Currently an effort is being conducted to introduce the

ENIC-NARIC approach and administrative members of the directorate general of higher education are being trained on those aspects.

9. Enhancing scientific research in institutions of higher education

There are two bodies that support research in Lebanon: the National Council for Scientific Research (NCSR) and the Ministry through international cooperation. However, the research activities and outcomes are still below the expectations.

Progress:

- Decree 10068 (2013) organising the doctoral studies
- Law 285 (2014) requires from the institutions to allocate 5% of their yearly budget to research
- New programmes and agreements managed by the NCSR

HEREs' Activities and National Consultations

In Lebanon, the Higher Education Reform Experts team was established in 2008. The team was formed by four members; three professors and one student. Currently, the team is formed of six persons, mainly professors and the Director General of Higher Education. Since the beginning, the HEREs have been working closely to the Ministry and have been promoting the Bologna process and the modernisation of the Lebanese higher education.

National Consultation 2008

During its first year the HEREs team has conducted a national consultation about the challenges facing the Lebanese Higher Education System and the main modernisation actions to engage. A national roundtable has been organised on 28 June 2008 to present the results of the survey. The discussions in the roundtable yield a set of recommendations that we provide hereafter. The survey was formed of 36 questions divided into 4 sections. In the General Issues section one question requested the selection of the most 3 challenges/problems facing the Lebanese Higher Education in a list of 11 items. The "Absence of a Quality Assurance System" and the "Absence of Research Structures and Funds" were pointed out as the most important two challenges. A section of the survey was related to Quality Assurance (QA). Respondents showed their belief in the positive impact of a QA system on higher education and expressed their support for the establishment of such system. The next section was dedicated to the 3-cycle system. The responses showed that most of the institutions declared having a credit system operational. The 3-cycle system was considered as a facilitator of mobility of students. A final session was dedicated to recognition. The importance of a National Qualifications Framework (NQF) has been expressed. NQF shall facilitate the reading of qualifications and thereby help employability, recognition, mobility and lifelong learning.

The consultation yielded a set of recommendations that served as a reference to the Tempus HEREs activities in the next years. We recall here these recommendations:

- R1. The modernisation of the Lebanese Higher Education is necessary to respond to the challenges facing this sector and to transform them into opportunities. This modernisation must be in line with Lebanese National Strategy for education.*
- R2. The modernisation process should respect a sensitive balance on several issues: autonomy vs. accountability, innovation vs. tradition, “flexibility” vs. quality assurance, productivity and efficient research structures.*
- R3. The Bologna Process and the Lisbon Strategy may serve as a model of reference to inspire the modernisation process of the Lebanese Higher Education sector.*
- R4. A network of reform experts across the Lebanese Higher Education Institutions is a matter of interest.*
- R5. There is a need for a reference and mandatory Lebanese National Qualifications System that would facilitate mobility and recognition. Qualifications levels should be clearly defined and adopted.*
- R6. The applied credit-based systems must provide a central role to the students. A transfer and equivalency table is necessary and must be defined as part of the Lebanese National Qualifications System.*
- R7. The Lebanese Research Structures must be clearly and well defined and reinforced. Interactions and partnerships between the local, regional and international actors and the universities are needed. This would facilitate the employability of our graduates.*
- R8. Quality Assurance processes must be implemented internally to the institutions and externally at the national level. These processes must respect global quality standards. The stakeholders must be assisted in establishing their Quality Assurance procedures.*
- R9. A national committee involving the Lebanese Higher Education stakeholders must be formed to study and prepare the Lebanese National Qualifications System (LNQS) and the process to implement it. This committee would assist the Ministry of Education and Higher Education in preparing this LNQS.*
- R10. A committee involving the Lebanese Higher Education stakeholders must be formed to help improving Research Structures and to assist in organising and reinforcing partnerships between the universities and social and economic actors. This committee must cooperate with the existing and operating national/regional committees.*
- R11. A committee involving the Lebanese Higher Education stakeholders must be formed to study and prepare a National Quality Assurance Agency and to support the different institutions in implementing their quality assurance procedures. This committee must cooperate with existing and operating national/regional/international committees.*
- R12. All the previous described effort would prepare the lifelong learning on the medium and long term.*

National Survey 2014

In 2014-2015 a survey has been organised by the Erasmus+ HEREs in order to describe the state of play of the Lebanese Higher Education sector. The survey was formed of 128 questions grouped under the following sections:

- General Issues [13 questions]
- Governance and Learning Environment [30 questions]
- Programmes: Structures and Modernising Curricula [45 questions]
- Mobility and Internationalisation [14 questions]
- Higher Education and Socio-Economic Development [26 questions]

The respondents could choose their language of response among English or French. The survey was addressed to Higher Education institutions and to individual experts. Responses have been received from eighteen universities⁷.

In the following some of the major results are reported.

General issues

Table 1 provides a summary of the answers received regarding the urgency to tackle some major problems and challenges that might be facing the Lebanese Higher Education (HE). Looking at the table, the following problems seem to be the most urgent to tackle:

- Employability of graduates
- Weak partnership with labour market⁸
- Lack of accreditation system
- Absence of quality assurance⁹
- Absence of research structures and funds

The five points can be grouped under three titles, and by order of urgency to tackle: Employability, Quality and, Research. The same idea is also reflected in the responses of other parts of the survey. For example, in Table 11, 77% of the respondents believe that the lack of excellent research environment is an obstacle to the development of doctoral studies. Employability is a recurrent issue cited at different parts of the survey. No or weak advancements have been felt in improving employability and developing research as shown in Table 2. Fair advancement is felt for the development of quality processes.

⁷ see Appendix A for details

⁸ Related to the previous point

⁹ Connected to the previous one

The following problems could be facing the Lebanese Higher Education Sector. In your opinion how urgent is to tackle each of them?					
	Not Urgent	Fairly Urgent	Urgent	Very Urgent	No Opinion
Absence of quality assurance	0%	6%	38%	56%	0%
Absence of research structures and funds	6%	6%	38%	50%	0%
Access to higher education	11%	22%	45%	11%	11%
Divergence of current higher education systems	11%	45%	22%	16%	6%
Employability of graduates	0%	6%	28%	66%	0%
Lack of accreditation system	0%	22%	17%	61%	0%
Lack of inter-university cooperation	11%	33.5%	22%	33.5%	0%
Lack of National Qualification Framework	6%	28%	28%	38%	0%
Obstacles to mobility	0%	50%	22%	28%	0%
Weak continuous education programs	11%	17%	55%	17%	0%
Weak partnership with labour market	0%	6%	33%	61%	0%

Table 1. Urgency to tackle problems that might be facing the Lebanese Higher Education.

In each of the following domains please rate your perception of the advances that would have been achieved in the Lebanese Higher Education System during the past five years?					
	No Advancement	Weak	Fair	Strong	No Opinion
Adoption of learning outcomes in the definition of courses and programmes	6%	28%	44%	22%	0%
Definition of a National Qualification Framework	11%	50%	33%	6%	0%
Employability of graduates	22%	44%	28%	6%	0%
Establishment of a data management system	22%	33%	39%	0%	6%
External quality assurance	17%	28%	38%	17%	0%
Harmonization of the credit-based systems	22%	22%	34%	22%	0%
Mobility of students	28%	34%	38%	0%	0%
Organisation of University-Industry relations	0%	78%	22%	0%	0%
Recognition of diplomas and degrees	0%	17%	39%	44%	0%
Strategic planning in the higher education sector	17%	28%	44%	11%	0%
Support to research	11%	67%	22%	0%	0%
Using the e-Learning	38.5%	38.5%	17%	0%	6%
Internationalisation	6%	44%	44%	0%	6%

Table 2. Perceived advancement in different aspects related to the modernisation of the Lebanese Higher Education.

After the three major topics of high urgency, the establishment of a Lebanese National Qualifications Framework (QF) seems to be a priority. The QF, and as shown in the next parts of the survey will also help in employability, mobility and recognition. In a separate question, more than 75% of the respondents believe there is a need for better reading of qualifications in general and, for job offering, job seeking, and mobility in particular.

Mobility appears to be crucial for 73% of the respondents while all (100%) believe in lifelong learning. Harmonising the different higher education systems adopted in Lebanon does not seem to be on the top of the priorities since only 59% of the respondents see it as a need.

94% of the respondents call to considering the Bologna process as a reference for the modernisation of the Lebanese HE. 89% say to be knowledgeable about latest developments in the European Bologna process and the Lisbon Strategy. There is a strong believe that the EU2020 strategic objectives could fit within the Lebanese context (yes 72%, no 6%, no opinion 22%).

Governance and Learning Environment

Internal Quality Assurance

All respondents believe in QA. 69% of them attest their institutions have implemented an internal QA system, and all the remaining say they were planning to. All acknowledge the existence of a link between QA and the administration of their institution. 65% of the respondents say their institutions have undergone an external evaluation by an agency. All respondents but one support the establishment of a Lebanese QA agency.

Looking into more details, the administration and faculty members seem to be totally involved in the QA processes as shown in Table 3. The involvement of administrative staff and students can be improved, while efforts are necessary to engage external stakeholders in QA processes. The access of external stakeholders and of general public to QA information need also to be facilitated as suggested in Table 4.

Who among the following is involved in QA in your institution?	
Students	76%
Teachers	100%
Administrative staff	82%
Top management	100%
External stakeholders	35%

Table 3. Stakeholders involved in QA.

Who among the following has systematic access to QA information?	
Internal stakeholders	100%
External stakeholders	47%
General Public	29%

Table 4. Access to QA information.

Financing Higher Education

All admit that financing is a major challenge to HE. Only 24% of the respondents attest their institutions have diversified their financial sources. No respondent mentioned direct public funds or R&D projects as a second major source of finance! This reflects the idea that our HE institutions are in their majority teaching institutions. A crucial need to develop research is being felt and is conformant to what has been shown in Table 1.

Looking into more details, Table 5 enumerates the major challenges in terms of finance. Here also, financing research seems to be a major challenge followed by the diversification of financial sources, buildings, infrastructure and equipment. Most of these challenges are interrelated. It seems easier to diversify the sources of finances if research is being developed, which by itself needs equipment and infrastructures.

Which of the following represent a major challenge in terms of finance?	
Buildings and infrastructure	69%
Competition	31%
Diversification of financial sources	69%
Equipment	56%
Massification of Higher Education	44%
Research	100%

Table 5. Challenges in terms of financing.

Human Resources

All respondents declare that their institutions have implemented a clear system for human resources management. Policies for the recruitment of academic, technical and administrative staff are clearly defined (100%), published (82%) and applied (100%). The respondents seem less convinced when answering about the rules for promotion that still appear to be clearly defined (94%), published (76%) and applied (88%). However, the respondents call for national rules for human resources (67%) and academic ranking of scholars (81%). The results show a good acceptance of the institution-based human resources management. The need for a national academic ranking of scholars seems to be more expressed.

It is worth noting that the HE institutions offer advantages to their employees. Some are mentioned in Table 6.

What advantages are offered to the employees?	
Children schooling	94%
Family allowance	65%
Medical insurance	100%
Sabbatical year	47%

Table 6. Advantages offered to the employees.

Student's services

The surveyed persons have been asked about the student's services offered in their institutions. The answers are summarised in Table 7. This table shows a broad range of services offered to the students. Housing, funding clubs and tutoring seem to be slightly behind the other services and could be improved.

The surveyed persons have also been asked to indicate the student's services that need to be further developed. The results are provided in Table 8. They are coherent with the previous comments, i.e. there is a need to further develop students' housing, funding clubs and tutoring. Further developing the support to find internships and placements appear as a priority and is here to confirm what has been noticed in Table 1 regarding employability.

What student's services among the following your institution is offering?	
Assistantship	94%
Counselling	82%
Finding internships and placements	88%
Funding clubs and extra-curricular activities	76%
Health care	82%
Housing	71%
International student office	76%
Internet access	94%
Library and study rooms	100%
Orientation	100%
Scholarship	94%
Support to students with special needs	82%
Tutoring	71%

Table 7. The offered student's services.

What student's services among the following your institution needs to develop?	
Assistantship	20%
Counselling	20%
Finding internships and placements	40%
Funding clubs and extra-curricular activities	33%
Health care	27%
Housing	47%
International student office	27%
Internet access	6%
Library and study rooms	13%
Orientation	0%
Scholarship	20%
Support to students with special needs	40%
Tutoring	33%

Table 8. Student's services that need further development.

Programmes: Structures and Modernising Curricula

This part of the survey is also divided into different parts that are briefly described hereafter.

Learning Outcomes

Most of the programmes seem to have specific programme learning outcomes as shown in Table 9. Learning Outcomes (LOs) are also defined for most of the courses of the different programmes (19%) or all the courses of all programmes (81%) depending on the institution. Courses LOs appear to be connected to the corresponding programme LOs. 63% of responses indicate that the Learning and teaching methodologies and assessment methods are connected to the LOs for most of the courses (63%) or for all the courses (37%). 63% of the responses indicate the existence of a unit that supports the professors in defining and using LOs.

Are the learning outcomes defined for your programmes?	
No	0%
Yes for few programmes	0%
Yes for most programmes	38%
Yes for all programmes	62%

Table 9. Definition of programmes learning outcomes.

Credit-Based System

Most of the respondents assert that their institutions make use of credits, either ECTS or American credits. 60% express the need for translation between ECTS and American credits.

Diploma Supplement

Only 44% offer Diploma Supplement (DS) or equivalent to the students while 75% find it useful and 88% believe it improves the readability of a qualification or learning pathway. A need for developing DS seems to be clearly identified.

Curricula Modernisation

The survey tries to explore what the stakeholders of the Lebanese Higher Education understand by modernisation of curricula. Several options are provided and the surveyed representatives of the institutions have to select at most three of them. The results are provided in Table 10. Looking at the results shows that by modernising curricula the institutions would understand more:

- Use of precise LO and corresponding teaching and Learning methodologies and appropriate assessments
- Respond to socio-economic demands

- Encourage research-based education
- Encourage Active learning

Once more, and besides the appropriate use of LOs, the results show the high interest for employability and research as noted in Table 1. The interest in active learning is to be also considered.

In what sense from the following do you understand curricula modernisation? (at most 3 choices please)	
Adopt Learning Outcomes in the definition of the courses and/or programmes	50%
Define new programmes that respond to socio-economic needs	31%
Update existing programmes to respond to socio-economic needs	50%
Update existing programmes with more precise learning outcomes and teaching methodologies and assessment approaches	63%
Replace an existing programme with a new better targeted programme	19%
Engage dialogue with socio-economic partners to define the programme learning outcomes	50%
Add new courses to the curricula dealing with entrepreneurship or other	38%
Better use of research oriented education	50%
Better use of individualised education	13%
Change for a more active learning	50%
Update programme to respond to lifelong learning	38%

Table 10. What curricula modernisation means for the HEIs.

Doctoral Studies

First, it is important to note that the number of respondents to the Doctoral Studies questions decreases to 13. This reflects the fact that not all the institutions have or intend to have doctoral studies. Among the respondents, only 38% have doctoral studies. About half of the respondents say to be aware of the Salzburg principles. All respondents but one are aware of the Lebanese decree on doctoral studies.

Table 11 shows the major challenges facing the organisation of doctoral studies in Lebanon according to the respondents. The lack of funding and the lack of excellent research environment seem to be the most challenging and dominating issues.

What are the main challenges facing doctoral studies?	
Lack of excellent research environment	77%
Lack of strategic planning and of good definition of objectives	38%
Lack of funding	92%
Lack of motivated candidates	0%
Recognition of degree	0%
Lack of dialog with socio-economic potential partners	38%
Language skills	15%
Lack of time and interest from supervisors	23%

Table 11. Main challenges facing doctoral studies.

National Qualifications Framework

As shown in Table 12 most respondents feel there is a need for a national qualification framework (QF) for international recognition and job offering/seeking. The majority is less important when considering QF for internal mobility. A large majority of respondents think the Lebanese QF shall be a reference and voluntary framework.

Do you feel the need for a National Qualification Framework in the Lebanese Higher Education?	
For job offering/seeking	75%
For internal mobility	63%
For international recognition	81%

Table 12. Need for a Lebanese Qualifications Framework.

e-Learning

The survey also investigated the aspects related to new technologies in higher education. 75% of the respondents say they are using modern learning technologies in their institutions. Classical tools are very well used in the classrooms as shown in Table 13 and Table 14. Only interactive whiteboard appears to be less used than other tools.

Is your institution using the following tools and instruments in the classrooms?	
Face to face (without electronic tools)	88%
Print (books, newspapers, ...)	100%
Video recordings and cinema	100%
Computer with video projector	100%
Interactive whiteboard	56%
Internet with email	100%

Table 13. Use of tools in classrooms.

Percentage of classrooms where the following tools and instruments are being used in your institution?												
Classrooms usage	0%	5%	10%	15%	20%	25%	30%	40%	50%	70%	90%	100%
Face to face (without electronic tools)	8%		8%						8%	8%		68%
Print (books, newspapers, ...)				8%					8%	15%	15%	54%
Video recordings and cinema		9%	27%			9%			37%	18%		
Computer with video projector									8%	8%	33%	51%
Interactive whiteboard	34%	17%		8%	8%				8%	17%		8%
Internet with email									15%	15%		70%

Table 14. The percentage of classrooms where tools are used.

About half of respondents assert they use social media in learning but only 31% declare using MOOCs¹⁰. 20% say they use m-Learning and 21% have rules and procedures in their QA systems for this mode of delivery.

As shown in Table 15 and Table 16 there is a fair belief in online education. However, the online and e-learning do not seem to be well used in the institutions according to the results in Table 17.

Do you believe education could be online?	
Strongly agree	6%
Agree	50%
Neutral	31%
Disagree	13%
Strongly disagree	0%

Table 15. Expectation regarding online education.

Do you think that online education is critical to the long-term strategy of your institution?	
Strongly agree	13%
Agree	56%
Neutral	31%
Disagree	0%
Strongly disagree	0%

Table 16. Strategy and online education.

Does your campus currently offer?				
	No Offering	Courses Only	MOOCs	Courses and Full Programmes
Blended learning	60%	33%	7%	0%
Online learning	73%	20%	0%	7%
100% e-Learning	86%	7%	0%	7%

Table 17. Offering of different modes of learning.

Priorities regarding structures and modernising curricula

Table 18 shows the felt relative importance to tackle the different aspects covered in this section of the survey. Modernisation of curricula come first followed by NQF and e-Learning then doctoral studies and learning outcomes.

¹⁰ MOOCs: Massive Open Online Courses

Among the following domains what is the most important to tackle?	
Credit-based system	6%
Diploma Supplement	6%
Doctoral Studies	12.5%
e-Learning	19%
Learning Outcomes	12.5%
Modernisation of curricula	25%
National Qualifications Framework	19%
Three-cycle system	0%

Table 18. Priorities related to programmes.

Mobility and Internationalisation

Mobility

All types of mobility seem important to the respondents. Table 19 reports the major obstacles to mobility as expressed by the respondents. The lack of funding appears clearly to be the first obstacle. Half of the respondents consider that the non-recognition of credits or degrees form an obstacle to mobility. About a third of the respondents look at visa problems as an obstacle to mobility. It is important to note that one respondent only thinks that there is no interest in mobility among students and professors.

Please indicate within the following two major obstacles to mobility?	
Lack of funding	81%
Non-interest from the students or professors	6%
Non-recognition of credits or degrees	50%
Visa issue	31%
Other	12.5%

Table 19. Major obstacles to mobility.

Internationalisation and cross border education

All but one asserts that internationalisation is part of their institutions' strategic plans, and they believe that internationalisation pushes towards a higher quality education. Three declared having campuses outside Lebanon, while nearly half of respondents declare planning to have a campus outside Lebanon. The existence of a demand seems to be the main reason justifying the establishment of a campus abroad (Table 20).

For what reasons you have or you might plan to have a campuses outside Lebanon?	
Attract excellent students and faculties	40%
Diversify activities	40%
Diversify the sources of funding	40%
Respond to a demand	80%
Other	40%

Table 20. Reasons behind establishing a campus outside Lebanon.

Recognition

Half of the respondents are aware of ERIC-NARIC network. 70% of the respondents believe a Lebanese ERIC-NARIC database would facilitate the recognition of degrees within the country and 90% think this would facilitate the recognition internationally. All but one believes that recognition should be based on a Lebanese QF.

Higher Education and Socio-Economic Development

Employability

All believe that a good definition of jobs and related skills would improve employability. They also believe that a Lebanese QF would improve employability by allowing a better readability of degrees and qualifications (63%), and by permitting to update or define targeted programmes (37%). All agree that developing the internships would help improving the employability. Most of the respondents say their institutions organise orientation sessions to the students and that they have established career offices. All but one sees a need to change or update curricula to introduce more transferable skills (entrepreneurship, communication, ...) for better employability.

University-Industry cooperation

About half have projects supported by local socio-economic actors, and do have an office to connect with socio-economic local and international actors. About 20% have research or long-term projects financed by the industry. 63% say they involve socio-economic partners in the definition or update of their programmes. All declare having alumni and holding good relations with the alumni. They all believe NQF can be used to dialogue with socio-economic partners.

Research Based Education

63% say that the research activities are well developed in their institutions. However, all say that those activities need to be further supported. Research based education seems to be fairly adopted in some institutions as shown in Table 21.

Are you adopting research based education?				
	No	Slightly	Fairly	Strongly
Bachelor	12%	38%	50%	0%
Masters	0%	12%	50%	38%
Doctoral	18%	9%	9%	64%

Table 21. Research based education.

Social dimension

All consider their universities have equity of access in general, and in particular:

- A gender balances
- Equity between impaired and normal students
- Equity between students issued from different social classes

Lifelong learning

80% say they have continuous education programmes. 66% say they have defined mechanisms to recognise professional experiences and prior learning.

Lessons learned

Employability, developing the research culture and implementing a national quality assurance system appear as three major topics that are urgent to tackle in the Lebanese higher education. In addition, it seems important to rethink the model of financing higher education mainly based on tuition fees in private higher education institutions and public funds in the Lebanese University. The three major challenges are tightly related to the financial model in place and are interdependent.

The Lebanese Higher Education appears to be aware of modern tools in use in higher education. However, the application of such tools is being delayed although large efforts for awareness raising has been spent. The change and the adoption of new tools seem to be slow. Examples of such tools are: diploma supplement, ECTS, and national qualifications framework. University-Industry dialogue and e-Learning are examples of fields of interest where some actions need to start.

Strategic dimensions

"The difficulty lies not so much in developing new ideas as in escaping from old ones."

John Maynard Keynes

"Nothing is as certain as change and perhaps nothing as uncertain as the details of change."

John Hudzik

The past decades have been very challenging to higher education globally. The challenges and pressing demands for significant changes have been mainly connected to: i/ globalisation, ii/ establishment of knowledge based society and knowledge based economy and, iii/ fast pace of development in science and technology. Universities have been requested to leave their ivory tower and to assist overcoming the tensions created by the previous three factors. This has tremendously changed the higher education landscape. Through education processes and environment, pupils must learn how to gradually become citizens of the world without losing their roots and how to manage tensions this might cause. Risks are related to steady globalisation of culture and university has to accompany the society in this hazardous transition while caring of flourishing individual cultures as constituents of the global one.

Knowledge is at the centre of the modern societies and economies. While traditionally maintained in universities, it is presently driving goods and services. Therefore, access to knowledge has to be facilitated to a point where knowledge can be seen as a common good. Efforts were to be done to lower the barriers between the universities and the societies. In this context, modern university must deal with matters such, for example, the critical balance between being competitive and preserving the equality of opportunity. Moreover, the extraordinary expansion of knowledge challenges the management of curricula and courses, the teaching and learning methodologies and their continuous improvement. Students, societies, higher education institutions and/or, sometimes systems, might not be always prepared to assimilate the fast pace of knowledge expansion. Furthermore, while promoting innovation and knowledge development forms a priority for socio-economic development, the respect of scientific rigour must be respected to guide this endeavour. The capacity of a university to face those challenges affects the access of its graduates to the labour market and, the development of the local economy of a country by itself. It is an enormous responsibility that university must bear.

World regions, countries and systems faced those challenges in different ways. The Bologna Process is the example of an organised approach put in place to modernise the European Higher Education and to serve Europe competitiveness in the knowledge based economy. Europe has been careful enough to allocated resources to support neighbour countries and regions in their reform/modernisation processes in order to reduce the knowledge divide.

Modernisation and reform are complex processes where progress varies enormously among different countries and regions. In the European Higher Education Area mechanisms have been also defined to assess and evaluate the progresses. As shown in the previous section while discussing the survey conducted, the reforms are definitely slower in the Lebanese Higher Education. For example, the system is still lacking a quality assurance system and very few have been done to establish a qualifications framework. Regarding the recognition of degrees, the system remains based on equivalence. More significant progress exists at the Lebanese institutional level. However, this differs among the different institutions. In definitive, despite the enormous support from Europe through the Erasmus+ Programme¹¹ the slow modernisation of the Lebanese system increases the divide. Actually, further changes are taking place at the international level while the Lebanese Higher Education system is slow in the implementation of past reforms.

The following two sections describe the new challenges and paradigms facing higher education globally. The section after is dedicated to the Lebanese Higher Education.

New paradigm for Higher Education and Research

"It's tragic because, by my reading, should we fail to radically change our approach to education, the same cohort we're attempting to 'protect' could find that their entire future is scuttled by our timidity."

David Puttnam

Impact of digital revolution

To the previously mentioned three challenges; i/ globalisation, ii/ knowledge based society and, iii/ fast pace of development of science and technology, two major factors have been added in the past years: iv/ ease of access to knowledge and skills and, v/ the fourth industrial revolution. Presently, knowledge is on the tips of one's fingers but not only, skills can also be acquired for example by watching a "YouTube" video explaining how to perform a task. Machines are being interconnected and customers' feedbacks can be collected instantaneously. This accelerates the development and update of products, goods and,

¹¹ Previously through the Tempus Program

services to satisfy customers' needs, reducing thereby the long industrial cycles that marked the previous centuries. Societal evolutions are also being sensed quickly. By observing the propagation of an idea or an image on social media, societal trends are precisely enough understood. We are in the middle of the digital revolution. University cannot be left out of this and has to face the challenges that arise accordingly. Several reforms suggested the use of digital technologies in the classroom to improve the learning process. Tools have been developed and widely used like Moodle or the MOOCs in blended learning or fully online delivery modes. While computer and networks -aided learning is a good use of new digital technologies, it would be simplistic to limit the impact of the digital revolution to that. The digital revolution not only shapes the learning processes or delivery modes. It deeply transforms the knowledge development and the knowledge structure. Typically, the advent of smart machines and tools made the boundaries between disciplines blurring till vanishing. Strategic discussions must be conducted regarding the traditional disciplinary model of learning and how it fits with the digital era. Another major question relates to the introduction of digital skills in the faculties of arts and social sciences. Can studies and research in humanities remain isolated from new technologies while search engines are smart librarians and machine translators permit to understand texts from any language? The extraction of cognitive concepts from text can also be done with machine. More major strategic questions about the future of higher education arise from the digital revolution. Strategic decisions have to be taken in order to have the university accompany the recent developments in order not to suffer the consequences.

Employability and accountability

During the last years, quality assurance processes have been developed and applied in order to respect the fit for purpose of higher education. Standards have been defined as part of the accountability imposed by the systems. Standards are specific to higher education and are only indirectly related to socio-economic objectives.

In [1], the authors argue that the cost of higher education is increasing while the value of the degree is falling. The data in [15] show that the tuitions and fees have been increasing since 1986-1987 and till the present academic year in the United States. Actually, tuition and fee price in 2016-2017 are 3.1, 2.43 and 2.29 times as high as it was in 1986-1987, after adjusting for increases in the consumer price index for public four-year, public two-year and private non-profit four-year sectors respectively. [6] shows that the cumulative net earnings of Bachelor's degree start to be higher than the earnings of non-holders of such degrees at 35 years age. However, the earnings of the holders of professional degree remain higher even than the earnings of doctoral degree. Most importantly, the unemployment rates for holders of Bachelor's degree or higher is the lower by far. This fact justified the massification of higher education in developed countries, i.e. reducing the unemployment rates by increasing the numbers of holders of Bachelor's degree or higher. Unfortunately, the same is not observed in other regions where high unemployment rates are observed among holders of higher education degrees.

Pressures on universities are increasing regarding employability. Employability is only indirectly related to higher education. Other socio-economic factors affect it. In this context, it is important to discuss at the strategic level how to move forward from the indirect quality standards towards measuring the impact on employability and other social demands of the reforms and activities occurring in universities.

Lifelong learning

The real value resides in the knowledge and skills. These are expanding at fast pace. It is therefore important to develop the learning throughout the lifetime to allow the workforce to follow the latest development in a particular field. Lifelong learning is a non-classical scheme that requires flexibility and a set of tools to accumulate credits. It also requires the recognition of prior learning. Several tools have been developed in the past years. These tools need to be further developed and diffused to support lifelong learning that is becoming more necessary in modern societies.

Although the necessary tools are not classical, the implementation of lifelong learning is based on two fundamental values of higher education: remaining at the state of the art and, delivering degrees and qualifications with assured value.

Internal and external quality assurance

Quality assurance has been on the top of the reform agenda for higher education systems globally. In a first period the quality assurance process was driven by external evaluation. This permitted to create the culture of quality. Once the culture established, the internal quality assurance becomes more important because it is operational and closer to the university reality. In this context external evaluation stresses on the efficiency of the internal processes and has an increasing role in the support of those processes.

In several contexts, the quality assurance process is decentralised, not only between external and internal but within each of them. Decentralisation of quality assurance is more than devolving the assessment procedures within an institution or system. It consists in allowing local units to define their own understanding of quality, which undoubtedly depends on the context of the unit. This does not come without risks. A general framework has to be defined and decentralised activities have to integrate a global quality scheme.

The roles of the different stakeholders in the quality system have to be clearly defined. Engaging them, in particular the students, is essential for the success in the installation of a real quality culture.

As mentioned previously when discussing employability, the impact of higher education in several domains is becoming crucial. It is strategic to integrate the assessment of the impact in the quality processes. It is also of high importance to clearly articulate relevance and quality. The national qualification frameworks can form a precious tool in this perspective.

Integrated tertiary education systems

Depending on the system, tertiary education has generally at least two tracks: vocational and high education. In some systems, technological higher education programs and/or short programs also exist. It would be useful to have an integrated post-secondary education system where pathways are precise and balanced. Actually, the massification of higher education based on the fact that in developed countries lower unemployment rates are found among the holders of higher education degrees has reached its limits. The need for differentiated skills at the output of tertiary education is clearly identified.

A strategic reflexion has to be held in this context in order to increase the flexibility of the tertiary education system to better serve the socio-economic needs. This has to be balanced by defining clear conditions to cross the different bridges within the integrated system but also to determine a sensitive balance of differentiated and complementary skills.

New paradigm for internationalisation and competitiveness

"...while education is an ongoing process of improving knowledge and skills, it is also – perhaps primarily – an exceptional means of bringing about personal development and building relationships among individuals, groups and nations."

Jacques Delors

Mobility and internationalisation for all

The advantages of mobility and internationalisation are numerous. Exposing our students to other educational practices or integrating students originating from a different system into our classrooms deepen our understanding of what is needed to enhance the learning experiences of the students. This is even truer when broadening the internationalisation practices and contexts. Internationalisation also contributes to the attainment of knowledge and skills required in modern globalised and multicultural societies. Mobility of students, instructors and researchers allow the circulation of knowledge and reduce thereby the tensions resulting from the knowledge divides. More arguments in the favour of mobility and internationalisation can be cited. These factors are largely admitted and the multiplication of programmes encouraging mobility of students, academics and researchers witnesses on that. Actually, Erasmus+ (and previously Tempus) is probably the largest programme that succeeded in promoting and developing mobility and internationalisation. The importance of the international dimension in H2020 illustrates the benefits of mobility and internationalisation even in a more competitive domain that is research.

The previous arguments are counterbalanced by some factors. First, to better profit from the mobility, it shall be prepared in the source programme and recognised in the curriculum which could be perceived as a burden by the academicians in charge of the programme. Second, while it is largely admitted that study abroad offers a golden opportunity for intercultural competence and transversal skills development, it is also known that the number of students that could profit from the advantages of international mobility is necessarily limited because of the limited resources. Furthermore, reducing the divide by mobility and internationalisation shall not open the door for another local divide between mobile and non-mobile local students especially that intercultural skills and international experiences acquired through international mobility are demanded in a globalised labour market. Other challenging factors exist like personal constraints, visa issues, etc.

Internationalisation for all is a possible remedy for some of the previous challenges. However, reaching this goal requires developments at different levels. Designing and offering international curriculum for all students respond better to the demands of the global professional context and help thereby to develop internationalisation for all. In parallel, the learning environment must evolve to be more conducive for the learners to contribute to the global development and not only to preserve tolerant societies. Internationalisation for all requires an in-depth reflection on how programmes shall be designed and how mobility shall be organised and managed in order to offer intercultural skills to all the students and not simply the mobile minority. This can be done in two ways: mobility of staff to acquire the necessary resources to build internationalisation for all or, providing dedicated support for the faculty members.

The new technologies can also be used to widen the access to internationalisation by opening on-line access to academic programmes. This can be done at lower costs than physical mobility. However, it does not develop as fast as physical mobility the intercultural and transversal skills, sought after by many for the globalised labour market. More developments in this direction are expected in the coming future.

International collaboration in Research is also developing. It has many advantages too, like reducing the divide in knowledge and skills. It can also be conceived in the frame of science diplomacy helping reducing tensions related to globalisation. International collaboration in research is also challenged by many aspects, like managing complementarities, competitiveness, contextualisation, etc. Several programmes are in place to nurture research international collaborations while preserving the competitiveness of the activities conducted.

Fostering of attractiveness at home and abroad

Global and local dimensions of internationalisation are not necessary opposites. However, they challenge researchers and policymakers to manage a set of opportunities and

imperatives in a multifaceted environment. The elaboration of internationalisation activities and agendas demands from the persons in charge to have access to information and skill-building opportunities to navigate the crucial nexus of attractiveness at global and local levels. This complex and resource demanding task is necessary but care is also needed to the capacity of the university to attract students.

With the fast development of internationalisation in a globalised world the university has to be attractive at the international level while not losing its local attractiveness. This will make it a privileged destination for international mobility, whether physical or virtual, of students, instructors and/or researchers. In other words, the university has to become attractive for competent human resources that will develop and transmit knowledge on its campus. Managing the attractiveness both locally and globally is not a straightforward task.

Attractiveness is tightly related to the good reputation of the university. This reputation has to be built up primary by continuously improving the quality of education and research. The institution has also to develop distinctive features for the learning environment it offers. Some of those features are related to the local context others depend on the quality of what is provided in teaching and learning and, on the quality of what is produced in research. Depending on the resources available an institution has to take strategic decisions regarding what aspects to focus on and the amount of resources to allocate in order to achieve distinctive results. Institutions can also build relevant partnerships allowing them to enhance their attractiveness.

Impact of international university rankings

Rankings is not new in higher education. In [3][4] the author distinguished four phases in the rankings history:

Phase 1: Sub-national/elite rankings that focuses on academic and scientific strengths.

Phase 2: National rankings begin in 1959 and emphasize reputation factors.

Phase 3: Global rankings started with the ARWU¹² or commonly known as Shanghai ranking.

Phase 4: Supra-national rankings that involves supra-national authorities like the U-Multirank of the European Union or what is projected by the OECD or the Worldbank.

This classification is debatable regarding the historical dates. For example, the ranking of engineering schools in France is not mentioned while it existed since the Napoleon period. Despite the historical distinction of the four phases, this classification has the merit showing the evolution of the meaning attached to rankings. In their beginnings rankings focused on academic and scientific strengths. Rankings were done by and for the higher education. Since the decision-makers started to be interested in the role of higher education rankings

¹² ARWU: Academic Ranking of World Universities

shifted to emphasize on reputation factors. With the university gaining a central role in socio-economic development, interest to benchmark the different universities increased and global rankings developed largely with a focus on few quality standards. Recently, new forms of rankings involving supra-national authorities appear where benchmarks are conducted on each higher education dimension.

Criticisms of rankings have been formulated and are still formulated. Rankings focus on few facets and do not take into consideration contextual elements while benchmarking institutions. They tend to focus on the top hundred or so of worldwide universities, while it might be difficult to generalise the models of those universities in the different contexts worldwide.

Despite the criticisms rankings are here to stay and they do inform and influence the decision-making processes in the universities and at the system level. They also participate in the shaping of the reputation of the institutions in the society. In [3] the authors report on a survey conducted to understand the impact of universities rankings on strategic, organizational, managerial or academic actions. Less than a third of respondents declare there was no influence. For more than two thirds of the respondents, the impact goes from existing and unidentified impact to the revision of formal procedures. In the same work, authors report on significant efforts dedicated at universities to monitor other institutions mainly for benchmarking purposes and establishing/maintaining collaborations. In [4] the author lists the top ten most important factors influencing student choice of a university or programme according to data from “International Graduate Insight Group Ltd.”. The reputation of a qualification ranked first followed by the reputation of an institution, the quality of research and the reputation of the education system in the country.

Rankings offer also the advantage of bringing institutions and systems to benchmark and reflect upon the quality based on specific standards. One can think about the French trend to group higher education institutions in different regions, an effort necessarily inspired by the rankings or at least serve this purpose.

In definitive, the higher education institutions and regulators must continue to consider the rankings processes and standards. They must pursue the efforts of progressing in the rankings without being totally depending on those rankings. Efforts must continue to improve the fairness of the rankings and the reading of their results in the local contexts. In parallel, institutions, regulators and the society in general must continue to read with the best precision possible the outcomes of the higher education and its progress using the appropriate quality assurance processes.

The Lebanese Higher Education system: the main challenges

Several improvements have been achieved in the Lebanese Higher Education system and/or institutions in line with the defined strategic plan and with the support of the European

Erasmus+ Programme. Some of the achievements are reported in the previous sections. However, many challenges remain and it seems urgent to deal with. Some of these challenges are listed hereafter. It is worth noting that these challenges are not independent and relate to each other.

Research

Developing research activities has been a strategic priority for the Lebanese Higher Education for several decades. Despite some improvements noticed in the previous years developing research activities is still perceived as a major and urgent need as reported in the results of the conducted survey. Most if not all the higher education institutions in Lebanon can be considered as teaching institutions. Some are said to follow the liberal art model, but none can be designated as a research institution. Facing this challenge is even more urgent when we notice that very limited research activities are conducted outside the academic environment.

The academic and administrative flowcharts of the Lebanese HE institutions reflect few if any organisation of research. Developing research activities remains a major strategic need ten year after issuing the strategy for the Lebanese Higher Education. Including in the law organising the higher education the clause relative to the allocation of five percent of the university budget to research is a step in the good direction. It needs to be complemented with stronger measures whose effects need to be assessed.

The decree on doctoral studies forms another step that supports the development of research. However, there is a serious risk to see this measure becoming counterproductive if not accompanied with strong measurements that promote research. Actually, having PhD graduates preparing their theses fully or partly in world-class laboratories and universities limits the possible divide in knowledge with the developed countries. This divide might increase in case of massive graduation of PhDs without a strong culture of research in the institutions. This risk increases in the absence of national scientific communities with critical thinking. An integrated national doctoral studies system adopting strict rules and maintaining strong links with state of the art laboratories and institutions would probably reduce this risk.

Finally, the advent of digital era is to be taken into account at both education and research levels. As mentioned earlier this does not only mean the improvement of learning by the usage of the new technologies but also and above all the deep transformation of the knowledge structures due to the new technologies. The Lebanese higher education may not take the lead in this domain but has at least to be perceptive of the changes about to come.

Social dimension

Modern higher education systems recognise their social role in forming future citizens for the democratic societies. This is a major role of higher education that has to engage the students in social activities in order to prepare them for an active social role that enhance

the democratic dimension and prepare for a global culture in which individual cultures naturally participate.

The recent activities of the Erasmus+ HEREs pushed in this direction preparing and calling for the adoption of a national charter for civic engagement [8][9][10]. Reinforcing civic engagement and promoting civic responsibility is not only positive at the social level or for globalisation, but it also helps the students developing personal competences and skills precious for the globalised labour market.

The social dimension shall also be present in different facets of the learning environment. Campus life is important in this direction. Students' activities and clubs play a role in developing the students' social awareness. These aspects must be dealt with by the different higher education institutions but also considered while assessing and evaluating the learning processes.

These efforts need to be followed and the activities taking place in the different higher education institutions need to be fostered. Having a charter adopted and followed up by a national committee can be strategic at this level.

Employability

Many facts indicate that employability of graduates is the major challenge of higher education in Lebanon and several countries of the region. Developing research and fostering the social dimension indirectly helps in this domain. However, a better understanding of the market needs has two major benefits. First it permits to adapt curricula and programmes to better prepare the graduates for the labour market. Second, it allows defining the needs in terms of applied research that would help the ecosystem to evolve in the direction of producing more job opportunities. This requires establishing and developing university industry partnerships and to nurture the trust between the different stakeholders.

The Erasmus+ HEREs are preparing a seminar targeting employability and the changes needed in curricula and programmes. However, stronger structural reforms are needed to tighten the relationships between higher education and socio-economic fabric. Spreading the culture of placements and internships is also needed. Engaging the students in those processes increases their sensitivity to these aspects.

Engineering higher education

Several structural reforms started and have been delayed for different reasons. The establishment of a national quality assurance system is probably the most critical example where a draft law has been in the parliament for about five years without any progress. Differentiating between quality assurance and quality control is also needed at the national level.

The establishment of a national qualifications framework allows a better readability of the qualifications. Having a structure to manage this Lebanese QF necessitates a dialog between

the different stakeholders about the qualifications and their relevance. Engaging this dialogue would be by itself an achievement.

The Erasmus+ HEREs have participated largely in all the processes related to QA and QF and at all levels. They have had a role in the drafting of the law proposal currently in the parliament related to QA. They have also actively participated to the project executed by the ETF that resulted in a first draft a Lebanese QF.

It is worth noting that a QF is not dedicated to higher education but cover all education levels. While acknowledging the difficulties at the national level to develop an integrated tertiary education, it is important to cote the benefits of such a vision especially when discussing QF. Integrated higher education does not mean having open bridges between the different types of tertiary education. Despite the need for appropriately defined bridges, it is crucial to have an in-depth thinking of an integrated tertiary education where vocational studies, short programmes, technological institutions provide in complement to higher education what fits with the market needs.

Student centred learning has to be promoted and developed. This requires engaging the students in the different processes at the university, including governance and learning processes. Engaging the students in the quality assurance processes, not only as providing feedbacks but as real evaluators is a must. This requires processes for communication, dialogue and training. Active participation of the students in the different committees is a need. They should also engage at different level in learning process and become a force of proposition of changes.

Tools for transparent recognition of qualifications and degrees must be further developed. The Lebanese higher education can be inspired by the European experience in the ENIC-NARIC networks. Efforts must be pursued in this direction especially with the critical impact on mobility and internationalisation.

Financing higher education

The Erasmus+ HEREs have organised a workshop on financing higher education which pointed out the different challenging aspects and risks of the current situation. The reader ([11][12]) for this workshop provides detailed information about this aspect.

The major issue noted is that the Lebanese HEIs did not diversify their source of funding, which is mainly relying on tuitions for private HEIs and public funds for the public Lebanese University. The other risk is related to the expansion of the higher education in terms of number of institutions which might not be efficient. The differences in tuition fees are rather large and open the room for sensitive questions. One must add to that the employability problem as well as the weak level of research.

Few institutions have had in the past years a strategy for diversification of financial sources through developing fund raising and philanthropy. Some of these few strategies are more solid since based to an improved reputation of the institution.

In this context, a concerted strategy has to be defined stressing on the diversification of sources and enhancement of the quality of delivered education. This shall permit to face the increasing financing challenge.

Conclusions and Discussions

Several achievements have occurred during the past decade in line with the strategic plan. The support of the European Tempus and later on Erasmus+ programme was significant in this endeavour. The reforms at the individual institutions level vary across institutions. While improvements in some institutions have been huge and fast, others have known slower developments. Several structural reforms have not been achieved. For example, there is still no quality assurance system despite the draft law in the parliament since 2013. Moreover, the results of the ETF project on establishing a national qualifications framework have not been taken forward and a national QF is still lacking. Other examples exist.

The reader has discussed several challenges facing higher education globally. The advent of the digital era and the fast expansion of knowledge is a major factor. This cannot be taken into account exclusively by introducing new technologies in the delivery and assessment methodologies. Actually, the digital era is deeply transforming the structure of the knowledge itself, and this has been discussed in the document. The employability and accountability have been also analysed in the previous section, proving the need to evolve from QA standards to a study of the impact of reforms and developments on employability. The relation between internal and external QA is also invoked while discussing the decentralised QA processes as the natural evolution after a decade of direct external and internal evaluation. This decentralisation is based on the idea of quality from within the academic unit which needs certainly to integrate a global quality scheme to avoid any divergence. We noted that with the absence of a national system in Lebanon it is difficult to proceed to a decentralised approach at present. The document also covered the advantages of integrated tertiary education, which can offer several benefits to the Lebanese case despite the organisational and political challenges and risks.

Mobility, internationalisation and competitiveness are also discussed in the present reader. The development of multicultural skills and providing international experience at the local level are undoubtedly the evolution of higher education globally, as imposed by globalisation and knowledge based economies. Lebanese higher education characterised by a high outgoing mobility, but also Lebanese incoming one, needs to organise this mobility and structure it. The impact of rankings was the latest global challenge detailed. The higher education institutions and regulators must continue to consider the rankings processes and standards without being totally depending on them. Calling for improving the fairness of

the rankings especially in local contexts must remain. It is obvious that these rankings shall never replace a contextual, reliable and accurate QA system.

Finally, several major challenges facing the Lebanese higher education are listed. The development of research, the employability of graduates, the establishment of higher education tools (QA, QF, Recognition, DS, ...), the social dimension, and the diversification of the financing are discussed in detail. Progresses in those directions are needed urgently as shown. The delays in implementing the reforms increase the divide with the global higher education. However, the developments taking place in some institutions compensate to a limited extent the slow evolution at the system level. This is reflected in the good performance regionally as reflected in the regional rankings while five to six Lebanese institutions are often ranked among the first fifty in the Arab region. Nevertheless, the implementation of the mentioned reforms remains essential for the whole sector.

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Appendix A. List of participating universities in National Consultation 2014

Responses have been obtained from the following universities through high administrators (presidents, directors, Vice Presidents, Deans,...)¹³:

1. UL: Lebanese University
2. AOU: Arab Open University
3. AUL: Arts, Sciences and Technology University in Lebanon
4. AUST: American University for Science and Technology
5. BAU: Beirut Arab University
6. IUL: Islamic University in Lebanon
7. LAU: Lebanese American University
8. LGU: Lebanese German University
9. MEU: Middle East University
10. MUBS: Modern University for Business and Science
11. MUT: Al Manar University of Tripoli
12. NDU: Notre Dame University - Louaize
13. RU: Al Rassoul Al Aazam University Institute
14. UA: Antonine University
15. ULS: University La Sagesse
16. UOB: University of Balamand
17. USEK: Holy Spirit University of Kaslik
18. USJ: Saint Joseph University

¹³ It is important to note that multiple answers have been received from several universities.