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Lebanon's 2011 ICT education reform strategy and action plan: Curriculum success or abeyance

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Abstract: The purpose of the present study was to investigate the effectiveness of Lebanon's Education Reform Strategy and Action Plan (LERSAP) set in 2011 as a form of the educational reform the curriculum underwent through focusing on promoting and employing the information communication technology (ICT) tools. The LERSAP was launched to equip teachers with the expertise and competencies adopted to bridge the disparity between the 1997 curriculum guidelines, general and instructional objectives on the one hand and the curriculum implementation, textbooks, and pedagogical practices on the other hand. The general objectives, introductions, instructional objectives, and activities for grades 3, 6, and 9 of the Lebanese English language curriculum were analyzed using the qualitative design implemented to serve the purposes of the study and to build on the approaches that inform about the theoretical/conceptual and empirical literature on education in Lebanon. The findings of the study indicated that the synthesis of the extant literature underscored the positive effect of the ICT tools in general and that of the WebQuest, Wiki, Google Drive, and Window Live Movie Maker models in particular on improving the pedagogical practices of the teachers and on enhancing the learners' skills as well as increasing the motivation of the learners.

ABOUT THE AUTHOR

Ghada Awada holds a PhD with the highest distinction in Applied Linguistics and Education from University Rovira i Virgili—Tarragona, Spain and a PhD in Public International Law and International Relations and Diplomacy with the highest distinction from Hautes Etudes Internationales ET Politiques-Paris with concentration in conflict resolution and crisis management. She is currently a Faculty and Consultant at the American University of Beirut. She is an expert in curriculum design and textbook writing. She also consulted as an expert in curriculum development, textbook writing, teacher education and development with institutions and schools in some Arab Middle Eastern countries. Dr Awada designed professional and Teaching Certification programs focusing on the use of ICT technologies, providing inclusive environments to all learners, English language teaching and instructional strategies and techniques.

Dr Ghada Awada's research interests focus on improving English as foreign language skills and on applications of technology in language teaching and learning.

Ghada Awada

PUBLIC INTEREST STATEMENT

Lebanon's 2011 Education Reform Strategy and Action plan (LERSAP) aimed at enhancing learners' creativity, citizenship, and cognitive development and provided a roadmap ensuring the integration of ICT within the Lebanese general education system. The study was conducted to investigate the effects of LERSAP on bridging the disparity between the 1997 curriculum guidelines, general and instructional objectives on the one hand and the curriculum implementation, textbooks, and pedagogical practices on the other hand. The findings of the study underscored the alignment between the Lebanese Science and English language curricula implemented in 1997 and the LERSAP set in 2011. The findings also asserted the positive effect of the information communication technology (ICT) tools in general and that of WebQuest, Wiki, Google Drive, and Window Live Movie Maker models in particular on improving the pedagogical practices of the teachers and on enhancing the learners' skills as well as increasing the motivation of the learners.

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1. Introduction

1.1. Lebanon's educational reform strategy and action plan (LERSAP) framework

The Lebanese Ministry of Education and Higher Education (MEHE) and the Center for Educational Research and Development (CERD) set the framework of Lebanon's Education Reform Strategy and Action Plan (LERSAP) in 2011 with technology as the main arm which could equip learners with the knowledge, dispositions, skills, competencies, and proficiency to meet the demands of a digital world (Diab, 2011). The LERSAP stipulated that the national curriculum reform could comprise embedding the competency-based outcomes that should be achieved to build up a high-quality human capital characterized by problem-solving, inquiry based, creative and cognitive skills. The LERSAP aimed at enhancing learners' creativity, citizenship and cognitive development and provided a roadmap ensuring the integration of ICT within the Lebanese general education system. The LERSAP was set as the mainstream for the technical infrastructure, digital-age, content-based curriculum, instruction and assessment that could form the integrated complex required to raise the cultural awareness of the Lebanese learners in general. The educational reform set by the MEHE started in 2011 without geographical boundaries whereof participants from different Arab and European countries were invited to collaborate to develop an ICT-based platform which would foster the exchange of experiences on Entrepreneurship Education specifically.

1.2. ICT effect on the educational reform

The educational reform and the vital digital age inception were launched in 2011 to widen the horizon of the Lebanese citizens and to build the citizenship required to meet the great educational policies implemented worldwide and to build up a society characterized by loyalty and devotion to the country as a whole and not to a particular sector or ideology. As the strategic plan notes, technology outcomes and digital content ought to be integrated into the revised curriculum, and the instruction shouldn't remain static. The LERSAP set high standards for teachers and conceptualized a teaching and learning training that would help teachers meet the standards and equip them with the technological, instructional guidance, digital resources, and professional development. As a result, the main goal of the MEHE in 2011 was to ensure that the teachers will mirror the success of the vision and goals outlined in the LERSAP so that the teachers will effectively deliver high-quality, interactive instruction that is adaptive to meeting the needs of the Lebanese learners.

1.3. Study questions

The present study intends to specifically address the following questions:

(1) It has been proved that ICT integration into classroom increases students' motivation to learning and improves learning and teaching processes. Does, therefore, Diab, 2011 ICT Educational Reform Strategy bridge the disparity between the curriculum guidelines and principles on the one hand and the curriculum implementation, textbooks and Teachers' language proficiency on the other hand?

(2) Does the Lebanese curriculum implemented in 1997 align with the 2011 LERSAP?

1.4. Significance of the study

The present study is significant for being the first study conducted to investigate the effectiveness of the 2011 LERSAP in shaping the education reform that was launched in 2011. This study is framed within the active learning theory which builds on the vital role of the integration of technology into classrooms. The study is also significant for it reports the findings of the metacognitive analysis of the plethora of the conducted pertinent studies investigating the impact of ICT in bridging the gaps created by the textbooks and providing authentic materials. The present study conducted a

metacognitive analysis of studies (Awada, 2014; Awada & Abdallah, 2014; Awada & Ghaith, 2014a). Awada and Ghaith (2014b, 2015), which investigated the effectiveness of the use of the WebQuest, Wiki, Window Live Movie Maker (WLMM), and Google Drive and other ICT tools in forming a remedy supporting the learner's center approach. This study presented the inquiry and problem-solving tools and shed light on LERSAP which might ensure the use of the authentic materials in classrooms and improve students' perceptions toward learning.

2. Method

The study employs the qualitative data analysis design which builds on the approaches that inform the theoretical/conceptual and empirical literature on education in Lebanon. Three broad categories of purposive sampling techniques; namely literature search, study selection, critical evaluation; and evidence synthesis, have been the basis of the investigation and generation of defined conceptual frameworks. The methodology included an analytical review of related studies and the extant litera-ture on best practices in teaching English in order to synthesize guidelines for the conceptualizations of effective language teaching and learning. The study methodology combined purposive sampling with systematic review methods employing the plethora of literature on the Lebanese curriculum development and educational reform in the educational public schools in Lebanon.

The systematic review methodology used the search, select and synthesis of the relevant, con-ducted literature to trace the disparity between the curriculum guidelines on the one hand and the curriculum implementation, textbooks, and pedagogical practices on the other hand. Moreover, the methodology presented a synthesis of the extant literature on the impact of the information com-munication technology (ICT) tools in improving the pedagogical practices of the teachers and in enhancing the skills and increasing the motivation of the learners. The National Center of Educational Research and Development has recently conducted a number of studies to investigate the various aspects of the current Lebanese educational system and to assess its efficacy. The studies were conducted by Ghaith (2013), Ghaith and Awada (2014), Hatab (2014a, 2014b), Mansour and Whaiby (2015), and Minaam and Hanna (2011). Minaam and Hanna (2011) studied the development of edu-cational indicators in Lebanon. Ghaith (2013) conducted a study of the teacher preparation pro-grams in Lebanon focusing on both public and private sectors. The findings of the study indicated that there is a need to provide course descriptions for each component within some of the programs under study as well as assess the degree to which the program learning outcomes are achieved. Curriculum should be perceived as encompassing much more than just the textbooks to include as well the methodology of teaching/learning and the methods and instruments of assessment (Ghaith & Awada, 2014).

3. Lebanese curriculum reform

3.1. 1997/1998 Lebanese science curriculum

The curriculum adopted until 1995 wasn't addressing the needs of the learners because it lacked the general and specific objectives, and it wasn't grounded in practice. The curriculum was based mainly on the theoretical aspects of knowledge (NCERD, 1995). The new Lebanese science curriculum provides learners with an opportunity to develop scientific literacy needed to make them able to meet the needs of their community. However, the curriculum should continuously be revised in light of the changes that take place in synergy with the changes happening in the global village (Boujaoude, 2002).

3.2. 1997/1998 Lebanese English language curriculum

Lebanon proclaimed in 1996–1997 and implemented through the MEHE and the National Center of Educational Research and Development (NCERD) a new English language curriculum which reso-nates the principles of theme-based language teaching. In agreement with the international stand-ards of English language proficiency, the 1997 curriculum intended to improve learners' communicative skills. The English language curriculum proclaimed in 1997 has been designed in agreement with international ESL/EFL standards as it has clear goals, objectives, sound performance indicators, perspectives on instruction, material selection and adaptation, and evaluation guidelines

(Ghaith & Awada, 2014). The implementation of the 1997 curriculum synchronized with introducing a new series of textbooks along with the initiation of teacher professional development training that covered all grade levels and regions of Lebanon. However, there have been no periodic and regular evaluation studies of the curriculum implementation that would identify and address the integral and contextualized issues arising in the process of implementation although 15 years of implementation passed while being characterized by the growing concerns of stakeholders and practitioners. However, proper implementation was hindered by the lack of teachers characterized by high level of language proficiency and content and pedagogical awareness and the lack of adequate resources and continuing professional development programs needed to improve teachers' knowledge and necessary competencies to implement the curriculum (Shaaban, 2013).

Studies (Bacha & Bahous, 2011; Esseili, 2011; Ghaith & Shaaban, 1999; Lebanese Association for Educational Studies (LAES), 2002) have maintained that the new curriculum is grounded in solid theoretical and conceptual principles as it is based on the general policy of the country, international trends, and second language acquisition research. Ghaith and Shaaban (1999) indicated that the 1997 curriculum constitutes "...the first serious, systematic effort that has presented a detailed plan for English language teaching in Lebanon" (p. 360). The organization of the curriculum at the cycle level into goals, instructional objectives, and performance tasks could be considered in alignment with the principles of communicative modern communicative language teaching and learning (Esseili, 2011; Ghaith & Shaaban, 1999; Shaaban, 1997). However, the Lebanese Association for Educational Studies (LAES) (2002) report indicated that the curriculum improperly included too many themes in some grades and not sufficient themes in others: 2–6 themes in primary grades, 13 themes in some intermediate grades, and 19 themes in grade 10.

3.2.1. Textbooks and teachers' language proficiency

There was a serious disparity between the curriculum and the official textbooks. Shaaban (2013) reported that overreliance on texts from encyclopedias in some grades, lack of scope and sequence and progression, scarcity of cooperative learning activities, and inadequate exercises stimulating critical thinking and study skills are all instances of serious deviations in textbooks from the curriculum plan. In fact, there is lack of scope and sequence among textbooks and within the same textbook as a result of the lack of coordination among textbook writing committees in different cycles and among those working on the same cycle (Ghaith & Awada, 2014). Esseili (2011) reports that the public school teachers viewed the NCERD textbooks as "total failure", "worthless", and "not enough to create a solid foundation in the English language" (p. 136). Shaaban (2013) agrees and attributes the problem with textbooks to being put together by amateur authors who have not been involved in textbook writing before. A look at the books shows clearly that there is no clear scope and sequence. Ghaith and Awada (2014) investigated the textbook content and the achievement levels of English language learners of grade 3, 6, and 9 in Lebanon and their study has been the first to serve such content analysis since research is still scanty despite the proclamation and implementation of a modern curriculum. With the exception of Mansour and Whaiby (2015), a study into the achievement levels and impacting factors in grades 4 and 7, there has no systematic empirical investigations of the efficacy of the curriculum and the social, economic, pedagogical, and cultural factors that affect achievement. Public school students in grades 3, 6, and 9 fall behind their counterparts in the private schools and more so the private schools in terms of their English language achievement (Ghaith & Awada, 2014).

The textbooks and the teachers' professional willingness to effectively implement the new curriculum were tremendously criticized since the teaching force in charge of implementing the curriculum lack the high English language proficiency levels as well as the basic knowledge, abilities, and dispositions to address the curriculum implementation. Furthermore, the pre-service and in-service professional development programs were criticized for having weak content and theory-based delivery (Shaaban, 2013). Shaaban's experience as training workshop implementer and trainer in workshops

for EFL elementary school teachers in remote areas of Lebanon formed the basis for his perceptions on the English language proficiency of elementary teachers. Shaaban (2013) reported that the reasons behind the limited English proficiency of teachers could be attributed to the findings indicating that about 40 percent of these teachers do not have a BA in English language and/or literature and the percentage of the MA holders who could serve as coordinators and leaders is rather small (13%) (Orr, 2011, p. 6). Likewise, Saba'Ayon (2012) reported that teachers whose certification "Kafa'a" are characterized by having received training that almost lacked observation and practicum activities since their teacher preparation program merely underlines theoretical traditional content. Accordingly, the teachers finish up adopting the similar traditional teaching methods in their classes as they begin in public schools (p. 117). Nabhani and Bahous (2010) reported the same findings when they investigated the effectiveness of the professional development activities given to private school teachers who were involved and expressed dissatisfaction for receiving training at the end of a school day. Concerning the teaching methods essentially used in the class vis-à-vis those proclaimed in the curriculum, existing studies seem to suggest significant disparities and deviances from acclaimed pedagogical approaches in the curriculum. For instance, based on class observation, Saba'Ayon (2012) indicted that teachers seemed to be operating completely outside the boundaries set by the curriculum in terms of teaching methods or classroom management. Saba'Ayon (2012) reported that the participants relied mostly on traditional methods with few occurrences of group activities, not all of which were efficacious or attained the objective (p. 117). As for resources and facilities, the proclaimed curriculum stimulated the use of audiovisual aids, computer laboratories, projectors, the Internet, and other digital devices in order to enable teachers to employ modern technological tools in their teaching and accomplish targeted goals and objectives.

3.3. Curriculum implementation assessment

One more pitfall is that although the curriculum calls for an assessment of all skills, teachers remain exclusively interested in grammar, vocabulary, reading and writing only as these are the skills and language elements tested on official national examinations (Shaaban, 2013). Accordingly, the reception skills of listening and reading as well as the productive skills of speaking and writing can't be considered properly taught and assessed as well as the cultural awareness, critical thinking, study skills objectives, and performance task of the curriculum. The preceding review of the existing literature suggests the need for a broad and systematic evaluation and review of the implementation of the English curriculum in order to empirically assess its impact and determine the factors that affect the learners' proficiency and academic achievement.

The Lebanese MEHE in 2011 and the CERD have set the framework of Lebanon's LERSAP with technology as the main arm which can equip learners with the knowledge, dispositions, skills, competencies, and proficiency to meet the demands of a digital world. As such, the curriculum underwent an education reform focusing on promoting the expertise and competencies essential for the present and future workforce. The reformed curriculum was set to provide the young learners with the ICT tools that enable them to collaborate with online communities, collect data, evaluate information, and create knowledge. As a result, the CERD under the patronage of the former minister, Professor Diab, who was keen and persistent enough to get in 2013 the Lebanese council of ministers' approval of the two decrees which have been issued for the first time since 1998 to give the legal inception for the preschool and cycle 1 (grades 1–3) curricula. Unfortunately, grades 4–6 haven't been given inception yet since a new government has been formed to replace the old one that started the educational reform. The ministry revised in 2013 the national curriculum to embed the competency-based outcomes that should be achieved to build up a high-quality human capital characterized by problem-solving, inquiry-based, creative and cognitive skills. The education reform set by the MEHE started in 2011 without geographical boundaries whereof participants from different Arab and European countries were invited to collaborate to develop an ICT-based platform which would foster the exchange of experiences on Entrepreneurship Education specifically.

The MEHE announced in October 2011 the launching of the information and communications technology (ICT) as a cornerstone component of Lebanon's LERSAP to enhance the teaching and

learning processes and the educational management and leadership. The ICT component has been crucial to address the individualized needs of all learners and to improve their economic and social environments in the twenty-first century. The change in the educational paradigms is a necessity and a strategic goal to transform education in the Lebanese schools (Diab, 2014). As such, Lebanon's National Educational Technology Strategic Plan which aims to actualize the LERSAP started in 2011. "The vision is that Lebanon's young people will be able to adapt smoothly to the digital age and maximize the benefits from it. To achieve this, we intend to invest in ICT and human resources in schools and to provide enhanced learning experiences" (Diab, 2011, p. 2). Continual persistence to contribute to the betterment of the Lebanese community has been drawn in building up the potentials of the graduated students who will in turn be instrumental in improving the society when they turn into good citizens whose skills can build the country the Lebanese people aspire. The Lebanon's National Educational Technology Strategic Plan (LERSAP) aims at enhancing learners' creativity, citizenship, and cognitive development required for lifelong learners and qualified applicants to higher education institutions. "The LERSAP provides a roadmap and a set of recommended actions to ensure the integration of ICT within the Lebanese general education system. It is based on six pillars—infrastructure, curriculum, instruction, assessment, professional development, and management and leadership" (Diab, 2011, p. 2). Several implementation plans have been drawn in 2011 to ensure the elevation of the education experience of learners to be on the track of the European and the American general education classrooms. The schools digital age necessitates the readiness of teachers and learners to meet the challenges of creative, high-tech collaboration in the realms of teaching and learning. The content-based instruction adopted in Lebanon demands an access to computers, resources, and expertise to ensure the ability to use the high-speed Internet tools and multimedia. The technical infrastructure, digital-age curriculum, instruction, and assessment form the integrated complex that can raise the cultural awareness of the Lebanese society gravely affected by the sectarian and partisan influences and confessional or regional fragmentation. The education reform and the vital digital age inception were launched in 2011 to widen the horizon of the Lebanese citizens and to build the citizenship required to meet the great educational policies implemented worldwide and to build up a society characterized by loyalty and devotion to the country as a whole and not to a particular sector or ideology.

The education reform plan as launched by Diab (2011) extended to include 31 representatives from 14 countries, including Egypt, Iraq, Jordan, Lebanon, Libya, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. The UNEVOC Centers in the Arab States highlighted the extent of educational reform needed, and discussed the recent initiatives targeting connections with the private sector. Moreover, UNEVOC Centre representatives from Nigeria, Germany, and Republic of Korea and representatives from regional and international organizations, including the African Development Bank (AfDB)/London School of Economics (LSE), United Nations Economic and Social Commission for Western Asia and INJAZ presented on regional activities in their respective countries and they concentrated their presentations on policies and practices to address youth unemployment through entrepreneurship education.

As this strategic plan notes, technology outcomes and digital content are to be integrated into the revised curriculum and the instruction shouldn't remain static. Consequently, the strategic plan asserts the significance of the ongoing teacher training to acquire the digital skills needed to instruct in new ways and to align with the technology and the competency-based curriculum.

LERSAP set high standards for teachers and conceptualized a teaching and learning training that would help teachers meet these standards and equip them with the technological, instructional guidance, digital resources, and professional development. As a result, the main goal of the MEHE in 2011 was to ensure that the teachers will mirror the success of the vision and goals outlined in the LERSAP so that the teachers will effectively deliver high-quality, interactive instruction that is adaptive to meeting the needs of the Lebanese learners and the country. The pioneering step to participate in the responsibility for the promotion of education was set in 2012 when the Ministry presented the first model of collaboration among municipal, civil society, and the ministry when former Minister

Diab announced the opening of the first interactive classroom in Lebanon in the Secondary Dhour Choueir Public school on Tuesday 05/22/2012, and on 26 September 2012, the Ministry announced the launch of the Citizenship Education Project.

The reform plan aimed at founding a learning environment that promotes active citizenship behaviors among learners and increase participation in governance. The European Union (EU) funded the plan. The Institute of Education and the University of London, UK in a consortium with the Centre for Lebanese Studies (CLS), Lebanese Association for Education Studies (LAES), and Association of Citizenship Teachers (ACT) have been assigned the responsibility of the implementation of the project. The Ministry emphasized that the support for quality assurance should include different Lebanese stakeholders and not to be restricted to the MEHE. Tempus program has also supported the educational reform of the Lebanese Higher Education programs and structures since 2002. Above all, the Tempus program has recently granted Lebanon a project titled "Towards the Lebanese Quality Assurance Agency (TLQAA)" launched by the Ministry and its Directorate General of Higher Education in Balamand University. The products and the deliverables of the TLQAA project included (1) "…the Lebanese quality assurance system, (2) a customized set of standards and guidelines, (3) the selection and training of Lebanese experts, and (4) some pilot evaluations" (Diab, 2014). The EU and the Lebanese partners in the project provided the valuable expertise and the required support. The international standards were embedded in the TEMPUS project to ensure that the institutions will undergo evaluation by international agencies.

3.4. Timeline of Lebanese ICT curriculum reform

"The curriculum overhaul is part of a broad education reform plan that was launched last year to allow schools and teachers to teach more relevant and important material" (Diab, 2014). The human capital has been a crucial pillar of the educational reform set in 2011.Teachers started receiving training funded by the international organizations and institutions that were parties to the agreement signed by Professor Hassan Diab in 2011, 2012, 2013, and 2014. Law No 150 was issued on 17–8–2011, and the reform included the Lebanese citizens for the law established compulsory free education in the primary education cycle. Another pillar of the reform was launched in 2013 to address the sanitation and hygiene crisis and to ensure the strict implementation of sanitation and hygiene guidelines in Lebanon's public schools. In collaboration with UNICEF, the Swiss Agency for Development and Cooperation, the MEHE launched a 136-page guide to significantly reduce water-related diseases to enhance sanitation in public schools along with the provision of water and treatment of waste water and to significantly reduce water-related diseases. The guide, entitled "Water Sanitation and Hygiene in Schools: Guidelines for Lebanon," is part of the international WASH program.

The year 2015 witnessed changes and tremendous cessation of the education reform launched in 2011. In accordance with the decree No 10227, issued in 1997, which stipulates that the curriculum be revised every four years, the current Minster of Education Bou Saab (2015) expressed dissatisfaction with the effectiveness of the present curriculum, textbooks, and official exams although he has acknowledged the efforts that have been made to develop the educational system. Bou Saab (2015) underscored the necessity to revise the history curriculum as public schools lack history textbooks covering Lebanon's modern history. Current textbooks cover Lebanese history until 1943 due to political sensitivities. Bou Saab (2015) declares that the official exams and the curriculum in 2015 aren't developing students' criticality and creativity as it has been the case before. Above all, Bou Saab adds that grades 9 and 12 official exams were characterized by cheating as he eye witnessed during the visits he made to test centers. A conference was recommended to reach a solution about how to conduct exams with good results, in a setting controlled by the ministry; the recommended conference should tackle special education for learners with disabilities and child protection in the private and public sectors; the conference should tackle education in the event of emergencies, such as the Syria crisis especially that the number of Syrian refugee students in public Lebanese schools exceeds those of Lebanese students. The private schools should be involved in the curriculum reform because the public schools accommodate two thirds of the Lebanese learners. Many Lebanese

learners are leaving the public schools because the quality of education isn't as good as it was due to the tremendous number of Syrians who settled in Lebanon and are attending the public schools (Bou Saab, 2015).

4. Alignment between Diab's ICT educational reform strategy and international ICT reform plan on the one hand and 1997 curriculum guidelines on the other hand

Information and Communication Technology (ICT) embraces the Internet and electronic systems such as computers, televisions, and projectors. ICT is effectively used in classrooms for instruction, knowledge, and assessment. ICT is needed for educational reform. ICT facilitates learning without the boundaries of time and Place (Fu, 2013). ICT provides abundant resources such as videos, visual presentation, and online materials. For example, online course materials and teleconferencing classrooms foster simultaneous interaction between the learner and the teacher and among the learners themselves (Heemskerk, Volman, Admiraal, & ten Dam, 2012, p. 155). ICT gives educational equality due to its motivating effects and its ability to differentiate teaching (Isling Poromaa, 2015). ICT is a powerful force required for educational reform (Player-Koro, 2012, p. 93). A Lazar Stošić (2015) reports that educational technology improves the quality of education since it includes instructional materials and the behavior of all participants in the educational process. Stošić (2015) reports that older teachers don't have the information technology, while the younger generations of teachers have the knowledge essential for the use of educational technology. Isling Poromaa (2015) reports that the present curriculum of the lower secondary schools in Sweden necessitates that all students use ICT in the quest for information and learning. ICT equipment, strong pedagogy for using ICT should be provided by the schools to enhance students' skills and dispositions to perform an authentic and real-life task.

ICT facilities differentiated instruction allows students to learn at their own pace. Different learning modalities integrate technology into the classrooms. ICT provides a learner-centered environment (Castro Sánchez & Chirino Alemán, 2011). ICT provides learners with opportunities to make decisions and to develop critical thinking skills (Fu, 2013; Lu, Hou, & Huang, 2010). ICT can improve educational quality and associate learning to everyday situations (Lowther, Inan, Daniel Strahl, & Ross, 2008). ICT allows students to learn through discovery and inquiry and to solve problems. ICT provides the learners with opportunities to build new knowledge, analyze, synthesize and assess Data and learning materials (Chai, Koh, & Tsai, 2010). Autonomy, capability, and creativity are the three characteristics that enhance learning (Fu, 2013; Lowther et al., 2008). ICT allows learners to control their learning and to learn through collaboration.

4.1. 2011 LERSAP and ICT tools' integration into classrooms

ICT allows teachers to create their own material and to provide more control over course content (Serhan, 2009). For example, the ICT integration into classrooms marks the tremendous change in the educational paradigms in Lebanon. It is based on six pillars—infrastructure, curriculum, instruction, assessment, professional development, and management and leadership. The plethora of the conducted studies by one of the authors indicated that the use of the WebQuest, Wiki, Window Live Movie Maker (WLMM), and Google Drive tools would form a remedy supporting the learner's center approach and presenting the WebQuest as an inquiry and problem-solving tool needed to ensure the use of the authentic materials in classrooms and to improve students' perceptions toward learning, The wiki and Google Drive as collaboration and project tools needed to improve the learners' communication and research skills (Awada & Abdallah, 2014) and the WLMM as an innovative journal writing tool needed to enhance the creativity and to reduce the anxiety of the learners (Awada, 2014). The WebQuest is an effective, instructional model which enhances the English as a foreign language (EFL) writing proficiency and decreases the writing apprehension of eighth graders enrolled in a Lebanese public school. The findings of the study indicated that the WebQuest model provides an excellent opportunity for teachers to employ supplementary and authentic activities and materials that bridge the gap found in the EFL textbooks (Ghaith & Awada, 2014). Another study conducted by Awada (2014) investigated the relative effectiveness of Windows Movie Maker (WMM) as a computer assisted language learning tool versus journal writing in improving the English as a

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foreign language (EFL) writing Proficiency and decreasing the levels of writing apprehension of eleventh graders enrolled in a public school. The findings of the study indicated that the WLMM as an instructional model, unlike the traditional pen and paper journal writing enables students to innovatively make their reflective journals. A third study conducted by the Awada (2014) underscored the significance of the wiki and Google Drive tools in increasing the motivation and improving the project work and research skills of the twelfth graders enrolled in a public school in Lebanon.

Under the Developing Rehabilitation Assistance to Schools and Teacher Improvement (DRASATI) project, the ICT in-school coaching was launched in 2014 to build the capacity of the teachers of the public schools and to effectively integrate ICT tools in classrooms. The author was one of the two-member English team whose task was to give training on the Use of cooperative learning techniques along with the WebQuest and authentic materials instruction in 2012 and on the use of different ICT tools in 2013, 2014, and 2015. A series of training workshops was given to the trainers of the trainers selected from normal and public schools and few counselors of the MEHE.

4.2. ICT as a creativity tool
ICT fosters learners' creativity and improves both teaching and learning quality (Gee, 2007, 2011). The challenges created by the use of ICT can be solved by providing more authentic group- and problem-based learning activities (Whelan, 2008). Fu (2013) recommends induction and orientation strategies for students and emphasis on the importance of effective administration; and the expansion of online tools to ensure capacity building and curriculum development, required to decrease student barriers and increase the effectiveness of ICT use in the classroom. Teachers should receive training on the effective strategies and tools that can allow technology integration into classrooms (Almekhlafi & Almeqdadi, 2010) and improve curricula with technology-boosted materials (Goktas, Yildirim, & Yildirim, 2009; Hutchison & Reinking, 2011).

4.3. ICT challenges
There are many constraints on the effective use of technology in the classroom (Bello, 2011; Lim, Zhao, Tondeur, Chai, & Tsai, 2013). Fu (2013) stated that in service and pre-service teachers' attitudes, as well as the school culture might be barriers encountered in the use of ICT. Palak and Walls (2009) also showed that due to a lack of awareness of the models to use technology to facilitate learning, and the lack of appropriate methods for integrating technology within a curriculum, teachers might use technology not to promote student-centered learning. Moreover, the accessibility of ICT equipment, planning instruction, technical and administrative support, curriculum, culture, national entrance exams, lack of access to computers and software, insufficient time for course planning, and inadequate technical and administrative support might be barriers impeding the use of ICT (Lin, Wang, & Lin, 2012). Through a combination of constructivist learning and technology, teachers who possess knowledge of both the technology and the pedagogy to meet educational goals will allow learners to analyze and synthesize information in an active learning process. To achieve student learning with technology, more professional development is vital with emphasis on increasing teachers' skills needed to overcome anxieties associated with using technology. Employing effective teaching with technology integration requires changes in teachers' knowledge, beliefs, and school culture (Ertmer & Ottenbreit-Leftwich, 2010). Ertmer and Ottenbreit-Leftwich (2010) recommended that technology integration should advance the teaching and learning process and should develop a pedagogical model that requires a strong link between theory and application since technology integration requires an understanding of specific hardware and software related to the curriculum. As such, teacher training is indispensable to augment the curriculum with technology integration.

Research has indicated that both external and internal factors influence ICT use in education (Al-ruz & Khasawneh, 2011; Lin et al., 2012; Sang, Valcke, van Braak, Tondeur, & Zhu, 2011; Tezci, 2011). The most common external factors are access to computers and software, inadequate time for course planning, and lack of technical and administrative support (Al-ruz & Khasawneh, 2011). Teachers' attitude, confidence, and belief in ICT use are the internal factors hampering the use of ICT (Al-ruz & Khasawneh, 2011; Lin et al., 2012). As such, ICT integration requires developing process for

teachers, learners, and school administrators. Effective teaching in combination with quality technology practices can increase student achievement (Lei, 2010). ICT tools have an encouraging effect on student achievement in mathematics and English (Bello, 2011; Hossain & Quinn, 2013; Suleman, Aslam, Habib, & Hussain, 2013; Thompson & Davis, 2013). The use of ICT in teaching and learning processes had been improved tremendously, even in developing countries. However, the effective practices of technology interventions are extremely reliant on numerous factors such as teachers' and learners' attitudes, beliefs, and school policies and culture (Gurevich & Gorev, 2012). Studies (Cakir, Delialioglu, Dennis, & Duffy, 2009; Inan & Lowther, 2010) have reinforced teaching and learning with technology across the curriculum in order to transform the learning environments. The integration of ICT into classroom makes instruction take place across the curriculum and facilitates the active engagement of students, teamwork, collaboration, and association to real-life situations. The use of ICT supports curricular goals (Bello, 2011) and improves students' learning (Almekhlafi & Almeqdadi, 2010; Hammond, Reynolds, & Ingram, 2011).

4.4. 1997-present cooperative learning approach as a curriculum activities framework

The curriculum calls for the implementation of cooperative learning as a framework of classroom interaction. However, it seems that it was not possible to use technology and implement cooperative activities in many public schools which lack resources and characterized by very large classes and traditional seating arrangement which do not facilitate group work (Esseili, 2011). Likewise, Yaghi (2008) reported that "most public schools are traditional with classes organized in rows because, in most cases, they … do not provide enough room for group-focused classes or interactive patterns" (p. 152), Likely, Esseili (2011) reported that teachers in her study complained about the lack of resources at their schools. Some of the teaching units require the use of multimedia, but these schools have "no LCD screens, computer labs, or sound systems" (p. 137). As such, the 2011 LERSAP would bridge the gap since it included equipping the public schools with the necessary tools and equipment required for the integration of technology into classrooms. Moreover, teacher training workshops and professional development were comprised in the LERSAP and the researchers were directly involved in the Developing Rehabilitation Assistance to Schools and Teachers Improvement **(**D-RASATI**)** grant given to the MEHE to ensure professional development and integration of technology into classrooms.

5. Implications

The phases of the development of the competency-based curriculum necessitated the process of defining the fundamentals of the evaluation standards, organizing workshops to discuss the schedule and the regularity of the workshops assigned to each subject and involving representatives of 90 educational institutions (Shaaban, 1997, 2013) tend to tribute the English language curricula as being designed in agreement with contemporary thoughts and approaches in the field of language teaching Shaaban (2013). The main problem lied in disparity between the 1997 curriculum guidelines, general and instructional objectives on the one hand and the curriculum implementation, textbooks, and pedagogical practices on the other hand. The plethora of reviewed literature underscored the effectiveness of the LERSAP in equipping the teachers with the expertise and competencies adopted to bridge the discussed disparity. Teaching and learning a language should most importantly be based on learner-and learning-centered, problem-based learning, and cooperative and collaborative learning approaches which have been shown as having powerful effect on learning. Moreover, the elements of cooperative learning should form the backbone of organizing students in well-structured, heterogeneous groups which have the advantage of promoting teamwork skills, while also enhancing students' school performance. The use of real-world contexts allows teachers to generate meaningful learning activities that focus on the resources, strategies, and contexts that students run into at any time. Such teaching fosters cooperation and communication, improves critical thinking skills, and boosts learners' performance. Educational technologies are an essential part of the curriculum, and it is important to employ ICT tools to develop the learners' skills. As such, the significant approach to follow is to use applicable technologies for teaching in order to improve the learning and to employ available technological tools such as blogs, wikis, movie maker, WebQuests, and Google Drive and so on and so forth (Ghaith & Awada, 2014). Assessment and evaluation

practices should persist, support learning, and employ a variety of techniques such as testing, observation, surveys, anecdotal records, etc. in order to cover the wide range of performance tasks, knowledge, skills, standards, and dispositions stated in the curriculum. It is also equally important to benefit from various equipment and tools needed for instruction. Such tools may include computer-generated/on-line resources, images and texts, songs, pictures, educational software, games and TV broadcasts; for example, topic-specific books, workbooks, teachers' manuals, maps and charts, collections, dictionaries, worksheets, visuals could be employed as ready-made experimental kits for various subjects and books other than the assigned textbooks.

Ideally, teachers should develop their own teaching materials and tailor them to their classroom contexts to address the needs of the learners provided that they have the time, expertise, and support. Students may utilize the WebQuest created by the teacher to provide them with a vast range of visuals and multimedia materials in their daily lives that shape their learning of English. The selection of authentic teaching and learning materials should be a vital part of curriculum planning and teaching in schools whereby teachers should be responsible to ensure that the teaching and learning materials they use are appropriate to their students' developmental growth and relevant to the achievement of expected learning outcomes. Recently, there has been an initiative that is currently underway to develop and implement a competency-based English language curriculum. A basic premise in this regard is that learners need to use language in complex situations for authentic and meaningful communication. Accordingly, it was decided in 2004 to consider Arabic, English, French, and Mathematics as stand-alone school subjects with independent materials that integrate content from the subjects of science, sociology, plastic arts, music, and theater and so on so forth (Ghaith & Awada, 2014).

6. Conclusion

The official English language curriculum adopted in 1997 is grounded in Lebanon's educational philosophy and foreign language education policy proclaimed in the Plan for Educational Reform (1994) and the New Framework for Education (1995). The 1997 curriculum and its consequent reviews are centered on the principles and priorities of theme based and competency-based language teaching and learning. The synthesis of the research underlines the necessity for applying interventions to guarantee effective implementation of the English language curricula and thereby increase the proficiency of learners mainly in public schools. The ICT as a cornerstone component of LERSAP is required to enhance the teaching and learning processes and bridge the disparity between the curriculum guidelines and principles on the one hand and the instructional materials, Teachers' performance and textbooks' content and activities. The ICT component has been crucial to address the individualized needs of all learners. The change in the educational paradigms is a necessity and a strategic goal to transform education in the Lebanese schools (Diab, 2014). As such, Lebanon's National Educational Technology Strategic Plan which aims to actualize the LERSAP launched in 2011. Lebanon's young people will be able to adapt smoothly to the digital age and maximize the benefits from it upon providing all the public schools with the equipment and the resources and providing all the teachers with the needed ICT professional development. To serve the above-mentioned purposes, continual persistence to contribute to the betterment of the Lebanese community has been drawn in building up the potentials of the graduated students who will in turn be instrumental in improving the society.

The LERSAP aimed at enhancing learners' creativity, citizenship, and cognitive development required for lifelong learners and qualified applicants to higher-education institutions. The integration of ICT within the Lebanese general education system could develop the infrastructure, curriculum, instruction, assessment, professional development, and management and leadership (Diab, 2011, p. 2). Several implementation plans have been drawn since 2011 to ensure the elevation of the education experience of learners to be on the track of the European and the American general education classrooms.

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