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**The Implementation of Project Work Methodology in the
Algerian EFL Education: towards the Integration of
Language, Content and Thinking Skills Based on Linguistic
and Cognitive Complexities and Learners' Proficiency Level**

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Dedications

This dissertation is dedicated to my family, to my husband for his love, support, and patience,
and in the memory of my brother.

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Abstract

Project work has recently become one of the most used EFL teaching methodologies. This study is concerned with the use of project work as a means to integrate the teaching of language, content and thinking skills in EFL. It deals with the issue of gradual integration of language, content and thinking skills into the Algerian EFL project work suggested in the official textbooks. The latter include the middle school textbooks *Spotlight on English One* (2003), *Spotlight on English Two* (2004), *Spotlight on English Three* (2006), and *On the Move* (2006), and the secondary school ones, *At the Crossroads* (2005), *Getting Through* (2006), and *New Prospects* (2007). It seeks to reveal the type of language, content and thinking skills these projects target to teach. Whether they target practical types of language and content and lower order thinking skills that characterize the use of language for basic interpersonal communications skills or whether they aim to teach abstract type of language and content and higher order thinking skills which are typical of the demands of cognitive academic language proficiency? Moreover, the research tries to find out whether these different types of language, content and thinking skills are integrated into the projects simultaneously or gradually from the least to the most complex both linguistically and cognitively. To achieve this aim, the study adopts frameworks for the integration of language, content and thinking skills into language tasks suggested by Mohan (1986) and Cummins (1981a) to elaborate categories for the analysis of the corpus that consists in 44 projects found in the textbooks under study. Questionnaires are also addressed to both middle school and secondary school learners to assess their opinions about the raised issue and find out whether or not their difficulties in conducting projects in English are due to the cognitive and linguistic complexities of the suggested projects in the official textbooks. The study adopts mixed-method research. The qualitative content analysis of the project works show that the latter aim to teach both practical type of language and content needed for basic interpersonal communication skills, and theoretical one required for cognitive academic language proficiency. These projects also aim to teach both higher and lower order thinking skills. Furthermore, the integration of the two types of language proficiency into the Algerian middle and secondary school EFL projects is simultaneous and does not consider the gradation principle in terms of both linguistic and cognitive complexities. The latter is, in fact, the reason for learners' difficulties in carrying out project work. The discussion of the results in the light of research in second language acquisition, educational psychology and psychology of child language development provides strong evidence that the teaching of language, content and thinking skills to beginner EFL learners should move from the least to the most complex skills both linguistically and cognitively. Based on these findings, a project work framework for the gradual integration of language, content and thinking skills in EFL is proposed.

Key words: Algerian Middle School and Secondary School EFL Textbooks; EFL Project Work; Gradation; Integration of Language, Content and Thinking Skills; Learners' Opinions; Linguistic and Cognitive Complexities

Résumé

La pédagogie de projet est devenue récemment l'une des méthodologies d'enseignement les plus utilisées dans l'enseignement de l'anglais comme langue étrangère. Cette recherche est une étude sur l'intégration de la langue, des contenus et des compétences de réflexion dans le projet didactique des manuels algériens d'anglais destinés à l'enseignement du cycle moyen et secondaire. Il s'agit notamment d'une évaluation des projets didactiques proposés dans les manuels scolaires d'enseignement moyen *Spotlight on English One* (2003), *Spotlight on English Two* (2004), *Spotlight on english three* (2006) et *On the Move* (2006), et ceux de l'enseignement secondaire *At the Crossroads* (2005), *Getting Through* (2006) et *New Prospects* (2007). Cette recherche vise à déterminer les types de la langue, des contenus et des compétences de réflexion enseignés à travers les projets et si leur intégration tient compte du principe de progression graduelle en termes de complexités linguistique et cognitive. Elle cherche à découvrir si ces projets ciblent le type pratique de la langue et de contenu et les facultés cognitives dites de bas niveau (*Lower order thinking skills*) qui caractérisent l'utilisation du langage pour le type communication, dites aptitudes interpersonnelles de base (savoir pratique), ou ils visent le type abstrait de la langue et de contenu et les facultés cognitives dites de haut (*Higher order thinking skills*) nécessaire pour la maîtrise cognitive de la langue au niveau abstrait (savoir théorique). L'analyse des projets s'appuie sur le cadre des structures de savoir proposé par Mohan (1986) et le modèle de classification des activités de communication proposé par Cummins (1981). Ces derniers sont utilisés pour élaborer les catégories pour l'analyse du corpus qui comprend 44 projets analysés dans les manuels d'anglais. Ils sont également utilisés dans l'élaboration des questionnaires adressés aux apprenants de la quatrième année moyenne et de troisième année secondaire pour évaluer leurs attitudes et opinions concernant la problématique de la progression graduelle en termes de complexités linguistique et cognitive dans l'intégration de la langue, des contenus et des compétences de réflexion dans le projet didactique des manuels d'anglais. Il s'agit aussi de savoir si les difficultés des apprenants à conduire des projets en anglais sont dues aux complexités cognitives et linguistiques des projets suggérés dans ces manuels. Les résultats de l'analyse montrent que ces projets dans l'enseignement moyen et secondaire visent à enseigner les deux types de compétence de communication, dites aptitudes interpersonnelles de base (savoir pratique) et maîtrise cognitive de la langue au niveau abstrait (savoir théorique). Les projets visent également à développer chez l'apprenant deux types de facultés cognitives dites de haut et de bas niveaux. Il a été aussi constaté que l'intégration de ces deux types de compétences linguistiques et cognitives dans les projets est simultanée et ne prend pas en considération le principe de progression graduelle en termes de complexité linguistique et cognitive. Ce dernier est, en fait, à l'origine des difficultés que les apprenants rencontrent pour conduire les projets. La discussion de ces résultats à la lumière des recherches sur l'acquisition de la langue seconde, de la psychologie de l'éducation et de la psychologie relative au développement du langage chez l'enfant montre clairement que, chez les débutants, l'enseignement de la langue, des contenus et des compétences de réflexion devrait se faire de manière progressive, du simple au plus complexe en termes linguistique et cognitif. En se basant sur ces résultats, un cadre pour l'intégration graduelle de la langue, des contenus et des compétences de réflexion dans le projet didactique a été proposé.

Mots Clés: Pédagogie du projet en anglais langue étrangère; intégration de la langue, des contenus et des compétences de réflexion ; Manuels de l'enseignement moyen et secondaire en Algérie; Opinions des apprenants ; Progression; Complexité linguistique et cognitive.

ملخص

أصبح المشروع في الآونة الأخيرة أحد منهجيات تدريس اللغة الإنجليزية الأكثر استعمالاً. بحيث تهتم هذه الدراسة بموضوع استخدام المشروع كوسيلة لدمج تدريس اللغة والمحتوى والمهارات الفكرية في اللغة الإنجليزية. تتناول مسألة الدمج التدريجي للغة والمحتوى والمهارات الفكرية في المشاريع المقترحة في الكتب المدرسية لتعليم اللغة الإنجليزية في الجزائر. وتشمل هذه الأخيرة الكتب الموجهة للتعليم المتوسط ، *Spotlight on English One (2003)* ، *Spotlight on English Two (2004)* ، *Spotlight on English Three (2006)* و *On the Move (2006)* والكتب الموجهة للتعليم الثانوي ، *At the Crossroads (2005)* ، *Getting Through (2006)* ، *New Prospects (2007)* وتسعى إلى معرفة نوع اللغة والمحتوى و المهارات الفكرية التي تهدف إليها هذه المشاريع. إذا ما كانت تهدف إلى تعليم مهارات الاتصال الأساسية بين الأشخاص (المعرفة العملية) أ والتحكم الفكري للغة (المعرفة النظرية) ، وإذا ما كانت تهدف إلى تعليم مهارات التفكير العليا (**Higher Order Thinking Skills**) والأقل مرتبة (**Lower Skills**) **Order Thinking** علاوة على ذلك، تحاول هذه الدراسة معرفة ما إذا كان دمج هذه الأخيرة يراعى مبدأ التدرج من حيث التعقيدات اللغوية والفكرية. لتحقيق هذه الأهداف ، تتبنى الدراسة المناهج الكمية والنوعية لجمع وتحليل البيانات.. وإضافة إلى ذلك ، تعتمد هذه الدراسة في تحليل نموذج 44 مشروع مقترح في الكتب المدرسية على إطار هياكل المعرفة (**Knowledge Structure Framework**) المقترح من طرف **Mohan (1986)** و نموذج تصنيف الأنشطة البيداغوجية القائمة على التواصل المقترح من طرف **Cummins (1981)** كما تم أيضاً توجيه استبيانات إلى كل من تلاميذ السنة الرابعة متوسط و السنة الثالثة ثانوي لتقييم آرائهم حول الإشكالية المطروحة ومعرفة ما إذا كانت الصعوبات التي يواجهونها في إنجاز المشاريع باللغة الإنجليزية ترجع إلى التعقيدات الفكرية واللغوية للمشاريع المقترحة في الكتب المدرسية. تكشف نتائج الدراسة أن المشاريع المقترحة في الكتب الموجهة للتعليم المتوسط و الثانوي تهدف إلى تعليم كل من مهارات الاتصال الأساسية بين الأشخاص (المعرفة العملية) والتحكم الفكري للغة (المعرفة النظرية) ، و كذا لك تهدف إلى تعليم مهارات التفكير العليا والأقل مرتبة. لقد تبين أن دمج هذين النوعين من المهارات قد تم بطريقه متزامنة بدون الأخذ بعين الاعتبار التعقيدات اللغوية والفكرية. إن مناقشة النتائج في ضوء البحث في اكتساب اللغة الثانية وعلم النفس التربوي وعلم نفس تطور اللغة لدى الطفل يكشف أن تدريس اللغة والمحتوى و المهارات الفكرية للمبتدئين يجب أن ينتقل من أقل إلى أكثر المهارات تعقيداً لغوياً وفكرياً. بناءً على هذه النتائج ، تم اقتراح إطار لدمج تدريجي للغة والمحتوى و المهارات الفكرية في المشروع لتعليم اللغة الإنجليزية .

الكلمات المفتاحية: المشروع التربوي ; دمج تدريس اللغة والمحتوى والمهارات الفكرية ; الكتب المدرسية للغة الإنجليزية للتعليم المتوسط والثانوي في الجزائر; التدرج من حيث التعقيد ; آراء التلاميذ

List of Abbreviations

ACR: At the Crossroads
BICS: Basic Interpersonal Communication Skills
CALP: Cognitive Academic Language Proficiency
CBA: Competency-Based Approach
CBI: Content-Based Instruction
CBLT: Competency-Based Language Teaching
EAP: English for Academic Purposes
ESL: English as a Second Language
EFL: English as a Foreign Language
ESP: English for Specific Purposes
GE: General English
GT: Getting Through
HOTS: Higher Order Thinking Skills
KSF: Knowledge Structures Framework
KSs: Knowledge Structures
LOTS: Lower Order Thinking Skills
MS: Middle School
NP: New Prospects
OM: On the Move
PBL: Project-Based Learning
PW: Project Work
SLA: Second Language Acquisition
SS: Secondary School
SEO: Spotlight on English One
SETW: Spotlight on English Two
SETH: Spotlight on English Three

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*“Expecting all children the same age to learn from the same materials is like
expecting all children the same age to wear the same size clothing”*

Madeline Hunter

*“Treat people as if they were what they ought to be and you help them become
what they are capable of becoming”*

Goethe

General Introduction

- **Statement of the Problem**

There has been much interest, recently, in the field of ESL/EFL in Project-Based Learning (PBL) and its relevance to language teaching and learning. This is the result of the change in education goals and teaching and learning paradigms. Education has moved from the teacher to the learner as the center of interest. Thus, according to Murdoch and Willson (2004) *what* teachers are expected to do when teaching, and *how* to do it, has also shifted in a dramatic way. Learner-centered pedagogy is defined by Mtika and Gates (2010, p. 396) as an approach which assumes that learners learn best by “actively constructing and assimilating knowledge rather than through the passive addition of discrete facts to an existing store of knowledge” (Quoted in Vavrus, Thomas, & Bartlett, 2011, p. 27). In language teaching and learning, the advocates of the learner-centered curricula are more interested in helping learners acquire linguistic and communication skills needed to carry out real world tasks instead of acquiring the totality of language (Nunan, 2013).

According to Plessis and Muzaffar (2010), the learner-centered approach which gives importance to the learner and the learning process draws on the constructivist theory of knowledge and learning. Prominent education scholars associated with the latter are Dewey, Piaget and Vygotsky. From the constructivist stand point, knowledge is internal rather than external to the knower. It is created by the latter rather than discovered. Knowledge is “created through a process of new information interacting with the prior knowledge and experiences of the learner” (Plessis & Muzaffar, 2010, p. 45).

The shift from teacher to learner-based instruction requires instructional methods which are different from the traditional teacher dominated ones. PBL is one of the most appropriate methods that enables learners to construct a wide range of skills for life and career success

Newell (2003); Bender (2012); Fadel and Trilling (2009); Murdoch and Wilson (2004); Diffily and Sassman (2002), and Arpin and Capra (2001).

The integration of PBL or Project Work (PW) into ESL/EFL programmes, according to Stoller (2002), is considered as an extension of Content-Based Instruction (CBI). By contrast to traditional approaches to language teaching which focus only on language, CBI targets both language and content objectives (Lyster, 2011). In addition to the teaching of language and content, Mohan (1990) claims that this approach aims also to develop language learners' thinking skills. He states that "The integration of language and content should relate language learning, content learning and the development of thinking, and should aim to find systematic connections among them" (Mohan, 1990, p. 2). In the same vein, Met, and Genesee (1989), say that in spite of the evidence that language development happens in a parallel way to cognitive growth, traditional methods in language teaching separate the teaching of language and content. CBI targets "to integrate language and cognitive development... provides not only the cognitive basis for language learning, however, but also the requisite motivational basis for purposeful communication" (Quoted in Lyster, 2007, p. 2). In this sense, PW in ESL/EFL is defined by Slater, Beckett, & Aufderhaar (2006, p. 242) as "a social practice into which students are socialized through a series of individual or group activities that involve the simultaneous learning of language, content, and skills".

In fact, in the recent years, research into the use of PW in ESL and EFL contexts has focused on its usefulness and role in the simultaneous teaching and learning of content knowledge and various sets of skills, mainly the cognitive ones, besides the target language. To make the integrated teaching and learning of these three aspects of PW more visible, Stoller (2002) and Beckett and Slater (2005) have suggested PW frameworks. Stoller (2002) in her ten steps project framework argues that in going through the different steps of a project, learners acquire various skills such as thinking skills and methodological skills, in addition to content knowledge about the project and language skills. The framework, Stoller (2002) claims, can be used in different ESL settings (General English (GE), English for Specific Purposes (ESP), and

English for Academic Purposes (EAP). Beckett & Slater's (2005) framework, which is based on Mohan's (1986) Knowledge Structures Framework (KSF), enables students in ESL settings who have negative attitudes towards learning English through PW to see concretely the benefits of the latter. These benefits consist in acquiring content knowledge, various thinking skills and language-related skills.

In Algeria, the general education reform that has started in 2002, concerns the teaching and learning of all school subjects, including foreign language education in all cycles of the educational system, including the middle and secondary schools education. As a result of the reform, the Competency-Based Approach (CBA) has been adopted to teach all school subjects, among them English. The latter has the status of a second foreign language in Algeria. Following the adoption of this approach, new syllabuses and textbooks were designed to implement the reform.

As regards the goal of EFL teaching, the Algerian middle school (MS) and secondary schools (SS) syllabuses state that it is to enable learners to master efficient linguistic tools that permit them to use English for different types of transactions (Programme d'Anglais de la Première Année Moyenne, 2002; Programme D'anglais Deuxième Langue Étagère : Première Année Secondaire, 2005). Besides, it targets the fostering of learners linguistic and communicative competencies (ibid). The designers of the MS syllabus claim that the aim of teaching English is the acquisition of competences rather than knowledge. The MS syllabus defines competence, which is not different from the one provided in the SS syllabus, as "The ability to act effectively through the integrated use of a set of abilities, skills and knowledge in problem situations that may have never been encountered before" (Programme d'Anglais de la Première Année Moyenne (2002, p. 49). As for the adoption of the CBA in the MS and SS syllabuses, the designers believe that it helps learners to acquire intellectual competencies and various processes which are necessary for knowledge assimilation and use in problem situations

inside and outside the school contexts (Programme D'anglais Deuxième Langue Etrangère : Première Année Secondaire, 2005; (Programme d'Anglais de la Première Année Moyenne, 2002)

To achieve the above stated goals of the MS and SS syllabuses and the aims of adopting the CBA, a teaching methodology which is based on the cognitivist and social constructivist conception of learning has been proposed. Furthermore, to put this methodology into practice, PBL has been adopted in the MS and SS syllabues (Programme d'Anglais de la Première Année Moyenne, 2002; Programme D'anglais Deuxième Langue Etrangère : Première Année Secondaire, 2005). PBL “takes a concrete form that indicates most visibly the extent to which the targeted competencies are attained” (Teacher’s Guide to *Spotlight on English Three*, 2004, p. 11). Besides, to put into practice the principles of the CBA and the PBL, new textbooks have been designed for the MS and SS cycles. The MS textbooks for the four levels are entitled *Spotlight on English One* (2003) (SEO), *Spotlight on English Two* (2004) (SETW), *Spotlight on English Three* (2006) (SETH), and *On the Move* (2006) (OM), respectively. The three SS textbooks are named *At the Crossroads* (2005) (ACR), *Getting Through* (2006) (GT), and *New Prospects* (2007) (NP), respectively (1).

The *Teacher’s Guide to Spotlight on English Three* (2006), for instance, explains that the PW rubric included in the textbooks aims at developing together the *psychomotor* and the *affective* domain of competency, as stated in Benjamin Bloom’s Taxonomy of educational objectives (1956). The objectives put forward by the guide include values such as autonomy, creativity, and responsibility (Ibid, p. 10). The guide specifies also that the inclusion of PW in the textbooks intends to “allow enough elbow room both inside and outside class for the learners to exercise their cognitive skills” (Teacher’s Guide to SETH, 2004, p. 23).

(1) SEO, SETW, and SETH have already been replaced by other textbooks (2nd generation textbooks) within the ongoing general education reform that has been started in 2016 by the Algerian ministry of education.

PW in the Algerian EFL, middle and secondary schools, is considered as a home assignment to be carried out by learners working in groups. They work on their projects outside the English language classes and they are required to complete and submit a project at the end of every instructional unit. Projects that learners work on are supposed to be the ones suggested in the official MS and SS English language textbooks. In fact, a topic or a theme for a project is suggested in the textbooks for every teaching/learning unit and they are in close relationship with the themes of the units. As for the procedures to carry out the projects, every unit of the textbooks devotes a page or two to explain the procedures that learners (working individually or in groups) should follow to conduct them. Moreover, teachers are supposed to explain the aims of the projects to the learners and the procedures they should follow to conduct them at the beginning of every instructional unit.

However, in practice, during our experience in teaching English in the Algerian MS we noticed that learners do not seem to take PW seriously. They usually doubt of the usefulness of PW in learning the English language. They also complain about projects difficulty that makes their completion very difficult and sometimes impossible. As a result of these and maybe other reasons, it is generally one of the members of the group that carries out the project or an older and more knowledgeable person (a relative, parent or an older learner) and most of the time, projects consist in ready-made work withdrawn from the internet and submitted to the teachers.

- **Previous Studies**

It is worth to mention that the integration of language, content and thinking skills through PW in EFL has received little attention in academia. Some of the case studies that are reviewed here are concerned with reporting some teaching experiences through PW to show either its success or failure in helping learners/students to acquire the English language, content or some type of skills. For instance, Sean (2017) has investigated the effects of the implementation of PBL in EAP writing course with Macau university students in China. The issues that the study

has raised is whether or not these students could successfully carry out PWs semi-autonomously and whether or not they achieve the objective of the implementation of PW in this context, which is autonomy for future self-directed learning. The results of this field study revealed that PW has successfully helped in achieving self-directed autonomous language learning.

Another study on the use of PW with proficient EFL learners has been conducted by Trabelsi (2013). The study has investigated the use of PW as a means to integrate authentic tasks for ESP students (Business English) in the Graduate Business School of Sfax, Tunisia. The aim of this study is to find out the extent to which PW can be a producer of authenticity in Business English course. The findings confirm that PW has triggered students' interest and motivation to use English in the classroom and has been of very important benefits in terms of language learning and research skills development.

Like the two studies above on the use of PW in EFL contexts, another study has been conducted on the effects of PW on university students at Bangkok University, Thailand, by Cameen (2015). The aim of this study is to investigate the extent to which PW can be successful in an English language classroom in the Thai culture in which the dominant role of the teacher is appreciated. The results of this study confirm the successful integration of PW. It has been found that PW was efficient in improving students' speaking skills in addition to their cognition, work ethics and interpersonal skills.

Other studies, however, affirm failure of PW with low level EFL learners. An example of these is a Japanese study on the limited effects of PW on low level English language students by Eguchi and Eguchi (2006). The main purpose of this study is to investigate the effect of PW (the magazine project) on learning English with students with low level in English. The researchers have underlined two main reasons of this failure: the first one is the over emphasis on the task (the project) over the tool to conduct this project (the English language). The second

reason is the lack of exposure to the target language outside the classroom and the students' tendency to use their L1 to conduct the project.

In Algeria, even though studies on the use of PW in the EFL teaching and learning are rare, a study which has been conducted by Hamada (2011) reveals interesting results. The study is concerned with teachers' perceptions of the issues of feasibility and evaluation of PW in the Algerian EFL SS context. Some of the major problems that the study has underlined are: Over emphasis on the content and neglect of the language skills and communication ability, PW is based on knowledge and information gathering, and the neglect of cognitive and metacognitive strategies in the evaluation of PW. On the feasibility of PW in such contexts, Hamada (2011, p. 71) concludes that "The application of project work –in a context where English is not a second language- does not help learners develop the expected competencies".

The above reviewed studies on PW in different EFL contexts have investigated and reported either success or failure of PW in the teaching and learning of language, content and some types of skills. They have not dealt with PW as a social practice that enables the teaching and learning of language, content and thinking skills. In other words, they are not concerned with investigating the relationship between the content that is taught through PW and the language that is needed to express it. They do not also consider the abstract thinking skills that represent the content, which are in themselves expressed through language. Furthermore, these studies are not concerned with investigating the relationship between students'/learners' failure or success to acquire language, content and some types of skills and the cognitive and linguistic requirements of the projects. They do not consider the relationship between learners'/students' success or failure in conducting PW and the cognitive and linguistic complexities of the latter. In other words, these studies do not consider whether or not learners' success in conducting PW is due to the appropriateness of the linguistic and cognitive requirements of the projects to their cognitive and linguistic level, or whether their failure in carrying out the projects is the result of their

(PWs) non appropriate level of linguistic and cognitive demands with that of the learners/students or not.

Therefore, the issue of gradual integration of language, content and thinking skills into EFL PW does not seem to have been raised neither by the reviewed case studies, above, nor by project frameworks for the integration of language, content and skills in ESL/EFL contexts, namely, Stoller (2002) and Beckett and Slater (2005) project frameworks. Indeed, none of the case studies on the use of PW methodology in various EFL contexts, either reporting learners'/students' success/failure in conducting PW, relate this to the linguistic and cognitive complexities of the projects. They do not specify the types of language, content, and thinking skills that the projects target and whether or not these fit the learners' proficiency level in EFL, hence, determining their success or failure in conducting the projects. Furthermore, Stoller (2002) and Beckett and Slater (2005) project frameworks for the integration of language, content and skills into ESL/EFL PW, do not also seem to be concerned with relating the type of language, content and skills to be integrated into PW to the students'/learners' proficiency level. Can any type of language, content and skills (mainly the cognitive) be integrated into PW with learners/students of any proficiency level in EFL? Or are these three components of EFL PW selected according to learners'/students' cognitive abilities and proficiency level in EFL? Additionally, the problem has not also been investigated with regards to the implementation of PW in EFL textbooks.

The issue of gradual integration of language, content and thinking skills into PW deserves careful investigation to ensure that projects are challenging enough but not too much demanding both cognitively and linguistically. Gradation enables learners to shift gradually from the least to the most complex types of projects through different grades and makes teaching and learning through PW enjoyable and successful.

Accordingly, the issue that this study investigates is to whether or not the projects that are suggested for the Algerian MS and SS learners, in the official textbooks, are designed to integrate the teaching of language, content and thinking skills taking into consideration the linguistic and cognitive complexities. That is, whether the linguistic and cognitive complexities of these projects are varied through the grades of the middle and secondary school or not. And whether these projects are challenging enough to keep learners engaged and motivated in order to learn or are beyond their cognitive abilities and English language proficiency level. Moreover, investigating this issue by analyzing projects that are suggested in the textbook is significant because of the role that textbooks play in EFL contexts, especially in periods of change. Sheldon (1988), for instance, claims that textbooks have advantages for both teachers and learners and that they represent for them “the visible heart of any ELT program” (Sheldon, 1988, p. 237). About the importance of textbooks in periods of change, Hutchinson and Torres (1994, p. 1994) state “the most convenient means of providing the structure that the teaching-learning system __ particularly the system in change__ requires”. Hutchinson and Torres (1994) also consider that textbooks are potential effective agents for change because the structure provided by the textbooks, on the one hand, relieves the teacher from many burdens and concentrate on the new content and the procedure to teach it. On the other hand, it makes it possible for people see what the change will look like.

In this research, we claim that the successful integration of language, content and thinking skills into EFL PW should consider the English language proficiency level of the learners, their cognitive abilities, and the effect of their language proficiency level on their performance in cognitively demanding projects; that is, the type of language, content and thinking skills to be integrated into the projects should be determined by the learners’ cognitive abilities and degree of the mastery of the English language.

Our claim that PW as a social practice should gradually integrate the teaching of language, content and thinking skills, both in terms of linguistic and cognitive complexities, is based on research findings in Second Language Acquisition (SLA) and in educational psychology. From the SLA research, this study relies on two main theoretical frameworks: Mohan (1986) KSF and Cummins (1979; 1981a) Language Proficiency Model. From the educational psychology stand point, it adopts Krathwohl (2002) revised taxonomy of the cognitive domain of educational objectives. Mohan (1986) in his KSF claims that language, content, and thinking skills should be systematically integrated in language teaching. He defines Knowledge Structures (KSs) as “abstract categories of the field of situation typically realised in discourse by logical meanings of the semantic system ” (Quoted in Mohan, 1989, p. 103). That is to say, every situation contains different abstract types of knowledge that are expressed through language. Examples of these KSs in a typical situation are classification, principle and evaluation (theoretical discourse), and description, sequence and choice (practical discourse). Each of these categories is expressed by means of language and represents some type of thinking skills (ibid). Practical discourse is specific to everyday situations of interaction whereas, theoretical discourse is typical to the academic type of situations. One of the implications of this distinction is the sequencing of language and content in teaching situations and the shift from the concrete or practical type of discourse to the most theoretical one (Mohan, 1986).

In the same line of thought, Cummins (1979; 1981a) in his Language Proficiency Model argues that communicative tasks that target the integration of language and content range in a continuum and gradual way from the least to the most complex. That is, they gradually move from the tasks containing concrete type of language and content to the ones incorporating the abstract type, and from those demanding less complex cognitive skills (context-embedded language and content) to the ones requiring higher cognitive skills (context-reduced language and content), respectively. The first type is meant to develop learners’ conversational skills that

are needed for everyday communication or Basic Interpersonal Communication Skill (BICS) whereas the second targets academic language proficiency, also called Cognitive and Academic Language Proficiency (CALP). The latter is both linguistically and cognitively more demanding and challenging than the former and requires more time to be mastered.

From the educational psychology perspective, Krathwohl's (2002) taxonomy of the educational objectives claims that thinking skills should be hierarchically classified from the lowest to the highest or from lower order thinking skills (LOTS) to higher order thinking skills (HOTS). The integration of these skills into education should be sequential and hierarchical. Sequence means that "each classification within it demands the skills and abilities which are lower in the classification order" (Bloom, 1956, p. 130). Among the principles for sequencing content in language teaching, according to Richards and Schmidt (2002) in the shift from simple to complex (easier items occur before more difficult ones), prerequisite learning which means an item is taught because it provides a foundation for the next step in the learning process.

- **Aims of the Study**

This study is concerned with the issue of the gradual integration of language, content and thinking skills in terms of both linguistic and cognitive complexity into the Algerian EFL PWs suggested in the official textbooks for both MS and SS learners. Its objectives are twofold: first, it aims to evaluate PWs in both MS and SS textbooks in relation to the raised issue from both the researcher's investigation and learners' attitudes. In this respect, we argue that the implementation of PWs in the textbooks under study does not account for the gradation principle. In other words, projects do not account for the cognitive complexity and linguistic demands of the integrated language, content and thinking skills into these projects. The evaluation of learners' attitudes towards PW in EFL, in general, and PW in the textbooks, in particular, help us shed more light on the issue and find out if learners' difficulties in conducting projects in EFL are due to the latter's cognitive and linguistic complexity or not.

The second aim of this study is methodological. It aims at critically reviewing PWs frameworks in ESL/EFL contexts in relation to the integrative teaching of language, content and skills. The project frameworks that are found in the literature on PW, namely, Stoller (2002) and Beckett and Slater (2005) are meant to be used in ESL contexts with relatively advanced level learners in GE, ESP, and EAP. Stoller's framework aims at providing guidelines in integrating language, content and various skills at the different steps of PW. Beckett and Slater's framework aims at enabling learners' to become aware of the positive aspects of learning through PW by keeping a record of the language, content and skills they acquire in the process of conducting their projects. These frameworks may not be suitable for beginner/ low level learners in EFL contexts because they neither provide systematic ways to integrate the teaching and learning of different types of language, content and thinking skills, nor do they explain how projects involving varied degrees of complexity in terms of these three aspects can be integrated for EFL learners of different levels. Therefore, our aim is to suggest a PW framework for the gradual integration of language, content and thinking skills to account for the linguistic and cognitive complexity of projects.

- **Research Questions and Hypotheses**

To investigate the issue of gradual integration of language, content and thinking skills into PW in the Algerian MS and SS EFL textbooks, and assess learners' attitudes towards these projects, the following research questions are raised:

Q1- What type(s) of language, content, and thinking skills do PWs in the Algerian MS and SS EFL textbooks target to implement?

Q2- Does the integration of language, content and thinking skills into these PWs account for the learners' cognitive abilities and their English language proficiency level?

Q3- Do PWs in the textbooks account for the principle of gradual and hierarchical integration of language, content and thinking skills?

Q4- Do the low English language proficiency level of the learners and the high cognitive and linguistic demands of these projects determine PW complexity for the Algerian MS and SS EFL learners?

To answer these questions, the following hypotheses are advanced:

H1- PWs in the Algerian EFL textbooks target the implementation of both BICS and CALP types of language and content and both types of cognitive abilities, LOTS and HOTS.

H2- The integration of language, content and thinking skills into the projects does not account neither for the learners' cognitive abilities nor their English language proficiency level.

H3- PWs in the MS and SS textbooks do not account for the principle of gradual and hierarchical integration of language, content and thinking skills.

H4- Low English language proficiency level of the learners and the high cognitive and linguistic complexities of the MS and SS PWs determine PWs difficulty for the MS and SS learners.

- **Research Methodology and Techniques**

This study is grounded in various theories that constitute its theoretical framework. The first methodological tool consists in Mohan's (1986) KSF. The latter is a framework for systematically integrating the teaching and learning of language, content and thinking skills. The KSF is situated within the Systemic Functional Linguistics approach to language which takes discourse in relation to its sociocultural context. It regards learning as a linguistic process and language learning as a socializing process (ibid). The Framework adopts Halliday and Martin's (1993) definition of language as "a resource for meaning rather than as a system of rules" (Quoted in Mohan, 2007, p. 317). The KSF is defined as "a heuristic tool for the analysis of discourse in social practice" (Early, Potts, & Mohan, 2005, p. 66). In other words, KSF is a tool that enables teachers and learners to examine language of social practices in order to develop the learners' language resources to learn language, to learn about language and to learn through language (Early et al., 2005).

In fact, the KSF is a model of social practice. In KSF, knowledge structures are defined as “broad and general patterns of the organization of information” (Mohan, 1990, p. 11). Mohan (2007, p. 303) defines a social practice as “a unit of culture that involves cultural knowledge and cultural action, in a theory/practice, reflection/action relation”. And knowledge structures as “the semantic patterns of discourse, knowledge, actions, artifacts, and environment of a social practice” (ibid). These structures represent cognitive or thinking skills “the whole group of KSs can be justified in their own terms as cognitive categories” (Mohan, 1989, p. 103). The KSF distinguishes between two types of knowledge structures that are involved in a typical social practice. These are: theoretical or general, such as, description, sequence and choice and practical or specific, for instance, classification principles and values. They represent different linguistic and cognitive categories that move in a sequence, from the least to the most complex, respectively.

The second methodological tool that this study uses is Cummins’ (1981a) conception of language proficiency in ESL/EFL contexts. Cummins has proposed a methodological framework of communicative proficiency in bilingual ESL contexts. He claims that the conceptualization of communicative proficiency has three requirements. First, it must incorporate a developmental perspective. That is, it should make a distinction between “those aspects of communicative proficiency mastered early by native speakers and L2 learners can be distinguished from those varying across individuals as development progress” (Cummins, 1981a, p. 11). In other words, a distinction, on the one hand, between aspects of language which are mastered in the early years of language acquisition by native speakers and L2 learners, including phonological, semantic and syntactic skills. On the other hand, aspects of language proficiency that continue to develop through the years (during school years or beyond). These are referred to as literacy-related skills, including reading, writing and acquisition of concepts in a language. Second, Cummins’ conception of communicative proficiency allows for the distinction between two types of

linguistic demands: those that are needed in the classroom context, and those that are required for interpersonal communication outside the school context. In other words, language that is needed for academic success in the classroom context, and the one that is required for other types of social communication. The former is called by Cummins Cognitive Academic Language Proficiency (CALP) and the latter Basic Interpersonal Communication Skills (BICS) The third requirement is the relationship between L1 and L2 proficiency. This study, however, focuses mainly on the two first aspects of communicative proficiency.

Cummins's two types of communicative proficiency in ESL contexts, BICS and CALP, require varied degrees of cognitive involvement and contextualization. The former involves context-embedded type of communication and is cognitively undemanding. The latter is context-reduced and is cognitively demanding. In ESL contexts, Cummins (1982) argues that it takes longer time for the language learners to master context-reduced/ cognitively demanding aspects of language (CALP) than context-embedded/cognitively undemanding (BICS) ones.

These two methodological tools have guided us in formulating the research questions that this study seeks to answer. They also guide us in elaborating the categories to be used to investigate the issue of gradual integration of language, content and thinking skills into the PWs understudy, in the research methodology (chapter four). They also guide us in the design of our PW framework for the gradual integration of language, content and thinking skills to account for linguistic and cognitive complexity (chapter ten).

The corpus of this study consists in 44 PWs suggested in the Algerian EFL textbooks, 22 projects proposed in the four MS textbooks and 22 included in the SS ones. The corpus is analysed, in an attempt to provide answers to the research questions raised in this study and confirm or disconfirm the hypotheses, using the methodological tools above. It is described and analysed qualitatively. These methodological tools are also used as guidelines in formulating the questions in the questionnaires to both 4th year MS and 3rd year SS learners to assess their

opinions and attitudes towards the integration of language, content and thinking skills into PW, in general, and PWs that are suggested in the textbooks under study. Data from these questionnaires are collected and analysed using a quantitative method (descriptive statistics) . Therefore, this study uses triangulation by: 1. data type combining qualitative and quantitative methods, or mixed methods. 2. Combining two research tools: a corpus of 44 PWs and questionnaires. 3. Data sources, by gathering data from two groups of learners (105 4th year MS and 111 3rd year SS learners. 4. By theory, combining the two frameworks to integrate the teaching of language, content and thinking skills described above.

- **Structure of the Thesis**

The thesis is divided into three parts, in addition to a general introduction and a general conclusion. The first part is entitled “Concepts and Theoretical Issues”. It includes three chapters. Chapter one, “Project-Based Education”, deals with the origins of PBL in general education, origins, definitions, characteristics and benefits of PBL in ESL/EFL education, as well as the underlying psychological and SLA theories. The second chapter is called “Competency-Based Approach, Content-Based Instruction, and Project Work”. It deals with CBA, its definitions, its use for the teaching of different skills and competencies, and PW as a methodology to teach skills and competencies. The chapter also deals with CBI and PW. It provides definitions and the rationale for CBI. It explains how PW can be used in CBI to integrate the teaching of language, content and skills. It includes also rational and theoretical perspectives for CBI, and frameworks or models for integrating language, content and thinking skills into ESL/EFL tasks. Finally, it explains and critically reviews PW frameworks for the integrated teaching of language, content and skills in ESL/EFL. Chapter three is named “Theoretical Rationale for Gradual Integrated Teaching of Language, Content and Thinking Skills through PW”. It includes Cummis’ developmental language proficiency model, taxonomies of levels of thinking in education, namely, Bloom’s (1956) taxonomy of the

cognitive domain of educational objectives and Krathwohl's (2002) revised taxonomy of the educational objectives. It includes also Piaget's stage theory of cognitive development and its application to language development, and his perception of the relationship between language and thought. The chapter deals also with Cummins' (1976) *Threshold Hypothesis* which explains the relationship between linguistic competence and cognitive growth. Finally, the chapter explains Vygotsky's view on the development of spontaneous and scientific concepts and his relationship between thought and speech.

The second part of this thesis is called "Methodological Tools and Results". It contains five chapters. Chapter four is named "Research Methodology". It explains mixed-methods research and how it is used in this study, and the different levels of triangulation that this study adopts. It also describes the data gathering tools, which consist in a corpus of PWs suggested in the Algerian MS and SS EFL textbooks, and questionnaires addressed to 4th year MS and 3rd year SS learners. Finally, it describes the data analysis procedures. This includes categories for classifying PWs targeting the integration of language, content and thinking skills, qualitative content analysis, and descriptive statistics. Chapter five is entitled "Integration of Language, Content and Thinking Skills into EFL PWs in the MS Textbooks". It includes results of the analysis of language, content and thinking skills integration into PWs in the four MS textbooks SEO, SETW, SETH, and OM, and a discussion. Chapter six is called "Integration of Language, Content and Thinking Skills into EFL PWs in the SS Textbooks". It deals with the presentation of the results for the analysis of the integration of language, content and thinking skills into EFL PWS in the SSTs, ACR, GT, and NP, and discussion. Chapters seven and eight are concerned with the analysis of the questionnaires to 4th year MS and 3rd year SS learners, respectively. Each chapter also includes a discussion of the results.

Part Three is named "Discussion of the Results". It includes two chapters. Chapter nine, called "Discussion of the Integration of Language, Content and Thinking Skills into PW in the Algerian

EFL Education”, discusses the results obtained from both the analysis of PWs in the Algerian MS and SS EFL textbooks and the questionnaires to 4th year MS and 3rd year SS learners. The results are analysed in the light of SLA research, educational psychology, and psychology of child language development. Chapter ten is named “Suggestions for language, content and thinking skills integration into EFL PW”. It deals mainly with the description of our suggested PW framework for the gradual integration of language, content and thinking.

Part One

**Concepts and Theoretical
Issues**

Chapter 1: Project-Based Education

Introduction

This chapter provides a review of the literature on project-based education. It starts by reviewing the origins of PBL in general education by looking at the contributions of Dewey, Kilpatrick, Freire, and the learner-centered approaches to education. Then, it deals with PBL in ESL/EFL education, its origins, definitions, characteristics, and benefits. Finally, it reviews the psychological theories and SLA research underlying the use of PW in ESL/EFL education. It provides an overview of the constructivist psychological theories that have set the ground for PBL, namely Piaget's developmental theory of learning, Vygotsky's sociocultural theory of learning, and Swain's linguistic theory, namely, the Output Hypothesis.

1.1. Origins of Project-Based Education

Scholars trace back the origins of PW to the American tradition in education. "Doing projects is a long standing tradition in American education" (Markham, 2003, p. 03). Beckett (2006) claims that it started with the American Reform Movement led by Dewey and Kilpatrick in the beginning of the twentieth century. According to Brydon-Miller (In Beckett, 2006) the first to conceive of PBL is David Snedder. Projects were used as means to teach science in American vocational agriculture. Then, they were made popular by Dewey and his student Kilpatrick.

PBL in literacy, according to Wrigly (1998), was first discussed by Kilpatrick in his pamphlet "The Project Method" (1918). Kilpatrick believes that the use of literacy in contexts meaningful to the learners provided a means to build their background knowledge and achieve personal growth (Wrigly, 1998). Wrigly says that this approach was used by educators who advocated Dewey's progressive philosophy of education. These educators believe that children best learn through experiences which interest them and activities that allow for individual differences.

At the time when the project method was developed in America, outstanding European scholars in the field of education also were laying the ground to PW, Montessori, Piaget, the Dutch existentialist psychologist Buytendijk, and Russian psychologist, Vygotsky (Beckett, 2006). Beckett (2006) claims that all of these scholars' philosophies form the foundation of what educators nowadays practice under different labels such as holistic teaching and humanistic methods. The latter are the result of the same ideological and pedagogical beliefs (Beckett, 2006, p, xiii).

As regards the use of the project approach in teaching and learning, Markham (2003) claims that it is due to two important developments: first, the revolutionarily theory of learning in the twentieth century that happened thanks to research in neuroscience and psychology. Research in these fields has proved that learners do not respond by feeding back information but they are active individuals who use what they already know to explore, negotiate, interpret and create. As a result, the emphasis has shifted to the process of learning. Second, because of the industrial culture in the twentieth century, students needed to learn both language and skills that enable them to succeed in life, either in work place or in mastering their roles as global citizens. In a word, the increasing popularity of PW in the twentieth century, according to Markham (2003), was urged by the need of education to adapt to the changing world. It is considered as a suitable approach to education because of its emphasis on standard clear outcomes.

1.1.1. Dewey's Progressive View of Education

Dewey in his book *Experience and Education* (1938) claims that mankind likes thinking in terms of Eithers-Ors without intermediate possibilities and that educational philosophy is not an exception. Two opposing views on education are known in the history of educational theory. Traditional education which believes in development from without, and progressive education which favours development from within. The subject-matter of traditional education consists of bodies of information/skills that have been worked out in the past and which schools transmit to

the new generations. Furthermore, it has the role of moral training in developed standards and rules of conduct. Because the subject-matter and the standards of proper conduct are handed down from the past, the attitudes of the learners must be that of docility, receptivity and obedience. Teachers, however, are regarded as the agents through whom skills are communicated and the rules of conduct are enforced (Dewey, 1938, p, 18).

The rise of the new type of education, known as progressive education, is the result of discontent with the traditional one. To understand what is meant by progressive education, Dewey (1938) contrasts its principles to those of the traditional one. The first principle of traditional education, imposition from the above, is opposed to expression and cultivation of individuality; to external discipline, is opposed free activity; learning from texts and teachers, is contrasted to learning through experience; the acquisition of skills and techniques by drills, is opposed to their acquisition as means of attaining ends which make direct vital appeal; instead of preparing for more or less remote future, progressive education makes the most of the opportunities of present life. Finally, the static aims and materials, are opposed to the acquaintance with the changing world (Dewey, 1938).

Dewey believes that the fundamental unity of the progressive type of education is found in the idea that there is a close relationship between the process of actual experience and education:

I assume that amid the all uncertainties there is one permanent frame of reference: namely, the organic connection between education and personal experience; or that the new philosophy of education is committed to some kind of empirical or experimental philosophy (Dewey, 1938, p. 25).

However, Dewey (1938) insists that not all experiences are educative and that genuine education comes from experiences which involve what he calls continuity and interaction. The first principle of the philosophy of experience, continuity, means that an experience is regarded as truly educative when “objective conditions” are subordinated to what goes within the individual having the experience (Dewey, 1938). In other words, continuity is the interaction between past

experiences or what is done by educators, equipment, books, apparatus, toys... and the desire and interests of the child (internal conditions) (Dewey, 1938, p, 42). The second principle, interaction, assigns equal rights to both factors in educative experience i.e. objective and internal condition (Dewey, 1938).

In his *Democracy and Education*, Dewey (1916) advocated learning that results from experience. He maintains that individuals do some actions and as a result they experience consequences of what they do. And learning happens when consequences are undergone. Put differently, learning from experience means to link the things we do (actions) and what we enjoy or suffer from them in consequence. Hence, Dewey says, “doing becomes a trying, an experience with the world to find out what is it like, the undergoing becomes instruction – discovery of the connection of things” (Dewey, 1916, p. 101). However, to render this experience meaningful, Dewey claims that an essential element is needed which is thinking. Thinking according to him, occurs in situations which are incomplete, uncertain, and problematic. Thus, he defines thinking as “a process of inquiry and investigation” (Ibid, p. 110).

As far as education is concerned, Dewey believes that a good habit that schools need to foster in learners is thinking. And the only direct way to endure improvement in instructional methods and learning consists in a focus on the conditions that promote and test thinking (ibid). If thought is to be aroused in learners, any school subject, according to Dewey, should be as unschoolatic as possible. That is to say, the kind of situations needed in educational settings should present themselves outside of the school and that interest emerges in the ordinary life of the learner (Ibid, p. 111). Accordingly, successful formal education methods in various subjects, such as, geography, arithmetics, foreign languages and others, should use situations which cause thinking out of the school i.e; “methods that give the pupils something to do not something to learn” (Dewey, 1916, p. 111). And it is doing which requires thinking, he continues.

It seems, according to what is said above about Dewey's view of education, that PW is the most suitable approach to make the aims of such an approach to education concrete. In fact, PW engages learners in tasks which are purposeful, meaningful, happen, or likely to happen in the life of the child outside of the four walls of the classroom and outside of the school. In trying to accomplish a project, learners engage actively in planning and executing the plans. It is the difficulties that they encounter when carrying out the projects that stimulate students' thinking and engagement in inquiry which results in learning in its turn. We also believe that PW is suitable to concretize Dewey's two conditions of an educative experience in the progressive type of education. That is, projects can provide learners with opportunities to integrate objective conditions (past constructed experiences, teachers' knowledge, books...) and their desires and interests.

1.1.2. Kilpatrick's (1918) Project Method

In his essay, "*The Project Method*" Kilpatrick (1918, p. 320) defines a project as "a whole hearted purposeful activity proceeding in a social environment". In other words, any activity which is undertaken by an individual with a determined goal and it is realized within a society. Characterizing a project as a "hearty purposeful act" means that any other activity carried out without a purpose and without an individual's attention to achieve some ends by accomplishing the activity is not a project. Kilpatrick states that to consider any activity as project, two essential factors are needed: first, the existence of what he calls "a dominating purpose", second, the purpose(s) of a project should be present in life. That is, the purposes should be similar to the ones that we strive to achieve in real life when undertaking any activity (ibid, p. 321- 322).

To defend the place of project in educational thinking, Kilpatrick claims that educators (American educators) have always wanted to consider education as life itself and not just as a means to prepare individuals for a later living i.e. prepare them to cope with life outside

school and after school (careers). Kilpatrick admits that he owes his ideas about education to Dewey's "learning by doing", which he believes implies a lot of wisdom about education. The following passage explains clearly Kilpatrick's view of education:

We scorn man who passively accepts what fate or some other chance brings to him. We admire man who is master of his fate, who with deliberate regard for a total situation forms clear far-reaching purposes, who plans to execute with nice care the purposes so formed. A man who habitually so regulates his life with reference to worthy social aims meets at ones the demands for practical efficiency and moral responsibility (Kilpatrick, 1918, p. 322).

Kilpatrick definitely disapproves rote and passive learning and advocates active learning, in which the individual learner makes and executes plans carefully and deliberately to achieve some purposes. He admires men who are practically efficient and morally responsible in life.

In his classification of projects, Kilpatrick distinguished four different types. The purpose of the first is to embody some idea or plan in external form, such as, building a boat, writing a letter, presenting a play etc. The second one has as a goal enjoying some aesthetic experience, e.g. listen to a story, hear a symphony etc. The desired goal of the third type is to straighten out some intellectual difficulty, that is, to solve some problem, for instance, to find out whether dew falls. The forth type of projects targets obtaining some degrees of skill or knowledge, as learning to write or learning irregular verbs in French (Kilpatrick, 1918, p. 332-334). The above classification of projects, according to Kilpatrick, is central because it highlights the relationship of project method to problem method. His categorization of projects shows that problem method is one type among others within the project method.

1.1.3. Freire's *The Pedagogy of the Oppressed* (1970)

Freire, in his *Pedagogy of the Oppressed* (1970), criticizes the traditional approaches to teaching and learning. About the relationship between the teacher and the learner, he says that an analysis of the relationship teacher-student, inside or outside the classroom, reveals a "narrative character". The relationship involves a narrating Subject (the teacher) and a listening Object (the student). The task of the teacher is to "fill" the students with contents he narrates to

them. Narration leads students to memorise mechanically what the teacher says or narrates. Worse than this, Freire says “it turns them into “containers”, into “receptacles” to be “filled” by the teacher” (1970, p. 53). The author calls this kind of education, where the teacher issues “communiqués” and students receive instead of communicating, “banking education”.

In the banking concept of education, knowledge is a gift given by those who consider themselves knowledgeable (teachers) upon those who they consider to know nothing (students). This ideology of oppression negates education as a process of inquiry. The attitudes and practices of the banking education mirror the oppressive society. Freire believes that the liberating education must start by finding a solution to teacher-student conditions. Reject the banking education and communiqué to adopt communication and problem-solving methods. This education aims at making the students critical thinkers instead of receptacles (Freire, 1970, p, 64). In the liberating education, people who are subjects to domination must fight for their emancipation, and it enables both teachers and learners to become subjects of the educational process by overcoming authoritarianism. Above all, this liberating type of education cannot serve the interests of the oppressor “No oppressive order could permit to begin to ask the question, why?” (ibid, p. 67).

PW, then, we believe, can be used as a pedagogical tool to challenge the “narrative character” of the relationship teacher-learner. Projects, in fact, require from the two sides to work in collaboration. Teachers in PBL are expected to encourage learners, of course with their help and guidance, to search for the contents (information) instead of pouring it into their minds. Besides, the main actors in the process of carrying out a project are learners and teachers have the role of assisting them. It permits both parts in the learning process to be active subjects. Project-based instruction seems also to suit the requirements of Freire’s liberating type of education which aims at empowering learners to become emancipated learners and critical thinkers.

1.1.4. Student-Centered Approaches and Project Work

PW stems also from student-centered approach to teaching and learning. The latter was developed in the start of the twentieth century due to the influence of the works of Dewey and Vygotsky (Zohrabi, Torabi, & Baybourdiani, 2012, p. 21). It is defined by Ang, Gonzalez, Liwag, Santos, & Vistro-Yu (2001, p. 2) as “a system of instruction that places the student in its heart. It is teaching that facilitates active participation and independent inquiry, and seeks to instill among students the joy of learning inside and outside the classroom”. In this view of learning, students learn more through experience rather than through observing others. Students are regarded as initiators and planners of their own learning, knowledge constructors rather than passive receivers of knowledge from teachers (Ibid, p, 20). Because of the premier and active role assigned to the learner in the teaching and learning process, student-centered approaches are regarded as a reaction to the traditional approaches to instruction which use the pedagogical method of lecturing, note-taking and memorizing information for late recognition or reproduction (Attard, Di Loio, Geven, Santa, 2010, p. 8). Student- centered experience is, then, opposed to teacher-centered one. Peyton, More, & Young (2010, p. 10) claim that:

Teacher-centered approaches have been described as emphasizing a passive transfer of knowledge from teacher to student, while student-centered approaches seek to engage students actively in learning in ways that are appropriate and relevant to them in their lives outside the classroom.

Because of this emphasis on the learner and his equipping with meaningful and useful ways of learning both in school and outside school, learner-centered approaches put the emphasis, according to Attard et al. (2010), building the learners experiences’ and strengths while also teaching them how to use specific learning strategies to accomplish their goals. In language instruction, they focus on needs, skills and interests of students while providing learning experiences that incorporate autonomy, choice, cooperation, collaborative and meaningful communication. They also provide opportunities for students to use the target language to

negotiate meaning with teachers and other students in group work, PW and task-based instruction.

1.2. Project Work in ESL/EFL

1.2.1. Origins of Project Work in ESL/EFL Education

PW is introduced as a teaching approach to ESL/EFL as a result of the changing beliefs about the learner, the learning process and language learning. Nowadays, emphasis in the world of education is put on the learner and the learning process, hence, the emerging of learner-centered approach to teaching and learning. Introducing PBL in ESL/EFL education two decades ago, according to Beckett (2006), reflects the principles of students-centered teaching. Hedge (1993) also claims that PW was introduced to English language teaching (ELT) in the mid seventies as the latter has espoused the principles of learner-centered teaching, learner autonomy, the negotiated syllabus, collaborative learning, and learning through tasks.

The shift to PBL in ESL/EFL education was also urged by SLA research which has known the emergence of two theories focusing on importance either of the “input” or the “output” in SLA, and the emergence of CBI. Relying on SLA research, Eyring (1989) considers PBL as a means to provide learners with opportunities to receive “Comprehensible Input” and produce “Comprehensible Output” (In Beckett, 2006, p. 3). Furthermore, Haines (1998) states that the goal of using PW in the teaching of ESL is to provide learners opportunities to recycle, in a natural way, language and skills already learned (In Beckett, 2006).

As regards the role of CBI in the adoption of PW in ESL/EFL education, Stoller (2002) considers PW as an appropriate approach to put into practice content-based second language education. Moreover, Stoller (2002) believes that its incorporation into content-based classrooms helps teachers to distance themselves from teacher-dominated mode of instruction and move towards authentic communication, collaborative learning, and problem solving.

1.2.2. Definitions of Project and Project Work

The concepts of project and PW have been given many definitions. Thomas (2000) claims that this is the result of a lack of a universally accepted model or theory of PBL. The word project has been defined differently. Katz (1994) defines it as “an in-depth investigation by children of a topic that is worth of their time, attention and energy” (Quoted in Clark, 2006, p. 2). It is also worth to mention that when dealing with PW, according to Katz (1994), three components need to be considered, content, process and product. Moreover, students and teachers go through three phases in carrying out a project. The first step consists in teachers’ and children’s selection and discussion of the topic to be explored. Next, children conduct investigations and present their findings. In the third phase, events are culminated and debriefed (Ibid). Besides, investigating a topic entails the application of various skills and competencies, intellectual, academic, and social. That is, a project involves the use of skills such as writing, reading, measurement, drawing, painting, creating stories.... In addition, it includes also the acquisition of knowledge and concepts in different domains, such as, sciences, social studies, literature... (Katz & Chard, 1992).

Grandini (1997) considers projects as “the backbone of the children’s and teachers’ learning experience. They are based on the strong conviction that learning by doing is of great importance and that discussion in group and to revisit ideas and experiences is the premier way of getting better understanding” (Quoted in Helm & Katz, 2001, p. 1). Grandini’s definition seem to consider Dewey’s major idea of “learning by doing” which considers action (doing) as vital and primary to get a better understanding. This conception of learning rejects the idea of pouring knowledge into the children’s minds. Mergedoller and Michaelson (1999) define projects as follows:

Complex tasks, based on challenging questions or problems, that involve students in design, problem solving, decision making, or investigative activities, give students the opportunity to work relatively autonomously

over extended periods of time; and culminate in realistic products or presentations (Quoted in Thomas, 2000, p. 1).

According to the above definitions, project is an activity in which the child is the main actor. It is an experience in which he investigates a topic of interest that is complex and challenging. In the process of project achievement, the child designs, solves problems and makes decisions. It also provides learners opportunities to work collaboratively and develop deeper understanding while discussing ideas in groups. The result of carrying out a project is a realistic end-product or a presentation. Moreover, what makes project worthwhile in education is its emphasis on both the process and the product.

PBL has also been defined differently. Thomas (2000, p. 1) defines it as “a model that organizes learning around projects”. Von Hofe (1916) describes the pedagogical practice that came to be known later as project method as follows: “it was not rote or recitative learning but learning with a purpose; it was a purposeful act derived by students and teacher interest” (Quoted in Capraro, & Slough, 2009, p. 9).

Although the aims of the project method stem, as mentioned earlier, from Dewey's and Kilpatrick's view of education, Lee (2009) believes that Adderley, Ashwin, & Bradbury (1975) have provided the deepest account of the project method which includes a range of definitions that are still used nowadays. Adderley et al. maintain that the project method often involves a solution to a problem, though not necessarily set by the student himself/herself. Projects involve initiative by the student or group of students and necessitate a variety of educational activities. They commonly result in an end-product. Besides, the work often goes on for a considerable length of time though the time span may range from a single afternoon to three years. In addition, the teaching staff is involved in an advisory rather than authoritarian role at any or all of the stages (In Lee, 2009, p. 454). In spite of the defining characteristics of PW which makes it different from other teaching methods, Haines (1989) claims that it does not replace them but it rather complements these mainstream methods (In Stoller, 2002).

The following definitions, among others, granted to PW in ESL/EFL education, are different but complementary. Perhaps the two most quoted definitions of PW in ESL/EFL education are Legutke and Thomas (1991) and Stoller (2002). The latter defines project as “a versatile vehicle for fully integrated language and content learning, making it as a viable option for language educators working in a variety of instructional settings, including general English” (Stoller, 2002, p. 109). Similar to Stoller’s definition, Legutke and Thomas’ (1991) one also claim the centrality of theme or content project-based ESL/EFL education. They define it as “a theme and task-centered mode of teaching and learning which results from a joint process of negotiation between all participants” (Quoted in Turnbull, 1999, p. 550). The authors refer to project as “a jointly constructed and negotiated plan of action” (ibid, p. 158). In the course of the action guided by the teacher, learners work in groups to gather information about the topic of their project, learn and practice language structures, lexis or skills needed to carry out the project and to present the final product, plan and monitor their process, their progress and the project. In addition to the fundamental importance of the content, the authors highlight its role in enabling learners to learn and practice language forms and structures in a collaborative process which culminates in a final product. Teachers in their turn assume their role in monitoring not only the product (project) but also the process the students go through as well (ibid). Fried-Booth (1997) stresses the importance of PW in putting learners in real-life communicative situations in order to acquire meaningful, authentic target language “Project work functions as a bridge between using English in class and using English in real-life situations outside of class. It does this by placing learners in situations that require authentic use of language in order to communicate” (Quoted in Moss, & Van Duzer, 1998, p. 1).

In this work, we will adopt Slater et al. (2006, p. 242) definition of PW as “a social practice into which students are socialized through a series of individual or group activities that involve the simultaneous learning of language, content, and skills”. In other words, according to

Beckett (1999), “project-based learning as a social practice requires language and content learning through planning, researching (empirical and /or document), analyzing and synthesizing data, and reflecting on the process and product orally and / or in writing by comparing, contrasting, and justifying alternatives” (Quoted in Slater et al., 2006, p. 242).

1.2.3. Characteristics of PW

In addition to the above definitions of PW, a set of features attributed to PW in ESL/EFL education contribute to its understanding and contrast it to other traditional approaches. They are as follows:

- The project approach, according to Haines (1998) “involve multi-skills activities focusing on topics or themes rather than on specific language targets” (Quoted in Tsiplakides & Fragoulis, 2011, p. 116).
- Projects do not fix specific language aims because what matters, according to Fried-Booth (2002, p. 6) is “the route to achieving the end-product”. That is, the process which leads to the end-point is premier than the product itself.
- During the route of the project, students integrate skills and process information from various sources mirroring real-world tasks (Stoller, 2002).
- As concerns the teachers’ and the learners’ roles in this process, Stoller (2002) maintains that while the teacher offers support and guidance through the whole process, project is student-centered. She says that project has cognitive and affective impacts on the learners, they are motivating stimulating, empowering and challenging.

1.2.4. Benefits of PW

Thomas (2003) has listed a number of benefits of PW as stated by teachers. The latter believe that projects help to overcome the dichotomy between knowledge and thinking i.e. they help students to “know” and “do”. They facilitate learning and practicing of skills in problem solving, communication and self-management. They also encourage the development of thinking

habits necessary for lifelong learning, civic responsibility and personal career success. Projects also play a role in integrating curriculum areas, thematic instruction and community issues. They provide opportunities to evaluate performance on content and skills using criteria similar to those in the world of work. They are also considered as a way to create positive communication and collaborative relationships among diverse groups of students. Furthermore, they meet the needs of learners with different skill levels and learning styles. Finally, teachers report that it encourages and motivates bored and indifferent students (Thomas, 2003, p. 6-7).

In addition to the benefits of PW in general education, above, other benefits related to ESL/EFL teaching and learning are reported by Stoller (2006). She has reported them as stated by practitioners in this field. First, projects offer opportunities for the students to be exposed to an authentic language and its use in genuine situations. It is also considered as a means to inspire learners' creativity because projects take them away from mechanistic mode of learning towards a more creative one. Another reported benefit of PW is the enhancement of language skills. It is found that it helps learners to improve their writing, reading, speaking, listening, vocabulary, and grammar abilities. This is due, according to Stoller, to the fact that projects provide repeated opportunities for interaction (output), modified input, and negotiating meaning. Moreover, by the end of the project, students increase their content knowledge because they (projects) are planned around gathering, processing and reporting of real information (Stoller, 2006, p. 24-27). Finally, projects are also praised by practitioners because they create purposeful opportunities for language input, language output and explicit attention to language features (forms, vocabulary, skills...) (ibid, p. 32).

1.3. Psychological and SLA Research Underpinning the Use of PW in Language Education

1.3.1. Constructivist Psychology View of Learning

Constructivism in its widest sense, According to Pritchard and Woollard (2010), is concerned with more than a theory of learning. It is first concerned with the concept of constructive epistemology, which aims at investigating and understanding the origin, nature, methods and limits of human knowledge. In doing so, constructive epistemology follows a constructivist approach which considers scientific knowledge as something constructed by scientists and not discovered from the world. Brooks and Brooks (1993, p. vii) also claim that constructivism is a theory of learning and knowledge and how it is constructed but not a theory of teaching “constructivism is not a theory about teaching... it is a theory about knowledge and learning and...the theory defines knowledge as temporary, developmental, socially and culturally mediated, and thus non-objective” (Quoted in Ültanir, 2012, p. 202). The constructivist knowledge is, then, according to Brooks and Brooks something different from one individual to another (non-objective) because of the different factors contributing to its construction. In fact, the cognitive factors (developmental) and the social and cultural factors that help the individual to shape and construct his/her knowledge are varied hence is the knowledge which is constructed.

Pritchard and Woollard (2010) claim that constructivism as a theory of learning is traced back to the twentieth century. It seeks to regularize the behaviourist approach of Pavlov, Watson and Skinner, which explains human learning in terms of stimulus-response-reinforcement chain. In fact, the constructivist theory of learning, according to Fox (2001) stipulates that human knowledge is acquired through a process of active construction. This view of knowledge construction runs counter to the behaviourist one which considers individual's learning as a result of some reactions to environmental stimuli. To capture well what is meant by

the constructivist theory of learning, Fox summarizes its basic tenets as follows: learning is an active process; knowledge is constructed, rather than innate or passively absorbed; knowledge is invented not discovered, all knowledge is personal and idiosyncratic, all knowledge is socially constructed; learning is essentially a process of making sense of the world; effective learning requires meaningful, open-ended, challenging, problems for the learner to solve (Fox, 2001, p. 24).

When it comes to the goals of constructivist education, Glaserfeld (1995) says that it (education) is “essentially a political enterprise with two purposes- to empower learners to think for themselves, and to perpetuate in the next generation ways of acting and thinking that are judged the best by the present generation” (Quoted in Williams & Burden, 1997, p. 49). In other words, because the aim of education is to make learners build their knowledge and understanding instead of transmitting it to them, the mission of education is, then, to equip these learners with necessary skills that enable them to be independent thinkers and active constructors of their knowledge. This view of education, then, according to Pépin (1998), rejects the previously widespread belief that a subject (individual) can understand and assimilate knowledge which has been mastered by other subjects in the past. This traditional belief of education holds that it is possible to transmit knowledge already worked out by others to the students. This idea is translated into school programmes by presenting a corpus of knowledge which is established in advance and that students have to master it in order to reproduce it in their own (Pépin, 1998).

The constructivist belief, according to Pépin (1998), is that knowledge is constructed by human beings in the process of adapting and that knowledge has meaning only to the extent it solves problems encountered while trying to achieve some goals and accomplish some projects. Put differently, the knowledge which is constructed by other individuals in the past is meaningless to the learners unless it helps to solve some problems encountered while trying to accomplish some tasks. And of course, in the constructivist view of learning, tasks should have

goals which are clear and real life like. In fact, Bentley (1998) claims that an individual who constructs his/her knowledge is doing so only if he/she is tangibly confronted with problems that this knowledge is supposed to solve (Bentley, 1998, p. 241). Taber (2011) also sheds light on the constructivist perspective on learning in educational settings by contrasting it to the traditional behaviourist view. He claims that constructivism might be understood as a change in the belief as regards the location of meaning of what exists in our environment. The traditional view assumes that objects in the environment have some inherent meaning which the learner identifies and adds to his/her store of knowledge. It is this type of cultural knowledge that traditional kind of schools is based on i.e. knowledge which can be transferred from one individual to another and can be reproduced. The constructivist view, on the other hand, because it assumes that the processes by which we come to experience our surrounding are processes of interpretation, the individual, then, has to construct in a meaningful way interpretations of what they see or hear. Consequently, in the constructivist classroom, every learner will construct a personal version of what is being taught (Taber, 2011).

Considering the above mentioned aims of the constructivist education, Glaserfeld (1995) believes that the best way to put the constructivist approach into practice is by presenting concepts, tasks, and issues in the form of problems to be explored in dialogue rather than as information to be ingested and reproduced (In Williams & Burden, 1997, p. 49). And even though constructivism is not, according to Daniels (1996), a practical pedagogical theory, he suggests what he calls classroom workshop to put it into practice. He considers the workshops as the pedagogical embodiment of the constructivist theory of learning. Daniels claims that:

Under this model elementary and secondary classrooms are no longer merely locations where information is transmitted. Instead they become working laboratories or studios, where genuine knowledge is created, real productions are developed and authentic enquiry is pursued... [in] a workshop, students and teachers together reinvent whatever field of study they are engaged in (Quoted in Bentley, 1998, p. 241).

In other words, within the constructivist approach to teaching and learning, classrooms are no longer regarded as places where knowledge is transmitted from the teacher (who is the knower) to the learner as it was the case with the behaviourist approach. Classrooms are rather considered as workshops where the teacher and the learners or learners work together to conduct authentic inquiries, to create authentic knowledge and develop genuine products.

These pedagogical tools (workshops) that embody the constructivist theory of learning, then, we believe are in line with PW. In fact, the latter enables teacher and learners or learners with their peers to work in collaboration to create some knowledge instead of having the teachers to pour it to the learners' minds for the sake of reproducing it later. Besides, projects, as seen earlier in this chapter, favour genuine tasks and genuine processes that lead to real life products.

1.3.2. Constructivist Theories of Learning Underpinning Project Work

As concerns learning theories underlying PW, scholars usually make reference to two constructivist theories, namely social and cognitive constructivism. According to Phillips (2000, In Richardson, 2003), these two types of constructivism, describe the whole domain of constructivism but they differ in the way they view learning and understanding. Cognitive or developmental constructivism is psychologically oriented whereas social constructivism is sociological in orientation. The former suggests that individuals construct their learning independently from others and that learning is idiosyncratic. That is, learning is an individual process of knowledge building in which the learner's background knowledge is essential. Phillips (2000) says that the development of meaning may happen within a social group and that the latter provides opportunities for the individual to share this meaning. If the individual agrees with the description of a phenomenon provided by the group, the meaning becomes formal knowledge (In Richardson, 2003). The latter, according to Phillips suggests that bodies of knowledge are constructed by individuals belonging to social groups. And the resulted meaning

is always influenced by the group's values, ideologies, religion, politics and other factors. So, the resulted knowledge is a subjective representation of the external world (Ibid).

These constructivist views of knowledge and learning, in spite of their different orientations, seem to agree on the fact that learning is an active process but one emphasizes more the cognitive aspects of it and the other insisting on its social dimension. And that knowledge is something to be constructed rather than innate or something that exists somewhere and it is for the individual to discover it.

The psychological rationale for the cognitive and social orientations of constructivism will be provided in the following. The first is represented in Piaget's developmental theory and the second in Vygotsk's social constructivist theory of learning with implications of both to teaching and learning in formal educational settings.

a. Piaget's Developmental Theory of Learning

In his theory of knowledge and learning, Piaget (1896-1980) aims to answer the question of how do individuals come to know what they know or how do they acquire knowledge? The psychologist claims that knowledge is constructed by the individual in the process of striving to organize his or her experiences, making use of preexisting mental structures or schemes (Bodner, 1986, p. 2). The concept of scheme is explained by Von Glasersfeld (1980) by the sucking reflex in the newborn child. The latter assimilates the thumb to the sucking reflex because the scheme of sucking is activated by the presence of a sensory signal to the child's perception (In Bodner, 1986, p. 2). Unlike those philosophers, like John Lock for instance, who believe that the mind of a newborn infant is like a blank slate and that the more you write on it the more intelligent the child becomes, Piaget believes that the child plays an active role in the growth of his intelligence. In other words, the child learns by doing and interpreting the world, not just observing and imitating the other (Singer & Revenson, 1996, p. 13).

In dealing with knowledge, Piaget makes a distinction between three types of knowledge, physical, logico-mathematical and social, as he also discriminates what he calls knowledge development from learning. In fact, Piaget (1964) argues that knowledge development is different from learning. He states that the former is a spontaneous process related to a whole embryogenesis process and the latter is something provoked by a situation. Embryogenesis process, according to Piaget, concerns the development of the body, the nervous system as well as the mental functions. In other words, development of knowledge is a developmental process which is situated in the biological and psychological context (Ibid). So, for Piaget, development explains learning and not the opposite. “Development is the essential process and each element of learning occurs as a function of total development, rather being an element which explains development” (Piaget, 1964, p. 176).

However, to understand how knowledge develops, one has to understand what Piaget calls Operations or Operational Structures. It is the essence of knowledge and he considers it as the natural psychological reality in terms of which knowledge development has to be understood (Piaget, 1964, p. 177). Piaget insists on the concept of Operations in knowledge development because he believes that it (knowledge) is not a copy of reality. That is to say, to know an object or an event does not mean merely to look at it and make a mental image of it. But it means to modify, transform the object and understand this transformation process and consequently the understanding of the object is constructed (Piaget, 1964, p. 176). The development of the operational structures in an individual from birth to adolescence is explained in chapter three.

In addition to the cognitive or Operational Structures, Piaget also distinguished between Cognitive Functions, which remain constant throughout development in operational structure and play an essential role in learning. What is meant by the cognitive structures, Garner (2008, p. 32) says is “the basic interconnected psychological systems that enable people to process information by connecting it with prior knowledge and experience, finding patterns and

relationships, identifying rules and generating abstract principles relevant in different applications” (Quoted in Blake & Pope, 2008, p. 59). In other words, the mind plays a premier role in constructing new knowledge by making use of previously acquired knowledge and experiences. Furthermore, Piaget’s developmental theory, according to Cameron (2001), was concerned with how children function in the world that surrounds them and how children’s actions influence their cognitive development. The child is seen by Piaget as continually acting in the environment to solve problems presented by the latter and it is action to solving these problems that leads to learning. Consequently, knowledge is the result of action it is not by imitation or innateness.

As regards the process children go through in constructing new knowledge, understanding and ideas, Piaget’s view point, according to Pritchard & Woollard (2010), is based upon a belief that there is a set of unconscious processes that are put into action each time an individual encounters new information or situations. Piaget in his genetic epistemological theory describes three basic processes through which learning takes place. These processes known as assimilation, accommodation and equilibration in which development can take place as a result of activity (action) (Cameron, 2001, p. 3).

The first process, assimilation, means the collecting and classifying of new information. When newly encountered information is added to the existing knowledge or scheme, assimilation happens. If a child has developed the notion of sucking the breast, as mentioned above, she will do the same with her thumb or any other sensory object placed before her, such as a rattle. The essential condition for assimilation is that there should not be a contradiction between the new information and the existing scheme (Cameron, 2001, p. 3). The second principle, accommodation, is related to assimilation. It refers to the change in the existing schema in order to allow the new and contradictory information. Initially a child tries to understand a new experience by applying old solutions (assimilation), however, when this does

not work, the child adjusts his existing conception of the world (understanding) in order to interpret and understand the new experience (Cook & Cook, 2005, p. 16). In the light of the above example, the infant who tries to drink milk from his thumb or rattle (assimilation) will soon learn that a thumb or a rattle cannot satisfy her hunger and that they are not substitutes for feeding (accommodation) (ibid). According to Piaget, it is this dual process of assimilation and accommodation which leads to what he calls adaptation. The latter is defined as “the process of seeking equilibrium between the self and the environment” (Cook & Cook 2005, p. 18). The third principle in Piaget’s genetic epistemological theory is, then, equilibration. This principle is related to accommodation i.e. when the mind strives for the state of no contradiction, it seeks equilibration. The latter is sought when an individual experiences a cognitive conflict and being able to deal with the conflict and eliminate the contradiction means the individual regains equilibration (Cameron, 2001, p. 3)

b. Implications of Piaget’s Psychology to Education/Project Work

In discussing the implications of Piaget’s theory of cognitive development for teaching and learning, Webb (1980) has listed a number of issues in Piaget’s theory which have implications for teaching. One of them which we believe is of direct relevance to PW is experience involving action. Because we accept Piaget’s idea that learning means the restructuring of the individual’s cognitive schema and not merely the increase in knowledge, learner’s involvement in this process becomes necessary. Furth and Wachs (1975) suggest a rational for selecting worthwhile activities involving action (experiment) for cognitive development. First, activities should be structured to encourage individualization and not convergences, that is, provide activities that permit multiple answers and not highly structured activities that accept only one way to respond. Second, provide activities that should be challenging but not overwhelming. This leads the students to focus on the activities rather than on the teacher. Third, the activities should be carried out in the company of peers because while

the individual's efforts are vital for cognitive growth, peer interaction provides encouragement and assistance (In Webb, 1980).

Accordingly, we believe that PW is the most suitable strategy to achieve these goals. By their nature projects provide learners opportunities to do something and to be involved in the process of learning and constructing knowledge. Carrying out projects also permits learners to work individually on some tasks but also they have to cooperate and interact with other members of their group to conduct activities.

Piaget's theory of learning, as seen above, has implication for learning in general and language teaching and learning as well. In fact, Williams and Burden (1997) have enumerated a number of its implications for language teaching and learning. Williams and Burden (1997) claim that language learners, in the light of Piaget's theory, should be taken as active individuals involved in meaning construction. That is to say, when learning a new language, learners are actively involved in making sense of the new language input provided for them rather than being passive receivers of it (language input). As concerns the role of language and experience in cognitive development, Williams and Burden (1997) maintain that language learning which is based on experience rather than memorization leads to a deeper understanding. Add to this, in relation to the stage development theory, the language tasks selected by the teacher should not be too simple or too abstract to the learner's cognitive level and competence. Furthermore, Piaget's adaptation theory, according to Williams and Burden (1997), is also relevant to language teaching and learning. Williams and Burden (1997) claim that in the process of learning a new language, the latter is continuously and gradually re-shaped to approximate the target language (ibid). That is, to achieve proficiency in the target language, learners keep assimilating new knowledge about it and accommodating their existing one.

These implications of Piaget's theory to ESL/EFL education seem to be of direct relevance to PW. Learners in the process of working on a project are exposed to the target

language via books, magazines, newspapers, TV, Internet etc. They are required to understand the language they read or listen to while searching for some information. Meanwhile, learners also assimilate new knowledge about the target language and accommodate existing one while reading/ listening.

c. Vygotsky's Sociocultural Theory of Learning

Like Piaget, his contemporary Vygotsky (1896-1934) was concerned with the question of how humans come to know what they know (In Taber, 2011, p. 13). However, whereas in Piaget's theory of learning the individual's nature of knowledge is essential, in Vygotsky's sociocultural theory, knowledge is thought to be derived from social interaction by individuals belonging to social communities (Vygotsky, 1978. In Taber, 2011, p. 13). Moreover, while Piaget proposes a theory of learning which consists in a series of invariant stages of the cognitive development that every individual goes through, Vygotsky suggests that thinking is culturally mediated (ibid). In fact, social constructivism as, Pritchard and Woollard (2010) claim, insists on the role played by culture and social context in constructing individual and social interpretations and understanding of reality. Furthermore, knowledge which is constructed cannot exist before its social creation. And it is the agreement between social partners that forge meaning and social understanding through the medium of language (ibid).

To highlight the importance of the child's cultural development, Vygotsky (1978, p. 57) says:

Every function in the cultural development of the child appears on the stage twice: first, on the social level, and latter, on the individual level, first between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals.

According to Vygotsky, then, the influence of the social factors is primary in the child's cultural development. Before concept formation or any other mental functions become psychological (individual) they are first social (they occur in social relations between individuals within a community).

In this genetic law of cultural development, the essential aspect of successful cognitive and intellectual development, according to Vygotsky, is social interaction. In other words, dialogue and other forms of interaction between the child and the others (Pritchard and Woollard, 2010, p. 14). Vygotsky's theory is also concerned with intimate relationship between learning and development (Palinscar, 1998, p. 351). In contrast to Piaget's theory of development which considers maturation as a precondition for learning, Vygotsky considers mental development as the result of learning (ibid). In this respect Vygotsky states that

Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and with his peers... [L]earning is not development; however, properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning. Thus learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions (Vygotsky, 1978, p. 90).

- **The Zone of Proximal Development**

In order to support the idea that learning leads to development, Vygotsky introduces the concept of the Zone of Proximal Development (ZPD). And he distinguishes between two levels of development, the actual and the potential ones (Palinscar, 1998); The former refers to those things a child can accomplish by his own without the others help whereas the latter refers to the things a child can do only with the help of others. This potential level in the child's development belongs to the ZPD (ibid). The latter is defined by Vygotsky as:

...the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined by problem-solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86).

Put differently, the ZPD is that stage of learning and problem-solving that a child is not yet capable to achieve alone but which can become possible if assisted by other more capable adults and peers. So, it is collaboration which permits the child to move to this level of thinking and understanding which is beyond his current level or ZPD.

d. Vygotsk's ZPD and the Concept of Collaboration in Education

The notion of the ZPD is currently regarded as a concept of reference for education and teaching in various fields and subjects including ESL/EFL education, reading, writing, mathematics, social sciences etc (Del Rio & Alvarez, 2007). Vygotsky discussed this concept in education with reference to both assessment and instruction making clear the relationship between the learner and other people who collaborate with him and provide support (ibid). In considering the ZPD in instruction, Vygotsky shows the importance of the instructor's guidance and assistance for the child to move from a current zone to the superior one. And it is the learning that occurs in this process which is the only true learning because it leads to development. Put differently, learning which does not lead to development cannot be properly called so (learning). Moreover, instruction which does not target development of the learner is useless. These ideas are expressed by Vygotsky in the following passage:

...instruction and development do not coincide. They are two different processes with very complex interrelationships. Instruction is only useful when it moves ahead of development. When it does, it impels or awakens a whole series of functions that are in a stage of maturation lying in the zone of proximal development. This is the major role of instruction in development. This is what distinguishes instruction of the child from the training of animals. This is also what distinguishes instruction of the child which is directed toward his full development from instruction in specialized, technical skills such as typing or riding a bicycle. The formal aspect of each school subject is that in which the influence of instruction on development is realized. Instruction would be completely unnecessary if it merely utilizes what had already matured in the developmental process, if it were not itself a development (Vygotsky, 1987, p. 212. Quoted in Daniels, 2007, p. 310)

It is important to draw attention to the fundamental element in this 'fruitful' instruction (instruction that leads to development) which is interaction. In fact, Vygotsky regards collaboration and cooperation as essential elements of effective development, as shown in the following:

...the maturation of the child's higher mental functions occurs in this cooperative process, that is, it occurs through adult's assistance and participation... In a problem-solving scientific concepts, he must be able to do in collaboration with the teacher something that he has never done spontaneously ...we know that the

child can do more in collaboration than he can independently (Vygotsky, 1987. Quoted in Daniels, 2007, p. 311).

Vygotsky (1987) proposes cooperation and collaboration to help learners in problem-solving and learning, hence, leading them to development, because he claims that direct instruction in scientific concepts is proved to be impossible and fruitless. Through direct instruction children learn words but not concepts because they learn through memory rather than thought. Besides, knowledge which comes as a result of direct instruction is inadequate in any meaningful application (In Daniels, 2007).

However, for an educative process to be truly collaborative, it must provide the child a central role while the teacher is supposed to guide and direct the child to carrying out different activities. In this respect Vygotsky (1926/1991) says “the personal activity of the student must be placed at the base of the educative process, and all the teacher’s art must come down to directing and regulating this activity” (Quoted in Davydov & Kerr, 1995, p. 17).

1.3.2. Language Acquisition Theories Underlying Project Work

1.3.3.1. Swain’s (1983) Output Hypothesis

Swain (1985) suggests that language acquisition occurs when learners are involved in producing language either in written or spoken form (In Swain, 1993). Put differently, language acquisition is the result of Output which she considers central in language acquisition process in many ways. First, the output, Swain (1993) claims provides learners with the opportunity to practice their linguistic knowledge in a meaningful way. Second, it may push the learners to shift from semantic to syntactic processing of meaning. Third, the output enables learners to test out hypothesis about the Second Language (L2) and find out whether they work or not. Finally, output permits learners to receive feedback on the language they produce. Feedback, according to Swain is essential because it enables learners to modify their language if it is not comprehensible or well-formed, or process it if it is comprehensible and well-formed (Swain, 1993, p. 159-160). It should be noted here that Swain has developed this notion of language

learning as a result of her research and experience in French immersion education in Canada, which is proved to be successful.

Besides the role that the output plays in SLA process, Swain (2000) highlights the centrality of “collaborative dialogue” in it (SLA process). This is also called knowledge building dialogue or dialogue that leads learners to build their linguistic knowledge (2000, p. 97). Swain claims that dialogue or interaction as it was used in L2 acquisition research (Krashen’s Input Hypothesis (1982) and Long’s Interactional Modification (1981, 1982) serves as a source for language input. In addition, Swain (2000) states that interaction enables learners to receive feedback about their L2, which also functions as input. However, Swain (1993) maintains that interaction provides also learners with opportunities for the target language use i.e. output. Add to the above mentioned ways in which output helps in L2 acquisition process, Swain says that output enables learners to notice gaps or “holes” in their L2 linguistic repertoire and reflect on them (gaps). Another evidence that makes dialogue important for second language acquisition, according to Swain (2000), comes from the sociocultural theory of mind (Vygotsky, 1978; 1987). The latter holds that the development of mental (internal) functions is the result of social (external) activities. The role of co-operation and collaboration in the development of the individual’s mental functions is already discussed in this chapter.

As for the pedagogical implications of the output for second language pedagogy, according to Swain (1993), they are varied but all of them share the need for providing learners with important in-class opportunities for speaking and writing. Yet, learners do not need only to speak and write, they also need to use their linguistic knowledge and enlarge it. It is important for them to reflect on the language they produce (the output) and find ways of modifying it in order to make it more comprehensible, appropriate and accurate.

According to the Output Hypothesis then, ESL/EFL acquisition results from the output rather than the input. Learners acquire the target language while trying to produce something in

that language, either in spoken or written form. Besides, the feedback they receive on their produced language serves to make it more appropriate and accurate. Consequently, projects constitute a pedagogical tool to acquire ESL/EFL because of their focus on end-product, as seen earlier in this chapter, they also require the use of language as both input and output.

Conclusion

The review of the literature on PBL shows that the latter takes its origins from different sources: first, Dewey's Progressive philosophy of education, which claims that learning results from experience and doing. Second, Kilpatrick's Project Method, which is based on Dewey's learning by doing, has also been influential. It is the first essay that has been written on how the project method can be used in education. Moreover, Freire in his *The Pedagogy of the Oppressed*, rejects the traditional type of education or "banking education" in which learners are considered as empty vessels to be filled in by the teachers. He advocates a liberating type of education which aims to empower learners to become emancipated critical thinkers. Project-based education is also the result of the shift from teacher-centered approaches to learner-centered ones, which encourage active role of the learner in the learning process. In foreign and second language education, it is also the result of SLA research that attributes language learning to the role of input and output, and the emergence of Content-based instruction (CBI). It is also the result of constructivist psychology represented mainly by Piaget's cognitive developmental psychology and Vygotsk's socio-cultural theory. The review of the literature shows also that the use of PW in language education (second/foreign) enables learners to acquire different type of skills, such as language and content related skills, cognitive, social etc. The following chapter is concerned with PW in different ESL/EFL instructional approaches, mainly, CBA and CBI.

Chapter 2: Competency-Based Approach, Content-Based Instruction, and Project Work

Introduction

This chapter consists in a critical review of the literature on PW in approaches to ESL/EFL education, namely CBA and CBI. First, CBA and PW deals with the definition of concepts of skills and competencies which are the target of foreign and second language teaching through CBA. It also looks at PW as a pedagogical tool to teach skills and competencies. Second, it provides a review of the literature on CBI in ESL/EFL and its role in the integrated teaching of language, content and thinking skills. It also reviews different theoretical frameworks that are suggested in the literature to integrate the teaching of language, content and thinking skills. The frameworks consist of Mohan's (1986) KSF, Cummins' (1981a) framework for task integration in CBI, and Chamot's (1983) cognitive model of second language learning. Next, the chapter explains the PW frameworks to integrate the teaching of language, content and skills in ESL, namely Stoller's (2002) and Beckett and Slater's (2005) project frameworks. Finally, it provides a critical view of these project frameworks and discusses their appropriateness in EFL teaching/learning to beginner/low level EFL learners.

2. 1. Competency-Based Approach and Project Work

2.1.1. What is Competency-Based Approach?

CBA according to Spady (1994) is defined as "a comprehensive approach to organizing and operating an education system that is focused on and defined by successful demonstrations of learning sought from each student" (Quoted in Parsons, 2012, p. 94) . It is based on outcomes. That is to say "...clear learning results that we want learners to demonstrate at the end of significant learning experiences... and ... are actions and performances that embody and reflect learner's competence in using content, information, ideas and tools successfully" (Spady, 1994. Quoted in Parsons, 2012, p. 94). Grant (1979, p. 6) states that CBA is a form of education that

derives a curriculum from "an analysis of a prospective or actual role in modern society to certify students' progress on the basis of demonstrated performance in some or all aspects of that role". (In Stanley, 1993, p. 146). Parker and Taylor (1980, p. 12-13) define it as "a performance-based process leading to demonstrate mastery of basic skills necessary for individuals to function proficiently in society" (Quoted in Auerbach, 1986, p. 431).

Moreover, the goal of education systems all over the world today is the fostering of key competencies within every learner. And the role of education is to create a favourable environment for the teaching and learning of the key competencies. Today, all over the world, education policy makers are moving to the competency-based education, which emphasizes skill attainment and proficiency, to ensure that learners acquire the skills, competencies, attitudes and values that enable them to participate fully and meaningfully in their societies (Parsons, 2012). CBA in foreign and second language education is defined as:

... a performance-based outline of language tasks that lead to demonstrate mastery of language associated with specific skills that are necessary for individuals to function, proficiently in the society in which they live (Grognet & Grandall, 1982, p. 3. Quoted in Auerbach, 1986, p. 431).

This characterization of CBA is ESL/EFL, according to Auerbach (1986), reflects a dual influence of developments in second language acquisition (SLA) theory and in adult basic education. From SLA theory, she says, comes the notion that meaning based communicative language instruction is more effective than grammar-based or form-based teaching. This means that importance is given to what learners can do with the language rather than to what they know about it.

According to Tuxworth (2005), the origins of the Competency-Based Movement in USA are traced back to the educational reform of the 1920s related to industrial and business models which are centered on the specification of outcomes in behavioural objectives form. Tuxworth (2005) says that starting from the mid 1960s a great impetus has been given to the Competency-Based-Education in USA as a result of the demands for accountability in education, the increase

in emphasis on economy and a shift towards more community involvement. On the other hand, Bloom, Hasting and Madous (1971) claim that CBE took its roots in the behavioural objectives movement of the 1950s which is based on learning outcomes (In Parsons, 2012).

In spite of the opinions against the CBA, mainly because of the ambiguity of the concepts related to it and its association with the behaviourist approach (Parsons, 2012), currently, it becomes less problematic. This is mainly due to the fact that the definitions of competency in education are becoming more consistent all over the world. And they (definitions) are no longer related to observable behaviours. They, include teacher's judgments in the assessment of the competencies. Besides, newer CBA include other attributes that characterize competent performance, such as, knowledge and understanding. As they also enlarge their view of competency to include, among other competencies, communication, numeracy, information technology, interpersonal competence and problem solving (Parsons, 2012). Furthermore, the CBA to education that is adopted all over the world today "includes integrated or relational learning" (Alberta Education, 2012, p. 82). The integrated approach views competency as "a complex combination of knowledge, attitudes, skills and values displayed in the context of task performance" (Kerka, 1989, p. 1. Quoted in Parsons, 2012, p. 82). This relational approach gives importance to the cultural context and social practices underlying competent performance (Ibid).

CBA to foreign and second language teaching and learning has been greatly influenced by Competency-Based Adult Education (CBAE) (Auerbach, 1986, p. 412). CBAE programmes, including ESL. They have started in the 1970s in the United States of America. They took the lead in developing a state-wide competency-based curriculum and testing system in adult education. English language training programmes were meant for refugees. Their aim was, according to Auerbach (1986), to build the individuals' competencies that enable them to fully participate in society.

2.1.2. CBA and the Development of Learners' Competencies

The call for a change in language teaching and learning practices and the shift from traditional to Competency-based language teaching (CBLT) is, according to Tudor (2013), the result of the current increase in the demand for language learning in our era of globalization and also the increase in the demand for language learning for communicative purposes.

In fact, the first thing that CBLT looks at is the need to help to determine the objectives that are assessed or specified for any training programme. Very often, the needs for the students to functionally communicate in the language have been overlooked (Findley & Nathan, 1980). Within CBALT needs analysis starts with questions regarding what the learner needs to be able to do with the language, i.e. what functions s/he needs to perform in the target language. It then looks at what aspects of the language are required to fulfill those functions (ibid). The underlying assumption according to Wilkins (1973) is that what a person wants to do through language is more important than the mastery of language in an unapplied system (ibid). Language needs are, then, "the requirements which arise from the use of language in the multitude of social and work situations in the lives of individuals and groups of people" (Findley & Nathan, 1980, p. 223).

These goals of language learning, according to Tudor (2013) and Finley and Nathan (1980), have been specified by the Council of Europe's Modern Languages Project (CEMLP). These needs which, have been identified according to the learners' needs, play a central role in promoting CBLT (Tudor, 2013, p. 23). These needs which express six functions of the use of language are as follows ((Van Ek, 1976, p, 25. In Findley & Nathan, 1980, p. 223):

- 1- Imparting and seeking factual information.
- 2- Expressing and finding out intellectual attitudes.
- 3- Expressing and finding out emotional attitudes.
- 4- Expressing and finding out moral attitudes.
- 5- Getting things done
- 6- Socializing

It follows, then, that the goal of language learning in CBALT is to develop the learners' competencies in the target language rather than assimilating the knowledge about the rules of the

language (Tudor, 2013, p. 24). Linguistic knowledge in CBALT is subordinate to the identification of the communicative competencies. That is, language forms and expressions are selected according to the communicative competencies to develop in the learners (ibid).

In addition to the fostering of the learners' language competencies, the CEMLP takes into account also the 'transferable learning skills'. These skills are developed in the Council's framework of lifelong learning, which includes lifelong language learning (Tudor, 2013, p. 24). However, these competencies, according to Tudor, are related to the process of language learning instead of the learning of the language itself.

Teaching for lifelong learning, which is also advocated in CBALT, requires according to Mackiewicz (2002, p. 3), new ways of instruction that are different from the traditional ones. "Lifelong learning requires a new pedagogy, i.e. a shift in emphasis from knowledge acquisition to competence development as well as a shift from teaching to learning" (Quoted in Tudor, 2013, p. 25). As regards the pedagogic approach that CBALT should adopt for the sake of teaching lifelong and transferable skills, Tudor (2013, p. 28) claims that "a coherent competency-based approach should thus logically accord attention to learning-process-oriented competencies and with a framework of goals related to learner empowerment and lifelong language learning".

2.1.3. Definitions of Skills and Competencies

Various definitions have been provided for the notion of competency in the domains of work and education. In the field of work, the Commission Européenne (2012) defines competence as the ability to choose, use and combine resources in order to behave appropriately in a particular context. Moreover, these resources can be related to theoretical or practical knowledge in a given subject matter or to environment (ibid). In the same vein, Rychen and Salganik (2003) claim that competence is not limited to knowledge and skills. It involves drawing on and mobilizing psychological resources which include skills and attitudes to efficiently face complex demands in particular contexts (In Ananiadou & Claro, 2009).

Communicating effectively as an example of competence, they say, needs an individual knowledge of language, in addition to practical information and communication skills and attitudes towards the people with whom someone communicates.

In the field of education, Tardif (2006, p. 54) defines competency as "complex knowing how to act supported by the active mobilization and combination of a variety of internal and external resources within a family or situation" (Parsons, 2012, p. 79). Another definition is provided by Alberta Education (2011b, p. 3). Competency is regarded as an interrelated set of attitudes, skills and knowledge that is drawn upon and applied in a particular context for successful learning and living. Competencies are developed over time and through a set of related learner outcomes... [and they] contribute to students becoming engaged thinkers and ethical citizens with an entrepreneurial spirit (In Parsons, 2012, p. 79).

Besides, key competencies, according to the Organization for Economic Co-Operation and Development (2002), include knowledge, skills, attitudes and values that are needed by individuals to function in different contexts. These competencies are resources and means that contribute to achieving outcomes (ibid). Walter (1993, p. 94) states that a competency involves:

the combination of attributes (knowledge, capacities, skills and attitudes) structured into competencies which enable an individual or group to perform a role or a set of tasks to an appropriate level or grade of quality achievement (that is, an appropriate standard) in a particular set of situations, and thus make an individual or group competent in that role (Quoted in Perston & Walter, 1993, p. 118).

To make the distinction between skill and competency clearer, The European Commission's Cedefop glossary (Cedefop, 2008) define skill as "the ability to perform tasks and solve problems" (Quoted in Ananiadou & Claro, 2009, p. 8), whereas competency is "the ability to apply learning outcomes adequately in a defined context (education, work, personal and professional development)" (ibid). A competency encompasses cognitive elements (concepts and knowledge), functional aspects (technical skills) as well as interpersonal attributes (social and organizational skills) (ibid). What is more, Rychen (2003, p. 110) maintains that "key

competencies are heavily influenced by what society's values and what individuals, groups and institutions within those societies consider important" (Quoted in Parsons, 2012, p. 81).

In language education, Richards & Schmidt (2002, p. 49) define competencies in competency based teaching as "descriptions of the essential skills, knowledge and behaviours required for the effective performance of a real world task of activity". They claim that activities like "a job Interview" or "taking telephone messages" are considered as collections of competencies or units of competency.

2.1.4. PW as a Means to Implement CBA in Language Education

According to Dooly (2013, p. 77), the focus of CBALT on developing integrated language competencies and skills related to the learning process as well as the use of purposeful activities to reach this goal "elucidates why project work is an effective medium of language learning". In other words, as Richards (2005) claims, the emphasis of CBA on the learning outcomes as a driving force to teaching and the curriculum makes it in alignment with various configurations of communicative language teaching, including the PBL, which is also founded in contextualized learner-centered outcomes. To make it clear how PW fits into CBA, Arab al. (2004, p. 23) state that "it is through the completion of projects that competency is really made visible and measurable". That is, project final output permits us to see and evaluate what competencies a learner has already mastered and which he/she has not attained yet. Besides, PW is also seen as a means to facilitate the integrated use of the language competencies, namely, linguistic, pragmatic, discourse, sociolinguistic and strategic competencies (Dooly, 2013, p. 79). It makes it possible to integrate all these competencies thanks to its features, such as, decision making, activity design, task collaboration, progress reporting, problem solving, output product... (ibid).

2.1.5. Embedding Skills into Project Work

The main concern of school today, according to Diffily and Sassman (2002) should be

that of preparing young people for life in their community, either in family or at work. Besides, the competitive world that we live in today requires from learners knowledge and skills in academic content fields and apply what they learn in different situations. Therefore, projects “are powerful tools that enable us to embed skills while ensuring the educational outcomes of lifelong learning and enhance personal qualities” (Diffily & Sassman, 2002, p. 102). The authors enumerate a set of skills that should be embedded into PW. They have grouped them into five types: *academic skills*, *critical thinking skills*, *interpersonal skills*, *communication skills* and *technological skills*. The diagram bellow summarizes these skills. Diffily and Sassman believe that the fundamental role of PW is to teach these skills for young learners and that “if skills were not an integral part of a project, there would be no reason for children to engage in project work” (2002, p. 103). All of the above mentioned skills, according to the authors, can be developed through PW. Besides, PW is related to different teaching approaches and strategies which allow for the teaching of the above mentioned skills, such as: strategic teaching, cooperative learning, thinking, solving problems, and information and communication technologies (Arpin & Capra, 2001).

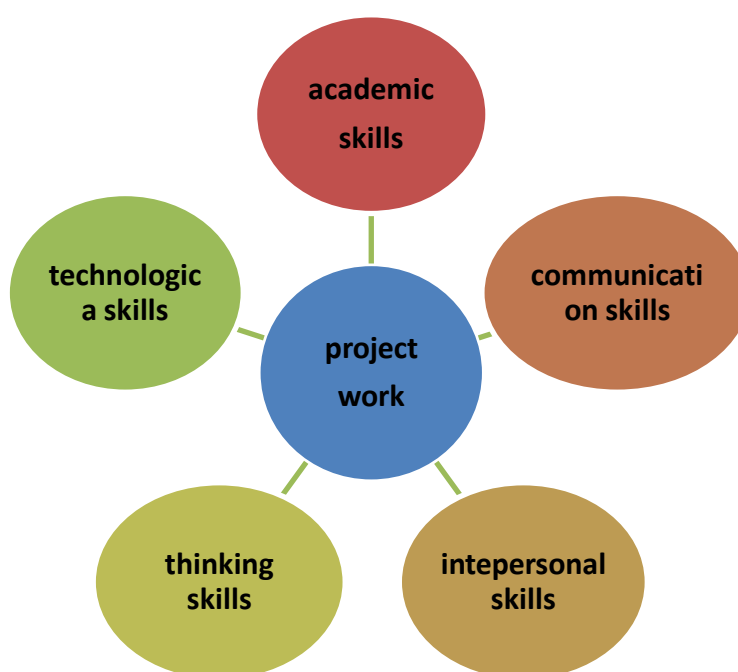


Figure 1: Skills Embedded in Project Work

The figure 1 above shows the different skills that can be developed through PW. Academic skills include, for instance, reading, writing, mathematics, science and social sciences. Thinking skills include, among other skills, creative thinking, problem solving, decision making, reasoning, and learning to learn. Communication skills include both oral and written modes. Technological skills are related to the use of information and communication technology to conduct PW (Diffily & Sassman, 2002).

2.2. Content-Based Instruction and Project Work

2.2.1. What is Content-Based Instruction?

CBI can be considered, according to Stryker and Leaver (1997), as a philosophical orientation, a methodological system, or a syllabus design for a single course, or as a framework for a whole programme of instruction. Unlike the traditional foreign language teaching methods, in CBI language proficiency is thought to be achieved through the study of a subject matter rather than the learning of language for its own sake. That is, as Richards and Rodgers (2001) claim, this approach to second language teaching is organized around content and information and not and not around linguistic syllabus. Thus, CBI advocates the total integration of the learning of language and content (Stryker & Leaver, 1997). Besides, for success, CBI curriculum should be based on subject-matter core, uses authentic language and tasks and it has to be appropriate to the needs of specific groups of students (ibid). Krahnke (1987, p. 65) provides the following definition for CBI “it is the teaching of content or information in the language being learned with little or direct or explicit effort to learn the language itself separately from the content being taught” (Quoted in Richards & Rodgers, 2001, p. 204). In the same way Snow and Brinton (1997, p. xi) define CBI as “language and content integration”.

Content-based second language teaching is defined by Lyster (2011) as an instructional approach which targets the teaching of nonlinguistic contents to learners in a language that is not their native one. Learners acquire an additional language while learning the nonlinguistic

content. It is committed to both language and content objectives but not necessarily in an equal way. Contrary to the other approaches to language education which consider content as the grammatical structures, communicative language functions, or language skills, CBI specifies content in nonlanguage subject matter. The latter can be related to traditional school subjects, themes of interests to students... etc. In addition to its emphasis on content, CBI targets the academic, linguistic, cognitive and metacognitive skills that are needed for students' success in their educational endeavours (Lyster, 2011).

Actually, content-based instruction takes different forms. According to Met (1998), these approaches vary from more content-driven to language-driven. The former includes, for example, total or partial immersion programmes. The latter includes language classes which might be based either on thematic units or on frequent use of content. Towards the middle of the continuum there are programmes in which learners study one of the school subjects in the target language in addition to a traditional language class (In Lyster, 2011). Regardless of their different emphasis, these approaches to CBI share the belief that learning of the subject matter helps students to learn the language and the mastery of the latter makes access to the content easier (Stoller & Doolan, 2008; Deusen-Scholl & May, 2008). CBI has three goals. They are related to content, language and general skills (Claud et al., 2002. In Hernández, 2003). Content goals mean the acquisition of knowledge and skills needed by the content (subject matter). Language goals learning language items, vocabulary and language patterns, that are required to communicate the content. The last goal, general skills, refers to study skills that promote the learning of both language and content (ibid).

2.2.2. Project Work to Implement CBI

As regards the implications of CBI to PW, Stoller (2002, p. 109) claims that CBI permits the natural integration of “sound” language teaching practices, including PW. In fact, she defines the latter as “a versatile vehicle for fully integrated language and content learning, making it a

viable option for language educators working in a variety of instructional settings, including general English, English for Academic Purposes, English for Specific Purpose...etc". So, PW is considered as a pedagogical tool to teach language and content. Besides, she maintains that PW is effective in classrooms where the concern is to teach both content and language because projects "represent a natural extension of what is already taking place in class" (ibid).

In addition, Corin (1997) argues for the importance of the use of projects in the language programme for the state of California military personnel in the institute called Defence Language Institute. The course, he says is mainly content centered. It includes teaching about geography; history, politics, economics and culture of the target language groups. The classes are based on authentic materials such as tourist guidebooks, maps, newspaper articles...etc. Corin states that in order this programme meets the needs of the learners to perform in real life contexts, it has included projects or activities that are based on real life situations. As a result of this pedagogical corollary of projects with activities that are based on real life contexts, the classes focus more on language exercises that prepare students to carry out certain activities rather than focusing on language study (Corin, 1997).

As it is mentioned in chapter one, this work adopts Slater (2006) definition of PW. That is, project as a social practice that enables learners to simultaneously acquire language, content and skills while carrying out a series of tasks individually or in group. Moreover, Mohan (1990, p. 2) claims that there is a close relationship between the learning of content, language and the development of thinking. "Language development and content development are not regarded in isolation from each other and there is a focus on the intersection of language, content and thinking objective". Among the assumptions that Mohan underlines for the integration of language and content teaching are, the aim of education is to support the learning of a language as a medium of instruction and to make students able to succeed academically. Besides, for ESL programmes to ensure academic success of learners, they have to develop, in addition to

conversational skills, the cognitive and academic proficiency that is needed. In other words, ESL programmes should help learners acquire the language and literacy competencies that are the goals of native English language speakers programmes (Mohan, 1990).

2.2.3. Theoretical Rationale for the Integration of Language and Content Instruction

Snow, Met, & Genesee (1989) have outlined four theoretical rationales underlying the integration of language and content instruction in the foreign/ second language classrooms. First, language development and cognitive development for children go hand in hand. By contrast to the traditional methods to teaching second/ foreign languages, which tend to separate the learning of language from the cognitive (academic) development, CBI is designed in a way to integrate the development of both language and cognition. Second, learners learn language more effectively when it is used for meaningful and purposeful communication in social or academic contexts:

In real life, people use language to talk about what they know and what they want to know more about, not to talk about language itself. What school children know and need to know more about is the subject matter of school. In the typical school setting, however, language learning and content learning are often treated as independent processes (Snow et al., 1989, p. 202).

The third rationale for the integration of language and content is second/ foreign language education is that content provides motivational and cognitive basis for language learning. That is, learners find it worthy to learn content which is of interest and value. Besides, content supplies real meaning which “provides conceptual or cognitive hangers on which language functions and structures can be hung” (ibid). Finally, the fourth rationale is concerned with language variation. In other words, the register which is used at school is different from the one used outside of the school and different subject matters require different registers. So, learning school register is vital for the mastery of a specific content and the academic development of the learner.

2.2.4. Theoretical Perspectives for Integrating Language and Content

According to Mohan (1990), three theoretical perspectives underlie the integration of language and content in second language education. These are Krashen's Comprehensible Input

Hypothesis, Cummins' Language Proficiency model, and the Language Socialization.

a. Krashen's Comprehensible Input Hypothesis

Krashen's model consists in comprehensible input hypothesis. The latter, according to Mohan (1990), emphasizes on comprehension has been beneficial. For instance, it has encouraged ESL teachers to shift from grammar-based approaches to more communication-based approaches. The input hypothesis aims to explain how learners acquire a second language. Krashen (1982) argues that the Input Hypothesis is concerned with "acquisition", not "learning". The first, "acquisition", is "a subconscious process and inductive process of constructing the system of a language, not unlike the process used by a child "picking-up" a language." According to Krashen (1982) the process of L2 acquisition is similar to L1 acquisition. However, L2 learners do not succeed in mastering their L2 while L1 learners do. He suggested that the reason for this is due to the differences in learning conditions. Traditionally, L2 learners have been taught rules of grammar and receive correction when they make grammatical mistakes while L1 learners receive neither grammatical instructions nor explicit correction when they make mistakes. This has lead Krashen (1984) to hypothesize that if the conditions for L2 acquisition were similar to those of L1, L2 acquisition would be more successful. That is why classroom tasks should focus on acquisition tasks rather than activities that focus on language forms (Mohan, 1990). This model, however, has its limitations because it is a theory of second language acquisition and not a theory of knowledge acquisition. Besides, content in this model does not have the same meaning as the content in subject areas. It rather means "an understandable message or content" (Mohan, 1990, p. 116). What is more, Comprehensible Input Hypothesis is not concerned at all with the issue of integration (ibid).

b. Cummins' Language Proficiency Model

The second rationale for language and content integration, according to Mohan (1990) is Cummins' language proficiency model. The latter argues that proficiency in language (first and

second) consists in two types of skills Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP) (Cummins, 1979; 1980; 1981a). The BICS/CALP distinction was elaborated into two intersecting continua (Cummins, 1981a) highlighting the range of cognitive demands and contextual support that a particular language task or activity involves. That is to say, they range from cognitively undemanding to cognitively demanding and from context-embedded/context-reduced. Cummins' distinction between BICS and CALP, according to Mohan (1990), has implications for integrating language and content. It stresses that academic language proficiency takes years for second language learners to acquire. However, this furthers the need for CBI instead of having learners wait for 5 to 10 years before being allowed to enter academic courses. According to Timothy (1997), the two continuums of context-embedded/context-reduced and cognitively-demanding/cognitively-undemanding language is also helpful for educators concerned with integrating language and content teaching in understanding some of the difficulties their students encounter. It can also guide teachers in materials and lesson design. Cummins language proficiency model is developed in the subsequent section of this chapter because it is one of the theoretical rationales of our study.

c. Language Socialization Perspective

Language Socialization Perspective means “both socialization through language and socialization to use language” (Mohan, 1990, p. 118). As an example of this Mohan says is the child learning language is also learning about the world or learning through language. Other views of language socialization perspective came in the Vygotskian school of psychology that considers the role of social activities in the development of the mind. In fact, psychological development in the Vygotskian perspective is closely related to the interactional character of socialization. In the Vygotskian framework, “higher order intrapersonal psychological processes are developed through (social) interaction. Particular sociohistorical circumstances, which provide for certain kinds of social activities, promote or impede the development of complex cognitive skills” (Quoted in Schieffelin & Ochs, 1986, p. 166). This perspective acknowledges

the role of the more knowledgeable other in guiding the novice to carry out particular tasks to develop skills in the Zone of Proximal Development (ibid). In addition, Cummins (2000) also believes that Vygotsky's distinction between spontaneous or everyday and scientific concepts is relevant to his distinction between conversational and academic language.

Vygotsky's relationship between language and thought and the development of spontaneous and scientific concepts are developed in chapter three because they consist in one of the theoretical rationales for gradual integration of language, content and thinking skills into language tasks (PW) in this study.

2.2.5. Integrating Language, Content and Thinking Skills into ESL/EFL Tasks

This section deals with the frameworks for the integration of language, content and thinking skills into language tasks in ESL/EFL. These include Mohan's (1986) KSF, Cummins' (1981a) framework for task integration in CBI, and Chamot's (1983) cognitive model of second language learning. Both Mohan's (1986) and Cummins' (1981a) frameworks are used in this study to elaborate our categories for the analysis of PWs in the Algerian EFL textbooks and investigate the issue of gradual integration of language, content and thinking skills into these projects. They are also used to critically review project frameworks for the integration of language, content and skills in ESL/EFL PW, namely, Stoller (2002) and Beckett & Slater (2005).

2.2.5.1. Mohan's (1986) KSF for the Integration of Language, Content and Thinking Skills

Mohan (1986) has provided a theoretical framework, Knowledge Structures (KSF) Framework, which systematically integrates the teaching/learning of content, language and thinking skills. The integration of this approach in second and foreign language education enables learners to develop their language while learning a specific academic content. The KSF "plays a bridging role between language and content" (Mohan, 2007, p. 322). According to Early, Mohan and Hooper (1989), "use of the "Knowledge Framework" approach (Mohan 1986)

as a teaching and learning strategy appears to be particularly promising in helping ESL students simultaneously learn subject matter knowledge and academic aspects of English” (in Early, 1990, p. 82). Mohan’s (1986) Knowledge Structures consist in a theoretical framework for an approach that systematically integrates the teaching of language and the teaching of subject-area knowledge. The framework can be used to help ESL students to continue their cognitive development and mastery of academic content (Early, 1990).

In fact, the framework of knowledge structures is a model of social practice. They are (knowledge structures) defined as “broad and general patterns of the organization of information, at a fairly high level of abstraction. A typical situation, activity or task includes them but is not limited to them” (Mohan, 1990, p. 11). Mohan (2007, p. 303) defines a social practice as “a unit of culture that involves cultural knowledge and cultural action, in a theory/practice, reflection/action relation”. And knowledge structures as “the semantic patterns of discourse, knowledge, actions, artifacts, and environment of a social practice” (ibid). These structures represent cognitive or thinking skills “the whole group of KSs can be justified in their own terms as cognitive categories” (Mohan, 1989, p. 103). Examples of knowledge structures in discourse include description, classification, sequence, principles, choice and evaluation. Thus, a typical unit of work in schools, according to Mohan (1986) shows a systematic integration of these social practices and knowledge structures. To illustrate how this works Mohan gives an example of a high school ESL social class studies studying the following news item "Quebeckers are taking part in what is perhaps the most momentous in vote in the country's history....Prime Minister Chretien and his wife. A line cast their ballots in their home town of Shawinigan". Mohan claims that while students work on this topic of vote, they are socialized to the social practice of voting in the Canadian society. They also learn about ballots and other cultural artifacts, such as, ballot boxes and voting booths. Meanwhile, they understand the description of Mr. Chretien as a Prime Minister. They also classify him as a politician and a member of the

party that holds power. Besides, students learn the sequential procedure of voting which is designed in conformity to the principles of a secret ballot. They also understand that the choice of vote in this context is related to the values of federalism and separatism. “The aim of the KF is to develop the cognitive language of students so that they can use English for learning across the curriculum” (Timothy, 1997, p. 9). That is, when learners learn the language of classification or description, they can use it in other areas or courses. In other words, they can transfer this knowledge. The KF servers to integrate the teaching of language, content and cognitive skills. It provides a starting point for designing student tasks that integrate the development of academic discourse and the acquisition of subject-matter knowledge. In addition, Key visuals may also be used in these tasks to enable learners to relate language and content (Early, 1990).

The knowledge structures involved in a typical social practice are described as being theoretical (background knowledge) or practical (action situation). The former includes classification, principles and values, whereas the latter contains description, sequence and choice (Mohan, 1986). Therefore, students participating in a social practice are, according to (Slater et al., 2006), required to *know* (knowledge/ theory) something and to *do* (action/practice) something. The authors claim that all the six knowledge structures occurring as theory or practice “appear in the social practice of knowing and doing project work ” (Slater et al., 2006, p. 246).

Background Knowledge	Classification/ Principles/ Values
Action Situation	Description/ Sequence/ Choice

Figure2: Knowledge Structures of Situation (Mohan, 1989, p. 104)

Table 1 bellow provides more illustrative examples and language and thinking skills that are acquired with each of these knowledge structures of a situation

Theoretical/General		
Classification	Principles	Evaluation
<u>Sample thinking skills:</u> • Classifying • Identifying • Understanding • Applying or developing Concepts <u>Sample language:</u> • Verbs of class membership “be” • Verbs of possession: have • Comparison: more than; taller than - Classification: include	<u>Sample thinking skills:</u> • Establishing hypotheses • Interpreting data • Drawing conclusions <u>Sample language:</u> • Cause/reason: is due to • Condition & contrast: if...then • Prediction: probably • Generalization and explanation	<u>Sample thinking skills:</u> - Evaluating - Ranking - Judging - Appreciating <u>Sample language:</u> • Describing emotions: like/dissatisfactory; unsatisfactory • Evaluation adjectives : good/right/wrong; • Verbs of volition: prefer/had rather
<u>Sample thinking skills:</u> • Observing • Identifying • Comparing • Contrasting <u>Sample language:</u> • Static verbs: believe; to see to feel • Relative clauses: who; where • Prepositions of place: between under; by;	<u>Sample thinking skills:</u> • Arranging events in order • Following directions • Predicting order <u>Sample language:</u> • Logical & chronological connectors: during; next; final • Prepositions of space & time at; about; between; around; toward	<u>Sample thinking skills:</u> • Selecting • Generating solutions • Solving problems • Identifying issues <u>Sample language:</u> • Modals: can; will; must; should would; may; • Request/offer: I can • Preference: prefer; had rather
Description	Sequence	Choice
Practical/Specific		

Table1: Sample Thinking Skills and Language Related to the Knowledge Framework (Beckett & Gonzalez, 2004, p. 167)

The knowledge structures, according to Beckett and Gonzalez (2004) consist in thinking skills and linguistic features that learners need to develop while doing a task within a certain KS. Table 1 above shows samples of thinking skills and language features that can be developed through a give task within a certain KS. And the use of visuals can be helpful to integrate the teaching and learning the language and content (subject-matter) (Beckett & Gonzalez, 2004).

2.2.5.2. Sequencing of Theoretical and Practical Discourse in Language Instruction

A fundamental distinction between practical and theoretical discourse, according to Mohan (1986, p. 108), is that “practical discourse is characteristic of everyday interactions in society; theoretical discourse is characteristic of language in school learning-academic discourse”. This distinction is based on the different dimensions along which discourses can be arranged. Mohan refers to these two dimensions as the distance that exists between the speaker and the topic and between the speaker and the listener (ibid). This distinction has implications for optimal sequencing of language teaching.

In fact, school curriculum, according to Mohan (1986), represents an arrangement of different types of discourse ranging from the least distant to the most distant along the two mentioned dimensions (i.e. speaker-topic, speaker-listener). For example “tell and show” activities for learners in the primary grades and for university students (writing a research paper for a large audience) entail different degrees of distance, from the least to the most distant, respectively.

Theoretical and practical discourses, Mohan (1986) says are associated to experiential and expository types of learning, on the one hand, and to practical and theoretical contents, on the other hand. The first is the difference between the learning that comes as a result of action and experience and learning from teachers and texts. The second is a differentiation between the content that is at hand the content that contains general concepts and explanations. This distinction between the three pairs of concepts can be more clearly explained as follows:

- Practical discourse Vs Theoretical discourse
- Experiential learning Vs expository learning
- Practical content Vs theoretical content

Taking these three principles together “provide for a sequencing of academic language and content that will expand from experiential learning of hands-on content and ‘here-and-now’ language to the learning of more abstract content presented in an expository way by means of

language itself” (Quoted in Cummins, 2000, p. 65). In fact, the above distinction, according to Cummins (2000), is a distinction between highly contextualized everyday uses of language and relatively less contextualized and more abstract uses. The latter are associated, on the one hand, with the different contexts in which language is used, for instance, everyday contexts versus academic contexts and between the differences in the degree to which verbal and conceptual structures are elaborated hierarchically, on the other hand.

2.2.5.3. Cummins’ (1981a) Framework for Task Integration in Content-Based Instruction

As for the appropriate methodology to teach language and content, especially for low English Proficient learners, a framework for the integration of language and content is suggested by Cummins (1980, 1981a). In fact, Cummins’ developmental framework consists in a guideline to sequence academic tasks, on the one hand, from less to increasingly more cognitively demanding, on the other hand, from context-embedded to context reduced to enable learners/students to extend their linguistic resources and develop their cognitive abilities (Lyster, 2007). In fact, Cummins (1980) distinguishes between two types of language proficiency. Basic Interpersonal Communicative Skills or BICS. These are skills that enable second language learners to use language for social interaction. This, however, is not enough for second language learners’ academic success. The second type, Cognitive/Academic Language Proficiency, or CALP is the language proficiency that is related to cognitive levels and conceptual knowledge. It is transferable from one language to another and it is key to academic success.

Cummins (1981a) distinguishes between two types of communication skills in ESL contexts: face-to-face communicative skills and language proficiency for academic achievement. The relationship between the two types of language proficiency (BICS and CALP) is described in terms of two intersecting continua that are context-embedded and context-reduced language proficiency, respectively. The latter help educators to conceptualize the difference between BICS

and CALP. Cummins means by context-embedded the range of contextual support to express or receive meaning. That is, context-embedded communication is the various situational support and paralinguistic cues, such as, intonation, gestures, facial expression.... Context-reduced proficiency, on the other hand, means the students' ability to deal with the communicative demands of situations where the extralinguistic support is reduced, for example, reading a difficult text, writing an essay... Context-reduced situations require more knowledge of the language than context-embedded face-to-face situations. It is important to note that there are two dimensions of contextual support that make task completion easier for learners (Cummins, 2000, p. 72). The first one, internal support, is an individual attribute which includes for example prior experience, motivation, cultural relevance, interests.... The second one, external support, relates to clear and understandable language input (e.g. syntactic and semantic redundancy). Cummins (1982) notes that the two types of communication occur in different contexts. Whereas context-embedded one is typical to the language that occurs outside the classroom or in the everyday world, context-reduced one reflects the language demands of the classroom. This continuum of contextual support is shown on the horizontal axis of figure 3 below.

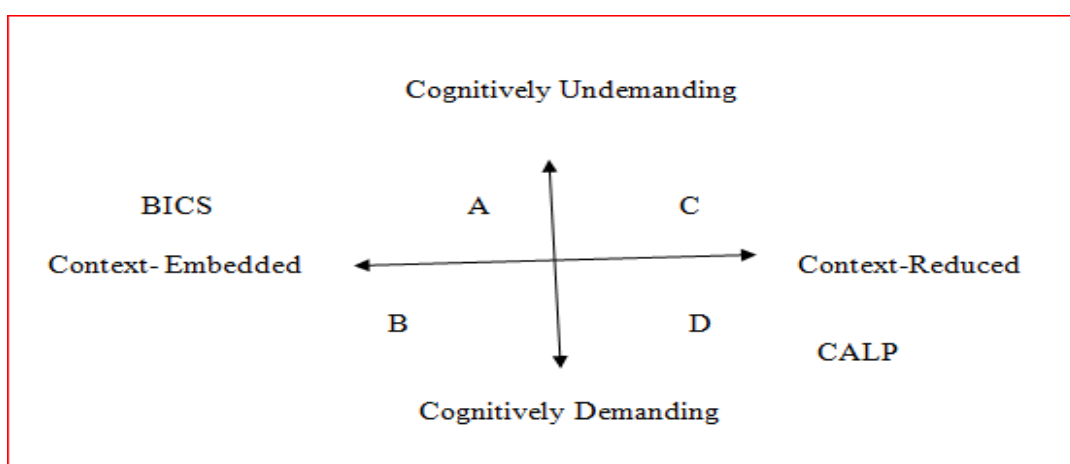


Figure 3: Range of Contextual Support and Degree of Cognitive Involvement in Communicative Activities (Cummins, 1981a, p. 5).

Cummins (1982) claims that learners master these language skills progressively and that it takes more time for L2 learners to master academic language proficiency than face-to-face or

everyday social communication. In fact, he holds that it takes from approximately five to seven years to master the academic language proficiency and about two years to acquire enough everyday social communication skills.

As for the cognitive demands and involvement in carrying out these two types of communicative activities or tasks. Cummins suggests that the latter should be arranged from the cognitively undemanding (upper part of the vertical continuum in figure 3) to the cognitively demanding ones (lower end of the continuum). When students progress through the grades and through time “they are increasingly required to manipulate language in cognitively demanding and context-reduced situations that differ significantly from everyday conversational interactions” (Cummins, 2000, p. 69). The continuum of contextual support and cognitive involvement ranges from A to C (BICS) to B to D (CALP). The distinction between the two types of language proficiency and the linguistic and cognitive requirements for each of them is clearly shown in figure 4 below.

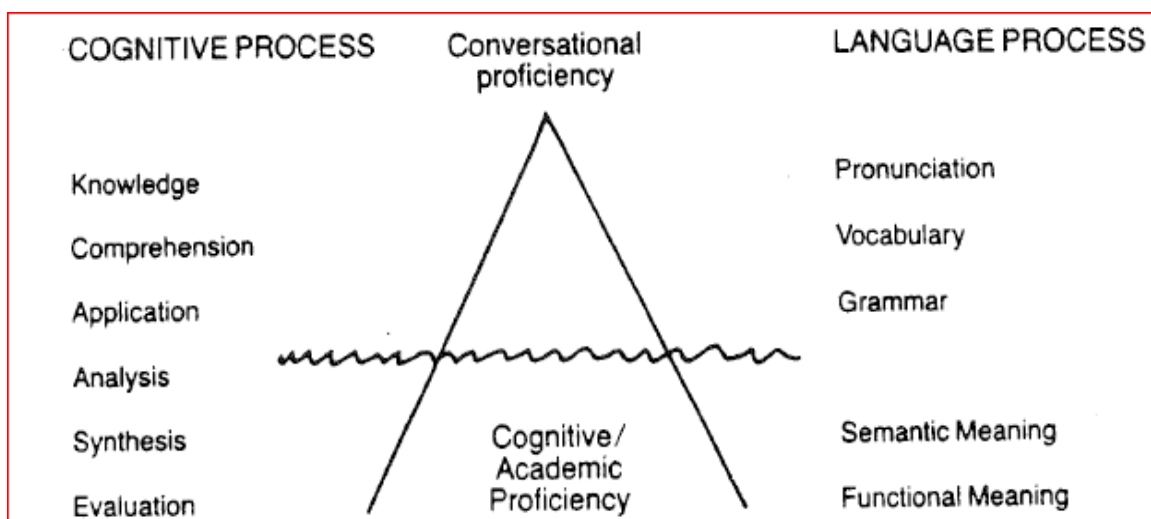


Figure 4: Surface and Deeper Levels of Language Proficiency (Cummins, 1992, p. 18)

The figure shows that the cognitive and linguistic aspects of both BICS and CALP are elaborated in terms of Bloom’s taxonomy of the educational objectives. The surface level of proficiency or conversational proficiency includes cognitive processes of *knowledge*, *comprehension* and *application*. It involves also language aspects pronunciation, vocabulary, and grammar. The

deeper level, cognitive/academic proficiency includes cognitive processes of *analysis*, *synthesis*, and *evaluation*, and the linguistic processes of semantic meaning and functional meaning.

The pedagogical implications of the contextual and cognitive continuum for second language learners, according to Cummins (2000, p. 71) “optimal instruction for linguistic, cognitive and academic growth will tend to move from Quadrant A, to B, and from Quadrant B to D. Quadrant C activities may be included from time to time for reinforcement or practice of particular points”. That is to say, most effective instruction of language and content should be cognitively challenging for learners but provides linguistic and contextual scaffolds that are needed to complete tasks successfully (ibid). Moreover, Cummins (1992) claims that failure to differentiate between the two types of language proficiency has negative consequences on language minority students’ in ESL contexts.

2.2.5.4. Chamot’s (1983) Cognitive Model of Second Language Learning

Following Cummins’s (1981a, 1982) distinction between BICS and CALP, Chamot (1983) distinguishes between two types of language learning needs. Language needed outside the classroom which is used for socializing and language needed inside the classroom. It is used for instruction. Chamot proposes a language learning model which is based on cognitive developmental stages, and suggests different types of activities that might be used in teaching ESL according to the learner’s level of cognitive development. In fact, the model consists in “a taxonomic representation of the cognitive aspects of second language learning” (Chamot, 1983, p. 461). It is based on Bloom’s (1965) and Bloom and Krathwohl’s (1977) sequential and hierarchical six levels taxonomy of the cognitive learning objectives domain (ibid) (See table 2 bellow).

The taxonomy describes the internal mental processes and proposes action verbs that describe the linguistic processes that occur at each of these stages. The two columns on the left describe the cognitive levels from the lowest to the highest, knowledge being the lowest and

evaluation being the highest, and the types of language proficiency acquired at each level. The cognitive levels and the language proficiency types are described as follows:

Cognitive domain taxonomy	Linguistic processes	Internal language skills	External language skills
Knowledge	Recalling	Discrimination of and response to sounds, words and analyzed chunks in listening. Identification of labels, phrases in reading.	Production of single words and formulas, imitation of models. Handwritings, spelling, writing known elements from a dictation.
Comprehension	Recombining	Recognition of and response to new combinations of known words and phrases in listening and oral reading. Internal translation to and from L1.	Emergence of interlanguage/telegraphic speech; code-switching and L1 transfer. Writing from guidelines and recombination dictation.
Application	Communicating	Social interaction	
.....		Understanding meaning of what is listened to in formal situations. Emergence of silent reading for basic comprehension.	Communication of meaning, feelings and intentions in social and highly contextualized situations. Emergence of expository and creative writing
Analysis	Informing	Acquisition of factual information from listening and reading in decontextualized situations.	Application of factual information acquired to formal, academic, speaking and writing activities
Synthesis	Generalizing	Use of information acquired through reading and listening to find relationships, make inferences, draw conclusions.	Explanation of relationships, inferences and conclusions through formal speech and writing.
Evaluation	Judging	Evaluation of accuracy, value, and applicability of ideas acquired through reading and listening.	Expression of judgments through speech and writing, use of rhetorical conventions.

Table2: Cognitive Second Language Learning Model (Chamot, 1983, p. 462)

The three first domains= communicative/survival language skills

The three last domains= academic literacy-related language

1. *Knowledge*: memorization and recall of language chunks.
2. *Comprehension*: combine previously learned items in a new way.
3. *Application*: the functional use of language for communicative purposes.

4. *Analysis*: language is used to receive and give information, to identify main ideas, and engage in other analytical tasks.
5. *Synthesis*: language goes beyond facts to find reasons, to make comparisons, to relate ideas and to make inferences.
6. *Evaluation*: the language proficiency developed in the first levels is used to understand, make and express decisions and judgments.

The first three levels (knowledge, comprehension and application), according to Chamot (1983) are related to the communicative and survival language skills, whereas the last ones (analysis, synthesis and evaluation) refer to the academic literacy-related language used for instructional purposes. As for the other columns, they describe the type of language activities that the learner engages in at each level. The receptive skills (internal language skills) and productive skills (external language skills) are grouped separately in columns three and four, respectively.

2.3. Frameworks to Integrate the Teaching of Language, Content, and Skills into ESL/EFL PW

The following looks at project frameworks for the integration of language, content and skills in ESL/EFL contexts. First it presents Stoller's (2002) theoretical framework for the integration of language and content in a project-based ESL classroom and then Beckett and Slater's (2005) framework. Next, it provides a critical review of the two frameworks.

2.3.1. Stoller's (2002) Project Framework

The following project framework proposed by Fredericka Stoller (2002) looks at the role of PW in content-based instructional formats (methodology). It shows how PW can be used as a vehicle to effectively integrate language and content learning in different instructional settings, such as GE, EAP, and ESP etc (ibid). Besides, Stoller says, in language classrooms where language and content are learned simultaneously, PW is effective because it is regarded as a natural extension of what is already happening in class. For a better explanation, Stoller provided us with an example from an EAP class structured around environmental topics but it can also be applied to other courses, for instance, general English and ESP course. A project which involves

the development of poster displays to propose ways in which the students' school can adopt more environmentally sound practices would be, Stoller believes, a natural outcome of the content and language learning tasks that are taking place in classroom (Stoller, 2002, p. 109).

The bellow, ten-step model for the incorporation of project work into language classrooms, including GE, EAP, ESP courses, to mention only some examples, helps and guides teachers and students to develop meaningful projects that enable students to learn content when gathering information about their projects and receive language instruction when needed. According to Stoller, after the teacher has introduced the students to the theme of the unit and the related elementary vocabulary and concepts, he introduces the project that will be woven into class lessons and that will last throughout the whole thematic unit. And to move from the first to the last phase (final outcome) of the project, students and instructor go through the following ten steps.

Step 1 Students and instructor agree on the theme of the project

Students are encouraged to fine-tune the project theme.

Step 2 Students and teacher determine the final outcome

They can choose from a variety of options such as written report, letter, poster, oral presentation, debate, brochure etc.

Step 3 Students and instructor structure the project

After determining the start and the end points, students and instructor need to structure the body of their project. They have to consider the type of information they will need and how they can obtain, compile and analyze it. As they will also have to specify what role will each student within different groups will play in carrying out the project.

Step 4 Instructor prepares students for the language demand of the information gathering.

The language and skills learners will need depends on how they plan to obtain information for their project. For example, if they plan to use an interview, they will maybe need instructions as

concerns forming questions, conversational gambits, and pronunciation feedback when doing role play activities. They may also need practice in letter writing (letter conventions, formal/informal language) in case they plan to receive information by writing letters.

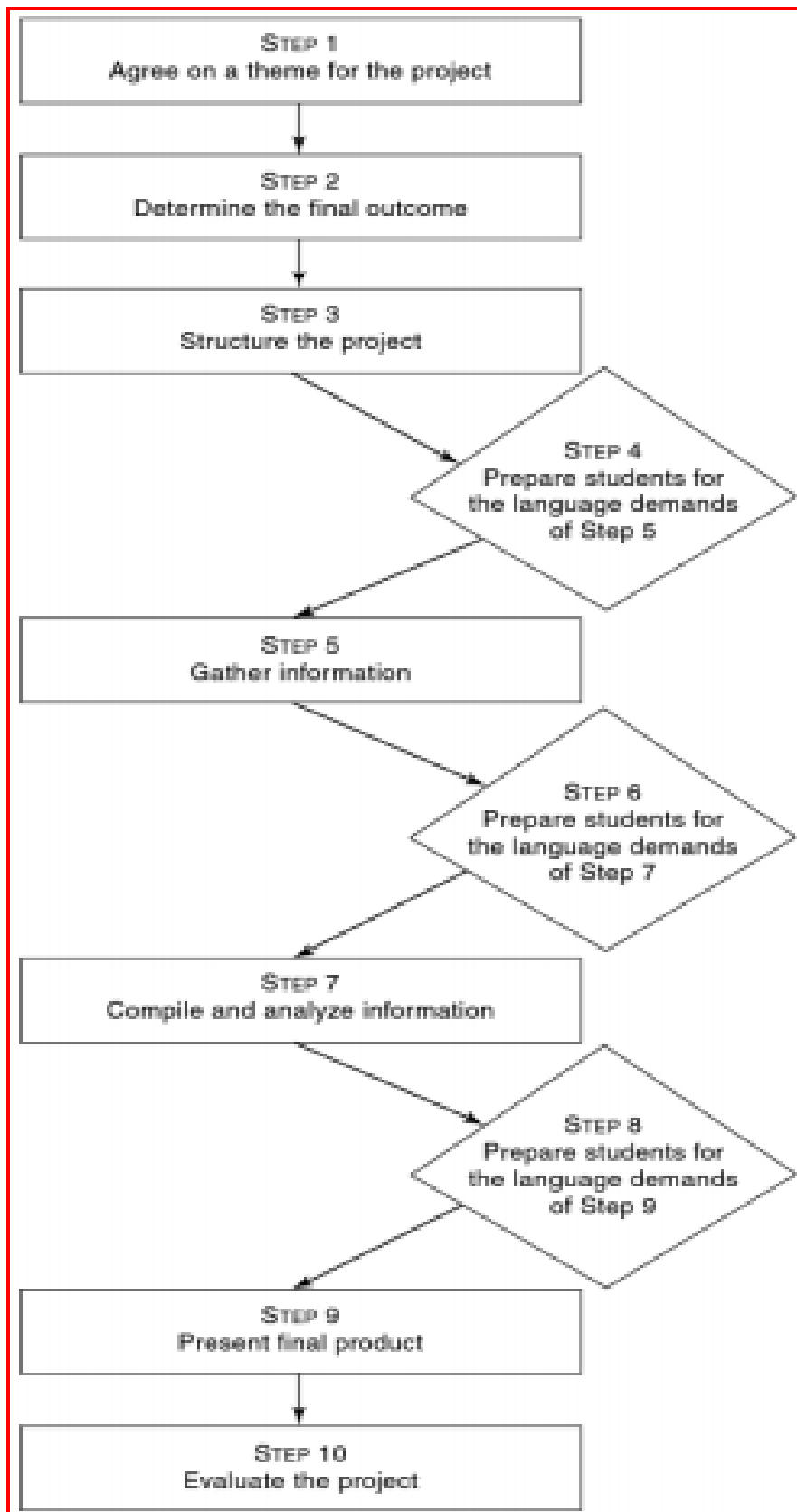


Figure5: Developing a Project in the Language Classroom (Stoller, 2002. In Richards & Renandya, 2002, p. 112)

Students may also need to learn some study skills, such as, note taking, skimming texts, devising a grid for data collection if they were to gather information through listening or reading texts.

Step 5 Students gather information

After practicing language skills and strategies necessary for gathering information, students are now ready to collect and organize it.

Step 6 Instructor prepares students for the language demands of compiling and analyzing data.

Instructor sets sessions in which students organize, evaluate, analyze and interpret the gathered materials in order to select the most appropriate information for their project.

Step 7 Students compile and analyze information

Students compile, analyze and weigh the value of the gathered information to select the appropriate one for their project and discard others because of their inappropriateness to the goal(s) of the project.

Step 8 Instructor prepares students for the language demands of presentation of the final product

At this level the instructor may design language activities to help students succeed in the final presentation of their project. The activities may consist of oral presentation skills, pronunciation, organization of ideas etc.

Step 9 Students present final product

Students are now ready to present their final outcome.

Step 10 Students evaluate the project

Students can reflect on the language and content they learned and used to complete their project. This will lead learners to realize how much they learned and for the teacher benefit from students remarks for future projects.

2.3.2. Stoller's Project Framework: Benefits and Limitations

Stoller's project framework for the integration of language and content into ESL/EFL language classrooms is intended for learners with different needs, EAP, ESP and GE. This can

be an indicator for the level of the language command and thinking skills development of these students. In fact, on the one hand, students of EAP and ESP are, generally, adults who are expected to have a considerable degree of proficiency in the target language and are capable of higher thinking skills. On the other hand, GE learners can be adults with advanced level in ESL/EFL and thinking skills as they can also be adult or young beginner learners with a limited proficiency in the target language. As for the development of thinking skills for this last category of learners, they might be limited either by their cognitive developmental stage or their linguistic competence (see Piaget's stage theory of cognitive development and Cummins' (1967) relationship between linguistic competence and cognitive growth, chapter 3). Stoller's project framework, then, does not seem to account for the differences in language proficiency level and cognitive development level among the different groups of learners/students.

However, L2 acquisition research suggests that the integration of language and content in language learning tasks should be done in respect to the cognitive and linguistic development of the learner (Cummins, 1981a; 1982). Neglect of these aspects in Stoller's project framework can be seen at its different stages. For instance, the types of information needed for the completion of PW and the sources for gathering it should consider the above criteria. In fact, content that is required for any project theme can be theoretical or practical (see Mohan's KSF, chapter 2) and the choice depends on the learners' thinking skills level and linguistic proficiency that enable them to comprehend these contents. In other words, while an advanced level adult student of GE may assimilate both theoretical and practical information, a young learner or adult beginner learner of GE might find it difficult to learn the theoretical information. This is due to the fact that lack of language proficiency restricts learners' access to theoretical or abstract type of contents (see Cummins, 1976 for the relationship between language proficiency and thinking skills development in chapter three).

In the same vein, students with higher knowledge of the target language can access and gather information for their projects from context-reduced situations, such as reading texts which require the use of linguistic resources only. Yet, those students with less knowledge of the language may compile it in context-embedded situations, which call for extra-linguistic resources. For instance, the use of pictures to understand some meaning (see Cummins, 1981a, chapter 2). Decision about language needs of the learners to prepare them for gathering information, analyzing and evaluating it, step four and seven, also has to be considered in respect to the above criteria.

2.3.3. Beckett and Slater's (2005) Project Framework

Beckett and Slater (2005) have proposed a framework to incorporate teaching and learning of language, content and skills in a project-based ESL classroom. The framework, according to the authors, is influenced by Mohan's (1986) knowledge framework, which provides a theoretical basis for the integration of language and content. This project framework, the authors say, helps the learners to understand the value of learning a second language through PW. It makes them aware of the fact that projects do not only help them to acquire the target language but they also offer them a chance of learning content knowledge and skills.

In fact, Beckett and Slater (2005) have proposed this framework in order to permit both teachers and learners to overcome their negative attitudes towards the use of projects in ESL classes. Two systematic studies Beckett (1999) and Eyring (1998) which aimed at evaluating teachers' and learners' attitudes towards learning a second or a foreign language through PW have revealed the dissatisfaction of students with the use of projects to learn a foreign or a second languages. This disappointment is mainly due to the fact that they believe that an ESL class should be chiefly devoted to the teaching and learning of language components such as vocabulary, grammar, speaking, writing instead of focusing on developing other skills like cooperative learning (Beckett, 2002). As for the ESL teachers' evaluation, while Beckett's

(1999) investigation has shown that Canadian secondary ESL teachers favoured the use of project-based instruction because it permitted them to use an integrated approach to language teaching. That is, integrate language, content and skills into their classes. This approach enabled them also to develop their students' skills, such as, critical thinking, problem-solving and cooperative learning (in learning (in Beckett, 2002). Eyring's (1998) study has shown that US teachers' evaluation was mixed. On the one hand, teachers have expressed their satisfaction with the way projects have helped students to improve their oral presentation skills. On the other hand, they have expressed their frustration and tension because they find it difficult to come to a consensus with their students about choosing worthwhile topics for projects and teaching through projects is too complex and demanding.

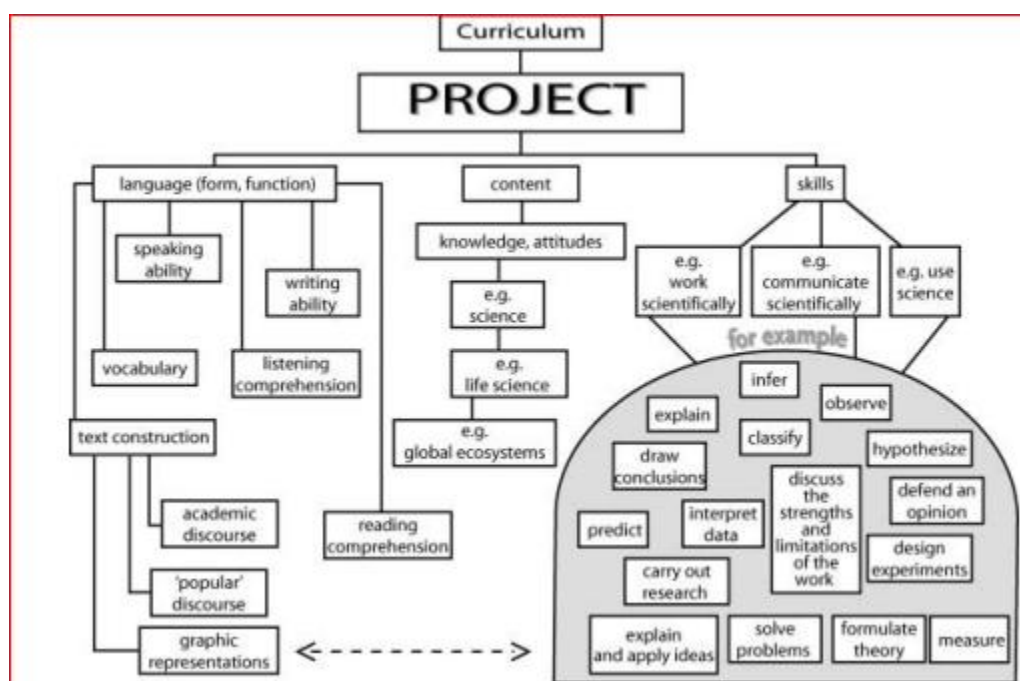


Figure6: The Project Framework (Beckett & Slater, 2005, p. 110)

Besides, teachers' frustration is also due to the students' lack of interest and their desire for a more traditional way to learn English. That is, learn the grammar, vocabulary, reading and writing (In Beckett, 2002).

The Project framework, figure 6 above, permits the categorization of the target language, content, and skills. It shows different types of language skills, functions, and forms, various

types of contents and thinking skills that can be acquired by students while conducting a project in ESL.

3.3.4. Beckett and Slater's Project Framework: Benefits and Limitations

Beckett and Slater (2005) project framework is designed, as already said, in order to enable undergraduate university ESL students with advanced degree in English (upper-intermediate) to understand the benefits of learning English through PW. The latter consists in, according to the authors, the advantages it offers for the simultaneous acquisition of language, content and thinking skills that promote students' high level academic literacy. The problem with this project framework, we believe, is that it does not clearly specify what kind of thinking skills, content and language are required for advanced ESL students. In fact, PW with young and low ESL/EFL proficiency learners also leads to the acquisition of these components.

However, different types of language forms, skills and functions and various kinds of contents and thinking skills are acquired among the two categories of learners/students. Actually, students with more developed cognitive abilities (Piagetian formal operational thinking) (See chapter three) and more proficiency in their L2 are expected to acquire higher level thinking skills. They also have the ability to access more theoretical (abstract) content and more ability to access and understand context-reduced type of language and content. So, they possess linguistic and cognitive resources that enable them to engage in cognitively demanding tasks. Low proficiency ESL/EFL learners, on the other hand, are more likely to be less successful in acquiring higher order thinking skills and dealing with those language tasks, as input or output, that require higher level thinking because of their inadequate linguistic competence (see Cummins, 1976 threshold hypothesis, chapter 3 on the effect of linguistic competence on cognitive growth).

For the sake of illustration, the cognitive skill of 'predicting', is the type of skills acquired by high proficiency ESL students through PW in Beckett and Slater (2005) project framework,

can also be developed by young learners with low proficiency in English while carrying out projects. However, it is necessary to highlight that this cognitive skill pertains to both higher and lower order thinking. Therefore, one expects, on the one hand, that an adult with a high proficiency level in ESL/EFL develops both skills of predicting: the high level (analysis and evaluation) and the low level ones (comprehension and application). On the other hand, while young learners with limited proficiency in the target language may develop low level predicting skills above that do not require a considerable knowledge of the language. They may fail in developing higher level of predicting skills which demand an important knowledge of the target language. For instance, a limited proficiency ESL/EFL learner may predict the meaning of a word/an expression successfully by means of extra-linguistic cues such as, gestures, pictures, facial expression...etc. This same learner may not be able to predict the meaning of a word/expression from reading a difficult text and relying only on his linguistic knowledge. In contrast to low proficiency ESL/EFL learners, adults students with high degree in the target language are expected to exhibit both types of predicting skills.

As far as the integration of the content component is concerned, the framework does not specify the type of content knowledge that should be accessed and acquired by high proficiency L2 learners. Actually, content that is related to the mentioned areas of knowledge, such as, global ecosystem and life science, can be acquired by both high and limited proficiency L2 students/learners. However, high proficiency students may access these contents through context-reduced tasks since they are expected to have at their disposal both the linguistic and cognitive resources that enable them to do so. Learners with limited knowledge of the target language, in contrast, to the former might access the same types of content but in context-embedded situations because of their relatively low linguistic and cognitive growth (see Cummins, 1981a, 1982, chapters 2 and 3).

For example, about life sciences, young and nonproficient language learners can be taught about life of animals or plants in the rainforest but one might not expect them to grasp much content dealing with processes that occur in living things, such as cancer cells. Yet, an adult with a relatively high command of the ESL/EFL can access both types of content. Additionally, the level of abstraction involved in these types of contents is not specified. While content according to Mohan (1986) can be theoretical or practical with the former requiring more knowledge of the language and more developed thinking skills than the latter.

In the same vein, reading comprehension skills, for example, in the language component of the Beckett and Slater's (2005) framework does not define the type of discourse that reading comprehension for high proficiency language students' should target. In fact, the latter should exhibit reading comprehension skills in both practical and abstract or theoretical discourse because of their developed linguistic and cognitive resources. Besides, other types of language skills required from proficient language learners need to be put clearly. This category of students, in contrast to limited proficiency ones who are expected to develop the language of socializing, have to show speaking and writing skills that are related to both the socializing and academic domains.

Stoller's (2002) and Beckett and Slater's (2005) project frameworks for the integration of content, language and skills in ESL/EFL education do not seem to be concerned with the type of language, content and thinking skills to be integrate in PW with different categories of learners. They do not specify whether all types of language, content (theoretical/practical) and types of skills (Higher Order or Lower Order thinking) can be taught to all groups of learners (high/low level thinking skills and high/limited proficiency in the target language), or does the integration of these three elements into PW has to account for the learners' proficiency level in the target language and their cognitive growth and abilities.

Therefore, the project framework that we suggest (chapter 10) accounts for the relationship between the language proficiency and cognitive development of the learners in the integration of language, content and thinking skills. It also considers the type of contents that learners might be to be exposed to and acquire through PW (theoretical/practical, context-reduced/context-embedded). That is, content is integrated in accordance to the learners' cognitive and linguistic development.

Furthermore, the two project frameworks mentioned earlier are designed for purposes that do not fit with the aims of this research. Stoller's framework is designed in order to show the different steps to be followed by teachers in implementing PW into their language classes. That is to say, procedures to follow in a project-based teaching unit in ESL/EFL class. Beckett and Slater's framework provides a guideline for students to evaluate their acquisition of language, content and skills as a result of carrying out a PW. The project framework that we suggest, however, is concerned with the design of PW for the teaching and learning of a foreign language. Like the previously discussed frameworks, it advocates the integration of the teaching and learning of language, content and skills simultaneously. Yet, it emphasizes that the three components should be integrated according to the learners' cognitive abilities and proficiency level in the target language. In other words, whether students are low or high proficient in the target language, and whether they have developed higher thinking skills or they are able only of lower order ones, either because of their age or because of the deficits in the target language proficiency. It also suggests that the three components should be gradually integrated, in terms of both linguistic and cognitive complexities.

Conclusion

The literature review in this chapter shows that PW in ESL/EFL is an appropriate methodological tool to teach different types of skills and competencies, including the language and thinking-related one. It also claims that PW as "a social practice" enables the integration of language, content and thinking skills in ESL/EFL teaching. In addition, it has been argued that

the integration of the latter into language tasks should carefully account for the types of language, content and thinking skills to ensure the shift from the simplest to the most complex types. In other words, they should gradually shift from tasks that are less cognitively and linguistically demanding to the most complex and demanding ones. Yet, a review of PWs frameworks to integrate the teaching and learning of language, content and skills in ESL reveals that they do not consider the principle of gradation. They only consist in guidelines to simultaneous teaching of language, content and skills. Therefore, the review of the literature on language tasks to integrate the teaching of language, content and thinking skills, namely Mohan's (1986) KSF and Cummins' (1981a) framework for task integration in CBI, will be used in this study to design our evaluation categories to investigate the issue of gradual integration of language, content and thinking skills into the PWs under study (See chapter 4). Moreover, they will serve as a theoretical ground to suggest a PW framework for gradual integration of language, content and thinking skills in EFL teaching (See chapter 10). The following chapter considers the theoretical rationale that supports the gradual integration of language, content and thinking skills into EFL tasks, mainly, from research on SLA, educational psychology, and Child's language development standpoints.

Chapter 3: A Theoretical Rationale for a Gradual Integrated Teaching of Language, Content and Thinking Skills through PW

Introduction

This chapter scrutinizes different theoretical grounds supporting the principle of gradation in the teaching of language, content and thinking skills. First, it looks at Cummins' types of language proficiency outside and inside the school contexts, namely, BICS and CALP. It also considers the issue of time which is required for the acquisition of these two types of language proficiency in ESL/EFL contexts. Second, it deals with the hierarchical levels of thinking in education as proposed by Bloom (1956) and Krathwohl (2002) in their taxonomies of the cognitive domain of educational objectives. Next, this chapter provides an overview of Piaget's theory of stages of cognitive development and the place of linguistic competence in the latter. It also considers the relationship between language and thought in the Piagetian sense. The fourth section is devoted to Cummins' (1976) *Threshold Hypothesis* which deals with the relationship between linguistic competence and cognitive growth. Finally, the chapter considers Vygotsky's conception of the development of spontaneous and scientific concepts and the relationship between language and thought.

3.1. Cummins' Language Proficiency Model

Cummins' (1979, 1981a) language proficiency model makes a distinction between two types of language skill: BICS or face-to-face communication and CALP). While the former refers to conversational fluency in a language, the latter means the learner's ability to express and understand concepts and ideas relevant to success in school, in both the oral and written modes. According to Cummins (1979), the distinction between BICS and CALP is originally meant to answer Oller's (1979) assertion that individual differences in language proficiency can be explained by *Global language proficiency*. Cummins (1979), however, questions Oller's

incorporation of all aspects of language use and performance into one single dimension, the *Global language proficiency*.

A glance at the literature on language competence or proficiency shows no consensus among researchers about its meaning. For Hernandez et al. (1978) model, it comprises 46 distinct competencies. Oller (1978, 1979) claims that there is only one global language proficiency. Adopting an intermediate position, Canale (1981) distinguishes four competencies, grammatical, sociolinguistic, discourse and strategic competencies (In Cummins, 1981a). Cummins highlights two major problems in applying any of these models of communicative competence to minority language learners. First, their conception of competence is static and does not account for the developmental aspect of communicative competence. Second, they do not take into consideration the specific acquisition contexts and the development of different aspects of communicative competence, in particular the communicative demands of language required for academic success or schooling (Cummins, 1981a).

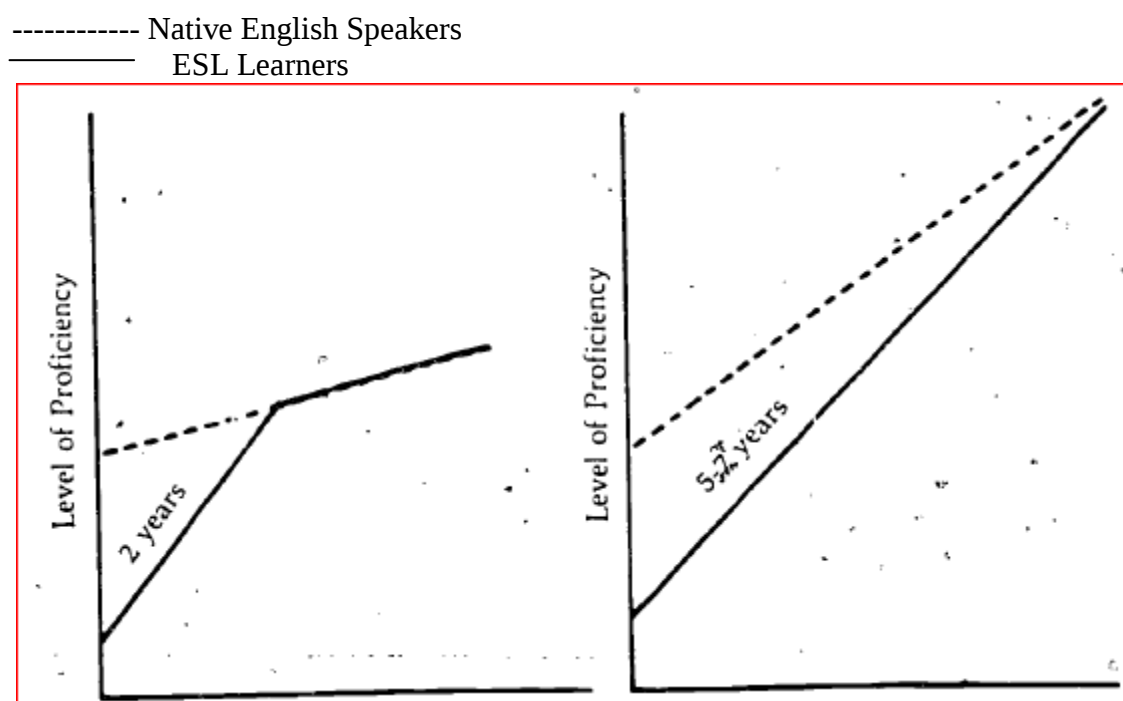
3.1.1. The Development of English Proficiency in School Contexts

According to Cummins (1981a), two types of language proficiency in school contexts can be considered. The first is what Bruner (1975) refers to as “species minimum”. It is the kind of proficiency that native speakers acquire by the age of six BICS. It includes phonological, syntactic and semantic language skills. However, other skills, mainly, literacy-related language skills such as reading comprehension, writing skills, vocabulary and conceptual knowledge CALP, continue to grow during the whole school years and even after. According to Cummins (1979), the aim of the distinction between BICS and CALP is to attract the attention of educators to the timelines and challenges that face second language learners while trying to catch up to their peers in acquiring academic aspects of the language (Cummins, 2008). It also helps clarifying the conflation between the two types of language competence for many educators.

This conflation is the source for many difficulties that learners of English as an additional language encounter (Cummins, 2008).

3.1.2. How Long does it Take for L2 Learners to Acquire BICS and CALP?

According to a study conducted by Cummins (1981b) on immigrant students in the Toronto Board of Education School, it takes for immigrant students about 2 years of exposure to English language to reach peer-appropriate proficiency level in conversational English or BICS. However, it takes for them about 5-7 years to attain proficiency in academic aspects of English or CALP. The results of this study, Cummins (2008) says, corroborate with many researches conducted over the past 30 years in different countries such as Canada (Klesmer, 1994), Europe (Snow and Hoefnagel-Hohle, 1978), Israel (Shohamy, et al., 2002), and the United States (Hakuta, Butler & Witt, 2002; Thomas & Collier, 2002).



Context-Embedded Face-to-Face Context-Reduced (Academic)
 Communicative Proficiency (BICS) Communicative Proficiency (CALP)
Figure7: Length of Time Required to Achieve Age-Appropriate Levels of Context-Embedded and Context-Reduced Communicative Proficiency (Cummins, 1982, p. 6)

Cummins (1981b) in his study concludes that aspects of L2 such as syntax, morphology, and literacy-related skills are rapidly learned by older rather than younger learners because, he says, these aspects are related to cognitive skills. The aforementioned aspects of L2 skills “assess a cognitive dimension of language proficiency, while measures of interpersonal communication skills may be less sensitive to cognitive differences between individuals” (Cummins, 1981b, p. 134). CALP is the level at which L2 learners can use higher-order thinking skills, such as, analysis, synthesis evaluation, generalization, conclusion formulation... in language and thought. Lack of linguistic development in either L1 or L2 can affect negatively the learner’s cognitive development (Hernández, 2003).

3.2. Levels of Thinking in Education

The educational psychologists Bloom (1956) and Krathwohl (2002) have highlighted different forms or levels of thinking in educational settings. Both of them provide us with a hierarchical taxonomy of thinking levels. The latter range from the lowest to the highest, or from the least to the most complex with the latter building on the former.

3.2.1. Bloom’s (1956) Taxonomy of the Cognitive Domain of Educational Objectives

About the aims of the Taxonomy of the educational objectives, Bloom (1956) claims that it offers a classification of educational goals of an educational system. It helps to find out about the behaviours emphasized by an educational plan. The taxonomy is also useful for curriculum designers to determine the learning objectives and hence design learning experiences and develop evaluation devices. The taxonomy includes three domains: the cognitive, affective and psychomotor.

The taxonomy of the objectives of the cognitive domain, according to Bloom “includes objectives which deal with the recall or recognition of knowledge and the development of intellectual abilities and skills” (Bloom, 1956, p. 7). The taxonomy contains six major classes, which are shown in the figure 8 bellow.

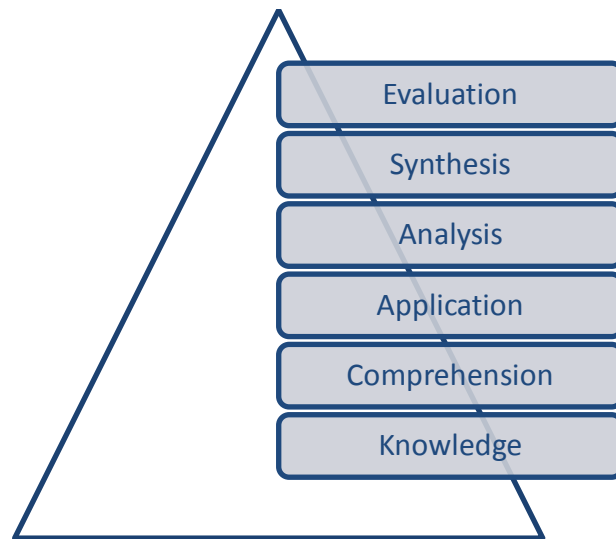


Figure 8: Taxonomy of the Cognitive Domain of the Educational Objectives (Bloom, 1956)

This classification of the cognitive domain objectives is hierarchical. It ranges from the simple, being Knowledge, to the most complex one, being Evaluation. They also move from concrete or tangible to the abstract or intangible.

In fact, cognitive objectives are divided into two main parts. The first one includes the simple behaviours of remembering, recalling, and applying of knowledge and the second one consists of more complex abilities and skills of analyzing, synthesizing, and evaluating (Bloom, 1956). Both types of educational goals are important. Knowledge helps in the learners' apprehension of reality. It is also fundamental to all other educational goals. "Problem solving or thinking cannot be carried in a vacuum" (ibid, p. 31). Knowledge is also the means by which the adequacy and accuracy of problem solving is tested.

The Knowledge objectives, however, cannot be the unique and primary goal of education outcomes. Learners need to demonstrate the ability to apply the information to new situations or problems. This is labeled by Bloom as intellectual abilities and skills. The latter should be the primary goal of education because of their applicability and transferability and permanence.

Two criteria seem to be central in Bloom's taxonomy of the cognitive domain of the learning objectives: culmination and hierarchy. The first refers to the range of the educational objectives, from the simple to the most complex. That is from knowledge to evaluation. The

second, hierarchy, means that the higher levels build upon incorporating the lower ones (Seddon, 1978)

Bloom's taxonomy is useful for teachers teaching through PW. It helps them in planning and evaluating learners' projects to make sure that they experience various forms and levels of thinking (Helm, 2015). *Deep Project Work*, Helm maintains, should incorporate both lower and higher-level thinking skills.

3.2.2. Krathwohl (2002) Revised Taxonomy of the Educational Objectives

Krathwohl (2002) revises Bloom's (1956) taxonomy and suggests a two-dimension taxonomy. It includes 1) Knowledge and 2) Cognitive Processes. The first one is like Bloom's (1956) Knowledge category and the second is like the six levels of thinking of Bloom. Important modifications can be clearly observed in figure 9 bellow. Nouns are changed into verbs, changes in the names of the categories and order. These can be summarized as follows:

Knowledge → *Remember*

Comprehension → *Understand*

Synthesis → *Create (it is the highest category)*

The other categories are turned into verb forms.

Application → *Apply*

Analysis → *Analyse*

Evaluation → *Evaluate*

All of these categories are shown in figure 9 bellow

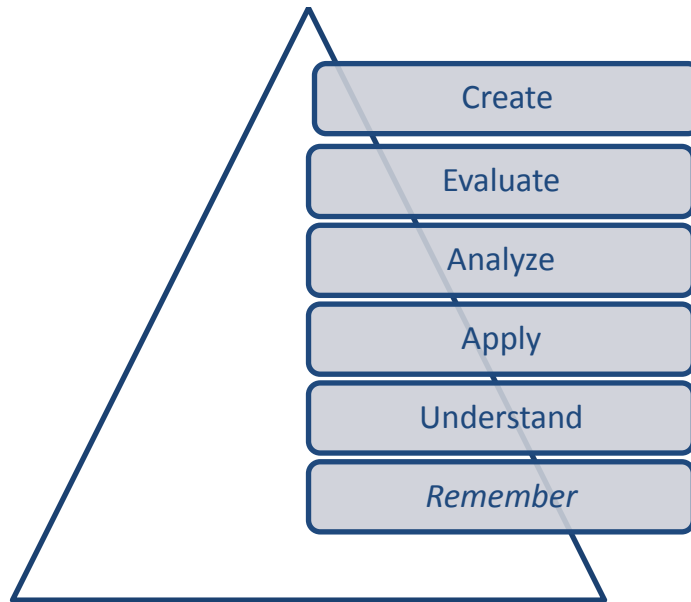


Figure9: Structure of the Cognitive Process Dimension (Krathwohl, 2002)

These cognitive processes can be used, according to Krathwohl (2002), to classify objectives, activities and assessments.

➤ **Structure of the Knowledge Dimension in Krathwohl (2002) Taxonomy**

- ***Factual Knowledge***

Knowledge of terminology

Knowledge of specific details and elements

- ***Conceptual Knowledge***

Knowledge of classifications and categories

Knowledge of principles and generalizations

Knowledge of theories, models, and structures

- ***Procedural Knowledge***

Knowledge of subject-specific skills and algorithms

Knowledge of subject-specific techniques and methods

Knowledge of criteria for determining when to use appropriate procedures

- ***Metacognitive Knowledge***

Strategic knowledge

Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge

Self-knowledge

➤ **Structure of the Cognitive Process Dimension in Krathwohl (2002) Taxonomy**

- ***Remember***

Recognizing, Recalling

- ***Understand***

Interpreting, Exemplifying, Classifying, Summarizing, Inferring, Comparing, Explaining

- ***Apply***

Executing, Implementing

- ***Analyze***

Differentiating, Organizing, Attributing

- ***Evaluate***

Checking, Critiquing

- ***Create***

Generating, Planning, Producing

3.2.2.1. Critiques for the Hierarchical Taxonomy or Sequencing of Thinking Skills

Bloom' (1956) and Krathwohl's (2002) taxonomies of thinking skills have been criticized for hierarchical order or sequencing of the skills. While the lower-order thinking skills can, in fact, come in the logical order of *remembering*, *understanding* and *applying*, the higher-order thinking ones, *analyzing*, *evaluating*, and *creating*, may happen simultaneously or in a varied order (Helm, 2015). Additionally, the linear assumption of the different categories of the taxonomy has also been criticized, especially, for the fact that it separates the knowledge category from the intellectual skills, for example, comprehension and application. Pring (1971) and Sockett (1971), for example, claim that knowing the meaning of a principle, knowledge of symbols and

terms implies understanding which is at the next level named comprehension. So, knowledge embodies different cognitive skills (In Furst, 1981)

However, as Helm (2015) claims the lower-level and higher-level thinking skills are distinguishable even though not in a lockstep hierarchy. She claims that “the higher levels of thinking must rest upon and build on the lower levels” (Helm, 2015, p. 27). One has also to recognize that thinking does not occur in vacuum and that knowledge is fundamental to all these intellectual operations. To join Helm’s (2015) claim above one cannot expect that students develop evaluation skills before understanding a phenomena.

- **Implications for our suggested project framework**

Relying on Bloom’s (1956) and Krathwohl (2002) revised version of the taxonomy of the cognitive domain of the educational objectives, our suggested project framework for the gradual integration of language, content and thinking skills (cognitive aspects of language learning) in EFL proposes that the two types of the cognitive domain objectives should be integrated into PW. That is, PW should target the fostering of both low and high level thinking skills of the taxonomies. In our project framework model, we do not claim that the cognitive skills should come in the strict order in which they are suggested by Bloom and Krathwohl. However, we do advocate that the low level thinking skills should constitute the foundation upon which the high level ones should be built. Our proposition is also founded on the relationship between the learners’ cognitive skills and their L2 proficiency (Cummins, 1976; 1981b). Cummins claims that high level thinking in Piaget’s formal operational thought requires an important linguistic knowledge from the learner. These also constitute an important support from the psychological and L2 acquisition stand point for our claim. Accordingly, the project framework that we suggest integrates LOTS for beginner EFL learners and HOTS for the more proficient ones.

3.3. Piaget’s Stage Theory of Cognitive Development

Piaget has identified four stages in the development of operational structures.

They are Sensorimotor Stage, Pre-Operational Stage, Concrete Operational Stage and Formal or Hypothetic-Deductive operational Stage (ibid, p. 177-178). Intellectual development during these stages depends on genetic factors and experience. The mental structures which are necessary for intellectual development are genetically determined. In other words, the limits for intellectual functioning at specific ages are set by the mental structures (nervous system and sensory organs). When these structures become more developed through maturation, the child uses them to cope with the environment. And because these mental structures develop through maturation, a young child has less developed ones than an adolescent or adult. Cognitive development is also, according to Piaget, culminative. This means that understanding and interpretation of new experiences depends on what the individual has previously learnt (In Singer & Revenson, 1996, p. 15).

In the first stage of the infant's cognitive development, the Sensorimotor stage (from birth to 2 years), children know the world only in terms of their own sensori input and their physical actions. In other words, they know the world only through what they see, hear, smell, touch, and taste and what they do (sucking, reaching and grasping) (Cook & Cook, 2005, p. 10). In fact, for an infant in this stage, according to Piaget (1964), objects have no permanence. When disappeared from their perceptual field, objects no longer exist. Newborn infants, then, do not have an internal representation of objects or events that exist outside their bodies. The beginning of thought or mental representation happens when language and symbolic functions start in the second stage, called Preoperational thought (from 2 to 7 years). Here the child reconstructs all that has been developed in the sensori period because, according to Piaget, the sensorimotor actions cannot be immediately translated into operations (Piaget, 1964). The most famous example of preoperational thought provided by Piaget is absence of conservation, "which is the psychological criterion of the presence of reversible operations" (Piaget, 1964, p. 177). Put differently, properties of objects, such as volume, mass and length remain the same even when

the physical appearance changes. Piaget, considered children's mental incapacity of reversibility in this stage as the hallmark for preoperational thought or knowledge is not truly operational because to be fully logical children's cognitive structures need to be reversible (logic of maths) (Cook & Cook, 2005, p. 18). Children show reversibility of true mental operations in the Concrete Operational period (from 7 to 11 years). These operations such as classification, ordering, spatial and temporal operations, are all the fundamental operations of elementary logic of classes and relations, of elementary mathematics, of elementary geometry, and even of elementary physics (Piaget, 1964). However, Piaget calls these operations concrete because they operate on objects. This means that the use of mental operations is related to materials, contexts and situation. If children do not have direct experience with the context or situation and if the material is not tangible, they do not succeed in the mental operations (Cook & Cook, 2005, p. 18). It is only during adolescence (approximately 12 year and above) that cognitive development reaches a high potential in the Formal Operational thinking, the fourth period in the cognitive development. In this stage children can reason on hypothesis not only on objects but they show a growing ability to engage in abstract thought (Piaget, 1964).

According to Piaget's stage development theory, then, children's thinking moves gradually from concrete to more abstract thinking and from figurative to operative aspects of cognition (Hernández, 2003). Consequently, "students learn more easily when they can manipulate objects rather than use abstract thought. The implications of this theory are that English language learning should follow instructional approaches that progress from concrete to abstract and employ rich learning experiences that develop cognitive thinking" (Hernández, 2003, p. 139).

3.3.1. Critiques to Piaget's Theory of Stage Cognitive Development

Among the critics that have been directed to Piaget's theory of cognitive development, some claim that, for instance, if children in the primary school demonstrate formal thought,

Piaget's theory would be disconfirmed (Ennis, 1978. In Orlando & Machado, 1996). In the same vein, failure in conservation tasks by eight-year old children would also damage Piaget's theory (Donaldson, 1987. In Orlando & Machado (1996). Other studies, such as, Ennis (1982) and Hawkins, Pea, Glick, & Scribner (1984), by contrast to Piaget's (1924), argue that children below the ages of eleven or twelve are capable of hypothetical reasoning. Hawkins's et al. (1984) study, for instance, concludes that children of five to six years can demonstrate deductive reasoning. For example, the children came to the conclusion that "Bears can't read books" starting from the syllogism "Bears have big teeth. Animals with big teeth can't read books. Can bears read books?"

These critics, however, according to Orlando and Machado (1996) illustrate misinterpretations of Piaget's theory. That is, they associate the stages with chronology of acquisition or that age is a criterion for cognitive development, whereas the essence of Piaget's theory is the sequence of cognitive transformations and not the age (ibid). Age, in fact, as stated by Piaget in the following quotation, can be an indication for developmental stage but not a criterion:

It is possible to characterize stages in a given population in terms of chronology, but this chronology is extremely variable. It depends on the previous experience of the individuals . . . and it depends above all on the social milieu which can speed up, slow down, or even prevent its manifestation . . . I consider the ages only relative to the populations with which we have worked; they are thus essentially relative (Quoted in Orlando & Machado, 1996, p. 147).

So, "if the sequence of transformations, not the age of acquisitions, is the key in Piaget's theory, then if a child solves a task earlier than reported by the protocol, no serious conceptual damage is inflicted on the theory" (ibid). Additionally, some problems such as the ones mentioned by Hawkins et al. (1984) above do not require hypothetical reasoning to be solved. They can be solved using preoperational competencies like transductive reasoning (Knifong, 1974), figurative or intuitive strategies (Matalon, 1990), or a simple matching bias (Overton, 1990a) (In Orlando & Machado, 1996).

3.3.2. Linguistic Competence in Piaget's Theory of the Child's Cognitive Development

Even though Piaget's theory of cognitive development holds that cognitive operations grow independently of language (Cummins, 1976). Cummins (1967) claims that there is an affinity between Piaget's view of the relationship between language and thought and his *Threshold Level Hypothesis*, which holds in its first assumption, that the child's lack of linguistic competence negatively affects his/ her cognitive growth. Research conducted by, for instance, Furth (1966) and Furth and Yuniss (1971) confirms Cummins' claim. In fact, the field study conducted by Furth (1966) on the cognitive development of deaf children reveals that both deaf and hearing children experience the same operational stages (in the Piagetian sense). However, it demonstrates that the performance of the deaf children was inferior to the one of the hearing children in conducting some tasks. The following summarizes the findings reached by these studies:

...whereas language is never a sufficient or necessary condition of operatory functioning, the evidence from our work with linguistically deficient persons indicates that it may have, at best, an indirect facilitating effect for concrete operations, but can have a direct facilitating effect on certain formal operations precisely because of the close relation between formal operations and symbolic functioning (Furth & Yuniss, 1971, p. 64. Quoted in Cummins, 1976, p. 30).

In other words, the researchers maintain that language is more related to formal operations than it is necessary for concrete operations since " ... for the functioning of concrete operatory structures physical events not verbal propositions are primary objects of thinking" (Furth & Yuniss, 1971, p. 63. Quoted in Cummins, 1976, p. 30). Linguistic difficulties, according to Cummins (1967), even though they do not prevent the child from developing formal operations, they do retard its process. In the context of L2 education, Cummins (1976, p. 31) concludes that:

... because linguistic experience can facilitate the development of cognition, difficulties in coping with two languages are likely to adversely affect a bilingual child's expression of his intelligence through language, and consequently, his interaction with an increasingly symbolic environment.

3.3.3. Piaget's Theory of Cognitive Development Applied to Language Development

Moerk (1975) claims that Piaget's theory of cognitive development provides an important support for the causal-genetic interpretation of language development. In fact, as Piaget (1957) points out "no structure is ever radically new, but each one is limited to generalizing this or that form of action abstracted from the preceding one" (Quoted in Moerk, 1975, p. 153). Therefore, if we consider that no structure is new, linguistic structures might have antecedents, too. That is, "Abstraction leads from early primitive to later advanced structures. With this formulation a mechanism for the translation from non-linguistic to linguistic structures as well as from primitive linguistic structures to advanced structures is postulated" (ibid). In other words, language development proceeds from non-linguistic period to linguistic one, but the linguistic period also evolves from the first and basic understanding and use of language to more abstract uses of concepts.

Two basic principles that underlie Piaget's conception of assimilation and accommodation, namely transformation and abstraction and classification seem to supply further arguments for functional antecedents of verbal behaviour (Moerk, 1975). Indeed, in his Genetic Epistemology, Piaget (1970) says that children experience different stages of temporary equilibrium, starting from their first encounter with the surface structures (schemes), before they reach finally permanent equilibrium, in which schemes become universal and stable. Moreover, because schemes are applicable to different objects, their form becomes gradually detached from specific contents in which they are first encountered (abstraction). Then, the substitution classes that are formed by the child become classes of classes (classification) (Moerk, 1975).

3.3.4. Piaget's Relationship between Language and Thought

Language and thought develop separately, according to Piaget, and thinking exists in children before the acquisition of language and the latter is not a source of logic. Thinking is rooted in action and the sensori-motor mechanisms that are more profound than language

(Veneziano, 2001). Language in Piaget's view is not a source of logic because it is only a particular case of semiotic functions; verbal expression of logical relations and operations is not an evidence that corresponding notions are assimilated by the child; thinking and formal operations exist even when verbal language does not exist (the case of deaf and mute children); and finally, the roots of thinking are to be found in the sensori-motor period. (Piaget, 1954/1964; 1963/1972, Piaget & Inhelder, 1966a. In Veneziano, 2001). It seems, however, that language, according to Piaget, is a necessary, even though, not a sufficient condition for the construction of formal logical operations. "Le langage est donc une condition nécessaire mais non suffisante pour la construction des opérations logiques" (Piaget, 1954, 1964, p. 133. In Veneziano, 2001, p. 156).

Language seems to be a necessary condition for the elaboration of formal operations both as a general representational system and as a means of communication and social interaction (Veneziano, 2001). In fact, Piaget claims that language plays a role in the completion of operations at the formal level of cognitive development. Language is implied in carrying out/exercising propositional operations that are developed at the formal level (Piaget, 1963/1972. In Veneziano, 2001). As a system of general representation, language makes it possible for mental operations to move from actions to abstract and symbolic representations. As a means of communication and social interaction, language permits mental operations to move beyond the individual level and benefit from adjustment as a result of cooperation and exchange with others. It is, for instance, through discussion that different opinions emerge and, hence, the need for argumentation, which socializes individual's thought (ibid).

Concerning the relationship between language and thought, Piaget (1963), states that there is, in fact, a close relationship between them. However, Piaget argues that logical thinking without language exists. The latter is, mainly, shown by children in their sensory-motor period and also during concrete operations where thinking takes the form of actions and manipulation of

objects. Intelligence in the sensory-motor period precedes the development of language in children. In concrete operations, thinking is related to objects. Therefore, children make use of language that belongs to the everyday/conversational vocabulary found in a language.

Piaget (1963) maintains that, even though language is not a sufficient condition for the development of intelligence, especially for the logico-mathematical one, it remains a necessary condition for the completion of the logical structures at the formal operational or propositional level of thinking, from 11-12 to 14-15 years of age. These structures, he says, lie within either the syntactic or semantic forms of a language. At this level, language is essential in expressing mental relations or operations, such as hypothetic-deductive relations. For instance, use of the expressions *if....then....*; *either...or* to express implication or consequence and inclusion or non inclusion, respectively. Expressing successfully these operations depends on the individual's command of the language: "l'aparaage de ces operations hypothéco-déductives, est précisément assurée par un tel maniement de la langue" (Piaget, 1963, p. 112). The significant role played by language in formal operations, in comparison to concrete operations is due to the fact that formal operations are not related to objects as it is the case in concrete operations, but to propositions and hypotheses which are expressed verbally. « Les opérations propositionnelles...sont alors manifestement plus liées à l'exercice de la communication verbale et l'on voit mal comment elles se développeraient ou plutôt comment elles achèveraient leur développement sans l'emploi du langage » (Piaget, 1963, p. 120).

3.4. L2 Linguistic Competence and Cognitive Growth: Cummins (1976) *Threshold Hypothesis*

A body of recent research in the field of bilingual education (e.g; Duncan et DeAvila (1979), Hakuta (1985), and Hakuta et al. (1986) confirms that there is a positive relationship between bilingualism and bilingual education and the growth of the child's cognitive skills and functioning (See Cummins, 1976; Hakuta, Ferdman, and Diaz, 1987 for a review). Cummins'

(1976) *Threshold Hypothesis* is also inscribed in the same vein. However, Cummins holds that bilingualism is beneficial for the cognitive development of learners on a condition that they reach a certain level or threshold of proficiency in the L1 and L2. The validity of the *Threshold Hypothesis* has been tested by researchers such as Diaz (1985). The latter has conducted an experimental study on Spanish (L1)-English (L2) bilingual children in kindergarten and first grade bilingual education programmes. One of the major findings of the study is that the degree of bilingualism for low proficiency L2 children strongly predicts their cognitive variability, while this variability is weak for children with high L2 proficiency.

In fact, in explaining the relationship between learner's linguistic competence and his cognitive growth, Cummins claims that:

... the level of linguistic competence attained by a bilingual child may mediate the effects of his bilingual learning experiences on cognitive growth. Specifically, there may be a threshold level of linguistic competence which a bilingual child must attain both in order to avoid cognitive deficits and allow the potentially beneficial aspects of becoming bilingual to influence his cognitive functioning (Cummins, 1976, p. 4).

Additionally, Cummins maintains that in cases where the learners succeed to attain and maintain competence in the two languages, bilingualism can have positive effects on the development of cognition. But in situations where the learner does not succeed to attain some competence in the two languages and continues to have difficulties over a period of time, this means that "bilingual child's interaction with an increasingly symbolic environment will not optimally promote his cognitive and academic progress" (Cummins, 1976, p. 24).

Because the level of competence in L1 and L2 attained by the child intervenes in his cognitive growth:

in immersion or bilingual education programs there may be a threshold level of L2 competence which pupils must attain both in order to avoid cognitive disadvantages and allow the potentially beneficial aspects of becoming bilingual to influence their cognitive functioning (Cummins, 1976, p. 24).

Therefore, a threshold level of the L2 linguistic competence is necessary if bilingualism has to increase learners' cognitive growth. If the L2 competence reached by the learner is low, this will lead to poor interaction with the environment both in terms of input and output. What is more, the low level in L2 proficiency also leads the child to have difficulties in developing his intelligence and functioning in the environment through the medium of the L2. This will possibly lead to the learner's decrease in both academic and intellectual curiosity (ibid).

The threshold level of the bilingual linguistic competence, according to Cummins (1976), cannot be defined in definite terms, it rather varies according to factors which are the time that the learner spends through the L2 and the second one is the type of cognitive operations that the learner has to express through the L2. The former means that the more time is spent through the L2, the higher must be the level of L2 competence necessary to avoid cognitive deficits. This explains the differences in the threshold level required for learners in the bilingual programmes and the one which is required for success in the immersion programmes. The latter explains that a child in grade six in an immersion programme has a higher level of L2 competence than a child in grade one. This difference between grade one and grade two L2 proficiency, according to Cummins, is also a distinction between concrete and formal operations (in Piagetian sense). Language, then, "is likely to increase in importance as an instrument with which the child can operate on his environment and express his developing intelligence" (Cummins, 1976, p. 25-26). This fact, Cummins explains the reason for which only slight cognitive retardations are noticed in children in early grades of immersion programmes. In the latter, the type of required interactions, and hence cognitive operations, is not highly dependent on language in comparison to the ones of the latter grades. Consequently, linguistic difficulties experienced by learners, such as lack of command of the L2, affect more their ability to express their intelligence at the formal operational level than at the concrete operational level (ibid).

3.5. Vygotsky's Development of Spontaneous and Scientific Concepts

Vygotsky, in his book *Thought and Language* (1934/1986), distinguishes between two types of concepts, spontaneous or empirical, and scientific or nonspontaneous concepts. While spontaneous concepts are characterized by their situational, practical and empirical nature, scientific concepts are abstract, decontextualized (detached from reality). These features make them difficult for children to learn. Systematicity, Vygotsky claims, is the cardinal difference between the two types of concepts. "In the case of scientific thinking, the primary role is played by *initial verbal definition* [originally italics], which being applied systematically, gradually comes down to concrete phenomena. The development of spontaneous concepts knows no systematicity and goes from the phenomena upward toward generalizations" (1934/1986, p. 148). Vygotsky maintains that the two types of concepts must be distinguished even though they are related to one another and they influence each other in their development. The difference in their inner and outer conditions influences the evolution of their conditions. While spontaneous concepts take their roots and evolve in the child's experience in his/her everyday life, scientific concepts result from classroom instruction. The acquisition of scientific concepts is beyond the reach of the child's everyday experience. Therefore, the mediation of the concepts which are already mastered by the child and classroom instruction plays an essential role in their acquisition (Vygotsky, 1986). Others' assistance in the ZPD helps children to control spontaneous concepts which are difficult and bring them to some level of development so as to guarantee that scientific reasoning/concepts are just above the spontaneous ones.

According to Vygotsky, instruction, then, plays an essential role in stimulating the development of the mental faculties in the child. His investigations conclude that at the beginning of school instruction, the child's higher mental functions cannot be considered mature and that instruction plays an important role in their development. For him, a best example that shows this significant role of instruction in developing the child's consciousness (higher level

thinking) is writing. The latter differs from oral speech in that it is more abstract and intellectualized and does not target only the immediate needs of communication of the child. So, Vygotsky claims that “instruction usually precedes development. The child acquires certain habits and skills in a given area before he learns to apply them consciously and deliberately” (1986, p. 184). Therefore, one cannot expect learners to apply and use higher mental structures as soon as we teach them because this stage represents only the beginning of the development of a concept or an operation. Additionally, learning new concepts for the first time does not imply full mastery of their meaning. It is rather the beginning of the basic understanding of it. The development of word meaning depends on the development of complex thinking processes, which can be mastered only gradually. The required mental functions for concept meaning development in children are deliberate attention, logical memory, abstraction and the ability to compare and to differentiate. The latter are higher order mental functions which are differentiated from the lower ones, namely, involuntary attention and primitive remembering.

To measure the child’s cognitive development at a particular time, developmental psychologists, mainly Piaget, considered the type of problems a child can solve alone. Vygotsky, however, claims that the child’s intelligence should rather be measured by what he/she is able to do with the assistance of others. Children, according to him, perform better on thinking tasks when they are assisted by others. This measure, he says, “gives more helpful clue than mental age does on the dynamic of intellectual progress” (Vygotsky, 1986, p. 187). This idea of assisting children in solving tasks that they cannot solve alone and helping them to attain a higher level of thinking is referred to by Vygotsky as the ZPD. Moreover, the basic psychological variable to measure the child’s development at each level is generality of concepts. Vygotsky considers the generalization of concepts as an evidence of cognitive development. Generalization also determines the child’s use of his mental operations such as

comparing, judging and drawing conclusions. Besides, when a certain level of generality is reached by the child, he/she becomes able to remember thoughts independently of words.

According to Vygotsky, then, instruction in any subject should target the development of higher mental functions. To achieve this aim, however, both others' assistance for the child and classroom instruction are prerequisites. Yet, instruction in any subject should consider the lowest and the upper threshold level of the child. That is, the minimum of knowledge and thinking abilities that is required in order to teach any subject and the maximum that can be expected from the child within the limits of his cognitive development (Vygotsky, 1986).

3.5.1. Vygotsky's Relationship between Thought and Speech

Vygotsky (1986) says that prelinguistic and preintellectual periods exist and the bound between speech and thinking originates and evolves in the process of the development of speech and thinking. He also argues that the basic unit that illustrates the existence of this relationship is word meaning. He calls this relationship verbal thought or meaningful speech. Yet, word meaning, he claims is something that changes, it is not static. Verbal thought shifts from primitive realization that is first and basic understanding of words to abstract concepts. On the relationship between thought and speech, Vygotsky believes that thought is mediated both internally and externally. At the internal level, it is mediated by word meaning and at the external level by signs (linguistic). Thought, then, he claims "must first pass through meaning and only then through external words" (Vygotsky, 1986, p. 252). Moreover, he says "thought is not merely expressed in words, it comes into existence through them" (ibid). Not only thought that is related to the development of the word but all the human consciousness. "Not only one particular thought but all consciousness is connected with the development of the word... the word is a direct expression of the nature of human consciousness" (Vygotsky, 1986, p. 256).

Conclusion

This chapter has looked at different theoretical grounds supporting the gradual integration of language, content and thinking skills in education. It has been argued that support for the

principle of gradation comes from various theoretical grounds: first, Cummins' research in SLA argues that in ESL/EFL contexts it takes learners more time to acquire CALP than BICS. The latter is due to both linguistic and cognitive complexities that are involved in CALP. Second, research in educational psychology, namely Bloom (1956) and Krathwohl (2001) taxonomies of cognitive domain of educational objectives, support hierarchical integration of thinking skills in education. That is, moving from the least to the most complex types of thinking skills. Third, research in psychology of child cognitive and language development provides also solid ground for the gradual shift from the least to the most complex types of language, content and thinking skills. Piaget's theory of child cognitive development claims that cognitive growth moves from the most concrete and simple types of operations to the most abstract and complex ones. It has also been argued that language plays a fundamental role in the expression of higher mental operations or formal operational thought. This view is also shared by Cummins' *Threshold Hypothesis* in SLA. Vygotsky's theory of child language development also argues that the process of language acquisition shifts from the least to the most abstract and complex, from the acquisition of spontaneous or every day concepts to the scientific ones. Furthermore, language plays a key role in the shift from the spontaneous to the scientific type of concepts. The second part of the thesis provides the methodological tools used to conduct the study and the results obtained from the analysis of projects found in the Algerian MS and SS EFL textbooks, and the results obtained from questionnaires addressed to Algerian MS and SS EFL learners.

Part Two

Methodological Tools and Results

Chapter4. Research Methodology

Introduction

This chapter is methodological. It deals with the research design of the study. It describes the research techniques and procedures used to investigate the issue of the gradual integration of language, content and thinking skills into PW in the Algerian MS and SS EFL textbooks. It includes four main sections. The first one deals with mixed-methods research. It provides a review of the use of qualitative, quantitative, and mixed methods in language in education research and justifies our choice of method in this study. The second section is devoted to the explanation of different levels of triangulation and describes the way this study uses them. The third section is concerned with the description of data collection tools which are the PWs suggested in the Algerian MS and SS EFL textbooks and the questionnaires addressed to both 4th year MS and 3rd year SS learners. The last section is devoted to the description of the data analysis procedures. It comprises our suggested categories to investigate the type of language, content and thinking skills that the PWs under study target. It also explains the qualitative content analysis procedure used and how it is used in this study to analyse the results obtained from the corpus. It also explains the descriptive statistical method used to analyse the quantitative data obtained from the two questionnaires.

4.1. Mixed-Methods Research

Mixed-Methods research, as Dörnyei (2007, p. 25) puts it, “involve different combinations of qualitative and quantitative research either at the data collection or at the analysis levels”. Scholars, such as Dörnyei (2007), Newman and Benz (1998); and Mackey and Gass (2005), claim that these methods are not mutually exclusive but rather form a continuum. Quantitative and qualitative approaches should not be regarded as “opposing poles in a dichotomy, but rather as complementary means of investigating the complex phenomena at work in second language acquisition” (Mackey & Gass, 2005, p. 146). Quantitative research involves,

according to Dörnyei (2007, p. 24), “data collection procedure that results primarily in numerical data which is then analyzed primarily by statistical methods”. A qualitative method consists in “data collection procedures that result primarily in open-ended, non-numerical data which is then analyzed by non-statistical methods” (ibid, p. 24). Nunan (1992, p. 3) draws a distinction between qualitative and quantitative studies as follows:

Quantitative research is obtrusive and controlled, objective, generalisable, outcome oriented, and assumes the existence of ‘facts’ which are somehow external to and independent of the observer or researcher. Qualitative research, on the other hand, assumes that all knowledge is relative, and there is a subjective element to all knowledge and research, and that holistic, ungeneralisable studies are justifiable.

In this study, in order to investigate the issue of the gradual integration of language, content and thinking skills into EFL PW, mixed-methods research is adopted. A qualitative method is used to collect and interpret data from PWs suggested in the Algerian MS and SS EFL textbooks. Quantitative method is used to collect and analyse data gathered from the questionnaires administered to both 4th year MS and 3rd year SS learners as regards their attitudes towards the investigated issue. Furthermore, while the qualitative method allows us to provide an analysis of the projects relying on the theoretical grounds as concerns the integration of language, content and thinking skills, the quantitative one permits us to have objective facts about the issue from the learners’ stand points.

Mixed-methods studies, according to Dörnyei (2007), involve both the collection and analysis of qualitative and quantitative data in a single study. The two methods can be combined at one or more phases of the research process. Moreover, studies that use both qualitative and quantitative components include three different categories in terms of sequence and dominance. In terms of sequence, it can be qualitative first, quantitative first, or concurrent. At the level of dominance, it can be qualitative dominant, quantitative dominant or equal status. Indeed, the present research combines the two methods at the stages of collection and analysis of data. In terms of sequence, it is qualitative first. It starts by qualitative collection of data and analysis of

the MS and SS projects, then quantitative data collection elicited from the participants via questionnaires. Analysis of qualitative and quantitative data is concurrent in the general discussion chapter. . However, this research is qualitatively dominant because quantitative data mainly aim to provide further support for the qualitative analysis of the projects.

Moreover, the possibility of triangulation which is offered by mixed-methods research ensures validity through corroboration and convergence of the research findings (Dörnyei, 2007). There is, in fact, convergence between the results obtained from the qualitative analysis of projects and the results obtained from the quantitative measurement of the learners' attitudes towards the integration of language, content and thinking skills through PWs understudy. The latter has also confirmed and provided more evidence for the qualitatively obtained results.

4.2. Triangulation

Triangulation in SLA research is defined by Benzin (1978, p. 291) as “the combination of methodologies in the study of the same phenomenon” (In Jick , 1979, p. 602). Miles and Huberman (1994. Quoted in Meijer, Verloop, & Beijaard, 2002, p. 146) have identified five types of triangulations in research. They are as follows:

- *Triangulation by data source* (data collected from different persons, or at different times, or from different places);
- *Triangulation by method* (observation, interviews, documents, etc.);
- *Triangulation by researcher* (comparable to interrater reliability in quantitative methods);
- *Triangulation by theory* (using different theories, for example, to explain results);
- *Triangulation by data type* (e.g., combining quantitative and qualitative data).

Our research uses four types of triangulation. First, triangulation by data source enabled us to collect data from two different groups of learners: 4th year MS and 3rd year SS learners. Second, it uses triangulation by method which allowed us to combine the analysis of EFL PWs in the Algerian MS and SS textbooks and results from the questionnaires to learners. The third

type of triangulation is by data type. It combines both qualitative data obtained from the analysis of PWs, and quantitative data gathered from the questionnaires to both groups of EFL learners. Finally, the research uses triangulation by theory i.e. to explain and interpret the results, in the general discussion. To achieve this, data have been interpreted relying on research findings in SLA, educational psychology, and psychology of child language development.

Our aim in the use of different types of triangulation is to ensure the validity and reliability of the results by obtaining data from different sources. It also enables us to avoid bias by providing both the researcher's analysis of the corpus or PWs, in relation to the issue of gradual integration of language, content and thinking skills into EFL PW, and learners' attitudes towards it. Indeed, as Johnson (1992, p. 146) puts it, the value of triangulation in SLA is "it reduces observer or interviewer bias and enhances the validity and reliability (accuracy) of the information" (In Mackey & Gass, 2005, p. 181). Furthermore, for more adequate support the use of two or more independent methods is required in order to support the study and the conclusions reached (Mackey & Gass, 2005, p. 181).

4. 3. Data Collection Tools

Data collection tools in this study consist in a corpus of 44 EFL PWs, 22 suggested in the Algerian MS EFL textbooks and 22 in the SS ones. It is important to mention that every teaching unit in the MS and SS textbooks contains suggestions for one or more themes for a project. However, when the suggested topics for the same project seem to have different objectives we have considered them as two different projects. They are referred to, in the description of the projects bellow and in the results chapters as "a" and "b". The data collection tools include also questionnaires to 4th year MS and 3rd year SS learners. The two subsequent sub-sections provide descriptions for the PWs and the questionnaires.

4. 3.1. PWs in the MS EFL Textbooks

- **PWs in *Spotlight on English One***

SEO is the first of the series of the MS textbooks issued by the Algerian ministry of education for the teaching of English as a foreign language in the MS. It is meant for young learners who study English language for the first time. It is designed by Mezraga et al. (2004). The material contains seven files entitled, respectively, as follows: *Hello!, Family and Friends, Sport, In and Out, Food, Inventions and Discoveries*, and *Environment*.

Each of the above files of the textbook contains the following sections: *Learn the Language, Learn about Culture, Reminder, Check, and Your Project*. Each of the files is closed with a project. Details about the PWs are provided in *Your Project* rubric. The suggested projects for each file in, *Your Project* section are as follows:

➤ **File one: *Hello!***

Project1: 1) - A tourist brochure about a country, a city, a town, a village... 2) - Make a poster (p. 38)

➤ **File two: *Family and Friends***

Project2: 1) - Make a card game (jobs/instruments/ families... 2) - Make your family profile (p. 59)

➤ **File three: *Sport***

Project3: Make a sport magazine (p. 79)

➤ **File four: *In and Out***

Project4: 1) - Make a brochure about wild, domestic animals and pets. 2) - Make a questionnaire about your friends, schools, town... (p. 100)

➤ **File five: *Food***

Project5: 1) - Make a recipe book. 2) - Make a menu for a week (p. 120)

➤ **File six: *Inventions and discoveries***

Project6: 1) - Make children's book of inventions or scrap book. 2) - Make civilization profile in a form of a 'wheel of knowledge' game (p. 142)

➤ **File seven: *Environment***

Project seven: 1) - Make your animal encyclopedia. 2) - Make a profile of your ideal city (p. 164)

Projects in SEO do not explain or give any instruction as regards the specific content and type of information that the projects should contain. They rather explain the different steps learners need to follow to carry out these projects. The steps are nearly the same for all the suggested project and they are summarized in table 3 bellow.

Steps of the project	Aims	Form (groups/ individual)
1.You can	Suggest topics for the project work. Invite learners to form groups to plan their works.	Group work
2. Group work	Invite learners to choose a topic for their project. To identify tasks for every member of the group. To collect information, illustrations...	Group work
3.Individual work	Suggest that every learner carries out his/her task after choosing it.	Individual work
4. Group work	Suggests that learners meet to show their works to one another discuss and correct it, and organizing their project (writing, typing it, illustrations...).	Group work
5. your project is ready	Learners talk to other groups about their project work. Look at other project works. Learners evaluate their project work and find ways to improve them.	Group work

Table3: Description of the Steps of PW in *Spotlight on English One*

- **PWs in *Spotlight on English Two***

SETW is designed for second grade MS learners. It is designed by Mezraga et al. (2005/2006), and issued by the Algerian ministry of education. The textbook comprises five files, entitled as follows: *a person's profile, language games, health, cartoons, and theatre*. Each file has three sequences and each sequence is composed of: *Listen and Speak, Discover the Language, Learn about Culture, Check, Your Project and Self Assessment*. Each of the files of

the textbook opens with a page explaining what learners are expected to learn in the file and briefly explaining what they are expected to do the project. Projects that are suggested in the textbook for each of the five files, in *Your Project rubric*, are as follows:

➤ **File one: *A person's profile***

Project1: Famous person's profile (p. 25)

The project should include physical description, life and career of a famous person

➤ **File two: *Language games***

Project2: Language game booklet (p. 47)

The language game booklet project should include definitions of words, synonyms and antonyms, cross words, pyramids...

➤ **File three: *Health***

Project3: Medical guide/ herbal guide (p. 70)

The projects consist in choosing to describe plants, vegetables fruits... or prepare a questionnaire/ an interview about the good/ bad effects of food on health, investigate about the plants and common illnesses. Take notes from a questionnaire administered to a nurse, a doctor or biology teachers.

➤ **File four: *Cartoons***

Project4: Write a story and make a strip cartoon (p. 93)

The project consists in having the students look at cartoons to read, or to get ideas, then write their own cartoon.

➤ **File five: *Theater***

Project5: Write and stage a play (p. 115)

The project consists in having students look for plays to read to get ideas, then write their own play.

All projects in SETW, like those in SEO, explain the steps and tasks that learners have to do individually or in group to conduct these projects.

- **PWs in *Spotlight on English Three***

SETH was issued for the first time in 2005. It has been revised by the Algerian ministry of education and the current version is issued in 2008/2009. This version is designed by Arab al. It consists of four files, named: *Communications*, *Travel*, *Work and Play*, and *Around the World*, respectively. Each file in this textbook is divided into three sequences. Each sequence is divided into two core teaching and learning rubrics, *Listen and Speak* and *Read and Write*. These rubrics are followed by: *Snapshot of Culture*, *Activate your English*, *Project Round-up*, and *Where do you Stand now*.

Like the two previously described textbooks, files in SETH also end up in PW, in the rubric *Project Round-up*. The suggested projects for each of the four files are, respectively as follows:

- **File one: *Communications***

Project1: A wall sheet about greetings (p. 41)

- **File two: *Travel***

Project2: A travel phrase leaflet (p. 79)

- **File three: *Work and play***

Project3: Designing a school magazine page (p. 113)

- **File four: *Around the world***

Project4: A tourist brochure (p 150)

The suggested projects in this textbook, except for project4, do not provide specific details about the contents of the projects. They provide ideas about the materials needed and how to improve the project when learners finish working on it, for instance, correct grammar, spelling...mistake, discuss the best contribution.... However, sample projects are suggested to be

followed by the learners. Project 4 “a tourist brochure” should include the following: locate a country geographically, add pictures of the capital city’s places, write one or two lines about the selected places to encourage people to visit it, say what is special about its’ traditions, say why you want tourists to visit this country.

- **PWs in *On the Move***

OM is the final book in the series of textbooks designed for the teaching of English language in the Algerian MS. It is written by Arab et al., (2006). It includes six files entitled: *It’s my Treat*, *You can do it*, *Great expectations*, *Then and now*, *Dreams, dreams....*, *Facts and fiction*. The teaching and learning process in OM is divided mainly into two moments. A reception phase, entitled *Language Learning*, and a production phase named *Skills Building*. PW is introduced at the *Preview* of each file and explained in the *Project-Round up* rubric after *Skills Building*. Each of the six files of the textbook includes a project. They are as follows :

- **File one: *It’s my Treat***

Project1: Designing a restaurant advertising leaflet (p. 35)

The project should include details like:

- Name of the restaurant, the date when it was established, and an advertising blurb.
- Where to find the place (directions)
- A typical menu including the chef’s specialty
- A recipe of a local dish
- A short interview with a customer aimed at eliciting his/her opinion of the restaurant

- **File two: *You can do it***

Project2: Making a profile of changes in man’s capacities (p. 60).

This project should be presented in a form of a sheet or a portfolio and include the following:

A) - A list of things that men could or could not do six hundred years ago in the domains of transport, medicine, entertainment, sports, politics...

B) - A list of remarkable performances that particular men and women were able to achieve in various field over the six hundred years.

C) – A list of things that men can/ and is able to do today and which he couldn't do years ago in the same domains above.

D) – A list of things that men will be able to/ may well/might/ do in the future.

➤ **File three: *Great expectations***

Project3: Arranging a conference (p. 85).

The project consists in arranging a conference for boy or girl scouts or local branch of young friends of the earth society /club. It may take the form of a folder, and include the following: a picture of the camp site or youth hostel, how to get there map, schedule of activities, including lectures, workshops, excursions, entertainment..., recommendations, contingency plans, a poster including title of the conference, the dates...

➤ **File four: *Then and now***

Project4: Making a differences poster (p. 111).

The project, in the form of a poster, should include:

- An interview with your grandmother or grandfather about the type of food people used to eat when he/she was young, clothes they used to wear, how they used to travel from place to place, how they used to celebrate weddings and different religious festivals, and what people used to do.

- Drawings and/or pictures of life as it is used to be in the learners' town , village, country...

- Find differences between the time of the grandmother and now by having learners observe how people around them live.

- Reflections on various inventions that have made these changes possible.

➤ **File five: *Dreams, dreams***

Project5: Laying out a newspaper problem page (p. 136).

The project should take the form of a wall sheet, and include the following:

- A letter to an ‘agony aunt’ to seek advice
- The agony aunt’s replay
- A transcription of the (imaginary) interview of a famous person who has decided to

quit his/her job. Why has s/he quitted it? What are his/her future plans?

- Tips to travelers abroad to suggest solutions to problems they might have.

➤ **File six: *Facts and fiction***

Project6: Making a scrapbook (p. 159).

The scrapbook project might include:

- 1- A short report about a news item (an accident, a new invention...) including headlines, illustrations and captions.
- 2- An obituary of a celebrity who has just died
- 3- A transcription in English of a short folktale told to the learners by the Arabic- and /or Berber-speaking group.

4. 3.2. PWs in the SS EFL Textbooks

- **PWs in *At the Crossroads***

ACR is designed for the Algerian SS learners of English in their first year. It is issued by Ministry of National Education in 2005. ACR contains five units: *Getting Through*, *Once Upon a Time*, *Our Findings Show*, *Eureka!*, and *Back to Nature*. Each unit deals with a different theme and includes in addition to four sequences, three sections. The four sequences are entitled: *Listening and Speaking*, *Reading and Writing*, *Developing Skills*, and *Consolidation and Extension*. The sections are entitled: *Stop and Consider*, *Project Workshop* and *Check your*

Progress. Each of the five units of the textbook includes a project. The following explains the aims of each of the projects.

➤ **Unit one: *Getting Through***

Project1.a: Making a job application booklet (p. 39)/

The purpose of this project is to design a booklet for teenage job seekers. The booklet should include adverts with job descriptions, phone enquiries about job vacancies, résumés or C.V.s, letters of reference, letters of application, replies (positive, negative) from administration/company, and letters of acceptance.

Project1.b: Making an internet user's guide for beginners (p. 39)

The Internet user's guide should contain description of a workstation/PC; a set of instructions for using a PC (opening an e-mail account, homepage etc.), maintenance tips (eg. No smoking, protection from dust, etc), tips for solving problems when PC goes wrong, and manners to be observed when using the internet.

➤ **Unit two: *Once Upon a Time***

Project 2: Writing a book review (p. 69)

The project contains two main tasks. First, learners choose a book of fiction to read and review. The book can be written in English or another language. The review should consist of the following: a) - a short biography of the author. b) - a short reminder of the context in which the author wrote his book. c) - a short summary of the book. d) - a short portrayal of the characters, especially that of the hero or the heroine. e)- a short description of the setting. f)- a short appreciation (why you like the story and what lessons it teaches you).

➤ **Unit three: *Our Findings Show***

Project3: Conducting a survey about peoples' reading habits, TV viewers and TV programmes, or the different uses of a computer (p. 101)

The project contains four main tasks. The first "designing the questionnaire",

learners decide on aspects of the newspaper and the readers to investigate, decide on information about the informants to include in the survey, such as age and sex, and write the questionnaire and hand it to the informants. In the second task “conducting the interview”, learners prepare the interview, and interview the informants. The third task consists in “collecting data and interpreting the results”. The learners will study the results of the questionnaire and the interview and provide statistics using different types of graphics. The fourth task is “writing the report”. Learners write their report which includes an introduction, method, results, analysis of the results, and a conclusion.

➤ **Unit four: *Eureka!***

Project 4: Making a profile of an invention (p. 131)

This project involves four main tasks. First learners choose an invention to research about. Second, after getting as much information as possible about the invention, learners write about it: background to the initial invention, problems with the initial invention, and subsequent improvements on the initial model. The third task consists in making a presentation of the different models of the invention. The latter should include what each model is made of, what it is composed of, what its dimensions are, how it works, and what the specifications of the recent models are. The last task is writing a timeline of all the inventors involved in the invention. This should include biographies of two of the most important inventors and the ways they contributed to improve the invention.

➤ **Unit five: *Back to Nature***

Project 5: Making a consumer's guide (p. 161)

The project involves mainly three tasks. In the first phase, “selecting products” learners select products that people consume everyday such as toiletries, detergent and cleaning products, paper and paper products, car or machine maintenance products, and plant and gardening tools. In the second task “gathering information about the various brands of the

product” learners collect adverts, labels, leaflets on the products, etc. task three is “analyzing the projects from the ecological point of view”. Learners have to find out chemical compositions of the brands, pay attention to packaging and marketing. The elaborated project should include adverts and babbles, consumer association memos about the various brands of the same product addressed to consumers, a rubbish collection guide, and a letter of complaint to the companies which do not produce clean products.

- **PWs in *Getting Through***

GT is designed for 2nd year SS learners. It contains eight teaching/learning units, each one dealing with a specific theme. The titles of the units are: *Signs of the Time*, *Make Peace*, *Waste not, want not*, *Budding Scientist*, *News and Tales*, *No Man is an Island*, *Science or Fiction?*, and *Business is Business*. Each of these units includes five parts: *Discovering Language*, *Developing Skills*, *Putting Things Together*, *Where do we Go from here?*, and *Exploring Matters further*. PWs are included in *Putting Things Together* part. GT Suggests the following projects for each unit:

- **Unit one: *Signs of the Time***

Project1: Making a profile about life style (p. 30)

The aim of the project is to describe life style in the past, present and futures in terms of clothes, food, and entertainment.

- **Unit two: *Make Peace***

Project2: A statement of achievements (p. 51)

The project consists in writing a sketchbook about the achievements of a Nobel Peace Prize winner. It should include: 1) - a checklist of the Nobel Peace Prize winners over the past ten years. 2) – Two or three short biographies about Nobel Peace Prize winners with short statements of their achievements. 3) – A list of potential candidates for the Nobel Prize for the year in Algeria and abroad, and short biographies about their achievements. 4) – a written

justification for the choice of the nominees, and how their winning of the prize contribute to a further advancement of peace in the world.

➤ **Unit three: *Waste not, want not***

Project3: A conservation plan (p. 72)

The project should take the form of a prospectus, and include the following: a) – a fact sheet synthesizing the main conservation measures that have already been taken by the Algerian government. b) - diagrams with presentation of how the public amenities and waste disposal systems work in your town. c) – a country code and a town code. d)- a map of an ideal (future) town with symbols and a small presentation.

➤ **Unit four: *Budding Scientist***

Project 4.a: The ABC Dream (p. 92)

The project should include the way people from the locality of the learner interpret dreams then write an ABC dream in the form of a poster with illustrations. The project provides a sample of an ABC dream to follow.

Project4.b: Writing reports on scientific experiments (p. 93)

This project consists in conducting a scientific experiment and writing a scientific report. It requires from learners to provide details about the report in the form of charts and diagrams...

➤ **Unit five: *News and Tales***

Project5: Writing a collection of stories (p. 114)

The project invites learners to write a collection of short stories (a disaster story, a love story, a folktale, a news story, a fantasy story...). The collection of stories should include: a forward/ a preface to the collection of stories, biographies of the members of the group, a short blurb for the collection of stories, and illustrations.

➤ **Unit six: *No Man is an Island***

Project6: Making a survey (p. 132)

This project consists in a survey, in a form of a booklet, about people's readiness to face natural and man-made disasters, such as floods, fires, droughts, earthquakes, home/road accidents... The survey should include the following:

A short questionnaire (of 8 to 9 questions) addressed to a sample of informants.

- A short interview of one of the informants.
- Data collection questions and the results.
- A report with graphs.
- A short safety instruction about the disaster(s) that have been surveyed
- Pictures and slogans against carelessness and give a list of precautions in order

to mitigate risks due to natural and man-made disasters.

➤ **Unit seven: *Science or Fiction?***

Project7.a: Writing Miscellanies (p. 152)

The project about Miscellanies should take the form of a journal, and includes the following:

- A what-if section answering questions like: suppose you could meet very famous people, who would they be? Why? And what would you say to them?
- Shortlist of fantasies: if a cow could fly,
- A section about wishful changes: if I had money, ...
- A world affairs section: If I were Kofi Anan, ...
- An advice section: If I were you, ...

Project 7.b: Making a repertory of inventions and discoveries (p. 153)

The repertory of the project should take the form of a magazine or wall sheet of paper and be about human achievements, such as inventions or discoveries in various fields e.g. medicine, technology; astronomy...

➤ **Unit eight: *Business is Business***

Project8: Compiling a business portfolio (p. 174)

The business portfolio should include the following:

- A letter/ telegrams/fax and telex messages on business situations: e.g. an order form, a letter of enquiry, a thank you letter, an acknowledgement letter, a letter of complaint...
- Letters on social situations related to business: e.g. invitations, thanks for hospitality, congratulations, new years' wishes...
- Other business documents, such as, a business/ company organization chart, with a short description of how the company functions, an annual report of the achievements of a firm, a report on employees...

- **PWs in New Prospects**

NP is the last of a series of the three textbooks designed for SS learners.

It encompasses six units. Each one dealing with a different topic. They are entitled: *Exploring the Past*, *Ill-gotten Gains never Prosper*, *Schools: Different and Alike*, *Safety First*, *Are We alone?* *Giant Leap for Mankind*, *We are a Family*. Each of the units in NP contains two main parts: part one *Language Outcomes* and *Skills and Strategies Outcomes*. *Language Outcomes* includes *Listen and Consider*, *Read and Consider*, and *Take a Break*. Part two *Skills and Strategies Outcomes* contains *Research and Report*, *Listening and Speaking*, *Reading and Writing*, *Project Outcome*, *Assessment*, and *Time For*. PWs are included in *Project Outcome*.

The textbook suggests a project for each unit. They are as follows:

➤ **Unit one: *Exploring the Past***

Project1: Making a profile of an ancient civilization (e.g. Greece) (p. 42)

The portfolio about the civilization should include four of the following suggestions:

- Information about the place where and the time when ancient Greek civilization flourished.

- Information on two ancient Greek major cities (Athens and Sparta)
- A short account of the life styles, beliefs, customs, myths, and laws of these cities.
- Information on the contributions made by ancient Egypt and Phoenicia to ancient Greek civilization.
- A summary of the major achievements made by this civilization in science, philosophy, politics...
- Information on the civilizations that preserved the Greek cultural heritage for mankind.

➤ **Unit two: *Ill-gotten Gains never Prosper***

Project2: Writing a character of ethics (p. 71)

The project consists in writing a character of ethics on ethical standards in professions like accountancy, law, banking, journalism, scientific research, teaching, agriculture, medicine, plastic surgery... The character should include the following:

A- A reminder of the social, economic, moral prejudices that the neglect of ethics might cause to the professions and their clients. Give data and statistics.

B- A short interview about the importance of ethics in the professions with representatives of professional associations.

C- A short article that reports unethical behavior in the professions and how the law deals with them.

D- A code of ethics for each selected profession.

➤ **Unit three: *Schools: Different and Alike***

Project3: Designing an educational prospectus (p. 103)

The project consists in comparing the British and the Algerian educational systems (secondary or higher education). The comparison should contain information about the following: organization, curriculum, school year/holidays, types of exams and qualifications.

The main tasks consist of: a) - compare the two educational systems. b) – draw diagrams to illustrate the information using statistics. c)- synthesis the information in a prospectus.

➤ **Unit four: *Safety First***

Project4: Making a survey on the impact of advertising (p. 132)

The project about the impact of advertizing should include: a questionnaire, a result form, diagrams, and a report. The following guidelines are suggested to guide learners in conducting the research:

- Preparing the questionnaire by deciding on the type of advertisement and the Audience.
- Write the report, which should include the following parts: introduction, a short description of the questionnaire and the audience, discussion of the findings with illustrated tables, charts..., conclusion giving a summary of the survey.

➤ **Unit five: *Are we alone? Giant Leap for Mankind***

Project5: Designing an astronomy booklet (p. 162)

The project, booklet about astronomy, should include 2 to 4 of the following items: ID cards about two major planets in our solar system, ID cards about two major moons in our solar planet, a short presentation of the history of space travel, a short imaginary dialogue with a famous astronomer/ space traveler, a checklist of the effect of space travel and astronomy on human life, and pictures, drawings of pieces of equipment used in astronomy.

➤ **Unit six: *We are a Family***

Project6: Writing a booklet for coping with strong emotions (p. 193)

The project should include, in a form of a booklet, tips on how to cope with at least three strong emotions, such as love, hate, anger, jealousy.... The booklet should include: a description of the emotion, a comparison of how these emotions are expressed in different cultures, illustrate

these emotions by, for example, providing a summary of a film, drama, novel that deal with them, and illustrate with sayings, cartoons, and proverbs.

NB. Because of the large size of our corpus we cannot include all the projects in the appendix, therefore only samples of the projects suggested in every textbook are included in the appendices A, B, C, D, E, F, and G.

4. 3.2. Questionnaires

a. Questionnaire as a Research Tool

Questionnaires are defined by Brown (2001, p. 6. In Dörnyei, 2007, p. 6) as “any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers”. In the same sense Dörnyei (2007) says that a questionnaire is a highly structured instrument of data collection. It can ask about a specific piece of information or provide options for the respondents from which they can choose, for instance by ticking off a box. Therefore, “this makes questionnaire data particularly suited for quantitative, statistical analysis” (ibid, p. 14). Besides, questionnaires can enquire about three types of data about the respondent: factual (to find out who the participants are), behavioral, typical questions of this type in L2 acquisition research are learning strategies used by the learners in the past. The last type of data is attitudinal. It is concerned with attitudes, opinions, beliefs, interests, and values. Questionnaires as research instruments are considered as efficient because they enable researchers to save time, efforts and financial resources (ibid).

Some of the shortcomings of the questionnaire as a research tool, according to Dörnyei (2007) are summarized in the following points:

- Some researchers claim that questionnaire data are not reliable or valid
- Simplicity and superficiality of answers
- Unreliable and unmotivated respondents

- Respondent literacy problems
- Little or no opportunity to correct the respondents' mistakes
- Fatigue effects

b. Context of the Study and Sample Population

This study took place in the Wilaya of Tizi-ouzou, Algeria, between the 1st and the 15th of April, 2018. The participants are 105 4th year MS and 111 3rd year SS learners. The MS learners belong to three schools: Ahmed Chafai, Makouda; Chahid Smail Hocine, Tamda; Haliche Hocine, Tizi-Ouzou city. The SS learners are from Diouani Mohamed Said, Makouda; Amar Toumi, Tigzirt; Fatma N'Soummer, Tizi-Ouzou city. At least four different groups of 4th year MS and 3rd year SS learners in each of the MSs a SSs were involved in this study. Sample participants were randomly selected from volunteer learners in these groups. Our aim in choosing the participants among volunteer learners is to avoid unreliable and unmotivated participants Dörnyei (2007). However, our chose of 4th MS and 3rd year SS learners instead of others (1st, 2nd, or 3rd year MS learners and 1st or 2nd year SS learners) was non-random or purposive. In fact, 4th year MS learners were chosen because they are familiar with PWs suggested in the four MS EFL textbooks. They are currently studying with OM and they have studied with SEO, SETW, and SETH in their 1st, 2nd, and 3rd years, respectively. 3rd year SS learners are also familiar with PWs in the three SS EFL textbooks. They are currently studying with NP, and they have studied with ACR and GT in their 1st and 2nd years of the SS, respectively. Therefore, instead of taking a sample from the four MS levels and the three SS ones, sample of learners in their last year of the MS and SS levels were selected. The former were asked about PWs in the MS textbooks, the latter were asked about the ones in the SS ones.

The size of the sample was chosen to ensure its representativeness to the whole populations of MS and SS learners. In, fact, according to Fraenkel and Wallen (2009) and Dörnyei (2007), a minimum of 100 participants is necessary to ensure validity in descriptive

studies. Therefore, in this study 150 MS and 150 SS learners were chosen, but some of them did not give back the questionnaires. Therefore, the total sample is 105 MS and 111 SS learners.

c- English in Education in Algeria and learners' EFL Proficiency Level

English is a foreign language in Algeria. It is not used for social communication. In fact, the languages of wider communication are Arabic and Berber. In some regions of the country, people also use French language, the first foreign language in the county, for different types of communication (at home, at work, in the administration...). As for the place of these languages in the Algerian education system, according to Benrabah (2007), French was dominant in the years following the independence of Algeria in 1962. Starting from the late 1960s until the late 1990s, the nativist phase, Arabic language was imposed in the educational system. During this period, English was only taught as a school subject. It was not until 1993, that attempts have been made to introduce it in grade 4 for school children who had to choose between English and French as the first mandatory foreign language. However, because of the insignificant numbers of children who chose English in comparison to the numbers of those who opted for French, this policy could not be implemented. Starting from the general education reform of the 2000s, English language is taught in schools from grade 6 to 12, from grade 6 to 9 in the MS and from grade 10 to 12 in the SS. Yet, the conditions for foreign language learning in Algeria are more favourable to the learning of French than English. The Algerian context offers more opportunities for exposure to linguistic input in French rather than in English (Milian, 2000).

Whereas Algerians, users and non-users have positive attitudes towards English, they have negative attitudes towards French, the first foreign language in Algeria. This negative view is due to the political and colonial past. French is the language of the French colonizer in Algeria for more than 130 years (Milian, 2000).

In education, Arabic is exclusively the language of instruction and English is used only in the domains that Arabic has not yet tackled. There is also a will, at the political level, to replace

French by English, because the latter is the language of science and technology (Miliani, 2000). This utilitarian view of the English language, Miliani claims, has led to the limited linguistic competence of large numbers of pupils and students. Miliani summarizes the negative consequences of this utilitarian aspect of English language learning in Algeria as follows:

...it has also plunged the latter in the most devastating anomie possible, rather than creating the best conditions for them to reach social and personal success. Indeed, language attrition is' such that the linguistic competencies rarely go beyond the embryonic stage, hence, the extreme poverty of the learners' personal lexis, and the high level of grammatical inaccuracies characterising their interlanguage (Miliani, 2000, p. 26).

To conclude, lack of exposure of the Algerian learners to the English language in the Algerian society and the limited utilitarian aim for the use of the English language in education have lead to the learners' poor competence in English.

d. Description of the Questionnaires to 4th year MS and 3rd year SS EFL Learners

The present study uses questionnaires to collect data from the Algerian 4th year MS and 3rd year SS learners. The aim of both questionnaires is to obtain information from the respondents as regards their opinions and attitudes towards the issue of gradual integration of language, content and thinking skills into EFL PW, in general, and PWs that are suggested in the Algerian MS and SS EFL textbooks, in particular. The final versions of the handed questionnaires contained 15 items for the one handed to 4th year MS learners and 14 questions for the one administered to the 3rd year SS learners. Both questionnaires were meant to obtain only quantitative data. Therefore, all the questions were close-ended. Besides, open-ended questions were not included because they are thought to provide simplistic and superficial answers (Dörnyei, 2007). The close-ended questions of the questionnaires include three types (see appendix H and I):

- Multiple choice item, questions 14 and 15 of the questionnaire to 4th year MS learners, questions 13 and 14 of the questionnaire to 3rd year SS learners.
- Likert Scales, items 1 to 12 of the questionnaire to 4th year MS learners, questions 1

to 11 of the questionnaire to 3rd year SS learners.

- Numerical rating Scales, question 13 of the questionnaire to 4th year MS learners, and question 12 of the questionnaire to 3rd year SS learners.

The questionnaires also include introductions that explain to the participants the aim of the questionnaires and what they are required to do. It has also ensured them about the anonymity and confidentiality of their answers.

The questionnaires were handed after having obtained the permission of the educational authorities of the Wilaya of Tizi-Ouzou and the headmasters of the MSs and SSs where this study took place. The questionnaires were handed by the researcher to some of the English language teachers of these schools who, in their turns, handed them to their learners. Teachers were asked to hand the questionnaires randomly to volunteer learners. Some of them allowed their learners to fill in the questionnaires during their classes, others because of time constraints, have asked them to fill them in at home and give them back in the following class.

- **The Questionnaires Validity and Reliability**

To ensure validity of the contents of the questionnaires to both 4th year MS learners and 3rd year SS one, only items that are directly related to the issue under investigation were included. In fact, content-related evidence of validity refers to how appropriate is the content? And how adequately does the sample of items or questions represent the content to be assessed (Dörnyei, 2003; Fraenkel & Wallen, 2009). For the purpose of internal consistency reliability, we have tried to include focused and homogeneous multi-items scales. Indeed, Dörnyei (2003, p. 110) claims that if a questionnaire has internal consistency-reliability, the researcher can feel safe “this attribute [has internal consistency-reliability] refers to the homogeneity of the items making up the various multi-item scales”.

- **Piloting the Questionnaires**

Before handing the final versions of the questionnaires to the sample of MS

and SS participants, a pilot study was conducted with 10 4th year MS and 10 3rd year SS learners. The latter belong to the same MSs and SSs that are involved in this study. The piloting allowed us to fine-tune the final versions of the questionnaires. Some questions were reformulated to make them clearer, correct mistakes and eliminate some questions that seemed to repeat same ideas and objectives. Indeed, the first versions of the questionnaires included 18 items for each. After piloting, these were reduced to 14 for the questionnaire to SS learners and 15 to the MS ones. Shortening of the questionnaires might also be helpful in avoiding “fatigue effects” (Dörnyei, 2007), by allowing participants to fill them in a short period of time.

- **Translating the Questionnaires**

In order to improve the quality of the data obtained from the questionnaires, the latter were translated by the researcher to the Arabic language before being handed to the participants at the piloting stage, and before handing the final versions to the sample participants, as well. In fact, to avoid participants’ misunderstanding /non understanding of the questions, because of their limited knowledge of the English language, the questionnaires were translated to Arabic language. The latter is the language of instruction for the participants for 9 years for the 4th year MS learners and 12 years for the 3rd year SS learners. Therefore, translation has also allowed us to account for one of the disadvantages of questionnaires as data gathering tools i.e. respondent literacy problems (Dörnyei, 2007).

4. 4. Data Analysis Procedures

4. 4.1. Categories for Classifying PWs Targeting the Integration of Language, Content and Thinking Skills

In order to investigate the issue of the gradual integration of language, content and thinking skills into PWs understudy, to find out the types of language and content they target (theoretical/practical), and the type of language proficiency they aim to develop in the MS and SS learners (BICS/CAPL), categories for describing the PWs were defined. The categories are

based on Mohan's (1986) KSs framework for the systematic integration of language, content and thinking skills into ESL/EFL tasks and Cummins (1981a) language proficiency model, range of contextual support and degree of cognitive involvement in language tasks. These categories are as follows:

- Type of language and content: practical (concrete)/ theoretical (abstract/academic)
- Type of language: automatized/ unautomatized
- Contextualization: context-embedded/context-reduced
- Learning situation: experiential/expository
- Degree of cognitive demand: cognitively undemanding (LOTS: remember, understand, and apply)/ cognitively demanding (HOTS: analyse, evaluate, and create)

Based on these categories, PWs fall into one of the four types or Quadrants in Cummins' (1981a) terms: Quadrant A, B, C, or D. A and C form the BICS type of language tasks and B and D form the CALP type. Criteria for classifying the projects into one of the four Quadrants are based on the five categories above. The first criterion clarifies whether the project aims to introduce language that is needed in social contexts to enhance learners' conversational skill or if it is meant to develop language required for formal academic (school success). The former requires practical type of language and content and the latter calls for a more theoretical language and content. Second, the criterion highlights whether the project calls for an automatized language or non automatized language. That is to say, language which has already been learnt or language that is new to the learners. The third characteristic is related to contextualization. The projects are classified as requiring context-embedded or context-reduced situations, topics, and language and content. The fourth criterion for the classification of projects is the type of learning situation or the type of input/output needed for the PW completion. These are experiential, (mainly concerning the input), involving immediate experiences of the learners or expository requiring from them to rely mainly on reading (books, articles...) about the topic

of the project to access the needed content and writing to conduct the project (output). The fifth criterion refers to the degree of cognitive difficulty required to handle the linguistic demands involved in the completion of the project. The latter are categorized as either cognitively undemanding (LOTS) or cognitively demanding (HOTS). Characteristics of communicative language tasks their projects belonging to each of the four types of language proficiency are as follows:

1. BICS

- **Quadrant A**

- Concrete/non academic/non formal language and content
- Language of everyday conversation (face-to face)
- Automatized linguistic tools
- Context-embedded
- Experiential
- Cognitively undemanding (LOTS)

- **Quadrant C**

- Concrete/non academic/non formal language and content
- Language of everyday conversation (on the telephone)
- Automatized linguistic tools
- Context-reduced
- Experiential/expository
- Cognitively undemanding (LOTS)

2. CALP

- **Quadrant B**

- Concrete/abstract/formal/academic language and content
E.g. persuading someone (e.g. about a point of view), time line of a civilization
- Unautomatized linguistic tools
- Context-embedded
- Expository
- Cognitively demanding (HOTS)

- **Quadrant D**

- Concrete/abstract/formal/academic language and content
E.g. different types of formal/academic writing
- Unautomatized linguistic tools
- Context-reduced
- Expository
- Cognitively demanding (HOTS)

NB: In our evaluation of the projects in the Algerian MS and SS textbooks, we have classified within the types C and B projects that do not target HOTS in terms of Krathwohl's (2002)

taxonomy, but which require from the learners to rely to a relatively to an important extent on reading for project completion, or expository learning in Mohan's terms. Expository learning, according to Mohan, requires more complex thinking skills and higher language proficiency than the experiential ones.

PWs which are classified as belonging to BICS (A and C types) are less complex both linguistically and cognitively than those classified as CALP (B and D types). However, not all projects that are classified as BICS or CALP involve the same degree of difficulty. In the first type, A, are easier than C. Both target the teaching/learning of concrete type of language and content and reuse of language that is previously learned (automatized), and require LOTS. The main difference between the two is contextualization. While type A suggests projects that are context-embedded in terms of language and content, those in type C are decontextualized. Besides, projects in A are based on experiential ways of learning only, those in C can also require expository ways. Therefore, C type is said to be more demanding both linguistically and cognitively than A, which is the least complex among the four types. Projects that are classified as CALP also involve different degrees of difficulty. Those in B are less difficult than those in D. The difference between B and D types is also contextualization. Both B and D types target the teaching of theoretical type of language and content that require new and unautomatized language (not already mastered by the learners) relying on expository ways of learning. They both involve HOTS. Yet, while B type targets the teaching/learning of these in contextualized situations, category D suggests decontextualized situations. Therefore projects which are classified in D category are more difficult than those in B, A, and C

4. 4.2. Qualitative Content Analysis

Hsieh and Shannon (2005, p. 1978) define qualitative content analysis as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns”. In the same sense, Given (2008, p. 120),

says “Qualitative researchers using a content analytic approach recognize that text is open to subjective interpretation, reflects multiple meanings, and is context dependent”. Types of materials analyzed in this type of analysis include textbooks, newspapers, television programs, speeches, musical compositions, essays, advertisements, magazine articles, or any other types of documents (Tavakoli, 2012). As for the procedure that the researcher follows in this type of analysis, according to Fraenkel and Wallen (2009), researcher should start by converting or coding descriptive information into categories. This can be done either by determining the categories before any analysis begins. The categories are based on previous knowledge, theory, and/or experience or the researcher uses categories that emerge from the data in the process of the analysis.

Coding in qualitative research is defined as “the analytical process of organizing raw data into themes and assist in interpreting the data” (Mackey & Gass, 2012, p. 222). Qualitative coding, according to the author is interpretive, it consists in extracting and comparing themes from the data that the researcher constructs before starting the coding process. Codes from previously established constructs can be used by the researcher. Codes are “the names or symbols used to stand for a group of similar items, ideas, or phenomena that the researcher has noticed in his or her data” (Le Compte & Schensul, 1999, p. 55. Qouted in Mackey & Gass, 2012, p. 222).

In this study, the sample for qualitative content analysis consists in the 44 EFL PWs suggested in the Algerian MS and SS EFL textbooks. Qualitative content analysis of these projects allowed us to investigate the issue of the gradual integration of language, content and thinking skills in EFL teaching. It, therefore, enabled us to find out the type of language and content (practical/theoretical) these projects target, the type of thinking skills involved (HOTS/LOTS), and, therefore, the type of language proficiency targeted (BICS/CALP).

Accordingly, results from qualitative content analysis of the projects guided us in providing answers to three of the research questions put forward in the general introduction, which are:

Q1- What type(s) of language, content, and thinking skills do PWs in the Algerian MS and SS EFL textbooks target to implement?

Q2- Does the integration of language, content and thinking skills into these PWs account for the learners' cognitive abilities and their English language proficiency level?

Q3- Do PWs in these textbooks account for the principle of gradual and hierarchical integration of language, content and thinking skills?

The coding instrument was constructed by the researcher based on theoretical grounds underlying this research i.e. language and content integration into language tasks, namely, Mohan (1986) KSs framework for the systematic integration of language, content and thinking skills into ESL/EFL tasks and Cummins (1981a) language proficiency model, range of contextual support and degree of cognitive involvement in language tasks. The coding of data from the projects under study was based upon the researchers' interpretation of the contents of these projects. That is to say, the topic(s) and aim(s) of the projects. The latter provided us with hints as regards the targeted type of language, content and thinking skills involved in carrying out each of the PWs under study.

In the coding process, the researcher has studied each of the 44 projects separately. Looking at the suggested topic(s) for every project and aim(s) and based on the researcher's subjective interpretation, names or labels were assigned to ideas about the projects' targeted type of language and content, situation(s), ways of learning and thinking skills that every project aims at. Accordingly, the projects are classified into one of the four types of communicative tasks (projects) A, C (BICS), B, or D (CALP).

This study follows a directed approach to qualitative content analysis, as it is explained by Hsieh and Shannon (2005), in the sense that the research questions are founded on existing theory and research. Besides, in terms of data analysis, it uses existing theory and prior research according to which coding categories were specified and helped guide the discussion of the findings.

Some of the ways of achieving reliability and internal validity in qualitative content analysis are dependability and credibility, respectively. The former can be ensured by providing a rich description of the phenomenon being analysed. This allows the reader to evaluate the strength of the coding categories. The latter can be achieved by triangulation and providing a thick description of the phenomenon being studied (Mackey & Gass, 2012). This study, therefore, tries to provide a rich and detailed description, and a thorough analysis of the projects under study (dependability). The description is done in the light of the two theoretical frameworks Mohan's (1986) KSs framework for the systematic integration of language, content and thinking skills into ESL/EFL tasks and Cummins (1981a) language proficiency model and range of contextual support and degree of cognitive involvement in language tasks. They both constitute the background from which the categories of analysis were constructed (triangulation).

4. 4.3. Descriptive Statistics

The results of both questionnaires to 4th year MS and 3rd year SS learners were analysed quantitatively. Because the questionnaires contain only close-ended items, all of them were analysed using a descriptive statistical method. The latter is defined by (Tavakoli , 2012, p. 161) "a set of statistical procedures that are used to describe, organize and summarize characteristics of SAMPLE DATA in a clear and understandable way, both numerically and graphically". Descriptive statistics procedures include *measures of central tendency* or also known as averages, such as the Mean, Mode, or Median (Dörnyei, 2007; Tavakoli, 2012). This study presents quantitative data in the form of percentages and uses Mode, when necessary, to indicate

scores in the distribution that occurred most often, or had the highest frequency. The numbers, percentages, and frequencies are displayed in the form of tables, pie charts, or histograms.

Conclusion

This chapter has dealt with the research design of the study. It was concerned with the description of the research method, types of triangulation, data collection and data analysis procedures. The mixed-methods section has explained how and for what purposes qualitative and quantitative methods are used in this research. It has also explained the ways triangulation is used at the levels of method, data collection instruments and underlying theories to conduct the research. The data collection procedures has provided detailed description of the corpus, PWs in the Algerian MS and SS textbook, and the questionnaires used to elicit data from the 4th year MS and 3rd year SS learners. Data analysis procedures describe the instrument that is used to analyse the PWs. The latter consists in the categories used to describe and classify the projects. Finally, it has clarified the procedure the researcher has followed to conduct the qualitative content analysis of the PWs and the descriptive statistical method, namely, percentages and measures of central tendency (Mode) to analyse the data gathered from the questionnaires. The subsequent chapters, five and six, deal with presentation of the findings from the analysis of PW found in the Algerian MS and SS EFL textbooks, respectively.

Chapter 5: Integration of Language, Content and Thinking Skills into EFL PWs in the MS Textbooks

Introduction

This chapter presents the finding of our research obtained from the analysis of the corpus of 22 PWs suggested in the Algerian MS FEL textbooks. It is divided into five sections. Sections 1, 2, 3, and 4 present the results of the qualitative analysis of the PWs suggested in SEO, SETW, SNTH, and OM, respectively. Each of the four sections starts by presenting and describing the types of language, content, and thinking skills that each project in these textbooks target. These are presented in the form of tables. The description of the results includes mainly three levels of analysis. First, the type of language and content (theoretical/practical) that the projects target. Second, the kind of learning situation(s) involved in dealing with the different types of language and content above. The situations required for the acquisition of the latter, experiential/expository, or context-embedded/context-reduced, respectively. The third level of analysis is concerned with the cognitive aspect of language and content learning or thinking skills required for the suggested types of language and content. These skills are divided into HOTS and LOTS. The second step in the presentation of the results provides the findings as concerns the type of language, content, and thinking skills within each of the MS textbooks. It also provides numbers as regards projects targeting BISC or CALP within each of these textbooks. The fifth section in this chapter consists in a discussion of the results obtained from the analysis of the PWs in the four MS textbooks.

5.1. Analysis of Language, Content and Thinking Skills Integration into PWs in *Spotlight on English One*

Table 4 bellow provides a detailed description of the projects that are suggested in SEO. It looks at each project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table4: Description of PWs in *Spotlight on English One*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context-embedded	Epository/ Context-reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills				
1) - A tourist brochure about a country, a city, a town, a village... - Make a poster	Describe touristic places Describe monuments	Adjectives describing places and monuments Present simple form of verbs Prepositions to locate places and monuments	-----	-----	Learner's prior-knowledge about cities and monuments in their places or country Hands-on learning experience Learning from others Language and content are context-embedded Using extra-linguistic cues (pictures, drawings...) to understand and express some meanings	Reading texts (books, magazines, internet) to get information about places and monuments to describe Write about these places and monuments (communication of information and meaning in writing) Contextualized /expository	<i>Remember</i> Recall and reuse previously learnt language for describing <i>Understand</i> Select appropriate language forms for describing Translating their content knowledge into the English language <i>Apply</i> Using the acquired language and contents to write about the cities and monuments	-----

2. Make a card game (jobs, instruments, families...)/ Make your family profile	Describe family members, the way they are related, their jobs, physical appearance, character...	Survival vocabulary relate to Jobs, family relationships, physical appearance.	-----	-----	Learner's prior-knowledge about their families. Hands-on learning experience. Learning from others. Language and content are context-embedded. Using extra-linguistic cues (pictures, drawings...) to understand and express some meaning.	-----	<i>Remember</i> Recall and reuse previously learnt vocabulary related to families, jobs... <i>Understand</i> Translating their knowledge from L1 to English	-----
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3. Make a sport magazine	Describing sports, their characteristic, equipments ...	Vocabulary related to different types of sports: football, swimming, boxing, tennis...	-----	-----	Learner's prior-knowledge their families. Hands-on learning experience. Learning from others Language and content are context-embedded. Using extra-linguistic cues (pictures, drawings...) to understand and express some meanings.	Read books, magazines, articles... to find information about different types of sports. Write articles about different sports (communication of information and meaning in writing). Contextualize d/ expository.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to sports. Memorize new language items and information. <i>Understand</i> Translate the obtained information from different sources. <i>Apply</i> Comprehend then use some content from reading books, magazines... to write articles about sports.	-----
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4a. Make a brochure about wild, domestic animals and pets.	Classify animals into domestic, wild and pets, and then describe them.	Vocabulary related to names of animals, the food they eat...	-----	-----	Hands-on learning experience. Learning from others Language and content are context-embedded. Using extra-linguistic cues (pictures, drawings...) to understand and express some meanings about animals. Learner's prior-knowledge about animals.	-----	<i>Remember :</i> Recall and reuse previously learnt vocabulary related to animals <i>Understand</i> Translating their knowledge/the information found about animals, from L1 to English Describe animals <i>Apply</i> Comprehend then use some content from read information to write descriptions about the animals	-----
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4.b Make a questionnaire about your friends, school, town...	Learning about other schools, towns, peoples' interests ...	Ask different types of questions to get information about friends' ages, names, and interests.	-----	-----	Here-and-now language. Hands-on learning experience Learning from others. Language and content are context-embedded.	-----	<i>Remember</i> Recall and reuse previously learnt question forms. Memorize new language items and information. <i>Understand</i> Describe a friend, school, city... <i>Apply</i> Comprehend then use some information from the questionnaires to describe a friend, school or town.	-----
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5. Make a recipe book/Make a menu for a week	Describe a dish. Learn about food in different cultures. Types: sweet, salty, spicy...; starter, main course, dessert.	Vocabulary related to food: ingredients and eating.	-----	-----	Learner's prior-knowledge about Food and recipes. Hands-on learning experience. Learning from others. Language and content are context-embedded. Using extra-linguistic cues (pictures, drawings...) to understand and communicate information about food and recipes.	Read cookery books to find recipes from other places and cultures. Write a recipe (communication of information and meaning in writing). Contextualized/expository.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to Food, ingredients and eating. <i>Understand</i> Translating their knowledge/the information found about the food and recipes to English. <i>Apply</i> Comprehend some content from reading cookery books, then write their own.	----- --
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6. Make a children's book of inventions or a scrap book/ Make a civilization profile in a form of a 'wheel of Knowledge ' game	Knowing about different inventions. Names of different civilizations.	Vocabulary related to different inventions indifferent domains (technology, transport, communication etc.	Achievements of different civilizations.	Language related to these achievements in different domains.	External support: learner's knowledge about different inventions and civilizations.	Read books, magazines, articles... about different civilizations and their achievements. decontextualized/ expository Write texts to describe the inventions (communication of information and meaning in writing)/ contextualized/ expository	<i>Remember :</i> Recall and reuse previously learnt vocabulary related inventions. <i>Understand</i> Translating their knowledge/the information found about the different inventions and civilizations. <i>Apply</i> Comprehend some content from reading about civilizations and inventions, then use it to write a civilization profile and a book of inventions	-----
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7. Make your animal encyclopedia/ Make a profile of your ideal city	Describing animals/cities.	Vocabulary related names of animals, their lives? Describing cities.	-----	-----	Learner's prior-knowledge about Animals, learners lives and cities. Hands-on learning experience. Learning from others. Language and content are context-embedded. Using extra-linguistic cues (pictures, drawings...) to understand and communicate information about animals and cities.	Read magazines, articles, books ... to find about animals/cities. Write a about animals/cities (communication of information and meaning in writing). Contextualized/expository.	<i>Remember :</i> Recall and reuse previously learnt vocabulary related to animals, their lives and cities. <i>Understand</i> Translating their knowledge/the information found about animals, learners lives and cities. <i>Apply</i> Comprehend some content from reading about animals and cities then use it to write texts	-----
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Based on the description of language, content and thinking skills integration into projects in SEO, the following tables 5, and 6 specify the type of language, content and thinking skills that every project targets, respectively.

Context-Reduced/ Expository	-	-	-	+	-	-	+	-
	+	-	+	+	-	+	+	+
Context-Embedded/ Experiential	+	+	+	+	+	+	+	+
	+	+	+	+	+	+	+	+
Theoretical Language /Content	-	-	-	-	-	-	+	-
Practical Language/Content	+	+	+	+	+	+	+	+
	PW 1	PW 2	PW 3	PW 4a	PW 4b	PW 5	PW 6	PW 7

Table5: Language and Content Integration into PWs in *Spotlight on English One*

Investigating the integration of language and content into PWs in SEO (see table 5 above) reveals that all the projects target the teaching of practical or concrete type of language and content. Only one project integrates theoretical language and content. All projects aim at teaching language and content in a contextualized way, and involve learning situations that are close to learners' experiences (experiential). The majority of these projects, however, projects 1, 3, 4a, 5, 6, and 7 require more than learners' experiences or previous knowledge for their completion. They require also learning from others or reading different materials to find out the necessary information. So, they are at the same time expository and experiential. Yet, only two projects, 4a and 6, target both context-embedded and context-reduced situations to teach language and content.

Create	-	-	-	-	-	-	-	
Evaluate	-	-	-	-	-	-	-	
Analyse	-	-	-	-	-	-	-	
Apply	+	-	+	+	+	+	+	
Understand	+	+	+	+	+	+	+	
Remember	+	+	+	+	+	+	+	
	PW1	PW2	PW3	PW4a	PW4b	PW5	PW6	PW7

Table6: Thinking Skills Integration in PWs in *Spotlight on English One*

As regards the integration of thinking skills or cognitive aspects of language learning into SEO, the analysis, as it is shown in table 6 above, reveals that all projects target fostering of

LOTS of remember, understand, and apply. The results indicate also that no project aims to teach HOTS of analyse, evaluate, and create.

5.2. Analysis of Language, Content and Thinking Skills Integration into PWs in *Spotlight on English Two*

Table 7 bellow provides a detailed description of the projects that are suggested in SETW. It deals with every project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table7: Description of PWs in *Spotlight on English Two*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context-embedded	Epository/ Context-reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills	Learner's prior-knowledge about the personality. Hands-on learning experience Here-and –now language.	-----	<i>Remember</i> Recall and reuse previously learnt language for describing <i>Understand</i> Select appropriate language forms for describing <i>Apply</i> Using language to communicate some meaning about description	-----
1. A famous person's profile	Describe people's physical appearance, lives and achievements.	Adjectives describing physical appearance. Present simple form of verbs.	-----	-----				

2. Make a language game booklet about countries, clothes, weather ...	Content, cultural knowledge about clothing, weather, and countries	Vocabulary relate to clothing, weather, and names of countries	-----	-----	Learner's prior-knowledge about clothing, weather, countries. Hands-on learning experience. Here-and-now language.	-----	<i>Remember :</i> Recall and reuse previously learnt vocabulary related to clothes, countries, and weather <i>Understand:</i> Identify synonyms and antonyms	-----
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3. Medical/herbal guide	Knowledge about illnesses and plants, healthy and unhealthy food, good and bad eating habits.	Vocabulary related to plants, illnesses, and food.	Classify food into healthy and unhealthy, eating habits into right and wrong ones. Making connections between eating habits, exercising and health	Language to express cause and effects relationships.	Hands-on learning experience learning from others: teachers, parents, peers... Learner's prior-knowledge about illnesses and plants, healthy and unhealthy food, good and bad eating habits.	Read and understand information from a questionnaire and interview. Read books, magazines, articles... about plants, common illnesses... Write about these plants and common illnesses (communication of information and meaning in writing). Contextualized/decontextualized/expository.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to food, plants, illnesses... <i>Understand</i> Translate the obtained information from questionnaire into English/ <i>Apply</i> Comprehend some content from reading books, magazines, questionnaire... and use it to write the herbal/medical guide	<i>Analysis</i> Acquiring factual information about plants, illnesses, food then use them to write herbal/medical guide <i>Evaluation</i> Considering and explaining the effects of herbs and food on health
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4. Write a story and make a strip cartoon	Type of practical contents depend on the theme of the cartoon.	Type of practical language depends on the theme of the cartoon.	Type of theoretical contents depend on the theme of the cartoon.	Type of theoretical language depends on the theme of the cartoon .	-----	Read selected cartoon to borrow some ideas Write cartoon scripts (communicating meaning in writing). Decontextualized/expository reading and writing.	<i>Understand</i> Understanding the cartoons, select some ideas to be used. <i>Apply</i> Comprehend some content from reading a cartoon and use it later on to write the cartoon.	<i>Create</i> Generate new ideas to write the cartoon.
5. Write a stage play	Type of practical contents depend on the theme of the play.	Type of practical language depends on the theme of the play.	Type of theoretical contents depend on the theme of the play.	Type of theoretical language depends on the theme of the play.	-----	Read selected play to borrow some ideas Write a stage play (communicating meaning in writing) Decontextualized/expository.	<i>Understand</i> Understanding the cartoons, select some ideas to be used <i>Apply</i> Comprehend some content from reading a play and use it later on to write the play.	<i>Create</i> Generate new ideas to write the play.

Relying on the description of language, content and thinking skills integration into projects in SETW, the following tables 8, and 9 specify the type of language, content and thinking skills that every project targets, respectively.

Context-educed/ Expository	-	-	+	+	+
Context-Embedded/ Experiential	+	+	+	+	+
Theoretical Language /Content	-	-	+	+	+
Practical Language/Content	+	+	+	+	+
	PW1	PW2	PW3	PW4	PW5

Table8: Language and Content Integration into PWs in *Spotlight on English Two*

The results of the analysis of PWs in SETW, table 8 above, show that they all target the teaching of concrete or practical type of language and content. Projects 3, 4, and 5 target both theoretical and practical types. The results also show that projects 3, 4, and 5 teach some aspects of language and content in contextualized situations and others in context-reduced ones, projects 1 and 2 target only contextualized language and content. Only project 3 requires from the learners to rely on both their experiences and expository ways to complete it. While projects 1 and 2 call only for learners' previous language and knowledge about the themes of the projects (experiential), projects 4 and 5 require only expository means (reading/ learning from others) for their completion.

Create	-	-	-	+	+
Evaluate	-	-	+	-	-
Analyse	-	-	+	-	-
Apply	+	-	+	+	+
Understand	+	+	+	+	+
Remember	+	+	+	-	-
	PW1	PW2	PW3	PW4	PW5

Table9: Thinking Skills Integration in PWs into *Spotlight on English Two*

Table 9 above shows that PWs in SETW target both LOTS and LOTS. All PWs aim at fostering learners' LOTS. Project 1 targets the three LOTS of remember, understand and apply.

Projects 2 and 3 target understand and remember. Projects 4 and 5 integrate only understand. The three last projects integrate both types. Project 3 aims at developing learners' analysis and evaluation skills. Projects, 4 and 5 aim at fostering learners' creative use of the language.

5.3. Analysis of Language, Content and Thinking Skills Integration into PWs in *Spotlight on English Three*

Table 10 bellow provides a detailed description of the projects that are suggested in SETH. It deals with every project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table 10: description of PWs in *Spotlight on English Three*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context- embedded	Epository/ Context- reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills	Learner's prior-knowledge about the different communicative functions. Redundancy of language forms already learned in the classroom. Hands-on learning experience. Language and content are context-embedded.	-----	<i>Remember</i> Recall and reuse language forms and expressions to express different communicative functions. <i>Understand</i> Select appropriate language forms to express different communicative functions. <i>Apply</i> Using language to communicate to express functions like invite, request...	-----
1. A wall sheet about greeting, inviting,	Expressing different communicative functions such as apologizing, inviting, requesting... in different cultures.	Learning survival communicative language functions and skills. For example, language forms and structures to apology, to request.	-----	-----				

2.A travel phrase leaflet	-----	-Survival vocabulary related to travelling by plane, boat... Survival vocabulary related to names of jobs and places related to travelling by boat, plane...	----- -	-----	Learner's prior-knowledge about different means for travelling. Hands-on learning experiences. Language and content are context-related.	-----	<i>Remember</i> Recall and reuse previously learnt vocabulary related to different ways of travelling, jobs... <i>Understand</i> Follow sample conversations to write similar ones in different situations. <i>Apply</i> Using language to some meanings and intentions, such as, asking for/giving information.	-----
3.Designing a school magazine	?	?	?	?	?	?	?	?

4. A tourist brochure	Describing places. Locating countries on a map.	Adjectives and adverbs to describe countries. Prepositions to locate countries and places on a map.	-----	-----	Learner's prior-knowledge about different places and countries. Hands-on learning experiences. Language and content are context-related. Use of non-linguistic cues.	Read magazines, articles, books ... to find about countries/places Write a about countries/places (communication of information and meaning in writing). Contextualized/ expository	<i>Remember</i> Recall and reuse language forms and expressions to describe and locate places and countries <i>Understand</i> Translate into English previously learnt information about the countries and places <i>Apply</i> Using language to persuade people to visit some places and countries	-----
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Relying on the description of language, content and thinking skills integration into projects in SETH, the following tables 11, and 12 specify the type of language, content and thinking skills that every project targets, respectively.

Context-Reduced/	-	-	?	-
Expository	-	-		+
Context-Embedded/	+	+	?	+
Experiential	+	+		+
Theoretical	-	-	?	-
Language /Content				
Practical	+	+	?	+
Language/Content				
	PW1	PW2	PW3	PW4

Table11: Language and Content Integration into PWs in *Spotlight on English Three*

The results of the analysis of the integration of language and content into projects of SETH (see table 11 above) indicate that all projects aim at teaching only practical types of language and content. Only project 4 teaches language and content in both are experiential and expository way. Projects 1 and 2 suggest themes that require only learners' experiences and prior knowledge about language and content of the project. All projects target to teach language and content in context-embedded situations.

Create	-	-	?	-
Evaluate	-	-	?	-
Analyse	-	-	?	-
Apply	+	+	?	+
Understand	+	+	?	+
Remember	+	+	?	+
	PW1	PW2	PW3	PW4

Table12: Thinking Skills Integration into PWs in *Spotlight on English Three*

Table 12 above reveals that all projects of SETH target the development of LOTS, namely, remember, understand and apply. No project target HOTS.

5.4. Analysis of Language, Content and Thinking Skills Integration into PWs in *On the Move*

Table 13 bellow provides a detailed description of the projects that are suggested in OM. It deals with every project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table13: Description of PWs in *On the Move*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical Language and content		Theoretical Language and content		Experiential/ context-embedded	Epository/ Context-reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills				
1. Designing a restaurant advertizing leaflet	Describe a menu/recipe. Express sequence in steps to follow to write a recipe.	Vocabulary related to food/eating Use connectors to describe sequence: then, next, after....	Evaluating and expressing opinions, likes and dislikes about the food in the restaurant.	Language to express likes and dislikes, and opinions.	Learner's prior-knowledge about food and local dishes. Hands-on learning experience. Context close to the learner's experience. Use non-linguistic cues to comprehend and express meaning. Contextualized/experiential	Read cookery books to find recipes from other places and cultures. Write a recipe (communication of information and meaning in writing). Contextualized / expository	<i>Remember</i> Recall and reuse previously learnt language about food and eating <i>Understand</i> Translate their knowledge about local dishes into English Select appropriate language to express likes/dislikes, sequence and opinion <i>Apply</i> Using language and previously learnt information to write about food and recipes	-----

2. Making a profile of changes in man's capacities	Describe man's life in the past, present and future	Language forms to express ability in the past and present, future possibility/probability	-----	-----	Learner's prior-knowledge about life in the present and past. Learners views about life in the future. Learning from others like parents/grandparents... Hands-on learning experience. Use non-linguistic cues to comprehend and express meaning. Contextualized/experiential	Read about life in the past Contextualized/expository	<i>Remember</i> Recall and reuse previously learnt language forms to express past, present and future possibilities/abilities <i>Understand</i> Selecting appropriate language forms to express changes in man's capacities Compare and contrast life in the past, present and future	-----
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3. Arranging a conference (of boy or girl scouts or local branch of Young Friends of the Earth)	Describe conference day(s): dates, activities, themes... Express sequence and schedule of activities. Give directions.	Naming activities: lecture, workshop, excursion... Giving precise dates and time. Use connectors/sequencers to schedule and plan. Prepositions to give directions.	-----	-----	Learner's prior-experience about conference events and activities. Asking others to get information on how to arrange a conference. Contextualised/experiential	Finding out about how to arrange a conference from teacher or other sources (Expository)	<i>Remember</i> Recall and reuse previously learnt language related to directions, plans, dates... <i>Understand:</i> Select appropriate preposition to give directions <i>Apply</i> Make use of the linguistic knowledge to schedule events and show directions	-----
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4. Making a differences poster	Describe life in the past and present (food, clothes, transportation, celebrating special days)	Use grammatical forms like “use to” to describe life in the past	-----	-----	Learner’s prior-knowledge about life past and present. Learner’s experience (observe people around you). Use non-linguistic cues to comprehend and express meaning Contextualized/experiential	Find out about life in the past Contextualized /expository	<i>Understand</i> Translate information from grandparents. Describe and explain changes.	<i>Analysis</i> Compare and contrast differences past and present <i>Evaluation</i> Reflect on reasons behind changes in man’s life (cause/effect)
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5. Laying out a newspaper problem page	Type of practical content depends on the problem discussed	Language structures to ask for and give advice.	Type of theoretical content depends on the problem discussed	Type of theoretical language depends on the problem discussed	Topics of the problem page may deal with personal experiences of the learner/heard about in his environment or read about. Social and real-life problems. Contextualized/ experiential.	Learning about social and psychological problems that are not experienced by the learners from other people or through reading (Expository)	<i>Understand</i> Explain a problem/ solution	<i>Analysis</i> Make suggestions to solve a problem <i>Evaluation</i> Cause /effect of a problem/solution
6. Making a scrapbook	Describe new inventions. Describe the sequence of events in an accident.	Appropriate language to describe an invention.	Formal knowledge related to narrating and reporting events.	-----	Experienced events (e.g. accident). Events/ stories/ tales already heard /read about.	Expository/ context-reduced: read stories/folk tales; write a report	<i>Understand</i> Report events: describe and explain them Translate folk tales form Arabic, Berber to English	<i>Create</i> Getting ideas from a folk tale, then, use them to write speech bubbles for a cartoon strip

Relying on the description of language, content and thinking skills integration into projects in OM, the following tables 14, and 15 specify the type of language, content and thinking skills that every project targets, respectively.

Context-Reduced/	-	-	-	-	+	+
Expository	+	+	+	+	+	+
Context-Embedded/	+	+	+	+	+	+
Experiential	+	+	+	-	+	-
Theoretical	+	-	-	-	+	+
Language /Content						
Practical	+	+	+	+	+	+
Language/Content						
	PW1	PW2	PW3	PW4	PW5	PW6

Table14: Language and Content Integration into PWs in *On the Move*

The results of the analysis of the integration of language and content into projects of OM (see table 14 above) show that all projects aim at teaching a practical type of language and content. Projects 1, 5, and 6 integrate both concrete and theoretical types. Except from projects 4 and 6 that require only expository way to find out the required information for project completion, the others require both expository and experiential ways. All projects target the teaching of language and content in context-embedded situations. Projects 5 and 6, however, introduce also, at the same time, language and content in context reduced-situations.

Create	-	-	-	-	-	+
Evaluate	-	-	-	+	+	-
Analyse	-	-	-	+	+	-
Apply	+	-	+	-	-	-
Understand	+	+	+	+	+	+
Remember	+	-	+	-	-	-
	PW1	PW2	PW3	PW4	PW5	PW6

Table15: Thinking Skills Integration into PWs in *On the Move*

The results for thinking skills integration into OM show that these projects target to teach both LOT and HOTS. All projects integrate the skills of understanding. Projects 1 and 3 integrate also remember and apply. Projects 4 and 5 aim at the same time at fostering HOTS of analyze and evaluate and project 6 targets create.

Based on the description of the type of language, content and thinking skills that every project in the textbook aims to teach, table 16 bellow classifies the projects in the four MS textbooks according to the type of proficiency they target, BICS or CALP.

Textbook	Project	Language Proficiency			
		BICS		CALP	
		A	C	B	D
<i>Spotlight on English One</i>	1		+		
	2	+			
	3			+	
	4a			+	
	4b	+			
	5		+		
	6			+	
	7			+	
	Total	2	2	4	0
<i>Spotlight on English Two</i>	1	+			
	2	+			
	3				+
	4				+
	5				+
	Total	2	0	0	3
<i>Spotlight on English Three</i>	1	+			
	2	+			
	3	?	?	?	?
	4		+		
	Total	2	1	0	0
<i>On the Move</i>	1		+		
	2		+		
	3		+		
	4				+
	5				+
	6				+
	Total	0	4	0	3
		12		10	

Table16: BICS and CAPL in the MS Textbooks

Table 16 above shows the numbers of projects that target BICS and CALP in the Algerian MS EFL textbooks. It clearly shows that 12/22 projects are classified as aiming to teach BICS, and 10/22 target CAPL. SEO includes 4 BICS and 4 CAPL projects. SETW contains 2

BICS and 3 CAPL ones. PWs in SETH are all of the BICS type. 4 projects in OM are classified with the BICS type and 3 others within BICS.

5.5. Discussion

PWs designed for the Algerian beginner MS EFL learners seem to give almost the same importance to the two types of language proficiency, namely BICS and CALP. In fact, out of the 22 analyzed projects, 12 aim at developing learners' BICS in the English language and 10 of them target CALP. While projects in SETH suggest themes dealing only with BICS, those in SEO, SETW, and OM aim at teaching both levels of language proficiency.

In SEO, four projects (1, 2, 4b, and 5) teach everyday, face-to-face and survival English through topics that are close to learners' life and that are used for social conversations (family, games, school, food...). Besides, carrying out this kind of projects is, relatively, cognitively and linguistically undemanding. Projects 2 and 4b need automatized language than 1 and 5. The latter also require more reading (expository). So, the first ones might be classified in Quadrant A and the last ones in Quadrant C. The other 4 projects (3, 4a, 6, and 7) seem to have a different objective. They introduce different types of language and content knowledge to the learners. They are of CALP category. They suggest topics which require from the learners more than language for basic conversation. Themes like civilization profile, describing inventions, animal encyclopedia, describing sports' activities, are clearly more linguistically and cognitively demanding than the previous ones. These, projects, however, can be classified in the Quadrant B because they require the use of language and content which are essentially concrete and context-embedded. Even though the analysis reveals that these projects target lower order thinking skills (remember, understand and apply), they are classified in Quadrant B because we believe that application skills can, in fact, be considered easy for a proficient learner of the language but this might not be the case for a beginner low level one. This skill in language learning means reading to comprehend some meaning and then produce a piece of writing to use the acquired language

and content knowledge. So, it is the beginning of the use of the two skills of reading and writing in the English language.

Projects in SETW, like those in SEO, aim to develop both BICS and CALP proficiencies among the learners. However, it seems that CALP is given slightly more importance. The first two projects can be classified in Quadrant A of BICS. They target the use of language for conversational purposes and developing survival vocabulary through the suggested topics (famous person's profile and language game about clothes, the weather...). They are both linguistically and cognitively undemanding. The suggested topics are close to the learners' experiences and language that might have already been seen (describing people, clothes, talk about the weather...), they demand LOTS, mainly remember and understand, and they are highly contextualized. CALP projects (3, 4, and 5) in SETW are all classified in the fourth Quadrant (D). They suggest more complex themes that demand more complex content knowledge, language proficiency and cognitive skills. In project 3, writing a herbal or medical guide, while learners might, in fact, make use of their prior knowledge about the topics or use some extralinguistic means to comprehend and communicate some meaning and information, they are also required to read about the topics and to find out information from others to carry out their projects (expository). Writing a project about plants and illnesses also requires the use of unautomatized and unpredicted language and also abstract content which can be expressed only by means of language. Moreover, the situation necessitates the use of HOTS, namely, analysis and evaluation. The former consists in using factual information to formal writing (herbal/medical guide). The latter involves, for instance, the use of language to express cause and effect relationship in dealing with the good/bad effects of plants and good/bad eating habits on health. Projects 5 and 6 are the most complex in the textbook. Make a strip cartoon and write a stage play, while they may require the use of some practical or concrete language and content they may also require other abstract concepts, depending on the themes of the cartoons and the

plays. Both projects require unautomatized and unpredicted language depending also on the themes. Moreover, the two require high level proficiency in English because most content can be accessed and expressed by means of language, even though some visual illustration can be used, especially for the strip cartoon. Finally, carrying out the two projects requires the use of highest order thinking skills of creativity, in Krathwhol (2002) taxonomy of the cognitive domain of the educational objectives. It consists in learners' use of the language to create their own strip cartoon and a stage play.

Projects in SETH seem to be easier than those in SEO and SETW. While the objectives of the third project in this textbook are not clear, projects 1 and 2 can be classified in Quadrant A and 4 in Quadrant C. They all call for the use of everyday language used for socialization purposes. The suggested topics (language functions like greeting, inviting..., talking about different means of travelling, and describing places and monuments) do not require the use of complex abstract language and content. The latter are close to the learners' experiences and language that has already been seen in the previous levels. The suggested situations are also highly contextualized. These projects also require only LOTS of remembering, understanding and applying. Project 4 is classified in Quadrant C because while, in fact, it can be experiential, learners also might need some reading to find out about the places and monuments to describe in their brochure.

Projects designed for fourth grade learners, in OM, seem to be more similar to those in SEO and SETW. Projects 1, 2, and 3 might all be classified in Quadrant C of BICS category. The three projects necessitate the type of language that is used in everyday conversations which is, relatively, automatized by the learners. Topics of these projects, namely, designing a restaurant leaflet, describing changes in man's capacities, organizing socialization aspects of a conference, respectively, require language and contents that might have been already experienced by the learners but also some reading might be needed to write texts and

descriptions to include in the projects (expository). The four projects require the use of LOTS (remember, understand and apply). The three last ones (projects 4, 5, and 6), that are suggested in the textbook, aim to develop learners' CALP. They can be classified in Quadrant D. The two projects, dealing with newspaper problem page and writing a story or a folk tale in form of a scrapbook, respectively, target HOTS. The fifth project targets mainly analysis and evaluation. It deals with evaluation of cause and effects of some social/ psychological problems and making suggestions to solve some of these problems. The sixth one needs mainly the creative use of language to write stories. To carry out these projects, learners need to rely essentially on their language as the main medium to convey meaning (context-reduced). The kind of language that is needed for such topics is also unpredicted (unautomatized) and needs a high level of creative use. The language can also be concrete or abstract depending on the theme of the story or the social problem.

The analysis of projects in the four Algerian MS EFL textbooks reveals that the integration of PW does not account for the gradual and sequential integration of language, content knowledge and thinking skills (cognitive aspect of language learning). This can be clearly shown through the comparison of projects in SEO, SETW, and SETH. Indeed, the results of the analysis indicate that projects in SEO and SETW which are meant for first and second year Algerian MS EFL learners, respectively, are more complex than those in SETH, which are designed for third year learners. The degree of complexity in the projects of the three textbooks can be observed at different levels, namely, type of language and contents required for projects completion, the type of the learning experience involved, degree of contextualization of the projects and the levels of thinking skills and language proficiency required.

As an illustration for the disparity in the complexity of the projects and non consideration of the principle of gradual and sequential integration of language and content in the projects within the textbooks under study, we may compare projects 1, 2, and 4 from SETH to project 6

of SEO and project 3 of SETW. Those in SETH deal with expressing communicative functions like greeting, apologizing..., language related to different means of travelling, and locating and describing places and monuments. The project in SEO deals with description of a civilization profile or an invention. The one in SETW deals with health problems and good/bad effects of food and plants on health. While topics of projects in SEO and SETH need some concrete or practical language and content, they also require important abstract content knowledge and the language that is used to express it, those in SETH require more concrete language and content. In fact, the themes of the projects in this textbook need here-and-now language used in face-to-face communication and which can be used in parallel to nonlinguistic cues, like gestures and facial expressions, to convey the intended meaning. Those in SEO and SETW require more abstract language to read and write about achievements of a civilization and cause and effects relationships of health problems and plants/food, respectively.

As regards the non consideration of the gradual and sequential principle in the learning experiences (experiential/expository) required for the projects' completion, which is also another criteria to evaluate projects difficulty, this is also clearly shown through the comparison of the projects in SEO, SETW, and SETH . In fact, the above mentioned projects from the SETH require from the learners to rely mostly on the language they have already learnt in the classroom and their prior knowledge about the topics (experiential learning), for instance, describing and locating places and monuments. All projects of this textbook require relatively little reading to be carried out. Projects in SEO and SETW, by contrast, while most of them also call for learners' experience about the subject and the language skills, they also require much more reading than those in SETH to access the necessary information to carry out the projects. In SEO all the projects require both experiential and expository learning except projects 2 and 4b which are only experiential. In SETW, only two projects (1 and 2) rely on learners' experiences or their prior knowledge about the language to describe a famous person, make a language game related

to clothes, the weather...). Project 3 requires both experiential and expository ways of learning. Projects 5 and 6 are expository. Learners have to read plays and cartoons to borrow ideas in order to write their own texts in form of a strip cartoon or stage play.

Contextualization, which is another criterion to evaluate projects' complexity and hence the principle of gradual and sequential integration of language and content in the projects, is also not taken into consideration in the projects under study. Our analysis reveals that all projects in SETH are context-embedded. They all rely on extra-linguistic means to express some meaning, for example, use of facial expressions or gestures to express communicative functions like apologizing, greeting... (project1). In SETW only projects 1 and 2 require only context-embedded situations. Some aspects of project 3 require context-embedded language and content, for example, use of pictures to illustrate plants. Other aspects are context-reduced, relying mainly on the learners' knowledge of the English language, for instance, evaluating cause and effects of illnesses and food/plants. Projects 4 and 5 are context-reduced. Learners rely on their knowledge of the English language, almost as the only means, in order to write strip cartoons and stage plays. Projects in SETW, then, require more context-reduced language and content for their completion than those on SETH which might, in fact, be conducted using various extra-linguistic cues. In SEO, all the projects are context-embedded except projects 4a and 6. They include some context-reduced aspects, for example, learning about different civilizations and then making a wheel of knowledge game about them.

The cognitive aspect of language learning or thinking skills required to cope with the linguistic difficulty in the projects under study also are not integrated in gradual and sequential ways. All projects in SEO target LOTS, namely, remember, understand and apply. In SETW, while the first two projects aim to foster learners' LOTS, projects 3, 4, and 5 aim at teaching HOTS , namely analyse and evaluate in project 3 and create in projects 4 and 5. Projects in SETH, however, target the same LOTS as SEO. Projects in OM are more like those in SETW.

While, the 5th and 6th projects target HOTS, namely, analyse, evaluate and create, projects 1, 2, 3, and 4 aim at developing learners' LOTS (remember, understand and apply).

While the principle of gradation, sequence and culmination in the integration of the thinking skills is well visible within each of the Algerian MS EFL textbooks, they either integrate LOTS only (SEO and SETH) or start with LOTS then shift to the HOTS (SETW and OM), the shift in the integration of these skills from one textbook to another is problematic. This is the case of SETW and SETH. While the former targets HOTS of analyse, evaluate and create, the latter makes a step backward to LOTS (remember, understand and apply). Besides, projects that target HOTS in SETW can be considered as cognitively demanding as projects 5 and 6 in OM. They require the skills of analysis, evaluation and creative use of the language.

Actually, the non consideration of the principle of gradation and sequence in the projects that are suggested in the Algerian MS EFL textbook is not only characteristic of the thinking skills integration. This also concerns the integration of language and content, learning experience, and contextualization issues. This fact might be well illustrated through the projects that deal with the same topics in the different MS textbooks. The first project of SEO and the fourth of SETH, "make a tourist brochure or poster" and "make a tourist brochure", respectively, seem to have the same objectives which are describing and locating places and monuments. The projects are classified in the same category, Quadrant C according to our established evaluation criteria. They require the same type of language and content; require the same contexts and learning experiences. We, however, believe that project in SEO is more difficult than the one in SETH. In fact, the language which is required for this project can only be relatively automatized by first year learners in the very first days of their EFL classes while in SETH (after three years of learning the English language), we expect the learners to be more familiar with language for describing and locating places (including for example, adjectives and prepositions of place).

Other similar examples of projects are project 5 in SEO “make a recipe book/ make a menu for a week” and project 1 in OM “designing a restaurant advertizing leaflet”. They also appear to have the same objectives which are writing a recipe and designing a menu for a restaurant and require the same LOTS. The project in SEO, however, requires more reading or learning from others (expository means) to learn about food in different places, to describe local dishes and other cultural aspects related to them like occasions when they are cooked. Project in OM is more experiential but also needs more abstract use of language through expressing personal opinions and evaluation of restaurants and the food they serve. However, like in the previously described example, project in SEO can be considered as more difficult than the one in OM because one has to expect that language related to food, eating, restaurant... is more familiar and automatized for fourth year learners than it is for first year ones.

There are only two similar projects in the textbooks that take account of the principles of gradation and sequence in the integration of language, content and skills into the projects. These are project 2 and 4 of the OM, “making a profile of change in man’s capacities” and “making a differences poster”, respectively. They seem to have almost the same objectives in terms of the language and content, they require the same learning experiences (learners’ prior knowledge about changes in Man’s life and capacities), but also learning more about these changes through reading or from others (e.g. grandparents) (expository learning). The fourth project, however, we believe, needs HOTS to analyse and evaluate reasons behind the changes and their causes and effects on Man’s life. So, it is more complex than the second one.

Conclusion

The projects that are suggested in SEO, SETW, and OM target both abstract and concrete types of language and content. They aim to teach the latter in both context-reduced and context-embedded situations. They also target both experiential and expository ways of learning. While projects in SEO and SETH target only LOTS, those in ESTW and OM integrate both LOTS and

HOTS. It has been found that projects that target CALP are introduced as early as the first year of the MS, in SEO. Projects in SETH, however, include only BICS. They are all based on experiential learning and target the teaching and learning of concrete types of language and content in context-embedded situations. All of them also require the use of LOTS. Therefore, projects in SETH are less cognitively and linguistically demanding than those in SEO, SETW, and OM. It has also been found that projects in OM involve the same degree of complexity as those in SETW. The discussion of the results obtained from the analysis of the projects that are suggested in the four MS textbooks has demonstrated that the latter do not account for the gradual integration of language, content and thinking skills into the projects, from the least to the most complex in terms of language, content and thinking skills

Chapter 6: Integration of Language, Content and Thinking Skills into EFL PWs in the SS Textbooks

Introduction

This chapter consists in a presentation of the findings of our research obtained from the analysis of the corpus of 22 PWs suggested in the three Algerian SS FEL textbooks ACR, GT, and NP. It includes four sections. Sections 1, 2, and 3 are concerned with the presentation of the qualitative analysis of the PWs in ACR, GT, and NP, respectively. Each of these starts by describing the types of language, content, and thinking skills that each project target. The results are presented in the form of tables. The description of the projects contains mainly three levels of analysis. First, the type of language and content (theoretical/practical) that the projects target. The second level is concerned with the description of the kind of learning situation(s) involved in dealing with the different types of language and content above. The situations required for the acquisition of the latter, experiential/expository, or context-embedded/context-reduced, respectively. The third level of analysis is concerned with the cognitive aspect of language and content learning or thinking skills required for the suggested types of language and content. These skills are divided into HOTS and LOTS. The second step in the presentation of the results provides the findings as concerns the type of language, content, and thinking skills within each of the SS textbooks. It also provides numbers as regards projects targeting BISC or CALP within each of these textbooks. The fourth section in this chapter consists in a discussion of the results obtained from the analysis of the PWs in the three SS textbooks.

6.1. Analysis of Language, Content and Thinking Skills Integration into PWs in *At the Crossroads*

Table 17 bellow provides a detailed description of the projects that are suggested in ACR. It looks at each project individually and describes the language, content and thinking skills

it targets. The description of the latter is based on the categories that are explained in chapter four.

Table17: Description of PWs in *At the Crossroads*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context-embedded	Epository/ Context-reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills	Hands-on learning experience (learners' job interests). Contextual support (syntactic and semantic redundancy seen in the unit).	Expository learning: contents require the understanding and use of general and theoretical concepts related to academic writing Decontextualized	<i>Remember</i> Recall and reuse previously learnt vocabulary related to jobs and job qualifications <i>Understand</i> Describe jobs, interests and job competencies	<i>Evaluation</i> Argue and justify a negative response Argue and justify a qualification for a job
1.a. Making a job application booklet	Describing interests (jobs) and competencies	Language forms to express interests and abilities.	Academic and formal knowledge related to writing C.V.s, job application letters, letters of reference, reply letters (acceptance/refusal).	Specific language for formal academic writing.				

1.b. Making an internet user's guide for beginner	Describe components of a PC. Give tips on how to use a PC and protect it. Describe good manners when using the internet .	Vocabulary relate to internet and computer components	Technical knowledge about computer and internet	Technical language related to computers and the internet	Internal contextual support: learners' experience with PCs and internet External support: reuse content knowledge and vocabulary about PC and internet	Expository/contextualized Read to find out about how to solve to solve a problem when a PC goes wrong, and how to maintain it in good conditions Learning theoretical concepts related to internet and computers Decontextualized	<i>Remember</i> Recall and reuse previously learnt vocabulary related to computers and internet <i>Understand</i> Describe and explain how to use a PC and internet <i>Apply</i> Use the information found (eg. Through reading) about computers and internet to write a guide.	<i>Evaluate</i> Valuing and judging manner (goog/bad) when using the internet
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2. Writing a book review	Description of the author's biography; the hero/heroine; place and time of the story.	Vocabulary related to describing people (characters' appearance, character...) ; place and time of the story.	Academic knowledge on how to write a summary of a book.	Technical language to use when writing a summary (of a book).	External support: reuse content knowledge and language to write a summary.	Expository and context-reduced: learning from texts and books, distance learner-topic/writer (learner) – audience. No external linguistic support: requires high knowledge of the English language.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to describing people, places, time... <i>Understand</i> Translate the content of the story in case it is not in English Summarize the story	<i>Analysis</i> Apply the formal/academic knowledge on how to write a review and summary to write one
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3. Conducting a survey about: people's newspaper reading habits/ TV viewers and TV programmes/ different uses of the PC	Type of newspapers/ TV programmes. Types of readers and TV viewers . Different uses of a computer.	Vocabulary related to newspaper and TV programmes	Formal and academic knowledge on how to design a questionnaire , design and conduct an interview. Convert information into statistical data and display them. Analyse and report data.	Academic language necessary to formulate hypothesis , express cause and effect, interpret data and draw conclusions	External contextual support (syntactic and semantic redundancy seen in the unit). Learner's knowledge about TV programmes and newspapers.	Expository learning/formal academic decontextualized situation: contents require the understanding and use of general and theoretical concepts related to academic writing/research work Expository and context-reduced: learning from texts and books, distance learner-topic/writer (learner) –audience No external linguistic support: requires high knowledge of the English language to access, comprehend, explain, interpret and then report data	<i>Remember</i> Recall and reuse previously learnt vocabulary and academic knowledge related to doing research work <i>Understand</i> Identify different opinions from the questionnaire and interview, explain and summaries them	<i>Analysis</i> Use the formal/academic knowledge gathered through questionnaire interview to write a report <i>Evaluation</i> Finding relationships, making inferences and drawing conclusions while analyzing the data from the two research tools
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4. Making a profile of an invention	Learning about different inventions, name and describe them.	Vocabulary related to the inventions: their names, their components etc	Evaluating initial and recent model of the invention;	language forms required to making comparisons and valuing;	Internal contextual support: learners' prior knowledge about the different inventions and possibly how they work;	Read books, magazines, articles... about the inventions and their history; Read the users' guide for the inventions to find out how they work. Decontextualized/expository	<i>Remember</i> Label the inventions and their components <i>Understand</i> Describe the inventions, their components and how they work	<i>Evaluate</i> Compare and contrast different models of the invention
5. Making a consumer guide	Describe different types of products like toiletries, paper products, gardening tools...	Vocabulary related to labeling and describing different types of products.	Describe compositions (chemical) of a product. Formal academic knowledge about writing a letter of complaint.	Language related to describing chemical compositions of a product. Language needed for formal academic writing (letter of complaint).	Internal contextual support: learners' prior knowledge about the different products and their characteristics and uses.	Read about products to find about their chemical compositions. Expository/context-reduced.	<i>Understand</i> Describe different products and their compositions	<i>Evaluate</i> Appreciating and evaluating a product Using arguments to complain about the quality of a product

Relying on the description of language, content and thinking skills integration into projects in ACR, the following tables 18, and 19 specify the type of language, content and thinking skills that every project targets, respectively

Context-Reduced/Expository	+	+	+	+	+	+
Context-Embedded/Experiential	+	+	-	+	+	+
Theoretical Language /Content	+	+	+	+	+	+
Practical Language/Content	+	+	+	+	+	+
	PW1a	PW1b	PW2	PW3	PW4	PW5

Table18: Language and Content Integration into PWs in *At the Crossroads*

It seems from table 18 above that all projects in ACR integrate both types of theoretical and practical types of language and content. Besides, all of them target the teaching of language and content in both context-reduced and context-embedded situations, except project 2 that introduces language and content in context-reduced situations only. Moreover, all the projects are expository. They all require from the learners consulting and reading different sources to find out the necessary contents and language for the projects' completion. Only project 3 requires, in addition to expository learning, learners' experiences about the theme of the project.

Create	-	-	-	-	-	-
Evaluate	+	+	-	+	+	+
Analyse	-	-	+	+	-	-
Apply	-	+	-	-	-	-
Understand	+	+	+	+	+	+
Remember	+	+	+	-	+	-
	PW1a	PW1b	PW2	PW3	PW4	PW5

Table19: Thinking Skills Integration into PWs in *At the Crossroads*

As regards the integration of thinking skills into projects in ACR, the results from table 19 above indicate that all the projects target both LOTS and HOTS. All the projects aim at fostering the skills of remember and understand, except projects 3 and 5 that target only understand. Project 1b targets, in addition to these skills, apply. Moreover, they all aim at teaching evaluation skills, except project 2, which integrates analysis skills. Project 3, however, targets both analysis and evaluation. Yet, no project targets create.

6.2. Analysis of Language, Content and Thinking Skills Integration into PWs in *Getting Through*

Table 20 bellow provides a detailed description of the projects that are suggested in GT. It looks at each project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table20: Description of PWs in *Getting Through*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context- embedded	Epository/ Context- reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills				
1.Making a profile about life styles	Describing life in the past, present and future .	Language forms to express habit in the past, future expression to express predictions. Vocabulary related to life style (clothing, food, entertainment ...). Time markers.	-----	-----	Hands-on learning experience. Internal contextual support (syntactic and semantic redundancy seen in the unit). Background knowledge of the learners about life styles in different cultures	Expository/ contextualized learning: reading about life styles in different civilizations in the past. Epository/ contextualized/ decontextualized	<i>Remember</i> Recall and reuse previously learnt vocabulary related to clothes, food, entertainment.... <i>Understand</i> Describe life styles in the past, present and future. <i>Apply</i> Use the information about life styles and appropriate language to write a profile of life style.	<i>Evaluate</i> Compare and contrast life styles in the past, present and future.

2. A statement of achievements	Describe life of a Nobel Prize winner/potential winners .	-----	Academic contents: achievements of Nobel Prize winners/potential winners	-----	Internal contextual support: learners' prior-knowledge about life and achievements of Nobel Prize winners/potential winners.	Read books, magazines, texts... to find out about life and achievements of Nobel Prize winners/potential winners. Expository/Decontextualized	<i>Understand:</i> Describe life and achievements of Nobel Prize winners/potential winners <i>Apply</i> Use the information found (through reading) about of Nobel Prize winners/potential winners to write a sketchbook.	<i>Evaluate</i> Valuing and appreciating achievements, arguing and justifying reasons for nominees to the Nobel Prize
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3. conservation plan	Description of environmental problems and conservation plans.	Basic vocabulary related to environmental problems and conservation plans	Drawing diagrams to show how amenities and waste disposal system works. Write a town/country Code.	Formal academic language related to writing a Code.	External support: reuse content knowledge and language to about environmental problems and conservation plans.. Learners' knowledge and experiences about environmental problems .	Expository and context-reduced: learning from texts and books about environmental problems, conservation plans and Codes dealing with the protection of the environment.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to the environment and its protection	<i>Analysis</i> Apply the formal/academic knowledge and factual information on to write a prospectus on conservation plans
						Distance learner-topic/writer (learner) –audience. No external linguistic support: requires high knowledge of the English language	<i>Understand</i> Translate content knowledge about the topic into English Describe and explain environmental problems and conservation plans	<i>Create</i> Generating solutions to environmental problems to write a town Code

4. a. the ABC of dreams (literary stream only)	Describing dreams	Use the conditiona l If ...will to express possibility			Hands-on-learning experience. Learners' prior-knowledge about interpretation s of dreams in their culture.	Context-embedded /Expository learning: reading about meanings of dreams in different cultures and religions.	<i>Understand</i> Explain the meaning of a dream <i>Apply</i> Using linguistic and cultural knowledge about meaning of dreams to write a poster about dreams	
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4. b. report on scientific experiments (scientific streams)			Academic/ formal knowledge about for instance different chemicals and their effects, convert raw data into charts and diagrams, how to write a report.	Academic/formal language to formulating hypothesis, drawing conclusions and inferences. Specific language to writing different parts of the report.	Internal- contextual support: Learners’ prior- knowledge about chemicals and substances.	Read books, magazines, articles...about the substances, chemicals and their effects. Expository and decontextualized distance learner- topic/writer (learner) –audience . No external linguistic support: requires high knowledge of the English language.	<i>Understand</i> Describe , explain the experiment, summarize the results	<i>Analyse</i> Use the results of the experiment to write formal/academic report <i>Evaluate</i> Interpreting results, drawing inferences and conclusions, formulating and checking validity of hypothesis
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5. writing a collection of stories	Describe the life (biography) of the author.	Vocabulary/ language to express chronological order when narrating a story.	Formal/ academic knowledge about narrative writing.	Language forms and structures related to different literary/academic genres (stories, forward, and introduction)	Internal contextual support: learners' prior knowledge (e.g. folk tales).	Use academic knowledge and language to write a forward and a preface.	<i>Understand</i> Describe events in a chronological order	<i>Create</i> Use language creatively to write stories
	Arranging the events of the story in a chronological order.		Formal/ academic knowledge about different genres of academic writing: preface, forward, stories .			Write a forward and a preface requires high knowledge of English and is used as the only means expository/ decontextualized .	Translate stories from other languages into English	

6. Making a survey	Describe different types of natural disasters (floods, fires, droughts...)	Vocabulary related to natural disasters.	Formal/academic knowledge about writing questionnaire, conducting interviews, converting raw data into statistics and charts.	Academic language necessary to formulate hypothesis, express cause and effect, interpret data and draw conclusions.	External contextual support : make use of previously acquired knowledge about doing research work (questionnaire, interview...)	Expository learning/formal academic decontextualized situation: contents require the understanding and use of general and theoretical concepts related to academic writing/research work. Expository and context-reduced: learning from texts and books, distance learner-topic/writer (learner) –audience. Learners read books, magazines, articles... about natural disasters and how to face them. No external linguistic support: topic requires high knowledge of the English language to access, comprehend,	<i>Understand</i> Describe, explain, then summaries the results of the survey.	<i>Analyse</i> Use the results of the survey to write formal/academic report <i>Evaluate</i> Interpreting results, drawing inferences and conclusions, formulating and checking validity of hypothesis <i>Create</i> Use language to create slogans against man-made disasters
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7.a. Writing Miscellanies	Knowledge about famous people and personalities	language to express wish, advice, possibility ...			Learner's personal experiences, wishes and interests.		<i>Remember</i> recall and reuse previously learner grammatical structures to express a wish, possibility, imaginary situation... <i>Understand</i> Describe a wish, possibility, imaginary situation...	
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7.b. making a report on invention and discoveries	Describe inventions and discoveries	Vocabulary related to describing the inventions and discoveries.	Usefulness and positive/negative effects of the inventions and discoveries on human life.	Use conditional forms to express regret and importance	Learner's prior-knowledge about different inventions and discoveries in various domains	Reading text, books, magazines... to find out about discoveries and inventions and the way they changed humans' life Expository learning/formal academic decontextualized situation: contents require the understanding and use of general and theoretical concepts related to scientific inventions and discoveries No external linguistic support: topic requires high knowledge of the English language to access, comprehend	<i>Remember</i> Recall and reuse previously learnt language and knowledge about inventions and discoveries <i>Understand</i> Translate knowledge about different inventions into English	<i>Evaluate</i> Compare and contrast the effects of different inventions and discoveries on humans' life
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8.Compiling a business portfolio	Different ways to express thanks, acknowledge merits and complaints...	Language related to thanking, acknowledging and complaining	Knowledge of formal/business writing Organization of a company	Formal language related to business letters (thank-you, complaint, enquiry...)	External contextual support : make use of previously acquired knowledge about formal business writing genre	No external linguistic support: topic requires high knowledge of the English language to access and comprehend the content	<i>Remember</i> recall and reuse previously learnt language and knowledge about business writing and company organization	<i>Analyze</i> use factual information about different organizations of a company, then write one
						Expository learning/formal academic decontextualized situation: contents require the understanding and use of general and theoretical concepts related to business	<i>Understand</i> describe the organization of a company	

Relying on the description of language, content and thinking skills integration into projects in GT, the following tables 21, and 22 specify the type of language, content and thinking skills that every project targets, respectively

Context-Reduced/ Expository	+	+	+	-	+	+	+	-	+	+
	+	+	+	+	+	+	+	-	+	+
Context-Embedded/ Experiential	+	+	+	+	+	+	+	+	+	+
	-	-	+	+	-	-	-	+	-	-
Theoretical Language /Content	-	+	+	-	+	+	+	-	+	+
Practical Language/Content	+	+	+	+	-	+	+	+	+	+
	PW 1	PW 2	P W3	PW 4a	PW 4b	PW 5	PW 6	PW 7a	P W 7b	P W 8

Table21: Language and Content Integration into PWs in *Getting Through*

The results of the analysis of the integration of language and content into PWs in GT reveal, as indicated in table 21 above, that almost all the projects aim at teaching both theoretical and practical types of language and content. Yet, projects, 1, 4a, and 7a integrate only the practical type and project 4b suggests only theoretical one. In addition, all the projects of this textbook suggest both context-embedded and context-reduced situations to acquire language and content, except from project 4a and 7a that suggest only context-reduced ones. Besides, all the projects require reading from various sources to be carried out (expository learning). Only projects 3 and 4a need both experiential and expository learning and project 7a only experiential.

Create	-	-	+	-	-	+	+	-	-	-
Evaluate	+	+	-	-	+	-	+	-	+	-
Analyse	-	-	+	-	+	-	+	-	-	+
Apply	+	+	-	+	-	-	-	-	-	-
Understand	+	+	+	+	+	+	+	+	+	+
Remember	+	-	+	-	-	-	-	+	+	+
	PW1	PW2	PW3	PW4a	PW4b	PW5	PW6	PW7a	PW7b	PW8

Table22: Language and Content Integration into PWs in *Getting Through*

The results of the investigation into the integration of cognitive aspects of language learning (thinking skills) into PWs in GT show that almost all of them incorporates both LOTS and HOTS. Projects 4a and 7a target only LOHS. In fact, all the projects aim at teaching the

skills of understanding. Some of them, projects 1, 3, 7a, and 8, target also remember. Yet, only three projects (1, 2, and 4a) integrate apply skills. Moreover, except from projects 4a and 7a, all the others target some HOTS. Projects 3, 4b, 6, and 8 integrate analysis skills. Projects 1, 2, 4b, 6, and 7b aim to foster evaluation skills. Finally, three projects (3, 5, and 6) target the highest thinking skills of create. Project 6 targets the three HOTS at the same time

6.3. Analysis of Language, Content and Thinking Skills Integration into PWs in *New Prospects*

Table 23 bellow provides a detailed description of the projects that are suggested in NP. It looks at each project individually and describes the language, content and thinking skills it targets. The description of the latter is based on the categories that are explained in chapter four.

Table23: Description of PWs in *New Prospects*

Project	Language and content				Learning experience/situation		Cognitive aspects of language/content learning (thinking skills)	
	Practical language and content		Theoretical language and content		Experiential/ context-embedded	Epository/ Context-reduced	LOT	HOT
	Knowledge structures	Language skills	Knowledge structures	Language skills				
1.Making the profile of an ancient civilization (e.g. Greece)	Describing the profile of the civilization: life style and achievements of the civilization and their contributions to mankind.	Language forms necessary to situate the civilization in terms of space and time.	Cultural, beliefs, and law of a civilization. Achievements of the civilization in politics, science, philosophy...	Language related to law, cultural beliefs, philosophy...	Syntactic and semantic redundancy seen in the unit to locate spatially and temporally.	Expository/decontextualized learning: reading books, magazines...about life styles, cultures, politics... in different civilizations in the past. Distance learner-topic Expository/decontextualized	<i>Remember</i> Recall and reuse previously learnt vocabulary related to locating <i>Understand</i> Describe life styles, culture, beliefs... <i>Apply</i> Use the information about the civilization and appropriate language to write a profile of a civilization	<i>Analyse</i> Use factual information about the civilization to write a profile of the civilization

2. Writing a character of ethics			Code of ethics in different professions: law, plastic surgery, scientific research..., punishment laws.	Language forms required to write a code (e.g. passive form), expressing opinions and values.	Internal support: learners' prior knowledge about ethical considerations in their culture, and their knowledge about how to conduct an interview and write a report.	Expository/ decontextualized Read books, magazines, texts... to find out about ethical/non-ethical behaviours in different professions and different cultures; punishment laws...	<i>Understand</i> Describe behaviours: ethical non-ethical, classify, and explain them	<i>Analyze</i> use factual information about ethical/non-ethical behaviours in different professions, then write a character of ethics <i>Evaluate</i> judging and valuing behaviors
			Classifying behaviours into ethical and non-ethical. Academic/formal knowledge about how to conduct an interview and write a report.					

3. Designing an educational prospectus			Characteristics of different educational systems : type of exams, qualifications and curricula; Comparison of educational systems; Formal/academic knowledge about doing statistics and converting data into charts, how to give an oral presentation;	Formal academic language related to educational systems: exams, curricula...	External support: semantic redundancy of vocabulary related to education (already seen in the teaching unit). Their experience about the Algerian educational system.	Expository and context-reduced: learning from texts and books about educational systems in different cultures. Distance learner-topic. No external linguistic support: requires high knowledge of the English language to access information and complete the project.	<i>Remember</i> Recall and reuse previously learnt vocabulary related to schools <i>Understand</i> Describe, explain, and classify educational systems	<i>Analysis</i> Apply the formal/academic knowledge and factual information about educational systems to write a prospectus <i>Evaluation</i> compare and contrast educational systems

4. making a survey on the impact of advertizing			Knowledge about different types of advertisements.	Academic language necessary to formulate hypothesis, express cause and effect, interpret data and draw conclusions.	External contextual support: make use of previously acquired knowledge about doing research work (questionnaire, writing report...).	Expository learning/formal academic decontextualized situation: contents require the understanding and use of general and theoretical concepts related to advertisement and academic writing/research work. Expository and context-reduced: learning from texts and books. Distance learner-topic No external linguistic support: topic requires high knowledge of the English language to access, comprehend, explain, interpret and then report data.	<i>Understand</i> Describe, explain, then summaries the results of the survey	<i>Analyse</i> Use the results of the survey to write formal/academic report <i>Evaluate</i> Interpreting results, drawing inferences and conclusions, formulating and checking validity of hypothesis
			Formal/academic knowledge on how to design a questionnaire, represent data using graphs, and write a report.					

5. Designing an astronomy booklet	Naming different planets in the Solar system and major moons; Equipments used in astronomy;	Names of planets and moons in the solar system; Vocabulary related to Equipment s used in astronomy .	Characteristics of planets and moons in the solar system. Effects of space travel and astronomy on technology and change of mentality.	Language related to astronomy.	Internal support Learners' prior-knowledge about different planets in the Solar system and major moons.	Read books, magazines, articles...about astronomy, solar system. Expository and decontextualized distance learner/topic. No external linguistic support: requires high knowledge of the English language to access information and report findings	<i>Understand</i> Describe the solar system and the history of astronomy <i>Apply</i> use information about astronomy to write a booklet	<i>Evaluate</i> consider the effects of astronomy on human life
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6. Writing a booklet of tips for coping with emotions	Describe emotions: anger, love, hate..., tips on how to cope with them.	Language forms to express advice.	Compare expression of emotions in different cultures. Formal knowledge on how to write a summary of fiction work (film, drama, and novel).	Appropriate language to use in a summary.	Internal contextual support: learners' experiences with emotions and how to cope with them Learners' personal experiences on how to cope with emotions	Use formal knowledge on how to make a summary of a fiction work Read about expressing emotions in different cultures expository/ decontextualized/ contextualized Making a summary of a fiction work requires from learners to rely only on English to convey meaning (no extra-linguistic support)	<i>Understand</i> Describe emotions and tips to cope with them Summarize fiction work <i>Apply</i> Use information about expression of emotions in different cultures to write a booklet	<i>Evaluation</i> Compare and contrast expression of emotions in different cultures
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Relying on the description of language, content and thinking skills integration into projects in NP, the following tables 24, and 25 specify the type of language, content and thinking skills that every project targets, respectively

Context-Reduced/	+	+	+	+	+	+
Expository	+	+	+	+	+	+
Context-Embedded/	+	+	+	+	+	+
Experiential	-	-	+	-	-	+
Theoretical	+	+	+	+	+	+
Language /Content						
Practical	+	-	+	-	+	+
Language/Content						
	PW1	PW2	PW3	PW4	PW5	PW6

Table24: Language and Content Integration into PWs in *New Prospects*

The results for the analysis of projects in NP (see table 24 above) reveal that all of them integrate the theoretical type of language and content and almost all of them, except from projects 2 and 4, integrate the practical type. All the projects require both context-embedded and context-reduced situations to acquire the content and language related to the themes of the projects. Moreover, they all require expository ways to find out about and acquire the language and contents related to the themes of the projects, except from projects 3 and 6 that might also call for some personal experiences of the learners.

Create	-	-	-	-	-	-
Evaluate	-	+	+	+	+	+
Analyse	+	+	+	+	+	-
Apply	+	-	-	-	+	+
Understand	+	+	+	+	+	+
Remember	+	-	+	-	-	-
	PW1	PW2	PW3	PW4	PW5	PW6

Table25: Thinking Skills Integration into PWs in *New Prospects*

As regards the thinking skills integration into PW in PN the results from table 25 above show that all the projects aim at teaching both LOTS and HOTS. Three projects, 1, 5, and 6, teach also apply skills. Only two projects (1 and 3) target remember skills. Besides, all the projects target HOTS of analyse and evaluate, except from project one that teaches only analysis

and project 6 that incorporates only evaluate. No project aims at teaching a creative use of the language.

Based on the description of the type of language, content and thinking skills that every project in the textbook aims to teach, table 26, bellow, classifies the projects in the three SS textbooks according to the type of proficiency they target, BICS or CALP.

Textbook	Project	Language Proficiency			
		BICS		CALP	
		A	C	B	D
<i>At the Cossroads</i>	1a				+
	1b				+
	2				+
	3				+
	4				+
	5				+
	Total	0	0	0	6
<i>Getting Through</i>	1		+		
	2				+
	3				+
	4a		+		
	4b				+
	5				+
	6				+
	7a	+			
	7b				+
	7				+
	Total	1	2	0	7
<i>New Prospects</i>	1				+
	2				+
	3				+
	4				+
	5				+
	6		+		
	Total	0	1	0	5
		4		18	

Table26: BICS and CAPL in the SS Textbooks

Table 26 above shows the number of projects that target BICS and CALP in the Algerian SS EFL textbooks. It clearly shows that 18/22 projects are classified as aiming to teach BICS, and 4/22 target CAPL. All of the six projects included in ACR are classified as CALP type. In

GT, 3 projects are classified within the BICS type and 7 within the CALP. NP includes 1 project that targets BICS, the other 5 ones aim at teaching CALP.

6.4. Discussion

Projects in the Algerian SS EFL textbooks seem to target the learners' CALP. In fact, out of the 22 projects analyzed in these textbooks, 18 of them aim at teaching CALP and only 4 projects teach BICS. Three projects among the latter can be classified in Quadrant C. These are projects 1 and 4a in GT and project 6 in NP. Only one project, 7b in GT is classified in Quadrant A. It is important to note that projects in Quadrant C are classified in this category because of the nature of the topics they deal with. The topics they deal with target more language for everyday use and exchange, rather than formal or academic one. However, projects 1 and 6 in GT and NP, respectively, unlike the other projects of this category are cognitively demanding. They both involve the use of evaluation skills. Project 4a in ACR, unlike also the other projects belonging to Quadrant C might require unpredicted or nonautomatized language forms.

All SS projects that are classified in CALP type deal with topics that are formal or academic, requiring both concrete (practical) and abstract (theoretical) types of language and content, except from projects 1, 4a, and 7a (GT) which require only practical type of language and content. They all require, in addition to some automatized language forms, the use of other unpredicted (unautomatized) language. Except from projects 4a and 7a in GT that target the use of language and content in context-embedded situations alone, and project 2 in ACR in context-reduced situations alone, all the others integrate both context-embedded and context-reduced situations of learning and use of language and content.

Contextualization of language and content in the projects of the three textbooks is, however, limited to the use of some internal or external support. That is, the use of learner's prior knowledge about the topics or reuse the language that has already been learnt before, for instance in the teaching unit. Yet, carrying out the suggested projects in the SS textbooks, mainly

the CALP ones, requires from the learners to rely heavily on their knowledge of the English language for accessing the contents needed to carry out their projects, usually through reading different types of books, scientific, history, fiction etc, and also writing them and presenting them (output). Even though some projects allow for the use of graphics as an extra-linguistic support, most of them do not provide opportunities for the use of other cues such as facial expressions or gestures. All projects in the Algerian EFL SS textbooks, except projects 7a in GT which is based only on learners' experiences (experiential), require expository ways to access the contents that are needed to carry out the projects, either through reading or eliciting data from field research through questionnaires or interviews, for instance (expository).

According to the above discussed characteristics of the Algerian SS EFL projects, it seems that the latter involve almost the same degree of difficulty. They almost all require accessing and expressing theoretical concepts and abstract ideas. Nearly all the projects deal with formal, technical or academic types of content in context-reduced situations. Learners need to rely mainly on their knowledge of the English language to access and report content knowledge related to different topics of the projects. Moreover, the majority of the suggested projects in the SS textbooks require the use of technical and academic language, which cannot all be predicted and cannot all be automatized by the learners at this level. However, when considering the degree of the cognitive difficulty that is involved in these projects, it seems that projects in GT are more cognitively demanding than those in ACR and NP. Indeed, while the latter target HOTS of analysis and evaluation, an addition to other LOTS, GT includes, in addition to all of these cognitive skills, creative use of the language, in projects 3, 5, and 6 of the textbook.

Our analysis of the projects in the three SS EFL textbooks also reveals that the latter do not account for the principles of gradual and sequential integration of language, content and thinking skills. In fact, while projects in ACR and NP seem to involve the same degree of complexity, GT contains both the easiest and the most difficult ones in the three textbooks.

These are projects that target BICS (projects 1, 4a, and 7a) and projects that target the creative use of the language (projects 3, 5, and 6).

The degree of difficulty involved in the Algerian SS EFL textbooks can be shown at the levels of the language (automatized and nonautomatized) and content (theoretical/practical), type of learning experience required (experiential/expository), contextualization and degree of cognitive demand. Except from projects 3, 5 and 6 in GT which seem to be the most difficult, and projects 1, 4a, and 7a which are the easiest, other projects in the three SS textbooks appear to involve almost the same degree of difficulty. This can be shown at different levels namely, the type of language and content, the type of input and output (through expository and experiential means), contextualization and finally the category of thinking skills. Nearly all projects need, in addition to some concrete or practical language and content, theoretical or abstract concepts and content knowledge.

In fact, the majority of the projects in the Algerian SS EFL textbooks require in addition to some concrete (practical) language and contents, essentially a high level of formal, technical and academic types of content knowledge. Other projects are thematic based but highly technical. Examples of formal and academic type of projects are: projects 1a, 2 (ACR), projects 2, 4, 5, and 6 (GT), and projects 1, 3, and 4 (NP). They are all concerned with formal type of content knowledge. This is shown through project tasks such as writing a job application, a CV, a letter of reply (positive/negative) to job application, letters of complaint, enquiry, business...etc. Writing a Code (of ethics and environment)...etc. Examples of the academic type of content include writing a summary of a book, film, drama and other fiction works, writing a forward and preface for a book, design a questionnaire and interview, and knowledge on how to convert data elicited from the latter into statistical data, writing a report of the results of a survey, writing stories etc. Other projects require, in addition to formal/academic content and language, thematic-based, specialized and technical ones. Examples of this kind include writing a

consumer guide (technical knowledge of the chemical compositions of a product), environmental problems and conservation plans and writing environmental Code, writing an astronomy booklet etc. They all require formal knowledge and language about how to write a Code, a report, a guide...etc, in addition to thematic, technical and specialized content knowledge and language related to environmental problems and conservation plans, organization of a company, knowledge about astronomy (planets, stars...) etc. These types of contents require from the learners a type of language that is specialized, technical, academic and mostly, context-reduced. Therefore, in terms of language and content integration in CALP projects of SS projects, it is clear that they all belong to the most complex type of tasks, Quadrant D, in Cummins (1981a) framework for language proficiency development.

Projects that target only a concrete or practical type of language and contents in the SS textbooks are rare. There are only 3 projects out of 22 projects analyzed in the three SS textbooks. These are projects 1, 4a, and 7a of GT. They suggest language and content that is related to describing different experiences of the learners, such as, describing life in the past, present and future, describing dreams and wishes, describing emotions and giving advice to cope with them, respectively. These projects require here-and-now language and contents that involve learners' interests, prior knowledge and experiences, they can be expressed using different linguistic and non-linguistics means. Yet, they require language that cannot all be predicted and automatized by the learners, hence, only project 7a is classified in Quadrant A of BICS, and the others are classified in Quadrant C.

As concerns the type of learning experiences required from the learners to carry out these projects, mainly the CALP ones, they all require in addition to some learners' prior knowledge about the topics, previous experiences and interests, an extensive reading in formal, academic, fiction and technical genres. All the projects require reading textbooks, articles, magazines, literary works, and learning from others such as teachers...etc to learn about the topics of the

projects and to find out the desired information. Only 6 among the 22 projects that have been analysed use both of experiential and expository learning at the same time. These are project 3 of ACR, project 3, 4a, and 7a of GT and projects 3 and 6 of NP. The other 16 projects rely only on expository means to access the required information to carry out the projects.

In terms of the contextualization of the learning situations, except from projects 4a and 7a of GT that require only context-embedded situations to be carried out, the others require both context-embedded and context-reduced situations. Indeed, some aspects of the language and contents of the suggested projects can be comprehended and expressed via non-linguistic cues. Other aspects, however, require from the learners to rely to a further extent on their knowledge of the English language (context-reduced) in order to understand the reading materials (input) and to write the final project out (output).

As for the cognitive complexity level that is necessary for these projects to be carried out, they all require in addition to the LOTS of remember, understand and apply, the HOTS, namely, analyze, evaluate and create. All the projects in the textbooks under study integrate the skills of analysis and evaluation and three projects from GT (projects 3, 5, and 6) aim at teaching creative use of the language. In fact, the above discussed topics of the projects related to academic, formal and technical content knowledge require mainly HOTS of analysis and evaluation and using appropriate language for these purposes. Some examples of the use of HOTS are using arguments in order to justify a negative reply for a job application or complain about the quality of a product; making inferences and drawing conclusions from the analysis of data gathered through questionnaires and interviews; formulating hypothesis and checking their validity; using factual information from an experiment or survey to write a report etc. As for the creative use of the language, this is integrated in the above mentioned projects from GT. The suggested projects require using language to express original solutions to environmental problems and write the Code for its protection, writing short stories, and slogans against man-made disasters.

Conclusion

Almost all the projects that are integrated into the Algerian SS EFL textbooks target both theoretical and practical types of language and content. They also target the teaching of these types of language and content in both context-embedded and context-reduced situations. Nearly all the projects that are suggested in these textbooks require expository ways of learning. Only some of them require experiential ways. As for the type of thinking skills that these projects target, almost all of them also require both LOTS and HOTS. GT contains the projects that require creative use of the language, the highest level of thinking skills. Only 2 projects in GT aim at integrating LOTS. The majority of the projects in the three textbooks, 18/22 target CALP, only 4/22 target the teaching of BICS. Projects in ACR are all of the BICS. In NP, only one project targets BICS, the others are all classified as CALP ones. GT contains 3 BICS projects and 7 CALP ones. Therefore, it contains the easiest and the most difficult projects in the three textbooks. The following chapters, seven and eight, present the results of the questionnaires addressed for both 4th year MS and 3rd year SS Algerian EFL learners, respectively.

Chapter 7: Results of the Questionnaire to 4th year MS Learners

Introduction

The chapter presents the findings obtained from the quantitative analysis of the results of the questionnaires addressed to 4th year MS learners. It is divided into two sections. The first one deals with the presentation of the results in percentages in the form of tables, histograms or pie charts. The second one consists in a discussion of the main findings.

7.1. Presentation of the Results of Learners' Answers to the Questionnaire

Item1. Doing project work in English language classes is interesting

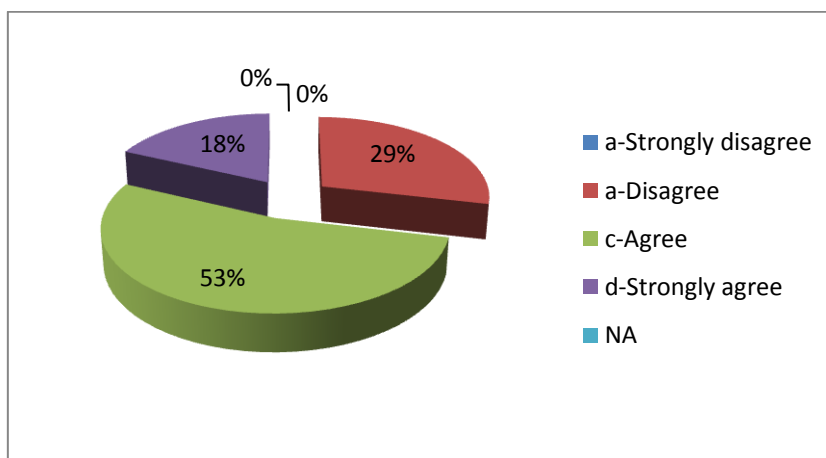


Diagram 1: 4th Year MS Learners' Attitudes towards the Importance of PW in EFL

Diagram 1 above shows that the majority of the participants think that doing PW in EFL classes is interesting (53% agree and 18% strongly agree). Only 29% of them disagree.

Item2. Doing project work in English language classes is difficult

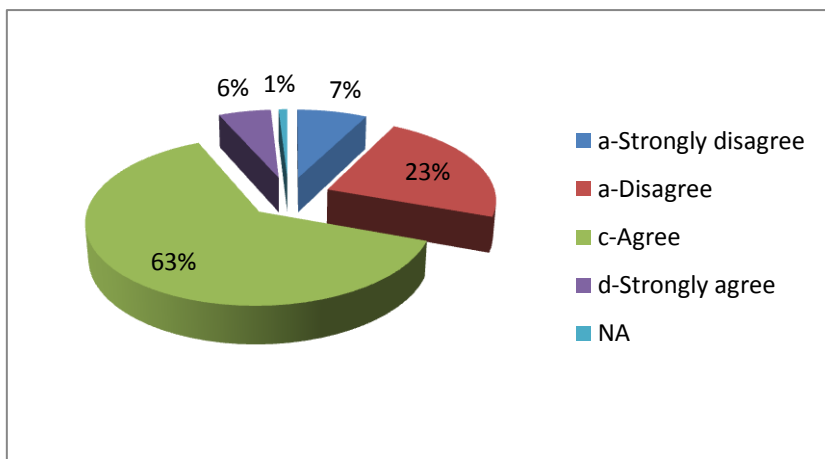


Diagram 2: 4th Year MS Learners' Attitudes towards PW Difficulty in EFL

It is clear from the results obtained from question 2, diagram 2 above, that the majority of the learners find doing PW in EFL difficult, 63% agree and 6% strongly agree. Only some of them disagree (23% disagree and 7% strongly disagree).

Item3. Doing project work in English language classes is easy

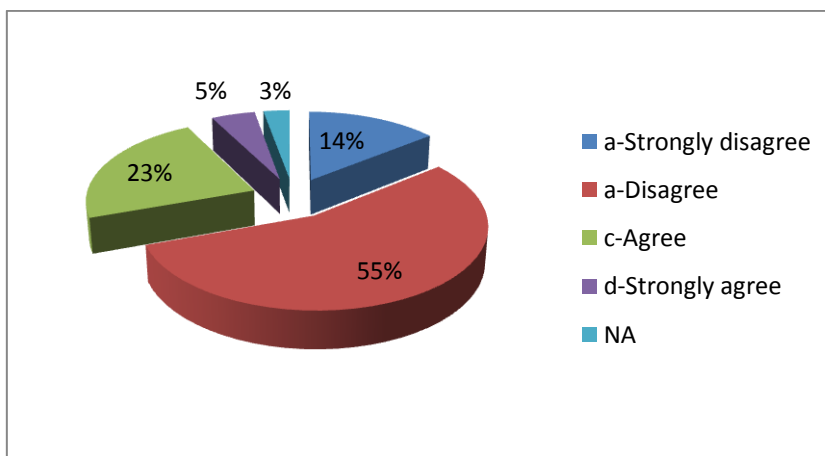


Diagram 3: 4th Year MS Learners' Attitudes towards PW Easiness in EFL

Results shown in diagram 3 above reveal that the majority of the participants disagree with the statement that “Doing project work in English language classes is easy”, 55% disagree and 14% strongly disagree. A minority of the respondents think that doing PW is easy (23% agree and 5% strongly agree).

Item4. When doing projects in English, you learn:

- a- English Grammar and vocabulary items which are new for you
- b- Information and knowledge about the project theme
- c- How to use English to give your opinion and arguments, to write stories

d- To use English vocabulary you have already learned to write the project

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	9	8,57%	11	10,48%	58	55,24%	26	24,76%	1	0,95%
b	0	0,00%	15	14,29%	66	62,86%	23	21,90%	1	0,95%
c	9	8,57%	36	34,29%	39	37,14%	19	18,10%	2	1,90%
d	3	2,86%	6	5,71%	73	69,52%	20	19,05%	3	2,86%

Table27: 4th Year MS Learners' Opinions about Skills Acquisition through PW

It is clear from the learners' answers to item 4 of the questionnaire, table 27 above, that they think that they acquire the different types of skills suggested in this item, namely, language, content-related and thinking skills. However, they agree with the acquisition of these skills to varied degrees, as it is shown in diagram 4 below. In fact, the total of the percentages presented in this diagram shows that when conducting PW learners learn to reuse language that is already acquired in the classroom. The latter comes in the first position with 88, 57% of the participants. In the second position there is the acquisition of information related to the project topic or content, chosen by 84, 76% of the learners. In the third place comes suggestion "a", the acquisition of new grammatical and vocabulary structures and items, with 80% of the learners. Finally, learning how to use language to give opinions and arguments and to write stories comes in the last position. It is chosen by 55, 24% of the respondents.

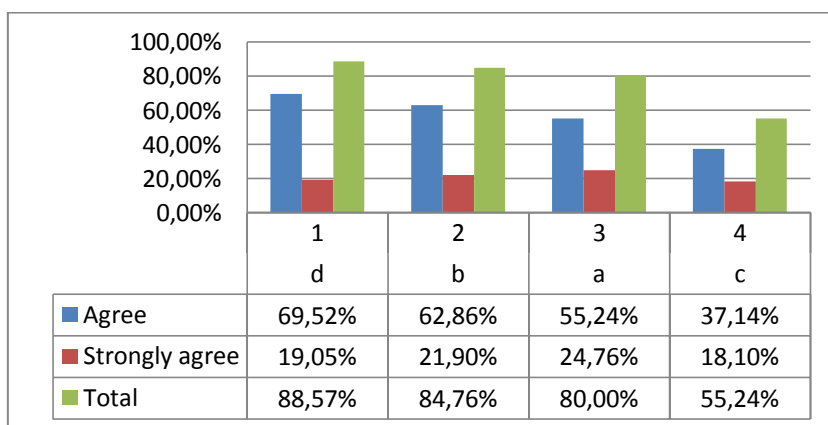


Diagram4: 4th Year MS Learners' Classification of Skills Acquisition through PW

Item5. Projects in the middle school textbooks aim to teach you the English language that you need to:

- a - Write SMS/email to a friend, a relative in English
- b - Talk to people when you visit a foreign country
- c - Understand texts (history, science, literary...)
- d - Use in the classroom to do school work

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	9	8,57%	48	45,71%	24	22,86%	23	21,90%	1	0,95%
b	3	2,86%	32	30,48%	44	41,90%	26	24,76%	0	0,00%
c	11	10,48%	22	20,95%	56	53,33%	15	14,29%	1	0,95%
d	3	2,86%	9	8,57%	67	63,81%	24	22,86%	2	1,90%

Table 28: 4th Year MS Learners' Opinions about the Types of Language Skills that PWs in the Textbooks Target

From the results shown in table 28 above, it is clear that the majority of the learners (45, 71% disagree and 8, 57% strongly disagree) think that PWs in the textbooks do not aim to teach them the type of language that is needed to “write SMS/email to a friend, a relative in English”. Some of them believe that they do, 22, 86% agree and 21, 90% strongly agree. The results also show that the majority of the participants (41, 90% agree and 24, 76% strongly agree) believe that the projects aim to teach them the type of language they need to talk to people when visiting a foreign country. Some of them, however, do not agree (2, 86% strongly disagree and 30, 48% disagree). As for suggestion “c” and “d”, understand texts (history, science, literary...) and use language in the classroom to do school work, respectively, the majority of the respondents agree that they are targeted by the projects suggested in the textbooks. The latter is revealed in the percentage of the learners who agreed with “c” and “d”: 53, 33% agree and 14, 29% strongly agree with the former; 63, 81% agree and 22, 86% strongly agree with the latter. Only a minority of the learners disagree with proposition “c” and “d”. 10, 48% strongly disagree, 20, 95% disagree with “c”, and 2, 86% strongly disagree 8, 57% disagree

with “d”. The classification of these language skills in terms of their integration in the PWs of the textbooks is show in diagram 5 bellow.

In fact, diagram 5 makes more visible the percentages of the participants who agree or disagree with the integration of these language skills into projects in the textbooks. The results are as follows:

a - Write SMS/email to a friend, a relative in English (54, 28% disagree and 44, 76% agree)

b - Talk to people when you visit a foreign country (33, 34% disagree and 66, 66% agree)

c - Understand texts (history, science, literary...) (31, 43% disagree and 67, 62% agree)

d - Use in the classroom to do school work (11, 43% and 86, 67% agree)

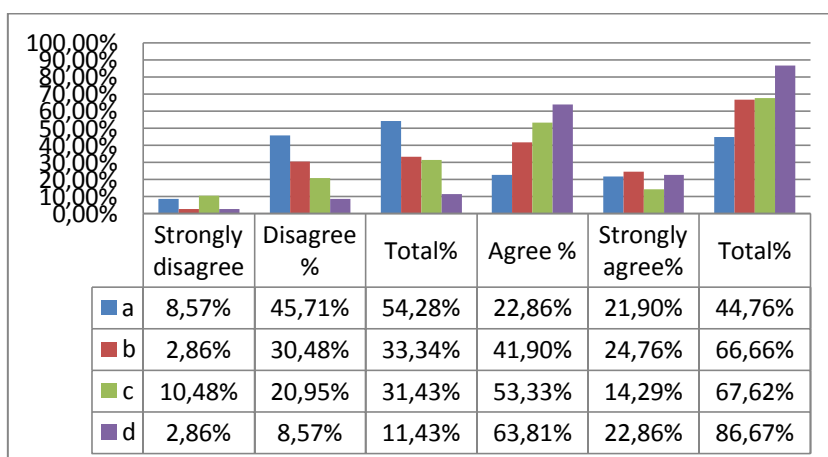


Diagram5: Classification of the Types of Language and Skills in the Middle School PWs

Item6. When you find it difficult to conduct the projects that are suggested in the middle school English language textbooks, it is because:

a- You do not have any knowledge about the topic

b- It is difficult to read texts in English to find out the necessary information

c- You cannot distinguish between the most important and the least important information

d- It is difficult to write and explain your project in English

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	9	8,57%	48	45,71%	35	33,33%	8	7,62%	5	4,76%
b	15	14,29%	11	10,48%	65	61,90%	11	10,48%	3	2,86%
c	19	18,10%	26	24,76%	47	44,76%	11	10,48%	2	1,90%
d	5	4,76%	15	14,29%	44	41,90%	38	36,19%	3	2,86%

Table29: 4th Year MS Learners' Opinions about the Sources of Difficulties of PWs in the Textbooks

Participants' answers to question 6, table 29 above, show that the majority of them, 45, 71% strongly agree and 8, 57% agree, do not think that they have difficulties with PWs that are suggested in the textbooks because of their lack of knowledge about the projects' topics. The majority of them, however, think that they have problems with reading texts in English to find out necessary information to conduct the projects (61, 90% agree and 10, 48% strongly agree). The majority also, 44, 76% agree and 10, 48% strongly agree, find difficulties in distinguishing between the most and the least important information. Finally, the biggest majority of the respondents (41, 90% agree and 36, 19% strongly agree) think that it is difficult to write and explain their PWs in English. Classifications of these difficulties according to the percentages of the participants who agree or strongly agree are shown in diagram 6 below.

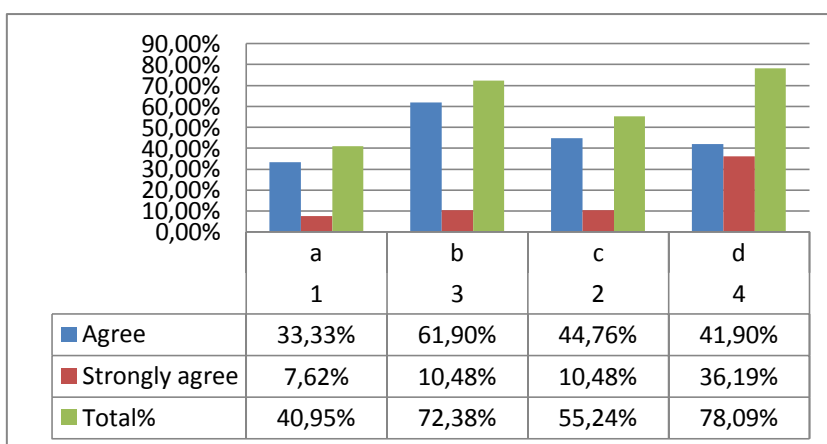


Diagram6: Classification of the 4th Year MS Learners' Difficulties in Doing the Textbooks' PWs

Diagram 6 above shows the classification of the difficulties encountered by the learners to conduct the projects that are suggested in the textbooks in a decreasing order from 1 to 4. The order is as follows:

- 1 → a- You do not have any knowledge about the topic (40, 95%)
- 2 → c- You cannot distinguish between the most important and the least important information (55, 24%)
- 3 → b- It is difficult to read texts in English to find out the necessary information (72, 38%)
- 4 → d- It is difficult to write and explain your project in English (78, 09%)

Item7. It is easier to conduct projects in English when you use only your knowledge and experience, such as describing your family, your favourite sport(s) etc

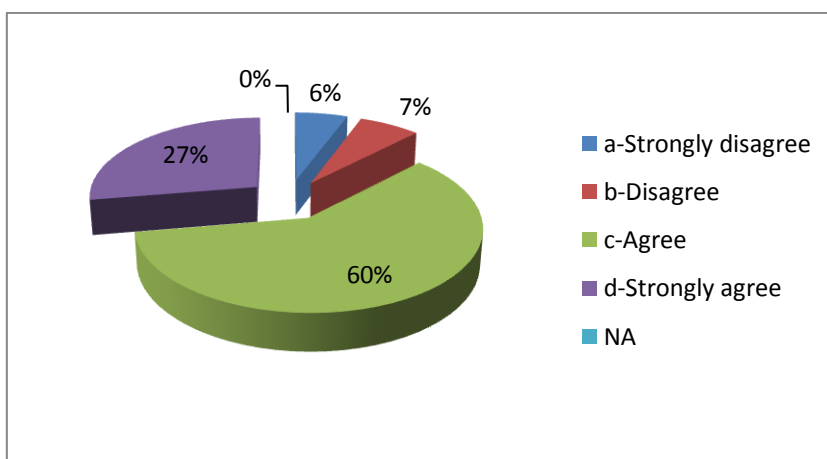


Diagram7: 4th Year MS Learners' Attitudes towards PWs that Require the Use of Personal Knowledge and Experiences

The majority of the participants (60% agree and 27% strongly agree) agree that it is easier to conduct projects that only require from them to use their own knowledge and experiences about the topic, as it is shown in diagram 7 above. Only a minority of them think that such projects are not easy (6% strongly disagree and 7% disagree).

Item8. It is difficult to conduct English language projects that require a lot of reading and writing

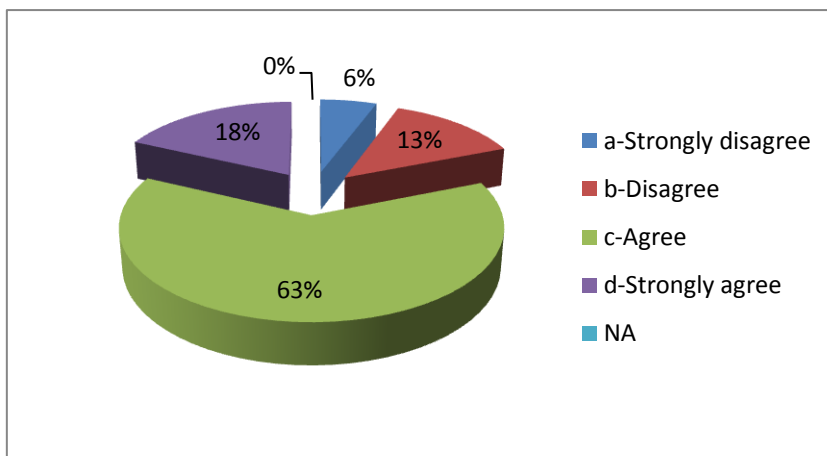


Diagram8: 4th Year MS Learners' Attitudes towards PWs that Require a lot of Reading and Writing

It is clear from the results displayed in diagram 8 above that the biggest majority of the participants, 63% agree and 18% strongly agree that PWs that require a lot of reading and writing are difficult. Only a small number of the participants, 13% disagree and 6% agree, think that those projects are not difficult.

Item9. Most project works in the four middle school English language textbooks are difficult

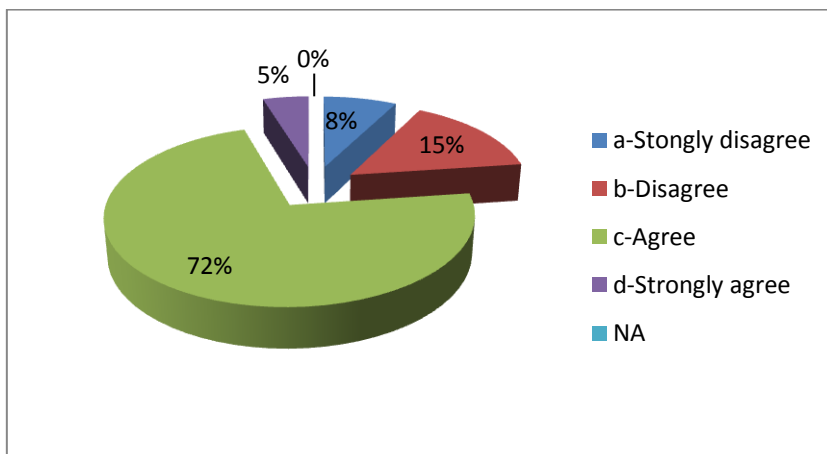


Diagram9: 4th Year MS Learners' Attitudes towards the Difficulty of PWs in the Textbooks

Results of item 9 of the questionnaire, diagram 9 above, show that the biggest majority of the respondents, 72% agree and 5% strongly agree that PWs that are suggested in the textbooks are difficult. Some of them only believe that they are not difficult (15% disagree and 8% strongly disagree).

Item10. Most project works in the four middle school English language textbooks are easy

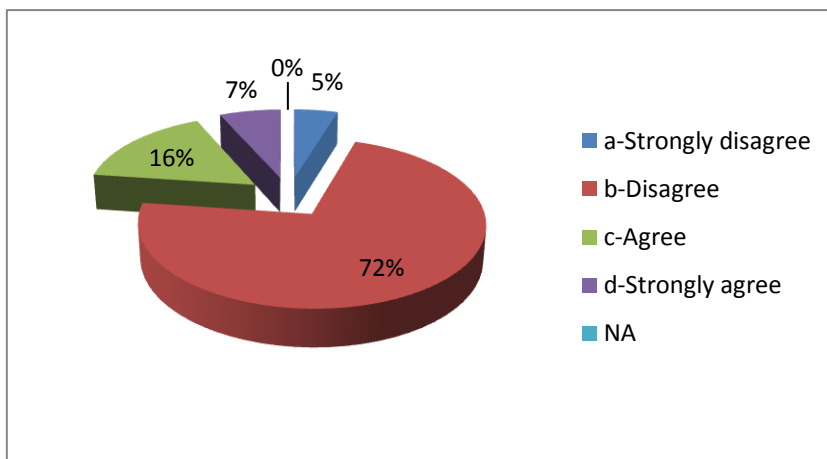


Diagram10: 4th Year MS Learners' Attitudes towards the Easiness of PWs in the Textbooks

The biggest majority of the participants (72% disagree and 5% strongly disagree), as it is shown in diagram 10 above, do not agree with the statement that PWs in the textbooks are easy. A minority of them think that they are easy (16% agree and 7% strongly agree).

Item11. Projects in *Spotlight on English One* and *Two* are more difficult than those in *Spotlight on English Three*

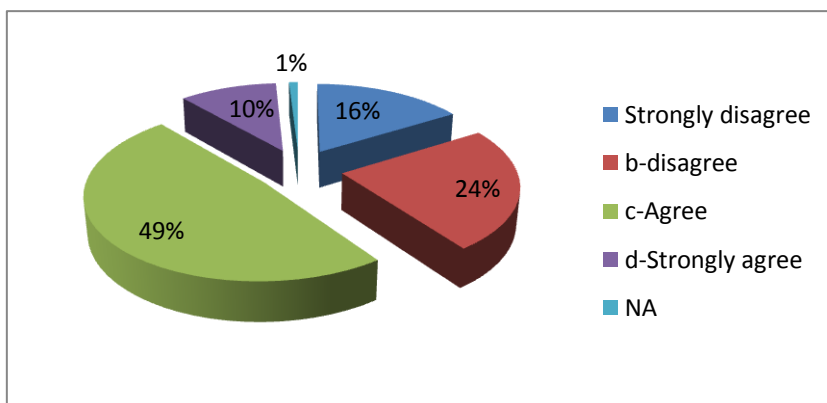


Diagram11: 4th Year MS Learners' Attitudes towards PWs Difficulty in *Spotlight on English One, Two, and Three*

Diagram 11 above shows that the majority of the respondents agree that PWs in SEO and SETW are more difficult than those in SETH (49% agree and 10% strongly agree). Some of them, however, do not agree (16% strongly disagree and 24% disagree).

Item12. Projects in *Spotlight on English Two* are as easy/ as difficult as those in *On the Move*

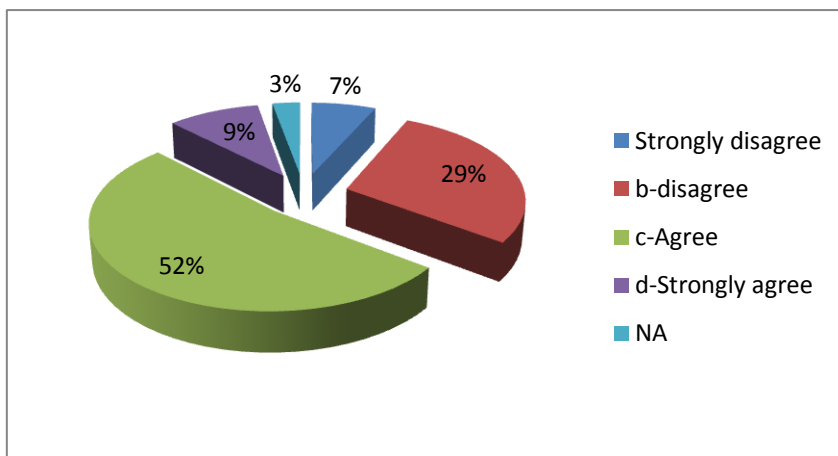


Diagram12: 4th Year MS Learners' Attitudes towards PWs Difficulty/Easiness in *Spotlight on Two*, and *On the Move*

Learners' answers to item 12, shown in diagram 12 above, reveal that the majority of them agree with the statement that "Projects in SETW are as easy/ as difficult as those in OM (52% agree and 9% strongly agree). Others, however do not agree (29% disagree and 7% strongly disagree).

Item13. Rank the following project topics from the middle school textbooks of English, in order of difficulty, from 1 to 6 (1= the easiest, 6= the most difficult):

- a- Talk/write about Family members and friends, food, and clothes
- b- Talk/write about sports and hobbies
- c- Write a recipe of your favourite dish
- d- Write about topics that you have already learned about in other classes (science, geography, history)
- e- Write a story, a play, and summary of a book
- f- Write a letter to complain about the bad quality of a product that you bought

		N1	N2	N3	N4	N5	N6	NA
13a	N	36	19	36	4	2	1	7
	%	34,29%	18,10%	34,29%	3,81%	1,90%	0,95%	6,67%
13b	N	16	45	27	8	0	3	6
	%	15,24%	42,86%	25,71%	7,62%	0,00%	2,86%	5,71%
13c	N	41	26	17	10	4	1	6
	%	39,05%	24,76%	16,19%	9,52%	3,81%	0,95%	5,71%
13d	N	1	3	9	17	26	46	6
	%	0,95%	2,86%	8,57%	16,19%	24,76%	43,81%	5,71%
13e	N	0	3	6	20	44	25	7
	%	0,00%	2,86%	5,71%	19,05%	41,90%	23,81%	6,67%
13f	N	3	5	5	41	22	21	8
	%	2,86%	4,76%	4,76%	39,05%	20,95%	20,00%	7,62%

Table 30: 4th Year MS Learners' Classification PWs in the Textbooks in Terms of Difficulty

Results of question 13, table 30 above, show that the majority of the participants classify propositions *a*, *b*, and *c* in the first positions whereas propositions *d*, *e*, and *f* comes in the last positions. Diagram 13 bellow makes the results of the classification of the projects from the easiest to the most difficult clearer. The results can be summarized as follows:

- 1 —→ c- Write a recipe of your favourite dish (39, 05%)
- 2 —→ b- Talk/ write about sports and hobbies (42, 86%)
- 3 —→ a- Talk/ write about Family members and friends, food, and clothes (34, 29%)
- 4 —→ f-Write a story, a play, and summary of a book (39, 05%)
- 5 —→ e- Write a letter to complain about the bad quality of a product that you bought (41, 90%)
- 6 —→ d- Write about topics that you have already learned about in other classes (science, geography, history) (43, 81%)

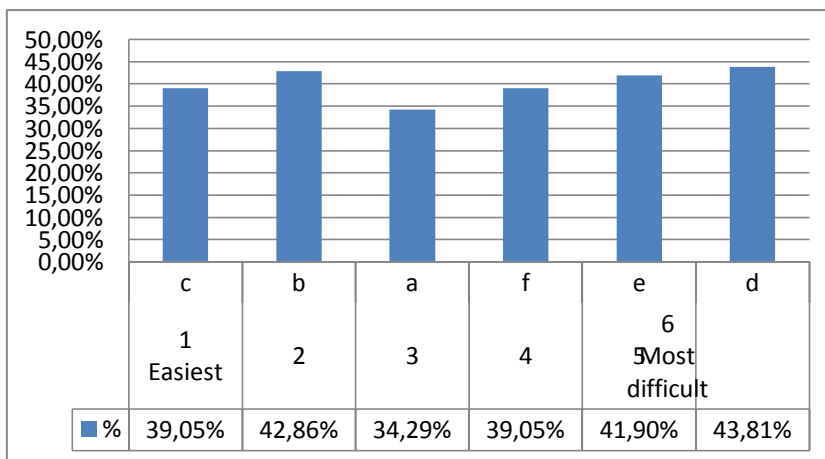


Diagram13: 4th Year MS Learners' Classification of the PWs in Terms of Difficulty

Item14. To conduct the projects that are suggested in the middle school English language textbooks, you obtain the information by (You may tick more than one):

- a- Relying on what you know about the topic ☐
- b- Reading books/magazines ☐
- c- Using internet sources ☐
- d- Asking other people (parent, teacher...etc) ☐

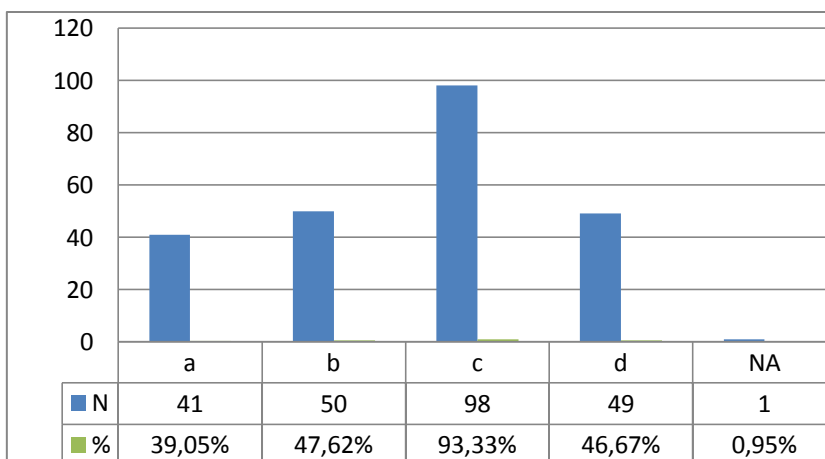


Diagram14: 4th Year MS Learners' Ways to Obtain Information to do PWs Suggested in the MS Textbooks

Learners' answers to item 14, diagram 14 above, reveal that they use different sources to obtain information for their projects. They use their own knowledge about the topics (39, 05%) , read magazines and books (47, 62%), use different internet sources (93, 33%) and ask other people (46, 67%).

Item15. What is the most difficult task you have to do when conducting a project in the English language? (You may tick more than one)

- a- Find the information ☐
- b- Select appropriate information ☐
- c- Summarize the information using your own words ☐
- d- You cannot present your project in English in front of other learners ☐

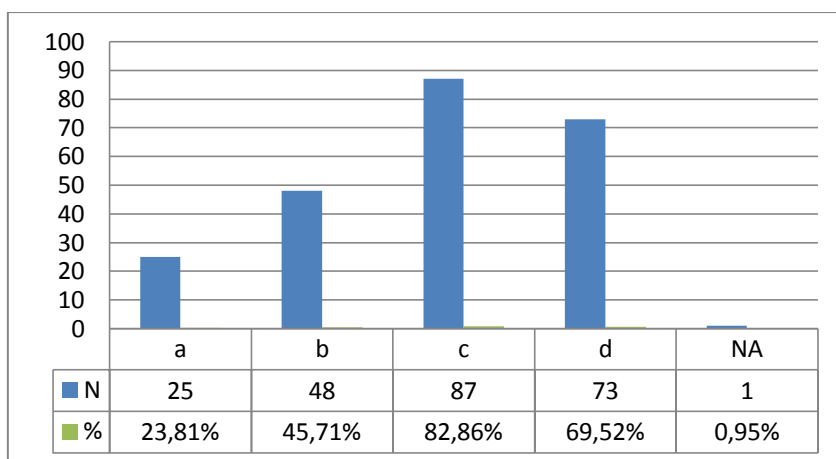


Diagram15: 4th Year MS Learners' Difficulties in Doing PW

It is clear from diagram 15 above that the participants face different types of difficulties while doing PW. It seems that the major problem they encounter is summarizing the information using their own words, with 82, 86% of the learners. This is followed by the difficulties in presenting their projects in front of their classmates, with 69, 52%. Many of them also (45, 71%) seem to have difficulties in selecting appropriate information for their projects, since only 23, 81% affirm that it is difficult for them to find out information necessary to conduct their projects.

7.2. Discussion

Results of the analysis of the questionnaire addressed to 4th year MS learners reveal interesting results about learners' attitudes towards PW in EFL classes and PWs that are suggested in the Algerian MS EFL textbooks. Indeed, while the majority of the participants agree on the importance of PW in EFL and find it interesting, there is also a general consent on the difficulty of doing PW in EFL classes. The majority of the participants also agree that they acquire language, content and thinking skills through PW in EFL. The percentages of learners who agree with the acquisition of language and content are close to each other (see results

section diagram 4). Yet, the percentage of the participants who confirm that they acquire thinking skills is relatively less important.

As regards the learners' attitudes towards the different learning experiences and types of input and output required for PW completion, the majority of the learners agree that projects that require experiential learning are easier and those that call for expository ways of learning are more difficult. Learners' difficulties in dealing with PWs that are mainly based on expository ways of learning might explain the problems they encounter in using English language to summarize information obtained about their projects' topics and present their projects in English (see results section for their answers to item 15 of the questionnaire).

Concerning the 4th year MS learners' attitudes towards PWs that are suggested in the official MS EFL textbooks ESO, SETW, SETH, and OM, the biggest majority of them agree that they are difficult. The biggest majority of the participants consider that their difficulties in dealing with those projects are related to reading texts in English to find out the necessary information for the completion of these projects and writing and explaining them in the English language. The majority of the participants also confirm that they cannot distinguish between the most important and the least important information. In other words, the difficulties that the learners' encounter with the PWs that are suggested in the MS textbooks are mainly related to the learners' insufficient mastery of the English language and thinking skills which are intimately related to language. That is, to distinguish the most important from the least important information is a cognitive skill that depends, mainly, on the understanding of meaning which is linguistically expressed.

As for the comparison of the degree of difficulty that is involved in the four MS textbooks' projects, the majority of the participants confirm that PWs in SEO and SETW are more difficult than those in SETH. The textbooks as already said are designed for the first, second, and third year learners respectively. The participants also agree that PWs in SETW are

similar to those in OM, which is designed for fourth year learners, in terms of ease/difficulty. Therefore, the integration of projects into the textbooks does not seem to account for the gradation principle in the teaching of language, content, and thinking skills.

The participants' opinions about the type of language proficiency that PWs in the MS textbooks target have clearly revealed that both BICS and CALP are targeted by these projects. However, the biggest majority of the learners confirm that they target CALP (understand different types of texts and use the English language to do school work). BICS (using English to carry out casual conversations) was chosen by less important numbers of the participants.

Learners' classification of the projects that are suggested in the textbooks, in terms of difficulty, shows that projects that target BICS are classified in the three first positions and those that target CAPL are in the last positions. This classification confirms learners' beliefs that projects that require a lot of reading/writing (expository) are difficult and those requiring only personal knowledge and experiences (expository) are easy. It also confirms their difficulties in dealing with PW that are mainly linguistic and cognitive. In fact, projects that are based on experiential learning (BICS) are less linguistically complex and require less complex thinking skills than those that are based on expository learning (CALP).

Conclusion

It has been concluded from 4th year MS learners' answers to the questionnaire items that while the majority of them consider PW in EFL classes as interesting, they think that doing projects in EFL, in general, and those that are suggested in the textbooks, is difficult. The majority also affirm that doing PW enables them to acquire language, content and thinking skills. The respondents also confirm that projects that are mainly based on experiential ways of learning are easy and those that are based essentially on expository ways are difficult. It has also been found that learners' difficulties in dealing with PW in EFL are related to their lack of mastery of the English language and the expression of their thinking skills that are highly dependent on the

mastery of language. Learners' answers confirm that PWs that are suggested in the textbooks target BICS and CALP. Their classification of the projects in terms of difficulty has clearly shown that the learners have classified BICS in the first positions and CALP in the last ones. The participants' answers have also confirmed that PWs that are suggested in the MS textbooks require more expository rather than experiential ways of learning for their completion.

Chapter 8: Results of the Questionnaire to 3rd year SS Learners

Introduction

The chapter consists in a presentation of the results obtained from the quantitative analysis of the results of the questionnaires addressed to 3rd year SS learners. It includes two sections. The first one deals with the presentation of the results in percentages in the form of tables, histograms or pie charts. The second one consists in a discussion of the main findings.

8.1. Presentation of the Results of Learners' Answers to the Questionnaire

Item1. Doing project work in English language classes is interesting

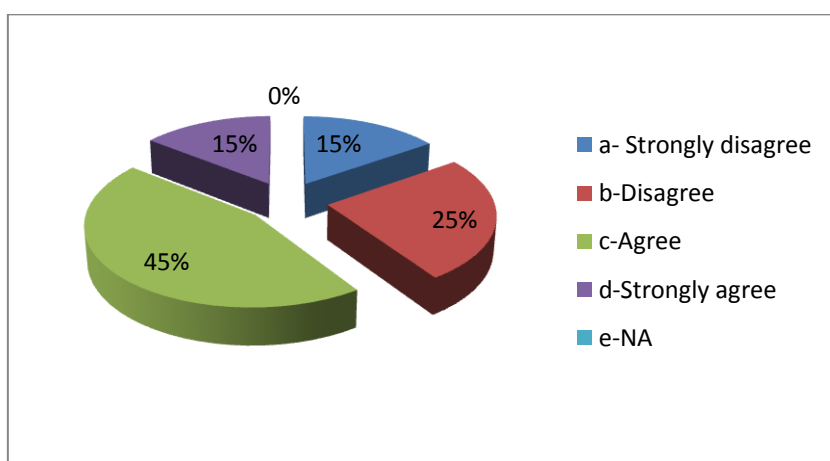


Diagram 16: 3rd Year SS Learners' Attitudes towards the Importance of PW in EFL

Diagram 16 above shows that the majority of the participants think that doing PW in EFL classes is interesting (45% agree and 15% strongly agree). Some of them do not find it interesting, 15% disagree and 15% others strongly disagree.

Item2. Doing project work in English language classes is difficult

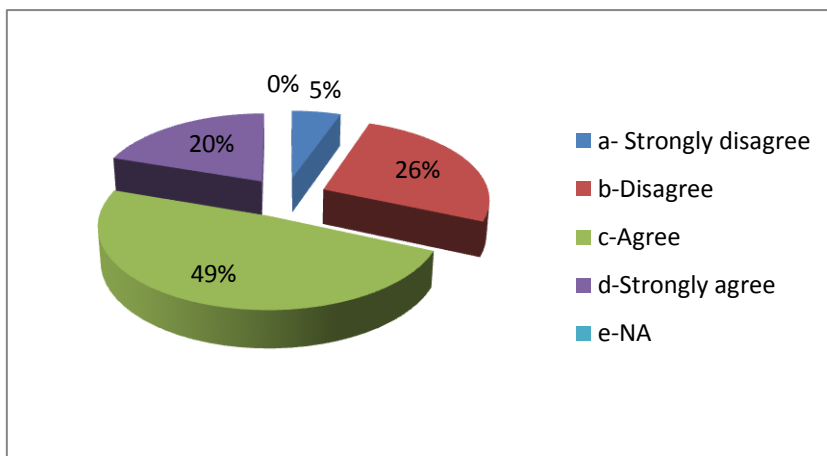


Diagram 17: 3rd Year SS Learners' Attitudes towards PW Difficulty in EFL

Results for question 2, diagram 17 above, reveal that the majority of the learners find doing PW in EFL difficult, 49% agree and 20% strongly agree. Only some of them disagree (26% disagree and 5% strongly disagree).

Item3. Doing project work in English language classes is easy

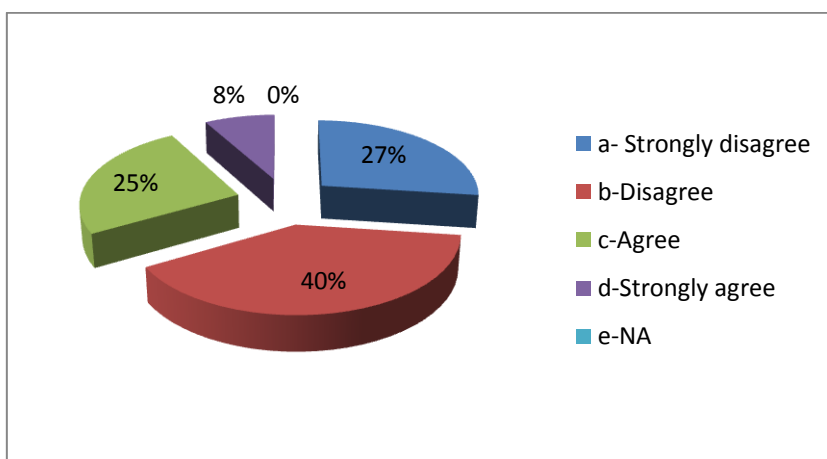


Diagram 18: 3rd Year SS Learners' Attitudes towards PW Easiness in EFL

Diagram 18 above shows that the majority of the respondents disagree with the idea that doing project work in English language classes is easy, 40% disagree and 27% strongly disagree. A minority of the learners think that doing PW is easy (25% agree and 32% strongly agree).

Item4. When doing projects in English, you learn:

- a- English Grammar and vocabulary items which are new for you
- b- Information and knowledge about the project theme
- c- How to use English to give your opinion and arguments, to write stories

d- To use English vocabulary you have already learned to write the project

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	11	9,91%	26	23,42%	41	36,94%	32	28,83%	1	0,90%
b	6	5,41%	13	11,71%	66	59,46%	21	18,92%	5	4,50%
c	8	7,21%	27	24,32%	48	43,24%	21	18,92%	8	7,21%
d	8	7,21%	14	12,61%	66	59,46%	18	16,22%	5	4,50%

Table31: 3rd Year SS Learners' Opinions about Skills Acquisition through PW

Learners' answers to item 4 of the questionnaire, table 31 above, display that the majority of the participants either agree or strongly agree that they acquire the different types of skills suggested in this item, which are language, content-related and thinking skills. Even though the percentages of the participants who agree with the acquisition of these skills are to some extent close to each other, see diagram 19 bellow, they show that the acquisition of information or content knowledge about the project topic (b) and the reuse of language already acquired in the classroom (d) come in the first position, with the percentages of 78, 38% and 75, 68%, respectively. It shows also that the learning of new English language grammar and vocabulary items (a) and use English to give their opinions and arguments, and to write stories (c) are in the last positions with 65, 77% and 62, 16% of the participants respectively.

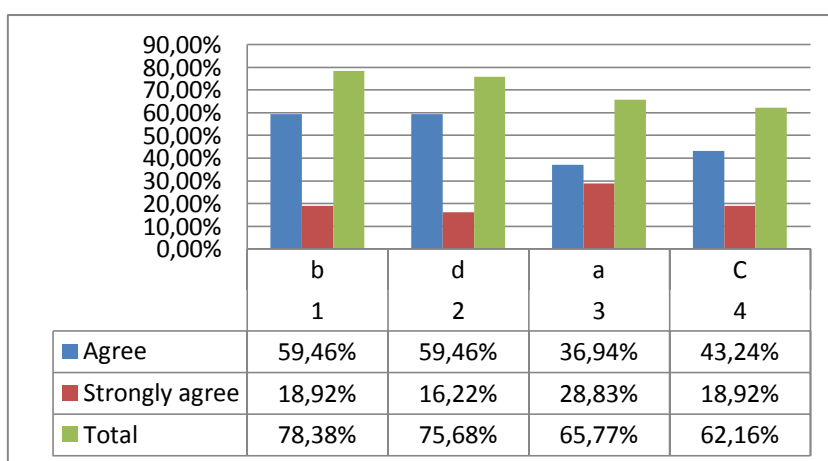


Diagram19: Classification of 3rd Year SS Learners' Skills Acquisition through PW

Item5. Projects in the secondary school textbooks aim to teach you the English language that you need to:

a - Write SMS/email to a friend, a relative in English

- b - Talk to people when you visit a foreign country
- c - Understand texts (history, science, literary...)
- d - Use in the classroom to do school work

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	19	17,12%	42	37,84%	26	23,42%	18	16,22%	6	5,41%
b	16	14,41%	40	36,04%	41	36,94%	13	11,71%	1	0,90%
c	13	11,71%	14	12,61%	64	57,66%	16	14,41%	4	3,60%
d	9	8,11%	15	13,51%	59	53,15%	20	18,02%	8	7,21%

Table 32: 3rd Year SS Learners' Opinions about the Types of Language Skills that PWs in the Textbooks Target

Table 32 above shows clearly that the majority of the learners think that PWs in the textbooks do not aim to teach them the type of language that is needed to "write SMS/email to a friend, a relative in English" (17, 12% strongly disagree and 37, 84% disagree). For those who think it does 23, 42% agree and 16, 22% strongly agree.

The results also show that the percentages of the participants who agree or disagree with the idea that the projects aim to teach them the type of language they need to talk to people when you visit a foreign country are nearly the same (14, 41% Strongly disagree, 36, 04% disagree and 36, 94% agree 11, 71% strongly agree)

As concerns suggestions "c" and "d", that is, understand texts (history, science, literary...) and se in the classroom to do school work, the majority of the respondents agree that they are targeted by the projects suggested in the textbooks. This is displayed in the percentages of the learners who agreed with "c" and "d": 57, 66% agree and 14, 41%strongly agree with the former; 53, 15% agree and 18, 02%strongly agree with the latter.

Some of the learners, however, disagree with proposition "c" and "d".11, 71% strongly disagree, 12, 61%disagree with "c", and 8, 11%strongly disagree; 13, 51%disagree with "d". The classification of these language skills in terms of their integration in the PWs of the SS textbooks is show in diagram 4 bellow.

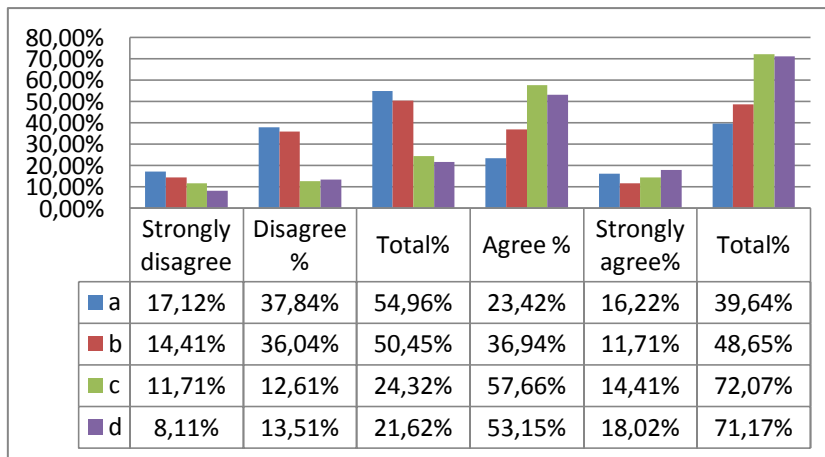


Diagram 20: Classification of the Types of Language Skills in the SS PWs

In fact, diagram 20 makes more visible the percentages of the participants who agree or disagree with the integration of the different types of language skills into projects in the textbooks. The results are as follows:

- a - Write SMS/email to a friend, a relative in English (54, 96% disagree, 39, 64% agree)
- b - Talk to people when you visit a foreign country (50, 45% disagree, 48, 65% agree)
- c - Understand texts (history, science, literary...) (24, 32% disagree, 72, 07% agree)
- d - Use in the classroom to do school work (21, 6 2% disagree, 71, 17% agree)

Item6. When you find it difficult to conduct the projects that are suggested in the secondary school English language textbooks, it is because:

- a- You do not have any knowledge about the topic
- b- It is difficult to read texts in English to find out the necessary information
- c- You cannot distinguish between the most important and the least important information
- d- It is difficult to write and explain your project in English

	Strongly disagree	%	Disagree	%	Agree	%	Strongly agree	%	NA	%
a	17	15,32%	33	29,73%	43	38,74%	12	10,81%	6	5,41%
b	11	9,91%	26	23,42%	51	45,95%	17	15,32%	6	5,41%
c	12	10,81%	27	24,32%	54	48,65%	12	10,81%	6	5,41%
d	6	5,41%	16	14,41%	57	51,35%	25	22,52%	7	6,31%

Table 33: 3rd Year SS Learners' Opinions about the Sources of Difficulties of PWs in the SS Textbooks

The respondents' answers to question 6, table 33 above, reveal that some of them (38, 74% agree and 10, 81% strongly agree) think that they have difficulties with PWs that are suggested in the textbooks because of their lack of knowledge about the projects' topics. Others, however, do not think so (15, 32% strongly disagree and 29, 73% disagree). Yet, the majority of them think that they have difficulties with reading texts in English to find out necessary information to conduct the projects (45, 95% agree and 15, 32% strongly agree). Only a minority of them 9, 91% strongly disagree and 24, 32% agree, think the opposite.

The majority also, 48, 65% agree and 10, 81% strongly agree, find difficulties in distinguishing between the most and the least important information. A minority of the participants, 10, 81% strongly disagree and 24, 32% disagree, do not find such difficulties.

Finally, the biggest majority of the respondents (51, 35% agree and 22, 52% strongly agree) think that it is difficult to write and explain their PWs in English. A minority of the learners, 5, 41% strongly disagree and 14, 41% disagree, do not find such difficulties. Diagram 21 below shows the classifications of these difficulties according to the percentages of the participants who agree or strongly agree.

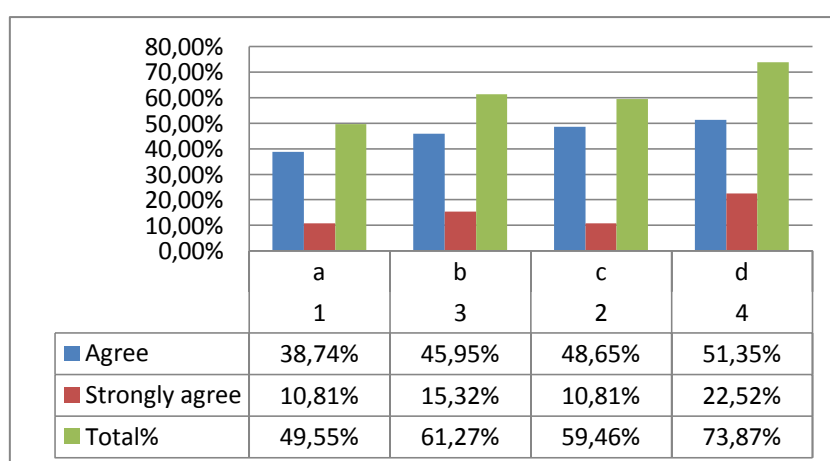


Diagram21: Classification of the 3rd Year SS learners' Difficulties in Doing the Textbooks' PWs

Diagram 21 above show the classification of the difficulties encountered by the respondents to conduct PWs that are suggested in the textbooks in a decreasing order from 1 to 4. The order is as follows:

- 1 —→ a- You do not have any knowledge about the topic (49, 55%)
- 2 —→ c- You cannot distinguish between the most important and the least important information (59, 46%)
- 3 —→ b- It is difficult to read texts in English to find out the necessary information (61, 27%)
- 4 —→ d- It is difficult to write and explain your project in English (73, 87%)

Item7. It is easier to conduct projects in English when you use only your knowledge and experience, such as describing your family, your favourite sport(s) etc

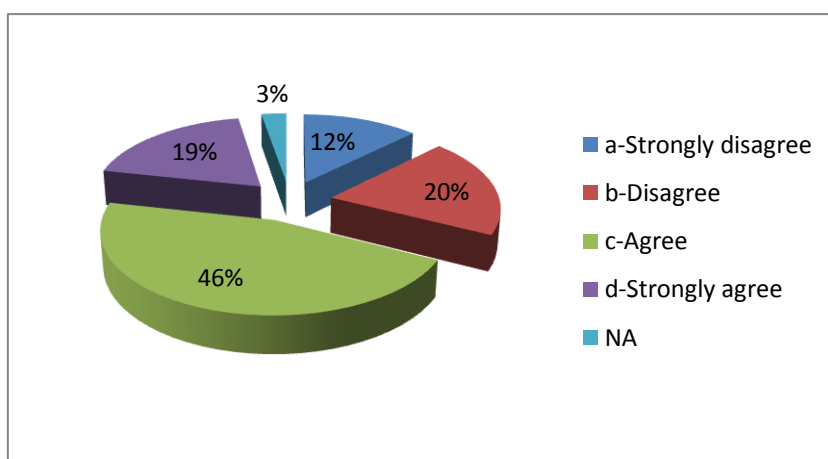


Diagram22: 3rd Year SS Learners' Attitudes towards PWs that Require the Use of Personal Knowledge and Experiences

The majority of the participants (46% agree and 19% strongly agree) think that it is easier to conduct projects that only require from them to use their own knowledge and experiences about the topic, diagram 22 above. Some of them consider that such projects are not easy (12% strongly disagree and 20% disagree).

Item8. It is difficult to conduct English language projects that require a lot of reading and writing

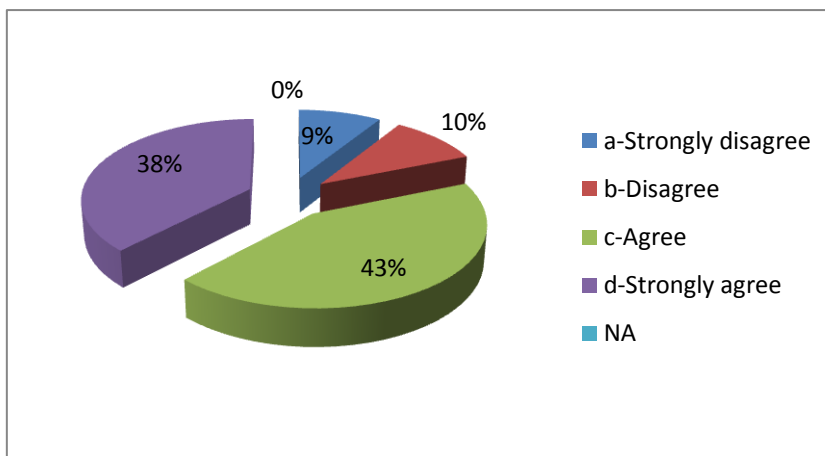


Diagram23: 3rd Year SS Learners' Attitudes towards PWs that Require a lot of Reading and Writing

The results displayed in diagram 23 above clearly show that the biggest majority of the participants, 43% agree and 38% strongly agree, think that PWs that require a lot of reading and writing are difficult. A small percentage of them, 10% disagree and 6% agree, think that those projects are not difficult.

Item9. Most project works in the three secondary school English language textbooks are difficult

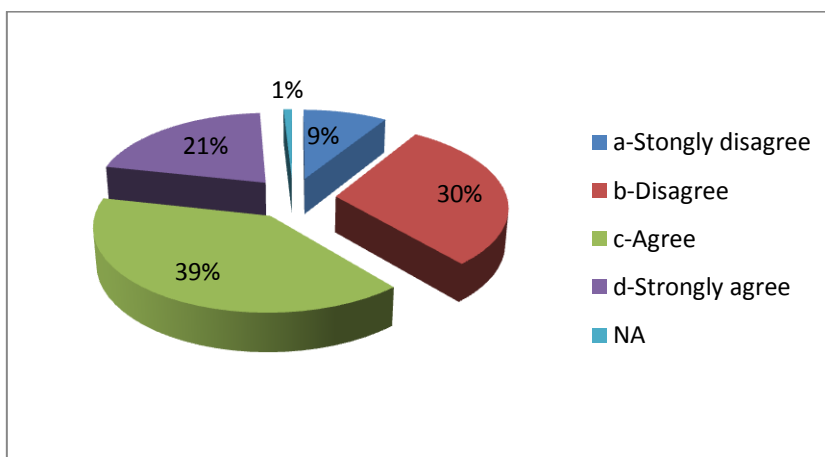


Diagram24: 3rd Year Learners' Attitudes towards the Difficulty of PWs in the SS Textbooks

Results of item 24 of the questionnaire, diagram 24 above, reveals that the majority of the respondents, 39% agree and 21% strongly agree that PWs that are suggested in the SS textbooks are difficult. Some of them think that they are not difficult (30% disagree and 9% strongly disagree).

Item10. Most project works in the three secondary school English language textbooks are easy

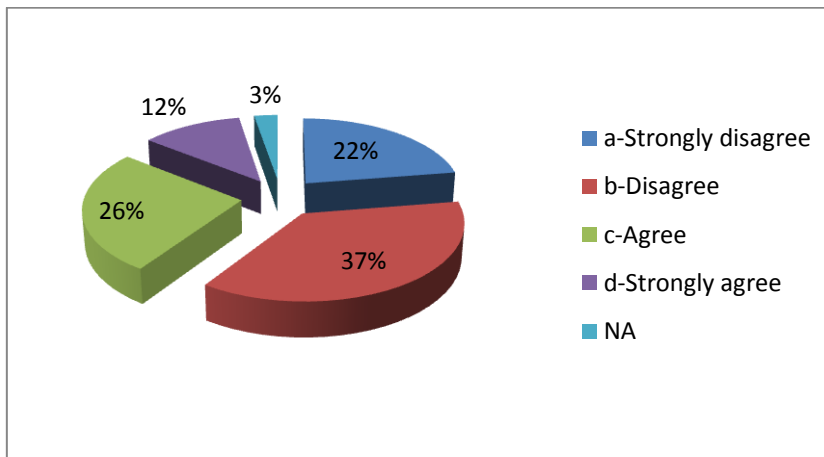


Diagram25: 3rd Year SS Learners' Attitudes towards the Easiness of PWs in the Textbooks

The majority of the respondents (37% disagree and 22% strongly disagree), as it is shown in diagram 25 above, do not agree with the statement that PWs in the SS textbooks are easy. Some of them think that they are easy (26% agree and 12% strongly agree).

Item11. Projects in *Getting Through* are more difficult than projects in *At the Crossroads* and *New prospects*

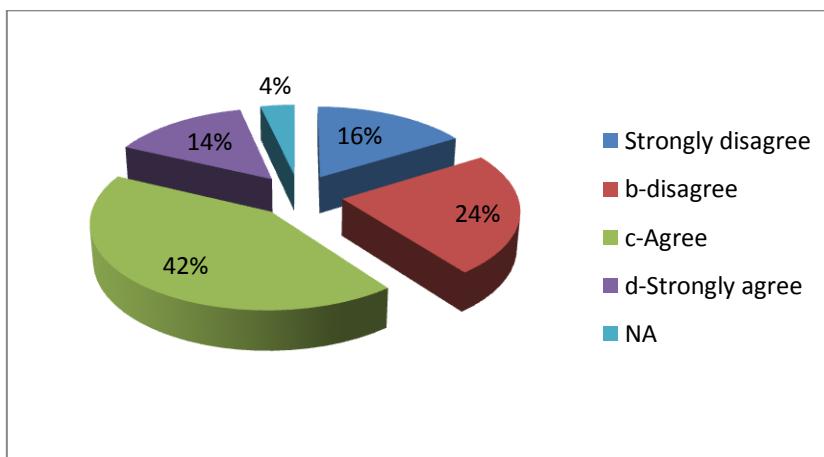


Diagram26: 3rd Year Learners' Attitudes towards PWs Difficulty in *Getting Through*, *At the Crossroads*, and *New Prospects*

Diagram 26 above shows that the majority of the respondents agree with the idea that PWs in GT are more difficult than projects in ACR and NP (42% agree and 14% strongly agree). Others, however, do not agree (16% strongly disagree and 24% disagree).

Item12. Rank the following project topics from the secondary school textbooks of English, in order of difficulty, from 1 to 6 (1= the easiest, 6= the most difficult):

- a- Write a collection of stories
- b- The ABC dream
- c- Write a booklet of tips for coping with emotions
- d- Write a book review
- e- Making a survey on the impact of advertizing
- f- Making a job application booklet

Results of question 12, table 34 bellow, show that the majority of the participants classify propositions *a*, *b*, and *c* in the first positions whereas propositions *d*, *e*, and *f* came in the last positions. Diagram 27 bellow shows clearly the classification of the projects from the easiest to the most difficult.

		N1	N2	N3	N4	N5	N6	NA
Q13a	N	2	0	3	5	28	58	15
	%	1,80%	0,00%	2,70%	4,50%	25,23%	52,25%	13,51%
Q13b	N	46	23	21	5	0	1	15
	%	41,44%	20,72%	18,92%	4,50%	0,00%	0,90%	13,51%
Q13c	N	27	29	20	18	2	0	15
	%	24,32%	26,13%	18,02%	16,22%	1,80%	0,00%	13,51%
Q13d	N	0	2	1	14	51	28	15
	%	0,00%	1,80%	0,90%	12,61%	45,95%	25,23%	13,51%
Q13e	N	7	14	18	41	12	4	15
	%	6,31%	12,61%	16,22%	36,94%	10,81%	3,60%	13,51%
Q13f	N	13	30	33	12	5	3	15
	%	11,71%	27,03%	29,73%	10,81%	4,50%	2,70%	13,51%

Table 34: 3rd Year SS Learners' Classification PWs in the Textbooks in Terms of Difficulty

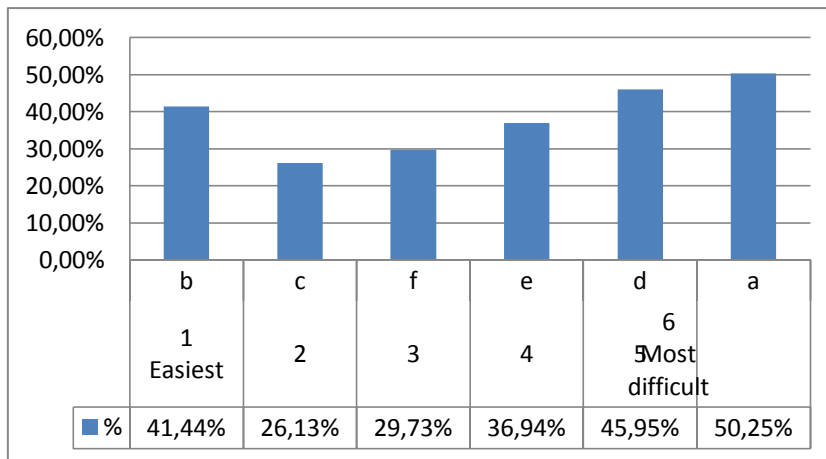


Diagram27: 3rd Year SS Learners' Classification of the PWs in Terms of Difficulty

The results of the participants' classification of the projects, then, can be summarized as follows:

- 1 → b- The ABC dream (41, 44%)
- 2 → c- Write a booklet of tips for coping with emotions (26, 13%)
- 3 → f- Making a job application booklet (29, 73%)
- 4 → e- Making a survey on the impact of advertizing (39, 94%)
- 5 → d- Write a book review (45, 95%)
- 6 → a- Write a collection of stories (50,52%)

Item13. To conduct the projects that are suggested in the secondary school English language textbooks, you obtain the information by (You may tick more than one):

- a- Relying on what you know about the topic ☐
- b- Reading books/magazines ☐
- c- Using internet sources ☐
- d- Asking other people (parent, teacher...etc) ☐

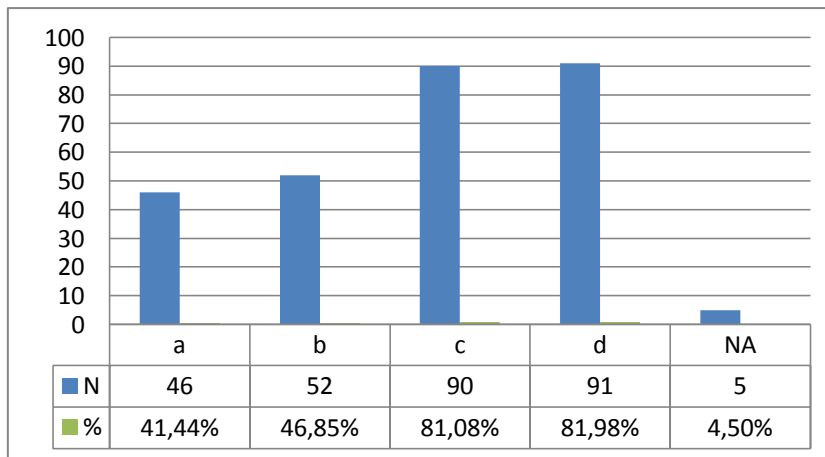


Diagram28: 3rd Year SS Learners' Ways to Obtain Information to do PWs Suggested in the SS Textbooks

Learners' answers to item 13, diagram 28 above, reveal that they use different sources to obtain information to do their projects. They use their own knowledge about the topics (41, 44%) , read magazines and books (46, 85%), use different internet sources (81, 08%) and ask other people (81, 67%).

Item14. What is the most difficult task you have to do when conducting a project in the English language? (You may tick more than one)

a- Find the information ☐

b- Select appropriate information ☐

c- Summarize the information using your own words ☐

d- You cannot present your project in English in front of other learners ☐

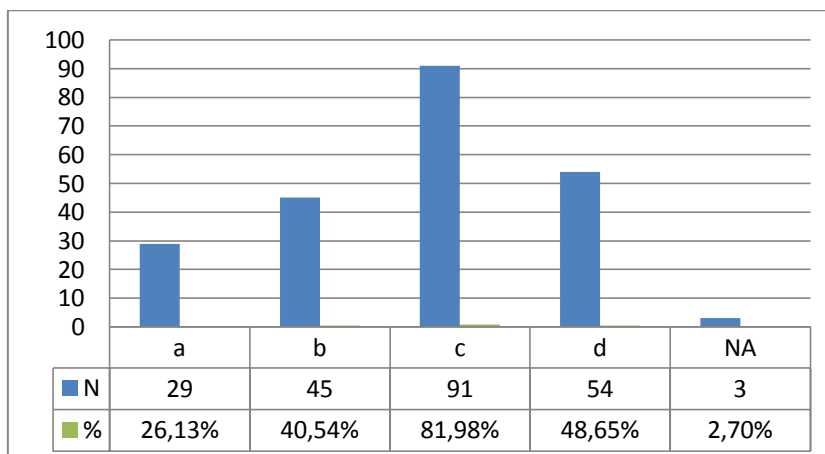


Diagram29: 3rd Year SS Learners' Difficulties in Doing PW

Diagram 29 above clearly shows that the participants encounter different types of difficulties while doing PW. It seems that the most difficult task for them is summarizing the information using their own words (c), with 81, 98% of the learners. This is followed with the difficulties in presenting their projects in front of their classmates (d), with 48, 65%. Many of them also seem to have difficulties in selecting appropriate information for their projects (b). Only 26, 13% affirm that it is difficult for them to find out information necessary to conduct their projects (b).

8.2. Discussion

Results of the analysis of 3rd year SS learners' answers to the questionnaire items provide important results about learners' attitudes towards PW in EFL learning in general and projects that are suggested in the Algerian SS textbooks, namely, *ACR*, *GT*, and *NP*. The results, in fact, have shown that the majority of the 3rd year SS learners, on the one hand, think that doing PW in EFL classes is interesting. On the other hand, the biggest majority of them agree that doing PW in EFL is a difficult task. The results have also clearly shown that the majority of the participants agree that carrying out projects in EFL enables them to acquire, the English language, content knowledge about their projects' topics and use language to express their thinking skills (see learners' answers to item 4 of the questionnaire in the results chapter).

The participants' answers to items 7 and 8 (see results chapter) clearly show their agreement with the idea that PWs that are based on experiential learning are easier and those requiring from them to rely on expository means as both input and output are (mainly through reading and writing) are more difficult. As for the type of difficulties that the learners' face when dealing with PW, answers to item 14 (see results chapter) reveal that while important numbers of the participants have problems with selecting appropriate information and presenting their projects in English, the biggest majority of them have problems with summarizing information using their own words. The latter confirms learners' difficulty in dealing with projects requiring

expository ways of learning. Indeed, in summarizing information using their own words, learners need an important knowledge and mastery of the English language both to comprehend the information while reading and summarize and write their findings using their own words.

As concerns the projects that are suggested in the SS textbooks, the majority of the respondents have confirmed that they are difficult to conduct. They also affirm that their difficulties in doing these projects are mainly related to the lack of the mastery of the English language and thinking skills that are expressed through language. In fact, the majority of the participants agree that they have problems in reading texts in English to find out information about the projects' topics and write and explain their projects to others using the English language. The majority of them also agrees that they cannot distinguish between the most important and the least important information in doing research about their projects. Concerning the ways learners obtain information for these projects' completion, the biggest majority of them confirm that they use different sources from the internet and ask other people. Only a minority of them affirm that they rely on their personal knowledge. In other words, PWs in the SS textbooks require more expository rather than experiential ways of learning. This can also be a reason for which learners consider these projects difficult.

As for the type of language proficiency that SS projects target, learners' answers to question 5 (see results chapter) show that the majority disagree that projects in the textbooks target to teach them language they need to write SMS to a friend or relative/talk to people in an English speaking country. The biggest majority, however, agrees that these projects aim at teaching them language necessary to understand different types of texts (scientific, literary...) and language they need to do school work. In other words, PWs in the SS textbooks, according to them target CALP rather than BICS. Furthermore, learners' classification of some of the suggested projects in the textbooks (see answers to item in the results chapter), in terms of difficulty, clearly shows that those projects targeting BICS are considered to be the easiest, they

are classified in the first positions. CALP types are classified in the last positions. They have classified “the ABC dream” as being the easiest and “write a collection of stories” as being the most difficult.

Learners’ opinions about the difficulty involved in the PWs in the three textbooks have revealed that the majority agrees that projects in GT are easier than those in ACR and NP. This might be explained by the fact that GT contains more BICS projects than the other textbooks.

Conclusion

3rd year SS learners’ answers to the questionnaire items have shown that they agree that doing PW in EFL classes is interesting. They also agree that doing PW in EFL classes, in general, and PWs that are suggested in the SS textbooks is difficult. The majority of the respondents confirm that doing PW in EFL enables them to acquire language, content and thinking skills. The participants confirm that PWs that require experiential ways of learning are easy, and the biggest majority affirms that projects that require expository ways of learning are difficult. As for the type of difficulties they encounter when dealing with PWs that are suggested in the textbooks, the participants affirm to have problems that are related to language and thinking skills which are mainly expressed through language.

Concerning the type of language proficiency that the projects in the SS textbooks target, the majority of the learners disconfirm that they target to teach BICS and the biggest majority affirms that they target CALP. Besides, learners’ classification of PWs in terms of difficulty confirms that PWs that aim to integrate BICS are easier and those integrating CALP are more difficult. The completion of the projects that are suggested in the SS textbooks require, according to the majority of the learners, expository ways of learning. The following chapters consists in an attempt to interpret the results obtained from both data gathering tools, PWs analysis and the questionnaires.

Part Three

Discussion of the Results

Chapter9. Discussion of the Integration of Language, Content and Thinking Skills into PW in the Algerian EFL Education

Introduction

This chapter aims at discussing the findings obtained from the analysis of both PW integration in the Algerian MS and SS EFL textbooks and 4th year and 3rd year SS learners' answers to the questionnaires items. These findings are discussed in the light of research in SLA, psychology of child language development, and educational psychology. It also aims to provide answers to the research questions and confirm or disconfirm the hypotheses put forward in the general introduction. The chapter starts by discussing the type of language proficiency (BICS/CALP) that PWs in these textbooks target, mainly from the cognitively oriented point of view. Then, it moves to discuss the integration of language, content and thinking skills in relation to the learners' proficiency level in EFL and their cognitive abilities. Next, it considers the issue of gradation in the integration of language, content and thinking skills into EFL PWs under study. Finally, it discusses the role of linguistic input and cognitive development of the learners in the integration of language, content and thinking skills into these projects

9.1. The Conception of Language Proficiency in the Algerian EFL PW: Holistic Vs. Multifaceted Conception of Proficiency

The intent to integrate language, content and thinking skills into the Algerian MS and SS EFL PW does not seem to distinguish between the two types of language proficiency, namely, BICS and CALP. The latter are introduced almost at the same time in the MS PWs and the SS projects are, almost all, of the CALP type and ignore BICS. Therefore, the designers of the Algerian EFL PW are likely to advocate a unitary or holistic conception of language proficiency. That is to say, they do not seem to make it clear which language skills and competencies should be fostered through PW at which level (s) and in what rate. The analysis of the PWs that are suggested in the textbooks reveal that projects that target CALP are introduced in the textbook designed for 1st year MS learners, SEO. And SETW, designed for the 2nd year learners

incorporates the most complex types of projects that are suggested in the MS textbooks (See chapter 5). In other words, projects that are both linguistically and cognitively demanding are classified in quadrant D of the range of communicative tasks in Cummins' (1981a) framework (see chapter two). This finding has been confirmed by both 4th year MS and 3rd year SS learners. The former confirm that PWs in the MS textbooks target both BICS and CALP (see Diagram 5, chapter 5), the latter, while they confirm that PWs in the SS textbooks target CALP, they do not agree that they aim to teach BICS (see Diagram 20, chapter 5).

The unitary or holistic view of what constitutes language proficiency is, in fact, advocated by some scholars like Oller (1978; 1979). He claims that in language learning and testing "there exists a global language proficiency factor which accounts for the bulk of the reliable variance in a wide variety of language proficiency measures" (1978, p. 413. Quoted in Cummins, 1980, p. 41). In other words, Oller's view suggests that there is "one unitary factor underlying all language use" (Quoted in Harsch, 2017, p. 251) (see chapter three).

This conceptualization of language proficiency, however, has been replaced by other multifaceted or multidimensional models (Harsch, 2017). In fact, examples of the models that advocate this view are Palmer and Bachman's (1981) and the Common European Framework of Reference (CEFR) (In Brain, 2000). Palmer and Bachman (1981) claim that language proficiency should be divided into different skills such as, speaking, writing and competencies, such as, linguistic, textual, pragmatic...etc. The CEFR has suggested a framework of language proficiency containing six levels (A1, A2, B1, B2, C1, C2) to replace the previously known level under the names of *elementary*, *intermediate*, and *advanced* levels. The six levels of proficiency in CEFR are arranged from the ability to use simple and isolated words (A1 level) e.g. use some basic greetings and yes and, no, excuse me, please, thank you, sorry....etc, to mastery (C2 level). That is, "the degree of precision and appropriateness and the ease with the language which characterises the speech of those who have been highly successful at learning the language" (In

Brain, 2000, p. 271). This ability is shown in great flexibility reformulating ideas in differing linguistic forms to give emphasis, to differentiate and to eliminate ambiguity (ibid).

The issue that is raised in the multidimensional view of language proficiency, according to Carroll (1983), is the speed at which all the skills that make language proficiency are achieved and whether they are all reached at the same time. "In asking the question of how language skills are "organised" one is really asking whether all skills are attained together, at the same rates, or attained separately, at different rates" (Carroll, 1983, p. 83. In Brain, 2000, p. 116). Therefore, Cummins' (1981a) distinction between BICS and CALP, we believe, can be inscribed in the same line of thought. He claims that the two types of language proficiency are not attained at the same time and at the same speed. BICS comes before CALP and is achieved earlier. Cognitive demand and contextualization are two criteria that determine the order and speed of the acquisition of these two types of language proficiency (see chapter two). This might be the reason for which the majority of the 4th years MS and the 3rd year SS learners find doing PWs that are suggested in the MS and SS EFL textbooks difficult (see Diagrams 9, 10, 24, and 25). In fact, Algerian EFL learners, especially in the MS, are not allotted enough time to acquire BICS before introducing projects that aim to teach CALP.

Furthermore, a more recent research on language proficiency, namely Hulstijn (2015), suggests a dichotomy of basic and higher language cognition or Basic Language Cognition (BLC) and Higher Language Cognition (HLC). The latter is similar to Cummins' distinction between BICS and CALP, respectively. The BCL-HLC distinction postulates that literacy skills (reading and writing) acquisition belongs to the scope of HLC. It is achieved only by individuals who have attained higher levels of education and who have had practice in reading and writing over an extended period of time (Hulstijn, 2015). BLC, according to Hulstijn (2015), is part of Core linguistic cognition or proficiency. It includes unconscious knowledge of phonetic, phonological, morphological and syntactic forms of the language, and conscious knowledge, in

the lexical area, of the form-meaning relations. As for HLC, it falls within both core and periphery language proficiencies. It includes the ability to interact which is not specific to any language, strategic competence, metalinguistic knowledge, and knowledge of discourse features (written and spoken).

Yet, the analysis of PWs in both MS and SS textbooks has shown that projects that require reading and writing in EFL (expository ways of learning) are introduced very early for the MS learners, in SEO. It has also revealed that almost all the projects in SS textbooks depend on reading and writing for their completion (chapter 5). Besides, results of the analysis of the questionnaires to both MS and SS learners show that the majority of the 4th year MS and 3rd year SS learners agree that projects that require experiential ways of learning are easy and those that require expository means are difficult.

Cummins (1981a) and Hulstijn (2015) view differently the relationship between the two types of language proficiency, BICS and CALP; BLC and HLC, respectively. While Cummins (see chapters two and three) considers it as being continuous, Hulstijn views it as a dichotomy. Yet, the two models agree that the acquisition of the two types of competency is a gradual one. In this sense Hulstijn, (2015, p. 23) claims that “...for each individual L1 and L2 learner, the acquisition process itself, i.e., the development of language proficiency, is gradual and this is true for both the acquisition of BLC and the acquisition of HLC”.

Therefore, projects in the early years of EFL learning should target BICS. This would enable learners to develop elementary and simple language skills and competences before introducing them to the complex ones. Actually, all the above mentioned language proficiency models, whether cognitively oriented (Cummins, 1981a; Hulstijn, 2015) or not cognitively oriented (CEFR; Bachman and Palmer), seem to agree that language proficiency includes different dimensions which range from the simplest to the most complex. Obviously, they cannot all be developed at the same time in EFL learners, especially for the beginner ones. So,

introducing PWs that target CALP should be delayed until learners acquire enough basic language competence and skills. This is because of the linguistic and cognitive complexities involved in CALP projects.

However, the analysis of PWs in the Algerian MS and SS textbooks, and both MS and SS learners' answers to the questionnaires have provided evidence that the integration of projects that target BICS and CAPL into the textbooks is not gradual. Results of the analysis of the MS textbooks' projects has shown that projects in SEO and SETW are more difficult than those in SETH. ESO and SETW contain both BICS and CALP projects, SETH includes only BICS ones. It has also been found that projects in SETW involve the same degree of difficulty as those in OM (see section 1 of chapter 5). The analysis of projects in the SS textbooks has revealed that GT includes the easiest and the most difficult projects in the three SS textbooks (see section 1 of chapter 5). Moreover, 4th year MS and 3rd year SS learners' answers to the questionnaire items confirm these findings (see Diagrams 11, 12, and 26).

Arguments against Cummins (1981a) and Hulstijn (2015) claim that L2 proficiency should be developed gradually can be founded on the fact that L2 learners might transfer their knowledge of their L1 to conduct linguistically and cognitively complex projects (CALP projects). However, research has shown that successful transfer of these skills from L1 to L2 is conditioned. Hulstijn (2015) claims that reading and writing in formal genres, which are vital in conducting CALP projects, requires metacognitive knowledge of these genres in both L1 and L2:

... given the fact that reading and writing of more formal discourse requires insight in and at least some explicit knowledge of the formal features of various types of genres (e.g., a business letter, a brochure for hospital patients, an advisory report to the town council), it is not surprising that metacognitive knowledge of these genres (even when there are different genre conventions in L1 and L2) is associated to both L1 and L2 literacy (Hulstijn, 2015, p. 131).

Hulstijn, (2015) has reviewed a body of research on the issue of the effects of L1 literacy skills on the acquisition of L2 literacy skills. It seems that there is an agreement among these researches that this effect can be positive on a condition that the L2 learners have some mastery

of the L2. Goodman (1971) claims that reading in L2 requires the transfer of skills from L1. Yet, reading in the L2 remains difficult for students who do not have a mastery of the grammatical system of the target language. In the same vein, Clarke (1979) argues that a student can be a good L1 reader but poor in L2 reading due to his/her lack in L2 knowledge. Alderson (1984) has concluded that “both L1 reading ability and L2 language knowledge affect L2 reading comprehension, but that L2 language proficiency has a stronger influence at lower levels of L2 proficiency, i.e. below a threshold of L2 knowledge” (In Hulstijn, 2015, p. 117). (Cummins, 1991a) has shown that the transfer of literacy skills from L1 to L2 can be beneficial only when the two languages have the same writing systems and rhetorical conventions (ibid). Cummins’ (1980) Interdependence Hypothesis in bilingual education is also inscribed in the same sense. It claims that there is interdependence between cognitive skills or unified dimension in L1 and L2 and that the development of L2 proficiency is partially the result of L1 development. This transfer, however, is possible only in case enough and the same amount of exposure to the two languages. “...it is predicted that to the extent that instruction in LX is effective in promoting cognitive/ academic proficiency in LX, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment)” (Cummins, 1980, p. 180).

Indeed, MS and SS learners’ answers to the questionnaires items (see diagrams 8 and 23) show that they find projects that require a lot of reading and writing in English difficult. Even though the participants in this study have had important experiences in reading and writing in other languages, such as Arabic which is the language of instruction for the participants for 9 years for the 4th year MS learners and 12 years for the 3rd year SS learners. Their difficulties in reading and writing in EFL, then, might be related to the differences in the rhetorical conventions between these languages and the lack of exposure to English, which is a foreign language in Algeria.

9. 2. The Algerian EFL Learners' Minimum Proficiency Level as a Criterion for the Integration of Language, Content and Thinking Skills into PW

CAPL, as seen above, is introduced to the Algerian EFL learners as early as the first year of the MS. Ten out of the twenty-two projects are classified in Quadrants B and D of Cummins (1981a) for the range of task complexity. Quadrant D projects are introduced in projects of SETW and OM, second and fourth year of EFL learning, respectively. It represents the most difficult category of tasks in Cummins' model (see chapter two). Our analysis of the three SS textbook projects also reveal that eighteen out of twenty-two projects are classified within the same Quadrant, D.

It seems that the PW designers have integrated projects that target CAPL, which are both linguistically and cognitively demanding, before having the learners exposed to and learn enough conversational everyday English, namely BICS. In other words, learners, while carrying out these projects, are required to use literacy-related language skills like reading texts, writing and using conceptual knowledge to carry out their EFL projects before they had enough time to learn the basic phonological, lexical, and semantic language skills. Cummins (1980; 2008), (see chapters two and three), claims that this is one the most significant sources of difficulties that learners encounter when learning English as an additional language. It has also been found from learners' answers to the questionnaire items that introducing PWs that aim at CAPL is the reason behind learners' difficulties in conducting PW (see diagrams 13 and 27). In fact, both MS and SS learners answers show that BICS projects, that are less linguistically and cognitively demanding, are classified as the easiest and CAPL projects that are more linguistically and cognitively demanding are considered as being the most difficult. Moreover, both MS and SS learners' answers have confirmed that projects that require more literacy-related skills, mainly reading and writing in the English language, are difficult (see diagrams 8 and 23).

The integration of language, content and thinking skills into PWs under study does not seem to consider the English language proficiency level of the learners. This is explained

through the integration of projects targeting CALP almost simultaneously as projects aiming at BICS. This may result in negative effects on the learners' development of cognitive and linguistic skills. As Cummins (1981a) and Chamot and O'Malley (1983) (see chapter two) claim, the difference between CALP and BICS lies also in the degree of cognitive demand required for each of them. In fact, CALP calls for HOTS at both levels of thought and language. Therefore, learners' inability to manage the linguistic difficulties required for CALP leads to learners' failure to conduct projects requiring HOTS of analysis, evaluation and creation. The latter involve complexity and difficulty of the cognitive operations and the language necessary for their expression. Indeed, both MS and SS learners confirm that their difficulties in dealing with PWs that are suggested in the Algerian MS and SS EFL textbooks are related to both linguistic and cognitive complexities of these projects (see diagrams 6 and 21).

Consequently, the simultaneous introduction of BICS and CALP PWs for the Algerian EFL learners shows that the designers of projects in the textbooks under study have not considered the threshold level of linguistic competence of the learners. The latter being taken into account might help learners avoid cognitive difficulties and benefit from the cognitive advantages of EFL learning (Cummins, 1976). (See chapter three). Furthermore, lack of language proficiency does not help learners to deal with PWs targeting HOTS (CALP) because language is a means to express this level of intelligence (Cummins, 1976) (See chapter three). In fact, the Algerian MS and SS learners affirm that they find it difficult to distinguish between the most and the least appropriate information for their projects' completion and it is difficult for them to summarize information using the English language (see diagrams 6, 15, 21, and 29).

The simultaneous integration of BICS and CALP projects does not allow time necessary for learners to acquire minimum language proficiency in EFL (threshold level). Therefore, learners' fail to conduct PWs and hence language learning and demotivation. In fact, in ESL contexts, Cummins (1982) (see chapter three), claims that learners acquire BICS after

approximately two years of exposure to the target language, whereas the acquisition of the cognitive and linguistic demands needed for academic success takes around five years. In another study, Hakuta et al. (2000) has investigated the length of time needed for learners to acquire BICS and CALP in different localities in the United States of America. The researcher came to the conclusion that learners need about four to five years of exposure to English to become proficient in BICS and about four to seven years to achieve proficiency level in CALP. This variation depends on the socioeconomic background of the learners. This might also explain the reason for which the biggest majority of the participants in our study, MS and SS learners, find doing PWs that are suggested in the textbooks difficult (see diagrams 9 and 24)

In EFL contexts, therefore, one has to assume that the development of the two types of language proficiency takes either the same amount of time or longer. This, indeed, we believe, is due to the differences between ESL and EFL environments. In fact, if in an ESL context (for example ESL immigrant learners in Canada and USA described by Cummins (1981b) and Hakuta et al. (2000), respectively, it takes between two years and seven years to achieve BICS and CALP, respectively, then it takes longer for a learner in an EFL context like Algeria. Unfortunately, no research has been conducted to find out about the time required to achieve both types of language proficiency in such contexts. Our assumption, however, is based on the basic features distinguishing the two contexts, ESL and EFL. Of course, the former presenting more advantages for learners to pick up the language in a shorter period of time than the latter. The distinction between ESL and ELT settings is summarized by Brown (2001, p. 116) as “a continuum of contexts ranging from high-visibility, ready access to the target language outside the language classroom to no access beyond the classroom door”. In other words, in second language settings, example of English as a second language classroom, the language of the classroom (English) is available in the society (streets, stores...). However, in English as a foreign language context, for instance, teaching English in Algeria, students do not have

opportunities for the use of English outside of the language classroom. Learners in these contexts are exposed to English through, for instance, media, books, language clubs, internet etc. (ibid). Therefore, considering the differences between the two contexts, in EFL settings, tasks or projects should encourage learners to acquire and use the language. Learners need to have a clear, visible and compelling objective; have English language built into the topic of the activity, not too cognitively demanding to manage in English, and should be interesting to the learners (Krieger, 2005).

Introducing PWs that target CALP early for the Algerian MS learners does not consider the relationship between the learners' language proficiency level and their cognitive development. By the age of 11-12 years (first and second year of the MS), learners, in fact, reach formal operational thinking or hypothetico-deductive reasoning (Piaget, 1964). (see chapter three). Yet, reaching this level of thought is not the unique condition required for the integration of CALP PWs for beginner EFL learners. CALP PWs that deal with complex abstract contents and formal operations (HOTS of analyze, evaluate and create) require complex and abstract language for their expression. Indeed, Piaget (1963/1972) claims that even though language is not a necessary condition for the development of formal propositional thought, its mastery remains vital for the expression of this kind of thinking (see chapter three).

To illustrate the problem of the inadequacy of language proficiency level of the Algerian beginner EFL learners and the type of thinking skills they are expected to acquire and express through the English language, consider projects 4 and 5 in SETW (see chapter 5, section 2). These projects target CALP. They both require creative use of the English language to write a strip cartoon and a stage play.

Conducting such projects requires high level thinking skills, namely creativity, and mastery of the language. While, in fact, learners might be able to conduct tasks requiring the use of these mental operations in a more familiar language, or in those that do not require the use of

language because, according to Piaget (1963/1972) (see Chapter three), thinking and language develop separately and language is not a prerequisite for the development of thinking. However, the task is complex when it is based on language as the unique medium to express this intelligence and should be conducted in a language that is less familiar to the learner or having only a very limited knowledge of it. It is at this level that Piaget (1963/1972) argues for the importance of language not only for the expression but also for the development of hypothetico-deductive reasoning. In the same vein, Vygotsky (1986) (see Chapter three), asserts that the entire human consciousness, not only his thinking, is related to the development of words. Therefore, the integration of such CALP projects early for the Algerian MS EFL learners and focus exclusively on such type of projects for the SS learners does not seem to encourage learners to conduct PW and makes the process of EFL acquisition a difficult one because of their (PWs) inadequacy to the language level of the learners. Such tasks require much reading and writing in the target language and also writing. In this sense, Yvonne & Freeman, 2009, p. 91) claim that “while engagement is a key to the development of academic language proficiency, ELLs need to reach a certain level of English proficiency and reading proficiency before they can read books with grade-level content” (Yvonne & Freeman, 2009, p. 91).

This is not to claim, however, that because CALP projects require high proficiency level in the target language should not be integrated for EFL learners. This type of language proficiency is necessary for learners’ school and academic success. Yet, it should be integrated in a way that enables learners to access complex contents, language and the thinking skills involved, and then, their expression in situations that are context-embedded and meaningful to the learners. “...therefore, the target for teaching all students, especially ELLs, should be “Quadrant B” (Yvonne & Freeman, 2009, p. 38). In other words, CALP tasks (QB) require HOTS, academic type of language and content but they are context-embedded, which makes their completion easier than QD tasks.

Therefore, to enable learners to better acquire EFL and develop their thinking skills, integration of language, content and thinking skills through PW should move gradually from the least complex (BICS projects) to the most complex (CALP projects). The former requires working on concrete situations that call for the use of concrete operations or thinking that is related to objects and also concrete language. The linguistic resources of the learners, then, are important to carry out PW that deals with abstract and theoretical content and symbolic functioning (Cummins, 1976; Furth & Youniss, 1971). Inadequate linguistic level hinders learners' expression of their thinking skills. This is, in fact, supported by the MS and SS learners who confirm that their difficulties in dealing with PWs that are suggested in both MS and SS textbooks are related to both their lack of the mastery of language and the use of the latter to express complex thinking operations (see diagrams 6 and 21). The following section is meant to provide more arguments for the gradual integration of PWs that target BICS and CALP in EFL teaching.

9.3. Gradual Integration of Language, Content and Thinking Skills into the Algerian EFL PW: Evidence from Psychological, Educational and SLA Research

Our analysis of the Algerian MS and SS textbooks' PWs has revealed that the integration of language, content and thinking skills into the projects does not consider the principles of sequence and gradation. That is, shifting from the least to the most difficult projects. This is shown in the place given to BICS and CALP PWs. While BICS and CALP projects in MS textbooks are given almost the same importance 10/22 and 12/22, respectively, in SS textbooks BICS projects are almost absent, they represent only 4/22 projects included in the three textbooks. Moreover, non gradual integration of language, content and thinking skills into PWs in these textbooks is also visible through the analysis of the PWs within each textbook and across the textbooks used at different levels.

The analysis of the MS PWs reveals that the BICS and CALP projects are given almost the same importance, except those in SETH which are all of the first type. Besides, projects in

SEO and SETW are more complex than those in SETH. Those in OM are more like those in SETW.

At the SS level, almost all the projects that are included in the textbooks ACR, GT, and NP involve almost the same degree of difficulty. 18/22 projects are classified in the CALP type. All the CALP projects belong to Quadrant D in Cummins' (1981a) framework of communicative tasks. What is most clearly visible in SS projects, and also to a less degree in MS projects, is the absence of Quadrant B projects. Quadrant B projects are important because they enable learners to develop HOTS and acquire content knowledge and language skills demanded for school and academic success in context-embedded situations, which are more easily accessible for the learners than context-reduced ones (Quadrant D projects). Absence of sequence and gradation is shown at the levels of the integration of language, content and thinking skills

- **At the level of the thinking skills**

While LOTS are integrated in all PWs in the seven textbooks under study, with a varied emphasis on some of these skills rather than the others, the integration of HOTS seems to be random. In fact, as tables 35 and 36 below show, while HOTS are totally absent in PWs of SETH, PWs in SETW integrate the highest level of HOTS, namely create. While projects in OM target the highest level of HOTS (create), this skill is not the target of PWs in the first year SS textbooks (ACR) and the third year one (NP). Yet, PWs in GT target all the HOTS of analyse, evaluate, and create (see tables 34 and 35 below).

MS Textbooks' PWs	Thinking skills					
	Remember	Understand	Apply	Analyse	Evaluate	Create
PWs/ <i>Spotlight on English One</i>	+	+	+	-	-	-
PWs/ <i>Spotlight on English Two</i>	+	+	+	+	+	+
PWs/ / <i>Spotlight on English Three</i>	+	+	+	-	-	-
PWs/ <i>On the Move</i>	+	+	+	+	+	+

Table35: Thinking Skills Integration into PWs in the Algerian MS EFL Textbooks

SS Textbooks' PWs	Thinking skills					
	Remember	Understand	Apply	Analyse	Evaluate	Create
PWs/ <i>At the Crossroads</i>	+	+	-	+	+	-
PWs/ <i>Getting Through</i>	+	+	+	+	+	+
PWs/ <i>New Prospects</i>	+	+	+	+	+	-

Table36: Thinking Skills Integration into PWs in the Algerian SS EFL Textbooks

The integration of thinking skills, into MS and SS PW, then, does not seem to account for the principles of hierarchy and culmination in developing learners' thinking skills, (see Bloom (1956); Krathwohl (2002); Helm, (2015) Chapter three), which advocate the shift from the lowest to the highest, hence, from the least to the most complex thinking skills. Besides, the integration PWs that target HOTS (CALP projects), too early, does seem to encourage learners to develop neither their thinking skills nor the language. To be able to carry out such projects, learners need first to acquire enough knowledge and practice of the target language. The integration of thinking skills also ignores the principle of the shift from the tangible to the intangible (concrete to abstract) Bloom (1956) and Piaget (1964) (see chapter three). In fact, language education which is based on Piaget's theory of stage development and learning should "follow instructional approaches that progress from concrete to abstract and employ rich learning experiences that develop cognitive thinking" (Hernández, 2003, p. 137).

The way thinking skills are integrated into the MS and SS textbooks' PWs is not in line with cognitive models of language learning, namely Chamot's (1983) and Cummins' (1981a) (see chapter two). Based on Bloom's taxonomy of the educational objectives, both models claim that ESL language tasks should be introduced to the learners from the most concrete to the abstract, from the least cognitively demanding to the most cognitively demanding. That is, from the least to the most complex or from LOTS required for BICS to HOTS required for CALP.

- **At the level of language and content**

Our analysis of the Algerian MS and SS textbooks' PWs reveal that the latter show no consideration for the principles of sequence and gradation in the integration of language and content. In fact, while all PWs in the Algerian MS textbooks require practical language and content for their completion, projects in SETW and OM call also for the theoretical, in addition to the practical type. Except from projects in SETH that require only the learners' experiences and context-embedded situations to be carried out, projects in the three other textbooks call for, in addition, to learners' experiences and context-embedded situations, a heavy reliance on language or expository means, through reading and writing for their completion and access and use language and content in context-reduced situations (for projects in SETW and OM) (see 37 below).

MS Textbooks' PWs	Language and Content		Learning Situation/ Context			
	Practical Language/ Content	Theoretical Language /Content	Context-Embedded	Experiential	Context-Reduced	Expository
PWs/ <i>Spotlight on English One</i>	+	-	+	+	-	+
PWs/ <i>Spotlight on English Two</i>	+	+	+	+	+	+
PWs/ / <i>Spotlight on English Three</i>	+	-	+	+	-	-
PWs/ <i>On the Move</i>	+	+	+	+	+	+

Table37: Language and Content Integration into PWs in the Algerian MS EFL Textbooks

SS Textbooks' PWs	Language and Content		Learning Situation/Context			
	Practical Language/ Content	Theoretical Language /Content	Context-Embedded	Experiential	Context-Reduced	Expository
PWs/At the Crossroads	+	+	+	-	+	+
PWs/ <i>Getting Though</i>	+	+	+	+	+	+
PWs/ / <i>New Prospects</i>	+	+	+	-	+	+

Table38: Language and Content Integration into PWs in the Algerian SS EFL Textbooks

Therefore, the Algerian MS EFL PWs do not account for the principles of sequence and gradation in the integration of language and content. That is to say, there is no gradual shift from the practical to the theoretical, from experiential to the expository and from context-embedded to context-reduced. Besides, our comparison between projects in the four MS textbooks shows that those in SETH are less complex than those in SETO and SETW. Projects in SETH do require neither context-reduced situations nor expository means for project completion. Yet, PWs in SETW call, at the same time, for both types of language and content, in both situations (contexts) and ways to access information and express it (experiential and expository). In SEO projects are expository. Thus, there is no gradation in the move from the least to the most difficult. 4th year MS learners confirm that PWs in SEO and SETW are more difficult than those in SETH. Students also affirm that PWs in OM involve the same degree of difficulty as those in SETW (see diagrams 11 and 12). Yet, Vygotsky's (1986), research on child's language development, has shown that learning of a language or word meaning evolves from spontaneous to scientific or abstract concepts. And the child's experiences, social mediation together with classroom instruction play a central role in this process. The integration of theoretical or scientific language and content into the Algerian EFL PWs under study does not seem to consider this. Not only the learners at this level have not yet had enough instruction in the target language to help them understand and use scientific/abstract formal concepts in EFL, but they have not also had much experience (exposure to the English language and its use).

The integration of language and content into the SS textbooks' projects shows more or less the same degree of complexity. Indeed, all of the projects require at the same time theoretical and practical language and content, context-embedded and context-reduced situations. However, all the projects in the three textbooks rely heavily on language itself (for reading different material) to conduct the projects. While some PWs in GT and NP require at the same time learners' experiences, those in ACR are exclusively expository (learning from texts).

Therefore, the integration of language and content into SS PW, like the ones in MS PWs, does not tend to move from the least to the most complex. 3rd year SS learners also confirm that PWs in GT are more difficult than those in ACR and NP (see diagram 26). Our analysis has also revealed (see chapter 5) that in SS PWs there is an over emphasis on theoretical language and content, context-reduced situations and expository means of learning rather than practical language and content, context-embedded situations and experiential learning, respectively.

A horizontal analysis of the integration of language and content to PWs in the Algerian MS and SS EFL textbooks has shown that there is a gradual shift from experiential and expository learning to an emphasis on almost exclusively expository ways of learning. It shows also that while MS PWs require mostly practical type of language and content, SS PWs call for, in addition to practical language and contents, a considerably important theoretical one. Yet, considering the way learners should access and express the contents needed to complete the projects, there seems to be no significant difference between MS and SS textbooks' PWs. Whereas one might expect MS PWs to involve context-embedded and experiential based projects, then moving gradually to context-reduced and expository ones in SS projects (see Mohan, 1986; Cummins, 1980; 1982. Chapter two), both MS and SS projects involve context-embedded and context-reduced situations and expository means even though MS PWs require at the same time experiential ones.

However, according to Vygotsky (1986), scientific and spontaneous concepts follow different ways in their development. While scientific concepts move from the abstract to the concrete, spontaneous concepts raise from concrete to abstract. Yet, spontaneous concepts are the basis for the construction of scientific one (Lee, 2005. In Brooks, Swain, Lapkin, & Knouzi, 2010). Scientific concepts in their turn transform the spontaneous ones by making them structured and conscious (Brooks et al., 2010). Without transformation, concepts remain at their initial stage of development. Therefore, effective instruction does not provide direct instruction

in the new concepts, but enables the two types of concepts to interact and transform each other. The ZPD is the place where the two concepts interact. It is at this level of the ZPD that languaging, according to Brooks et al. (2010) plays an essential role in mediating between the scientific and spontaneous concepts in ESL contexts.

Languaging is “a dynamic never-ending process of using language to make meaning” (Swain, 2006, p. 96. In Brooks et al., 2010, p. 90). The concept of languaging as a cognitive tool, according to Swain (2006) refers to “the use of language to mediate cognitively complex thinking such as those involved in understanding new concepts” (Quoted in Brooks et al. 2010, p. 90). Therefore, the concept of languaging as a mediating tool in learning an additional language is a facilitating factor for learners with already developed spontaneous concepts or what Cummins calls BICS in the target language. This, however, might not be beneficial for limited proficiency EFL learners. Therefore, introducing scientific concepts or CALP, in Cummins’ words, for limited proficiency EFL learners makes the process of language and content development complex, because of the role that language plays in the learning of such type of language and content. Accordingly, it is important to introduce, at the beginning stages of EFL learning, language and contents that are more concrete or practical, more context-embedded and experience-based because they make it possible for learners to use paralinguistic cues to access and express meaning.

Swain’s concept of languaging is based on Vygotsky’s relationship between Language and Thought (1986). Vygotsky holds that “the development and functioning of all higher mental processes (cognition) are mediated, and that language is one of the most mediating tools of the mind”. This means, according to Swain (2006), that individual capacity for thinking is related to his/her languaging capacity. There is a dialectical relationship between the two, she continues. Swain uses the term languaging to refer to “the meaning of language as a cognitive tool” (Swain

M, 2006, p. 96). Swain's concept of languaging is based on Halliday's conception of language as a resource. She claims that:

Individuals use language to mediate cognition (thinking). In other words, as we consider the notion of 'advancedness' in language use, it is too simplistic to think of language as being only a conveyer of meaning. Rather we need to think of language as also being an agent in the making of meaning (ibid).

Swain (2006, p. 97) means by languaging:

When language is used to mediate problem solutions, whether the problem is about which word to use, or how best to structure a sentence so it means what you want it to mean, or how to explain the results of an experiment, or how to make sense of the action of another, or ... that languaging occurs (2006).

Therefore, Swain considers languaging as “a vehicle through which thinking is articulated and transformed into an artifactual form” (ibid). In other words, languaging is “the process of making meaning and shaping knowledge and experience through language” (ibid, p. 98).

In ESL contexts, languaging is a way of learning language at an advanced level. This means that, in using language to learn about language “more proficient students do this more effectively than less proficient ones” (Qi & Lapkin, 2001. Quoted in Swain, 2006, p. 98).

So, languaging mediates learners' understanding and use of abstract language and contents required for CALP projects. i.e. language is a tool that enables learners to access and use abstract and theoretical language and content, which also call for the use of HOTS. However, the issue that might be raised here is the extent to which beginner EFL learners can succeed in conducting this type of projects (CALP) which rely on language as the main tool to both access and express theoretical and abstract language and contents and also the HOTS that go with the latter.

In the Algerian MS and SS EFL PWs understudy, learners are required to use the English language as a resource for content learning, learning from texts or other sources; and expression, or using language to report their findings in their PWs in both oral and written forms. In other words, language is fundamental to carry out most of PWs understudy. Additionally, the latter also imply the learning of English language as an object. Indeed, conducting CALP projects

which means, as already seen, working with abstract contents, language and the use of HOTS, implies also, to use Swain's (2006) concept, languaging. In other words, to vehicle all those abstract contents needed for their projects completion, learners need to use the English language to discuss and find appropriate language forms and structures to achieve this aim. Furthermore, working on CALP PWs also means predicting meanings of concepts (scientific, abstract, and technical), from their contexts. Of course, predicting concept meaning from its context requires a high mastery of the English language. Therefore, conducting CALP projects by limited proficiency EFL learners hinders the process of its learning rather than facilitating it.

8. 4. The Role of Linguistic Input and Cognitive Development

The integration of CAPL PWs into the Algerian MS EFL PWs, as already seen, is as early as the first year of the learning of the English language. Projects requiring the use of the highest mental functions (create) and the most complex language forms and functions (writing stories and plays), are introduced in the second year of the MS. We have also seen that almost all SS PWs require more complex thinking skills, more theoretical language and contents, and more context-reduced situation for the acquisition and use of the latter. These findings are significant because they indicate that the designers of the Algerian MS and SS EFL PWs advocate the view that cognitive development determines linguistic development or language acquisition is wholly a matter which is related to the cognitive development of the individual. This standpoint is also referred to as Cognitive Determinism view on language learning Schlesinger (1977, p. 154). This view holds that "the child attains the concepts expressed by language through maturation and interaction with the extralinguistic environment, and subsequently these concepts are associated with their suitable linguistic expression". Therefore, the assumption that when children reach the formal operational stage of cognitive development in Piaget's stage theory of cognitive development (see chapter three) by the age of 11 to 12, they are able not only to understand high mental functions but also to express them through language. The Algerian MS learners are

around the same ages (11-12) in the first and second years of the MS. Therefore, they are supposed, according to this view, to be able to conduct EFL projects requiring HOTS (CALP projects) in addition to the language which is necessary to express this type of intelligence, the required contents (abstract or concrete) for these PWs completion.

This view is advocated by research based on Piaget's theory, which seeks to investigate the relationship between cognitive maturity and language development. Among these studies, Sinclair has shown that there is a correlation between the language used by the child and his/her level of cognitive development (In Piaget & Inherder, 1966/1992, p. 71).

And those children cannot use language related to express some logical thinking before they reach formal operational stage. For instance, children who have acquired the concepts of conservation and seriation can use language to express comparative forms like '*one thing has or is more than another*'; differentiated properties, such as, '*this is large*', but '*this is long and this is fat*' and contrast, for example, '*this one has less in it but it is bigger*'. Whereas those who have not yet mastered these concepts can use language only to talk about differentiated terms, they can less easily be taught to use comparatives. But it is impossible to teach them how to use language to contract (Sinclair de Zwart, Hermine, 1969. In Halliday, 1978). In other words, children who have mastered these concepts differed in the way they use language from those who have not mastered them. In this view, then, language development depends on the development of logical operations. Slobin (1973) clearly explains the relationship between cognitive growth and linguistic development in the Piagetian sense "it is possible, then, to trace out a universal course of linguistic development on the basis of what we know about the universal course of cognitive development" (Slobin, 1973, p. 242).

The designers of the Algerian EFL PW, therefore, seem to ignore the role of linguistic input or linguistic experiences and exposure to the target language which is an important determining factor in the individual's language development. In fact, by contrast to the cognitive

determinism view on language learning, proponents of the Linguistic Input Hypothesis assert that “the child’s linguistic experience accounts for acquisition of concepts underlying language” (Schlesinger, 1977, p. 159). They argue that “there are complexities in language which are beyond those required for expressing the concepts and relations attained by cognitive development” (Schlesinger, 1977, p. 154). Instances of these language complexities are agreement phenomenon and the expression of gender in some languages. Slobin (1973, p. 242) suggests that both cognitive maturity and a mastery of the linguistic complexities are required for language development. “So although one can talk about order of acquisition in terms of semantic or cognitive complexity, there is clearly a point at which formal linguistic complexity also plays a role”. A case in point, according to Slobin, is the acquisition of plural class of nouns in Arabic. This result has been reached in a study conducted by Omar (1973) on the acquisition of Egyptian Arabic. It has been found that even older learners, about 15 years-old, made errors in the use of plural nouns in Arabic. The reason behind this, according to this study, is due to the complexity of plurals in Arabic in which the largest number of nouns are irregular (Slobin, 1973).

The results of both 4th year MS and 3rd year SS learners’ answers to the questionnaire items (see diagrams 17 and 24) have shown that they find doing PW difficult. Furthermore, their classifications of PWs in terms of difficulty confirm that projects that target CALP are the most difficult. Their answers have also revealed that difficulties in carrying out these projects are mainly related to the mastery of the English language and the use of the latter to express higher mental functions (see diagrams 13 and 21). Therefore, in spite of the learners’ cognitive maturation, considering their ages, they are capable of formal operational thinking which enables them to engage in abstract thought (Piaget, 1964) (see chapter three), they are not capable of dealing with CALP PWs. The reason, as seen above, is related to their inadequate level in EFL. This confirms Schlesinger (1977) claim above that there are complexities at the level of a

language which are beyond the cognitive development of the adolescent. Therefore, language development does not depend only on the development of logical/formal operations. It depends also on the learners' exposure to the target language (input).

Conclusion

PWs that are suggested in the Algerian MS EFL textbooks aim to teach both BICS and CALP and both LOTS and HOTS. Those in the SS textbooks target the teaching of CALP exclusively and aim at both LOTS and HOTS. While the integration of language, content and thinking skills into PWs in the MS textbooks and SS textbooks considers the cognitive development of the learners as a criterion for the integration of CALP and HOTS, it does not take account of the learners' EFL proficiency level. It has also been found that the integration of language, content and thinking skills into the MS and SS PWs does not account for the gradual integration of the latter in terms of linguistic and cognitive complexity. Difficulties that MS and SS learners encounter in dealing with projects that are suggested in the textbooks are mainly related to language and the use of the latter to express higher mental functions. Therefore, projects that require HOTS and high command of the language (CALP) are considered as the most difficult type of projects. The following chapter consists in providing suggestion for the integration of language, content and thinking skills into the Algerian EFL PW and explains our suggested alternative framework for the gradual integration of language, content and thinking skills into EFL PW, based on linguistic and cognitive complexities.

Chapter 10: Suggestions for Designing EFL PW to Integrate Language, Content and Thinking Skills

Introduction

The aim of this chapter is to provide suggestions for the integration of language, content and thinking skills into EFL PW. It is divided into two sections. The first one is concerned with providing some suggestions for the improvement of PWs found in the Algerian EFL textbooks. The second section explains and illustrates our suggested project framework for the gradual integration of language, content and thinking skills into EFL PW.

10.1. Suggestions for the Design of PW in the Algerian EFL Textbooks

10.1.1. Introduce PW that Target BICS before the CALP Ones

Based on the findings of this study, from both PWs analysis and learners' answers to the questionnaires, and their interpretation in the general discussion chapter, we suggest that PW in the Algerian EFL textbooks introduce projects that target BICS before the CALP ones. In other words, projects that introduce learners to the type of language they need for everyday life type of exchange and communication, which is needed for socializing, before the language needed for academic achievements, which is needed in the classroom context. Introducing BICS in the first years of EFL learning would allow learners enough time to acquire survival everyday English and basics of the language before learning theoretical and academic type of language (Cummins, 1982). The development of the latter depends on the former. That is to say development of scientific or abstract concepts, which are characteristic of CALP, would not be possible without the development of spontaneous everyday concepts (Vygotsky, 1986). Furthermore, introducing projects that target BICS before the CALP ones is important to ensure gradation. In fact, even though the two types of proficiency are important for EFL learners, they should be differentiated and the shift from the BICS to the CAPL should be gradual (Cummins, 1981; Hulstijn, 2015).

Gradation enables EFL learners to move from the concrete to the abstract (theoretical) type of language and content, hence, from the least to the most difficult both linguistically and cognitively.

10.1.2. Consider the Cognitive and Linguistic Demands of the Projects

Our analysis of the PWs that are suggested in the textbooks has shown clearly that cognitive and linguistic demands of the projects was not a criterion for the integration of language, content and thinking skills into the projects. However, gradual integration of PWs that target BICS and CALP into the Algerian EFL textbooks would allow for a consideration of the cognitive and linguistic demands of the projects. Indeed, projects that aim to teach BICS are less linguistically and cognitively demanding than the CALP one. The first one calls for a concrete type of language and content, which can be comprehended and expressed using either linguistic or non-linguistics resources (context-embedded). The second one requires theoretical or abstract type of language and content. It relies mainly on language as a means to access and express some meaning (context-reduced). Therefore, projects targeting CALP are more cognitively demanding than BICS one because they involve more abstraction. They also require the use of HOTS, while BICS require LOTS. Accordingly, projects that aim to teach BICS should be introduced in the early years of EFL learning because they are less linguistically and cognitively demanding. This would make EFL learning through PW for the Algerian learners easier, more attractive, and more beneficial.

10.1.3. Introduce more Experiential and Context-Embedded Project Topics

Results of this study have also revealed that projects that are suggested in the textbooks, mainly the SS ones, require expository ways of learning for their completion and language and content learning in context-reduced situation. However, this would make the task of language learning through PW difficult for beginner and learners with low levels in English. Therefore, we suggest that projects for the Algerian EFL learners incorporate more experiential and context-embedded situations for language learning. In other words, projects should deal with more topics that are related to the learners' lives and experiences, especially for the MS learners. This type of

projects requires less reading in the English language for their completion. In fact, reading in the English language (expository means of learning in Mohan' (1986) sense is a very difficult task for beginner learners because of their limited knowledge of the English language that does not allow them to understand texts. Projects topics suggested for the MS learners should be context-embedded. In other words, due to the learners' limited knowledge of the English language, projects should deal with topics that enable learners to use non-linguistic resources to understand and express meaning.

10.1.4. Introduce Type B of CALP Projects

The results of this study have shown that many of the CALP projects that are suggested in the MS and most of those in the SS textbooks are classified in the category D of projects. The latter is said to be the most difficult type of language tasks in Cummins' (1981a) range of communicative tasks in ESL in terms of both linguistic and cognitive difficulties. Type B, however, which is considered to be less complex, was almost absent. Types B of CALP projects, like type D allows for the teaching/learning of academic and abstract type of language and content. However, type B teaches it in context-embedded situations. Therefore, type B is less cognitively and linguistically demanding. Consequently, type B of CALP proficiency projects would be more suitable for EFL learners.

10. 2. Project Framework for Gradual Integration of Language, Content and Thinking Skills in EFL

The project framework, that we suggest (figure 10 bellow), accounts for the EFL learners' cognitive growth and their English language proficiency level in the integration of language, content and thinking skills. In fact, it advocates that the three elements should be taught and learnt simultaneously in the process of carrying out PW. However, the targeted language items and structures, the subject-matter knowledge or content and the cognitive skills should account for the learners' proficiency level in EFL and their cognitive growth and abilities.

Consequently, this project framework suggests that language, content and thinking skills should be integrated sequentially and gradually in teaching beginner/low proficient EFL learners. Content and language integration gradually moves from practical to theoretical, from the context-embedded to the context-reduced language and content and from the cognitively undemanding to the cognitively demanding ones. Tasks arrangement should also move from experiential (cognitively undemanding) to expository (cognitively demanding) ones. The cognitive skills integration also ranges from the least complex (LOTS), including *remember, understand and apply*, to the most complex (HOTS) including *analyze, evaluate and create*. The former, refer to the development of communicative and survival language skills (BICS) and the latter refer the academic literacy-related language (CALP).

This project framework is based on Mohan's (1986) KSs framework for the integration of language and content and Cummins' (1981a) ESL proficiency model and his developmental framework for sequencing academic tasks. It is also based on Krathwohl's (2002) taxonomy of cognitive domain of educational objectives. The distinction between theoretical and practical types of discourse goes hand in hand with differentiation between highly contextualized everyday use of language (BICS) and the less contextualized and more abstract uses of language (CALP) (language and content integration on the bottom left part of the project framework). In fact, both discourse types and communication skills, on the project framework, suggest that language and content are arranged sequentially and gradually. This arrangement is based on the degree of abstraction and difficulty involved in the type of the language, communication skills and content knowledge. The project framework shows that practical discourse is associated with everyday interaction in society or face-to-face communication. They both imply the use of concrete language and content that is presented in some real and contextualized situations. This requires a relatively low degree of thinking skills. These are shown on bottom right part of the project framework. They include the LOTS, as suggested by Krathwohl (2002). They consist in

remember, understand and analyze. The latter also reflect the limited use of language to survival purposes.

The project framework suggests that a shift to the other kind of language, communication skills and content, which needs more complex thinking skills, should be gradual (this is shown on the upper part of the project framework). The language and content (left of the upper part) represents the content and language skills that are used for academic performances. They are mainly theoretical and abstract. They are learned in

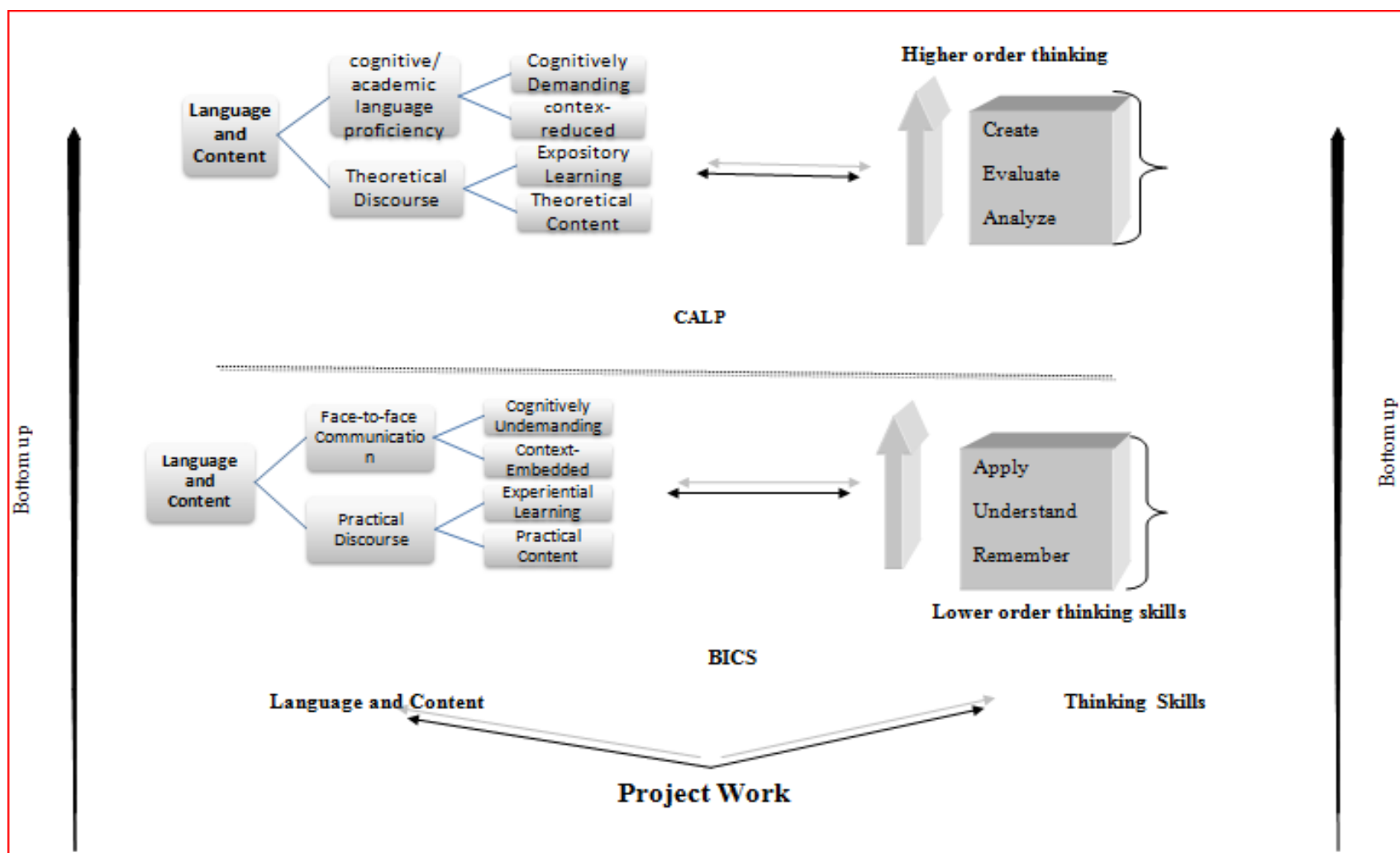


Figure10: Project Framework for Gradual Integration of Language, Content and Thinking Skills

abstract contexts, which rely on language as a main medium to comprehend and express the content. They are more linguistically and cognitively demanding.

In fact, the use of academic literacy-related language calls for the use of more complex thinking skills. These are illustrated on the upper right part of the project framework. They consist in the HOTS, as suggested by Krathwohl (2001). They are analyze, evaluate and create. The use of these skills implies the use of a more complex language used for academic and literacy-related purposes.

The framework suggests that the teaching and learning of academic and literacy-related language/Theoretical discourse (CALP) builds on the survival language skills/Practical discourse (BICS). This framework, then, can be used to design projects for both low and high proficient learners/students in EFL.

10. 2.1. Sample Project Work that Targets BICS and LOT Skills

An example of a PW that might be used with beginner or low proficient EFL learners is “describing people”. This can be about *“describing family members, a best friend, a favourite sport’s man/woman, singer, actor/actress...etc”*. Conducting a project on such a topic may enable learners to acquire some survival language and communication skills that can be used for social exchange. At the same time, it leads to developing their relatively LOTS that are required for such contents.

In fact, working on this topic permits learners to learn about, read and write about practical content and language which can be challenging enough but not linguistically and cognitively much demanding. In other words, it can be learnt and expressed in relation to some concrete situation or context. It deals with the type of language and meaning that is used in everyday exchanges in society. The language for description and the meaning it conveys can be learnt and expressed by the learner relying on various non-linguistic cues like pictures. Besides, describing family members or a person of their choice may motivate learners because it permits

them to use their knowledge about the person, what they look like?, what are they like?, what do they have?, and their achievements etc. It also permits them to re-use the grammatical structures and vocabulary that are already acquired, translating and finding equivalents in the L1, in addition to the use of other means to learn new language learning from others (parent, learner from a higher grade) etc. Hence, working on such topics may provide both internal and external support which is required for acquiring BICS or survival language skills.

More concretely, the topic of description may lead the learner to work with and acquire some practical content/knowledge and the language and the cognitive skills that are associated with it. Some of the practical KSs that may occur here are; *description*, *choice*, *classification* and *evaluation*.

- **Description** may entail learning and making use of language associated with the topic like the verbs be and have, adjectives for describing physical appearance, personality, clothing...etc. It involves also cognitive skills like identifying and comparing...etc.
 - **Choice** includes, for instance, the language of preference (eg. I prefer...) for the person to describe. It requires the use of cognitive skills such as selecting, for example, selecting the appropriate adjectives to describe something/someone (Applying).
 - **Classification** contains language for comparison (eg. Younger than, as clever as...) to describe people in one's family. Verbs for membership, like, my mother *is* a vet. Verbs for possession, for instance, my little brother *has* a pet. Classification principle entails the use of cognitive skills like understanding and applying concepts, identifying and classifying.
 - **Evaluation** in this context involves the use of evaluative language, like, ...is my *best* friend. Expressing preference, for instance, I *like* her/him because... This also calls for the use of thinking skills such as judging and evaluating.
- NB. Evaluation and classification pertain to higher order thinking. They can be added to the topic of description with learners with relatively more proficiency in the English language

More explicitly, conducting a project on describing people by low proficiency EFL learners enables them to develop the following thinking skills:

- **Remember**, while describing their family or a person of their choice, learners recall the language of description that is already learnt in classroom or outside. They also learn and memorize new language items and forms.
- **Understand**, using language to describing requires identifying, recognizing and classifying the language. For instance, adjectives that describe appearance, character...etc.
- **Apply**, this skill can be seen in the learner's ability to choose the appropriate language to describe their person and/or illustrate better what a picture represents.

10.2.2. Sample Project Work that Targets CALP and HOT Skills

A sample project that can be designed for advanced EFL learners is about “protection of the environment”. It can be stated as follows: *do you think that the government has to increase the fund to be spent for the protection of the environment. Make a plan to solve environmental problems in your region.* Having students work on such topics for PW enables them to acquire and make use of theoretical/abstract knowledge and concepts. It also permits them to use more complex and abstract language. So, it requires high level and complex knowledge of the language and highly developed thinking skills. In fact, dealing with problems of the environment and proposing and designing plans for its protection demands knowledge about, for instance, the environmental problems in their country, region, village, or city, such as, pollution, deforestation, loss of biodiversity, waste disposal...etc, and environmental law in their country. While this does not exclude the use of some non-linguistic resources by the learner either to comprehend some contents and language or to express their own ideas in their projects, is clear that it requires from the learners to rely on their knowledge of the language (context-reduced situations). The latter is needed to read, learn and then write about the different types of environmental problems in their area, their causes and effects, why it is important to handle these

problems immediately, and their plans to stop these problems. Besides, investigating this topic on environmental problems enables learners to learn and then make use of contents and language that are academic and literacy-related and use/develop HOTS that are necessary to deal with it. Therefore, it is likely to be a suitable project for proficient learners of English as a foreign language because it is both linguistically and intellectually challenging.

Precisely, examples of the theoretical and abstract language and content and the thinking skills that can be developed by the students working on the above project theme might be described as follows:

- **Sequence** involves, for example, causes and effects of an environmental problem. What happens when the environment is not protected? And what happens next as a result of this? In terms of the language skills, this requires the use of the logical connectors to express cause and effect. For example, because, nevertheless, consequently...etc. an examples of thinking skill that may developed here is arranging events in terms of logical order and time.
- **Choice** may include for instance whether money that is spent to protect the environment has to be increased or whether we have to consider other solutions. Considering alternatives leads students to develop higher order thinking skills like generating new solutions to solve environmental problems.
- **Classification** refers for instance to the classification of the environmental problems, whether they are related to the lives of animals or plants. Thinking skills that might be involved are identifying environmental problems, understanding and classifying them.
- **Principles** this type of knowledge in this case refers to, for example, the knowledge of the Algerian environmental law. Thinking skills: interpreting a legal document about the protection of the environment.
- **Values**, includes evaluating and judging the situation of the environment in the

region where the student lives or even at the national or global level. In terms of the language, it requires the use of, for instance, adjectives to describe the alarming situation of the environment. Values require evaluating a situation, ranking the problems in terms of danger and priority.

Examples of the thinking skills that students might develop when conducting this project are as follows:

- **Remember:** make a list of environmental problems, and define them.
- **Understand:** explain the environmental problems.
- **Apply:** interpret and generalize a legal text about the protection of the environment.
- **Analyze:** identify the main causes and effects of an environmental problem. Question the local or national policy for the protection of the environment.
- **Evaluate:** students evaluate the situation of the environment in their region and compare it to other situations (similar, better or worse).
- **Create:** propose solutions to some problems of the environment and design a strategy to put them into practice.

The descriptions of the two PW samples we suggest illustrate the type of language, content and cognitive skills that can be developed with two categories of EFL learners/students, the low and the high proficiency ones. The project for beginner learners, about descriptions, is limited to the concrete type of language and content. It can be learned and expressed by either linguistic means or other non-linguistic resources. It deals with contents that are related to the learners' experiences and LOTS. Therefore, its accomplishment does not require the use of much complex and abstract language and it is not much cognitively demanding. However, the project sample for proficient students requires more complex language, content and cognitive skills. In fact, understanding and expressing contents related to the problems of environment and plans for its protection, while it does not exclude the use of concrete language and non-linguistic means to comprehend some contents and express it, it requires more abstract and theoretical knowledge

and language forms and concepts. Meanwhile, its accomplishment needs more varied and more developed thinking skills. It calls for both LOTS and HOTS. While the first project targets the acquisition of survival language and communication skills (BICS), the second aims at fostering learners' academic and literacy-related language (CALP).

Conclusion

This chapter has provided some suggestion for the improvement of PW in the Algerian EFL textbooks. It has been suggested that the latter should introduce PW that targets BICS before the CALP ones, consider the cognitive and linguistic demands of the projects, introduce more experiential and context-embedded project topics, and introduce type B of CALP projects.

It has also presented and explained our suggested project framework for gradual integration of language, content and thinking skills into EFL PW. It has also provided two project samples to illustrate how projects can be used with beginner and advanced EFL learners

General Conclusion

General Conclusion

This study has been conducted with the aim of investigating the issue of the gradual integration of language, content and thinking skills into EFL PW. The issue has been investigated from the perspectives of SLA research, educational psychology, and psychology of child language development. The purpose of this study was twofold. First, it has tried to explore the raised issue by analyzing EFL PWs suggested in the Algerian MS and SS EFL textbooks. It has also assessed learners' attitudes and opinions about the integration of language, content and thinking skills into PW, in general, and PWs that are suggested in these textbooks, in particular. Furthermore, it has tried to find out whether or not the Algerian EFL learners' difficulties in conducting PW are due to the linguistic and cognitive complexities involved in these projects. The second aim has consisted in our attempt to suggest a PW framework for gradual integration of language, content and thinking skills into EFL PW.

This research has relied on two methodological tools: the first one is Mohan's (1986) KSF for a systematic integration of language, content and thinking skills into language tasks. The second one is Cummins' (1981a) model of language proficiency and ESL contexts. Both frameworks, along with research in educational psychology, namely Krathwohl (2002), provided us with tools to evaluate the projects that are suggested in the Algerian EFL textbooks. They were used to construct our categories for the evaluation of the types of language, content and thinking skills that each of the PWs in the textbooks under study target. They also guided us in formulating the questions in the questionnaires for both 4th year MS and 3rd year SS learners. These methodological tools also constitute the theoretical background and guidelines in designing our PW framework for the gradual integration of language, content and thinking skills in EFL. The study was conducted using mixed-methods research. The corpus of 44 PWs suggested in the Algerian MS and SS EFL textbooks was analysed using qualitative method and the results obtained from the questionnaires were analysed using quantitative statistical method.

To investigate the raised issue, four research questions and hypothesis were put forward. The first question was: what type(s) of language, content, and thinking skills do PWs in the Algerian MS and SS EFL textbooks target to implement? The researcher hypothesized that PWs in the Algerian EFL textbooks target the implementation of both BICS and CALP types of language and content and both types of cognitive abilities, LOTS and HOTS. The results of this study have confirmed this first hypothesis. In fact, our analysis has revealed that PWs designed for the Algerian MS and SS learners target both BICS and CALP and both types of thinking skills HOTS and LOTS. Projects in the MS textbooks, except those in SETH that integrate only BICS, target both BICS and CALP. 12/22 projects are classified as BICS and 10/22 as CALP. SS projects target exclusively CAPL with 18/22 projects. Only 2/22 target BICS. However, it has been found that all SS projects, on the one hand, target theoretical and practical type of language and content to be taught and learned in both embedded-embedded and context-reduced situations, and relying on both expository and experiential ways of learning. MS projects, on the other hand, aim to teach both types of language and content relying on experiential and expository means but mostly in context-embedded situations. In terms of thinking skills, except for projects in SETH which target only LOTS, projects in ESO, ESTW, and OM aim to teach both LOTS and HOTS. All projects in the SS textbooks target both types of thinking skills.

The second research question this investigation has tried to answer was as follows: does the integration of language, content and thinking skills into these PWs account for the learners' cognitive abilities and their English language proficiency level? The hypothesis that was put forward states that the integration of language, content and thinking skills into the projects does account neither for the learners' cognitive abilities nor their English language proficiency level. The findings of our research have confirmed the second part of the hypothesis but infirmed the first one. In other words, it has been found that while the integration of language, content and

thinking skills into the projects under study accounts for the cognitive development of the learners as criterion for the integration of projects that target CALP and HOTS, the learners' EFL proficiency level was not considered. Indeed, projects that target CALP and HOTS are introduced almost simultaneously as those targeting the teaching of BICS and LOTS. They are introduced as early as the first and second year, in SEO and SETW. Therefore, the integration of such linguistically and cognitively demanding projects does not allow necessary time for learners to develop minimum proficiency (threshold level) in EFL, which is required before introducing complex projects (linguistically and cognitively). In ESL/EFL contexts, however, it has been proved that language tasks targeting CALP and HOTS take longer time to be mastered than those involving BICS and LOTS. The designers of the PWs in the textbooks under study, then, seem to take learners' cognitive development as a determining factor for the integration of cognitively and linguistically demanding PWs. Yet, research has shown that dealing with abstract type of contents and HOTS, which are involved in CALP projects, is difficult for learners who have limited knowledge of the language because accessing and expressing such type of content and thinking skills depends on language as a unique medium. In other words, the expression of formal operational thinking or hypothetico-deductive reasoning, in the Piagetian sense, and scientific concepts (Vygotsky) depends mainly on the mastery of language.

The third research question that was addressed in this research was: Do PWs in the textbooks account for the principle of gradual and hierarchical integration of language, content and thinking skills? It was hypothesized that PWs in MS and SS textbooks do not account for the principle of gradual and hierarchical integration of language, content and thinking skills. The hypothesis has been, indeed, confirmed. The results have shown that the integration of language, content and thinking skills into PWs under study does not account the principle of gradation or the shift from the least to the most difficult projects in terms of both linguistic and cognitive complexities. To illustrate the point, in MS projects, BICS and CALP projects are given nearly

the same importance. It has also been found that while projects in SETH contain only BICS and LOTS, those in SEO, SETW are more complex. They include both BICS and CALP, and LOTS and HOTS projects. It has also been shown that SS projects involve almost the same degree of cognitive and linguistic difficulties. They almost all target CALP and both LOTS and HOTS. Besides, while projects in OM target the highest thinking skill (create), the latter is absent from ACR and NP. Therefore, the integration of thinking skills into the MS and SS projects does not consider the principles of hierarchy and culmination (Bloom, 1956; Krathwohl, 2002). Furthermore, language and content integration into these projects does not cater for the principle of gradation. In fact, projects in SEO and SETW target both theoretical and practical types of content and language, whereas projects in SETH target only the practical one. SS projects are found to involve almost the same degree of complexity in all the textbooks, integrating theoretical and practical types of language and content.

The fourth issue this study has tried to address was: Do the low English language proficiency level of the learners and the high cognitive and linguistics demands of these projects determine PW complexity for the Algerian MS and SS EFL learners? In an attempt to answer it, the researcher has hypothesized that low English language proficiency level of the learners and the high cognitive and linguistic complexities of the MS and SS PWs determine PWs difficulty for the MS and SS learners. This hypothesis was confirmed. Indeed, the results of the analysis of the respondents' answers to the questionnaires have shown that their difficulties in conducting PWs that are suggested in the textbooks are mainly related to the use of language to express higher thinking skills. For instance, the majority of the MS and SS learners find it difficult to read texts in English to obtain information to conduct PW and summarizing it. They also meet difficulties in writing and explaining their projects in English. Their difficulties are also related to the cognitive demands of the projects. For example, the majority of the respondents have classified PWs that target CALP as being the most difficult projects.

Based on the results of this study, we have suggested a project framework to gradually integrate the teaching of language, content and thinking skills into EFL PW, from the least to the most complex both linguistically and cognitively by considering learners' proficiency level in English. Indeed, the framework distinguishes between two types of projects. At the bottom, there is the projects that target BICS or language and content that are needed in everyday life for socialization. On the top, there is CALP projects that aim to teach language and content that are needed for the learner's school and academic success. The framework shows that the two types of projects require different types of language, content and thinking skills. The first type of projects (BICS) targets practical language and content (practical discourse). It is acquired in context-embedded situations and relies on learners' personal experiences about the topic of the project. This type of projects requires LOTS (remember, understand, and apply). The second type of projects, CALP, aims to teach theoretical language and content (theoretical discourse). The latter relies mainly on language for its acquisition and expression, context-reduced, and based on expository ways of learning, mainly reading. CALP projects require HOTS (analyse, evaluate and create). It is clear, then, CALP projects are more linguistically and cognitively demanding than projects that target BICS. Therefore, it is suggested that in EFL contexts the two types of projects should be introduced gradually for beginner and low proficient learners, starting from BICS and gradually moving to CALP ones.

Our project framework, like Stoller (2002) and Beckett and Slater (2005) frameworks suggests that PW in EFL should target the simultaneous teaching and learning of language, content and thinking skills. However, unlike these two frameworks it provides systematic way for the integration of different types of language, content and thinking skills moving gradually from the least to the most complex types of projects both linguistically and cognitively.

References

- Achour, K., Ameziane, H., Bouhadiba, B., Guedoudji, O., Mekaoui, O., Riche, B., & Tamrabet, M. (2003). *Spotlight on English One*. Alger: O.N.P.S.
- Ananiadou, K., & Claro, M. (2009). 21st century skills and competences for new Millennium learners in OECD countries. *OECD Education Working Papers*, No. 41, OECD Publishing, Paris. Available at: <http://dx.doi.org/10.1787/218525261154>. Accessed on June, 2015.
- Ang, R. P., Gonzalez, C. T., Liwag, E. D., Santos, B. S., & Vistro-Yu, C. P. (2001). *Elements of student-centered learning*. Ateneo de Manila
- Arab, S. A., Riche, B., Ameziane, H., Khouas, N., & Louadj, N. (2006). *Spotlight on English Three*. Alger: O.N.P.S.
- Arab, S. A., & Riche, B. (2006). *On the Move*. Alger: O.N.P.S.
- Riche, B., Arab, S. A., Bensemmane, M., Ameziane, H., & Hami, H. (2006). *Getting Through*. Algiers: O.N.P.S.
- Adderley, K., Ashwin, C., & Bradbury, P. (1975). Project methods in higher education. London, Society for research into higher education
- Arpin, L., & Capra, L. (2001). *L'apprentissage par projets*. Montréal : Chenelière.
- Attard, A., Di Loio, E., Geven, K., & Santa, R. (2010). *Student centered learning an insight into theory and practice*. Education and Culture DG, Lifelong Learning Programme, Bucharest.
- Auerbach, E. R. (1986). Competency-based ESL: one step forward or two steps back? *TESOL Quarterly*, 20(3), 411-430.
- Beckett, G. H. (Spring, 2002). Teacher and student evaluations of project-based instruction. *TESL Canada Journal/revue TESL du Canada*, Vol. 19, No.2, 52-66.
- Beckett, G. H., & Gonzalez, V. (Winter, 2004). Content-based ESL writing curriculum: a language socialization mode. *NABE Journal of Research and Practice*, Vol. 2, N. 1, 261-275.

- Beckett, G. H., & Slater, T. (2005). The Project framework: A tool for language, content, and skills integration. *ELT Journal*, Volume 59/2, 108-116.
- Beckett, G. H. (2006). Project-based foreign and second language education: Theory research and practice. In G. H. Beckett, & G. H. Miller P. C. (eds.), *Project-based second and foreign language education past, present, and future* (pp.3-16). Greenwich, Connecticut: Information Age Publishing,
- Bender, W. N. (2012). *Project-based learning: Differentiating instruction for the 21st century*. California: A Sage Company.
- Benrabah, M. (2007). Language-in-education planning in Algeria: historical development and current issues. *Language Policy*, 6:225–252
- Bentley, M. L. (1998). Constructivism and a referent for reforming science. In M. Larochelle et al. (ed.), *Constructivism and education* (pp. 233-249). Cambridge: Cambridge University Press.
- Blake, B., & Pope, T. (May, 2008). Developmental psychology: Incorporating Piaget's and Vygotsky's theories in classrooms. *Journal of Cross-Disciplinary Perspectives in Education*, Vol. 1, No. 1, 59 – 67.
- Bloom, B. (1956). *Taxonomy of educational objectives: The classification of educational goals*. London: Longmans, Green and Co LTD.
- Bodner, G. M. (1986). Constructivism: A theory of knowledge. *Journal of Chemical Education*, V. 63, 873-878.
- Brian, N. (2000). *The development of a common framework scale of language proficiency*. New York: Peter Lang Publishing, Inc.
- Brooks, L., Swain, S., Lapkin, S., & Knouzi, I. (2010). Mediating between scientific and spontaneous concepts through languaging. *Language Awareness*, 19:2, 89-110.
- Brown, H. D. (2001). *Principles of language learning and teaching*. San Francisco

State University: Longman.

Burlbaw, L. M., Ortwein, M. J., & Williams, J. K. (2009). From the project method to stem project-based

learning: The historical context. In R. M. Capraro, & S. W. Schott (ed.), *Project-based learning an integrated science, technology, engineering, and mathematics (STEM) approach* (pp. 7-18). Rotterdam, Taipei: Sense Publishers.

Cameen, K. (2015). Project-based learning and its validity in a Thai EFL classroom. *Procedia - Social and Behavioral Sciences*, 192, 567 – 573.

Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.

Chamot, A. U. (September, 1983). Toward a functional ESL curriculum in the elementary school. *TESOL Quarterly*, Vol. 17, No. 3, 459-471.

Chamot, U., & O'Malley, J. M. (June, 1987) The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly*, Vol. 21, No. 2, 227-249.

Cook, J. L., & Cook, G. (2005). *Child development: principles and perspectives*. New York: Pearson Education.

Capraro, R. M., Slough, S. W. (2009). *STEM Project-based learning an integrated science, technology, engineering, and mathematics (stem) approach*. Rotterdam/Boston/Taipei: Sense Publishers.

Clark, A. M. (2006). Changing classroom Practice to Include the Project Approach. *Early Childhood Research and Practice*. [online] Volume 8, Number 2. Available from: <http://ecrp.uiuc.edu/v8n2/clark.html> [Accessed 27th December 2018].

Commission Européenne (2012) *Première enquête européenne sur les compétences*

linguistiques. Available at:

http://ec.europa.eu/dgs/education_culture/repository/languages/library/studies/executive-summary-eslc_fr.pdf. Accessed on Jun, 2015.

- Corin, A. (1997). A course to convert Czech proficiency to proficiency in Serbian and Croatian. In S. P. Stryker, & L. B. Leaver (ed.), *Content-based instruction in foreign language education: Models and methods* (pp. 78-104). Washington, D.C.: Georgetown University Press.
- Cummins, J. (1976). The influence of bilingualism on cognitive growth: Synthesis of research findings and explanatory hypotheses. *Working Papers on Bilingualism*. Ontario Inst. for Studies in Education, Toronto. Bilingual Education Project, No. 9, 1-44.
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Bilingual Education Paper Series*, California State University, Los Angeles, Vol. 3 No. 2, 1-96.
- Cummins, J. (1980) The construct of language proficiency in bilingual education. In J. E. Alatis (ed.), *Georgetown University Round Table on Languages and Linguistics Current Issues in Bilingual Education* (pp. 81-103). Washington, D.C.: Georgetown University Press.
- Cummins, J. (1981a). The role of primary language development in promoting educational success for language minority students. *Schooling and language minority students: A theoretical framework*, Evaluation, Dissemination and Assessment Center, California State University, Los Angeles, 3-49.
- Cummins, J. (1981b). Age on arrival and immigrant second language learning in Canada: A reassessment. *Applied Linguistics*, Vol. 11, No. 2, 132-149.
- Cummins, J. (February, 1982). Tests, achievement, and bilingual students. *National*

- Clearinghouse for Bilingual Education*, Office of Bilingual Education and Minority Languages Affairs, N° 9, Washington, D C., 2-9.
- Cummins, J. (1992). Language proficiency, bilingualism, and academic achievement. In P. Richard, & M. Snow (ed.), *Multilingual classroom* (pp. 12-26). London: Longman Publishing.
- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters LTD.
- Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street, & N. H. Hornberger (eds.), *Encyclopedia of language and education* (2nd ed., pp. 71-83). New York: Springer Science + Business Media LLC.
- Daniels, H. (2001). *Vygotsky and pedagogy*. London/New York: Routledge Falmer.
- Daniels, H. (2007). Pedagogy. In H. Daniels et al. (eds.), *The Cambridge companion to Vygotsky* (pp. 307-331). Cambridge: Cambridge university press.
- Del Rio, P., & Alvarez, A. (2007). Inside and outside the Zone of Proximal Development: An educational reading of Vygotsky. In H. Daniels et al. (eds.), *The Cambridge companion to Vygotsky* (pp. 276-306). Cambridge: Cambridge university press.
- Davydov, V. V., & Kerr, S. T. (April, 1995). The Influence of L. S. Vygotsky on education theory. *Educational Researcher*, Vol. 24, No. 3 (Apr., 1995), 12-21.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: Macmillan.
- Dewy, J. (1938). *Experience and education*. New York: Kappa Delta Pi.
- Diaz, R. M. (December, 1985). Bilingual cognitive development: Addressing three gaps in current research. *Child Development*, Vol. 56, No. 6, 1376-1388.
- Diffily, D., & Sassman, C. (2002). *Project-based learning with young children*. Portsmouth: Heinemann

- Dooly, M. (2013). Promoting competency-based language teaching through project-based language learning. In M. L. P. Cañado (ed.), *Competency-based language teaching in higher education* (pp. 77-92). New York, London: Springer Dordrecht Heidelberg.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration and processing*. Mahwah, New Jersey, London: Lawrence Erlbaum Associates, Publisher.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Early, M. (March, 1990). ESL beginning literacy: A content based approach. *TESL Canada Journal/ Revue TESL Du Canada* Vol. 7, No.2. 82-93.
- Early, M., Pott, D., & Mohan, B. (December, 2005). Teachers' professional knowledge in scaffolding academic literacies for English. *Prospect*, Vol. 20, No. 3, 63-76.
- Eguchi, M., Eguchi, K. (2006). The limited effect of PBL on EFL learners: A case study of English magazine projects. *Asian EFL Journal*, Volume 8, Number 3, 207-225.
- Fadel, C., & Trilling, B. (2009). *21st century skills: Learning for life in our times*. San Francisco: Jossey-Bass.
- Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: Mc Graw-Hill Companies Inc.
- Findley, C. A., & Nathan L. A. (June, 1980). Functional language objectives in a competency based ESL curriculum. *TESOL Quarterly*, Vol. 14, No. 2, 221-231.
- Fried-Booth, D. L. (2002). *Project work*. Oxford: Oxford University Press.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Herder and Herder.
- Furst, E. J. (Winter, 1981). Bloom's Taxonomy of educational objectives for the cognitive domain. *Review of Educational Research*, Vol. 51, No. 4, 441-453.

- Furth, H. G. (1966). *Thinking without language: Psychological implications of deafness*. New York, Free Press.
- Fox, R. (March, 2001). Constructivism examined. *Oxford Review of Education*, Vol. 27, No. 1, 23-35.
- Glaserfeld, E. V. (1995). A constructivist approach to teaching. In L. P Steffe, & J. Gale (eds.), *Constructivism in education* (pp. 3–15). Erlbaum: Hillsdale.
- Given, L. M. (2008). *The sage encyclopedia of qualitative research methods*. Los Angeles, London, New Delhi, Singapore: Sage Publications, Inc.
- Hakuta, K., Ferdman, B. M., & Diaz, R. M. (1987). Bilingualism and cognitive development: Three perspectives. *advances in applied psycholinguistics*, Vol, 2. New York: Cambridge University Press.
- Hakuta, K., Bulter, Y. G., & Witt, D. (2000). How long does it take English learners to attain proficiency? *The University of California, Linguistic Minority Research Institute*, Policy Report 2000- 1.
- Halliday, M. A. M. (1978). Is learning a second language like learning a first language all over again? In J. J. Wenster (ed.), (2007) *Language and education*. London (pp. 174-193), New York: Continuum.
- Hamada, H. (June, 2011), Feasibility and evaluation of project work in EFL at secondary schools. *Forum de l'enseignant*. Ecole normale supérieure, Constantine, 71-86.
- Harsch, C., (April, 2017). Proficiency. *ELT Journal*, Volume 71/2, PP. 250-253.
- Hawkins, J. Pea, R. D., Glick, J., & Scribeur, S. (1984). Merds that laugh don't like mushrooms: Evidence forDeductive Reasoning by Preschoolers. *Developmental Psychology*. American Psychological Association. Inc, Vol. 20. No. 4, 584- 594.
- Hedge, T. (1993). Key concepts in ELT. *ELT Journal*, Volume 47/3, 275-277.
- Helm, J.H., & Katz, L.G. (2001). *Young investigators: The project approach in the*

- early years. New York: Teachers College Press.
- Helm, J. H. (2015). *Becoming young thinkers: Deep project work in the classroom*.
Columbia University: Teachers College.
- Hernández, A. (2003). Making content instruction accessible for English
language learners. *English Learners: Reaching the Highest Level of English Literacy*.
International Reading Association, 1-25
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content
analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Hulstijn, J. H. (2015). *Language proficiency in native and non native speakers theory and
research*, Amsterdam, Philadelphia: John Benjamin Publishing Company.
- Hutchinson, T., & Torres, E. (October, 1994). The Textbook as an Agent of Change. *ELT Journal*
Volume 48/4, 315-328.
- Jick, T. D. (December, 1979). Mixing qualitative and quantitative methods: Triangulation in
action. *Administrative Science Quarterly*. volume 24, 602-611.
- Katz, L. G., & Chard, S. N. (1992). The project approach. In J. E. Johnson, & J.
Roopnarine (ed.), *Approaches to early childhood education* (2nd ed.). Merrill Publishing Co.
- Kilpatrick, W. H. (1918), The project method: The use of the purposeful act in the education
process. *Teachers College Record*, 19, 319-335.
- Krashen, S. D. (1982). *Principles and practices in second language acquisition*. Oxford:
Pergamon Press.
- Krashen, S. D. (1984). *Writing: Research, theory, and applications*. Oxford: Pergamon Press.
- Krathwohl, D. R. (autumn, 2002). A Revision of Bloom's Taxonomy: An
overview. *Theory into Practice*. Volume 41, N° 4, College of Education, the Ohio State
University
- Krieger, D. (2005). Teaching ESL versus EFL: principles and practices. *English Teaching
Forum*, Volume 43, N. 2, 8-16.

- Lee, N. (2009). Project methods as the vehicle for learning in undergraduate design education: A typology. *Design Studies: The Interdisciplinary Journal of Design Research*, Elsevier Ltd, 541-560.
- Lyster, R. (2011). *Learning and teaching languages through content: A counterbalanced approach*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Mackey, A., & Gass, S. M. (2012). *Second language research methodology and design*. Mahwah, New Jersey, London: Lawrence Erlbaum Associates, Publishers.
- Markham, T. (2003). *Project-based learning: A guide to standards-focused project based learning for middle school and high school teachers*. California: The Buck Institute of Education.
- Meijer, P. C., Verloop, N., & Beijaard, D. (2002). Multi-Method triangulation in a qualitative study on teachers' practical knowledge: An attempt to increase internal validity. *Quality & Quantity* 36: 145–167, 2002.
- Miliani, M. (2000). Teaching English in a multilingual context: the Algerian case. *Medeteranian Journal of Educational Studies*, Vol. 6(1), 13-29.
- Merazga, L., Bouhadiba, F., Guedoudj, W., & Torche, Z. (2004). *Spotlight on English two*. Alger: O.N.P.S
- Moerk, E. L. (July, 1975). Piaget's research as applied to the explanation of language development. *Merrill-Palmer Quarterly of Behavior and Development*, Vol. 21, No. 3, 151-169.
- Mohan, B. A. (1986). *Language and Content*. Massachusetts: Addison-Wseley Publishing Company
- Mohan, B. A. (1989). Knowledge structures and academic discourse. *Word*, 40:1-2, 99-115.
- Mohan, B. A. (1990). Students and the integration of language and content:

- Knowledge structures and tasks. *Office of Bilingual Education and Minority Languages Affairs (ED)*, Washington, DC. In: Proceedings of the Research Symposium on Limited English Proficient Students' Issues (1st, Washington, DC, September 10-12, 1990, 113-160.
- Mohan, A. B. (2007). Knowledge structures in social practices. In J. Cummins, & C. Davison (ed.), *International handbook of English language teaching* (pp. 303-316). Springer International Handbooks of Education.
- Murdoch, K., & Willson, J. (2004). *Creating a learner-centered primary classroom: Learner- centered strategic teaching*. London, New York: Routledge.
- Moss, D., & Van Duzer, C. (1998). Project-based learning for adult English language learners. *National Clearinghouse for ESL Literacy Education*, Washington DC., Adjunct ERIC Clearinghouse for ESL Literacy Education Washington DC., 1-7.
- Newell, R. J. (2003). *Passion for learning: How project-based learning meets the needs of 21st century students*. Lanham, New York, Toronto/Oxford: Rowman & Littlefield Education.
- Newman, I., & Benz C. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale, Edwardsville, Southern Illinois University Press.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge: Cambridge University Press
- Nunan, D. (2013). *Learner-centered English language education: The selected works of David Nunan*. London, New York: Routledge.
- Orlando, L., & Machado, A. (1996). In defense of Piaget's theory: A reply to 10 common criticism. *Psychological Review*. American Psychological Association, Inc. Vol. 103, No. 1, 143-164.
- Palinscar, A. S. (1998). Social constructivist perspective on teaching and learning.

Annu. Rev. Psychol., 49, 345-75.

- Parsons, J. (2012). From knowledge to action: Shaping the future of curriculum development in Alberta. *Alberta Education Planning and Standards Sector*. Available at <http://education.alberta.ca/department/ipr/curriculum.aspx>. accessed on May 2015.
- Pépin, Y. (1998). Practical knowledge and social knowledge: A constructivist representation of education. In M. Larochelle et al. (ed.), *Constructivism and education* (pp. 173-192). Cambridge: Cambridge University Press.
- Peyton, J. K., More, S. K., & Young, S. (2010). Evidence-based, student-centered instructional practices. *CAELA Network Brief. Center of Applied Linguistics*. Washington, DC.
- Perston, B., & Walter, J. (1993). Competency-based standards in the professions and higher education: A holistic approach. In C. Collins (ed.), *Competencies: The competencies debate in Australian education and training* (pp. 116-130). Curtin: Australian Coll. of Education.
- Piaget, J. (1964). Cognitive development in children: Development and learning. *Journal of Research in Science Teaching*, VOL. 2, 176-186.
- Piaget, J. (1963). Le langage et les opérations intellectuelles. In *Problèmes de psycholinguistique Symposium de l'association de psychologie scientifique de langue française*. Paris: Presses Universitaires de France, 1963.
- Piaget, J. (1972) Intellectual evolution from adolescence to adulthood. *Human Development*, 15, 1-12.
- Piaget, J., & Inherder, B. (1966/1992). *La psychologie de L'enfant*, Paris: Presse Universitaire de France.
- Plessis, J. D., 1 Muzaffar, I. (2010). *Professional learning communities in the Teachers' College: a Resource for Teacher Educators*. USAID (EQUIP1), American Institute for research.

- Pritchard, A., & Woollard, J. (2010). *Psychology for the classroom: Constructivism and social learning*. London, New York: Routledge.
- Programme d'anglais de la première année moyenne (2002). Alger: O.N.P.S
- Programme D'anglais deuxième langue étrangère: Première Année Secondaire (2005).
Alger: O.N.P.S
- Richards, J. C., & Richards, T. S. (2001). *Approaches and methods in language teaching: A description and analysis*. Cambridge: Cambridge University Press.
- Richards, J. C., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics*. London, New York: Pearson.
- Richardson, V. (December, 2003). Constructivist pedagogy. *Teachers College*, Columbia University, V. 105, Number 9, 1623–1640.
- Richards, J. C. (2005). *Communicative language teaching today*. Cambridge: Cambridge University Press.
- Riche, B., Arab, S. A., Hami, H., Ameziane, H., & Louadj, K. (2005). *At the crossroads*. Algiers: O.N.P.S.
- Arab, S. A., Riche, B., & Bensemmane, M. (2007). *New prospects*. Algiers: O.N.P.S.
- Schieffelin, B. B., & Ochs, E. (1986). Language socialization. *Annual Review of Anthropology*, Vol. 15, 163-191.
- Schlesinger, M. (1977). The Role of cognitive development and linguistic input in language acquisition. *Journal of Child Language*, 4, 153-169.
- Sean, G. (2017). Implementing project-based language teaching in Asian context: A university EAP Writing Course case study from Macau. *Asian-Pacific Journal of Second and Foreign Language Education* (2017) 2:4.
- Seddon, G. M. (Spring, 1978). The properties of Bloom's Taxonomy of educational objectives for the cognitive domain. *Review of Educational Research*, Vol. 48, No. 2, 303-323.

- Sheldon, L. E. (October, 1988). Evaluating EFL Textbooks and Materials. *ELT Journal* Volume 42/4, 237-246.
- Singer, D. G., & Revenson, T. A. (1996). *A Piaget primer: How a child thinks*. New York: A plume book.
- Slater, T., Beckett, G. H., & Aufderhaar, C. (2006). Assessing Projects as second language and content learning. In G. H. Beckett, & P. C. Miller (eds.), *Project-based second and foreign language education past, present, and future* (pp.241-262). Greenwich, Connecticut, Information Age Publishing.
- Slobin, D. I. (1973). Cognitive prerequisites for the development of grammar. In C. A Ferguson, & D. I. Slobin (eds.), *Studies in child language development* (pp. 175-208). New York: Holt, Rinehart & Winston.
- Snow, M. A., & Brinton, D. M. (1997). *The content-based classroom: Perspectives on integrating language and content*. New York: Longman
- Snow, M. A., Met, M., & Genesee, F. (June, 1989). A conceptual framework for the integration of language and content in second/foreign language instruction. *TESOL Quarterly*, Vol. 23, No. 2, 201-217.
- Stanley, G. (1993). The psychology of competency-based education. In C. Collins (ed.) *Competencies: The competencies debate in Australian education and training* (pp. 145-153). Curtin: Australian Coll. of Education.
- Stoller, F. L. (2002). Project work: A mean to promote language and content. In J. C. Richards, & W. A. Renandya (eds.), *Methodology in language teaching: An anthology of current practice* (pp. 107-120). Cambridge: Cambridge University Press.
- Stoller, F. L. (2006). Establishing a theoretical foundation for project-based

- learning in second and foreign language contexts. In G. H. Beckett, & P. C. Miller (eds.), *Project-based second and foreign language education past, present, and future* (pp. 19-40). Greenwich, Connecticut: Information Age Publishing.
- Stoller, F. L., & Doolan, S. (2008). Content-based instruction. In N. V. Deussen-Scholl, & S. May (ed.), *Encyclopedia of language and education* (2nd ed., pp. 91-86.). Cham: Springer Science+Business Media LLC.
- Stryker, S. P., & Leaver, L. B. (1997). Content-based instruction: From theory to practice. In S. P. Stryker, & L. B. Leaver (ed.), *Content-based instruction in foreign language education: Models and methods* (pp. 2-29). Washington, D.C.: Georgetown University Press.
- Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review*. 50, I, 158-165
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford: Oxford University Press.
- Swain, M. (2006). Linguaging, agency and collaboration in advanced second language proficiency. In H. Byrnes (ed.) *Advanced language learning* (pp. 59-108). London, New York: Continuum.
- Taber, K. S. (2011). Constructivism as educational theory: Contingency in learning, and optimal guided instruction (pp. 39-61). In J. Hassaskhah (ed.) *Educational Theory*. Science Publishers, INC.
- Tavakoli, H. (2012). *A dictionary of research methodology and statistics in applied linguistics*. Tehran: Rahnama Press.
- Teacher's Guide to *Spotlight on English Book three* (2004). Alger: O.N.P.S.
- Thomas, J. W. (2000). A review of research on project-based learning.

[online] Available from: <http://www.autodesk.com/foundation>. Accessed on 5/7/2014

- Timothy, S. (1997) Integrating language and content instruction: A framework to guide cross-disciplinary team teaching. *Miyazaki International College*, Miyazaki, Japan, 3-24.
- Trabelsi, S. (2013). Project works as vehicles for authenticity in the graduate Business School of Sfax, Tunisia". *AWEJ*. Volume.4 Number.2, 77-92.
- Tsiplakides I., & Fragoulis I. (2011). Content-based instruction in the teaching of English as a foreign language. *Review of European Studies*. [online] Vol. 3, No. 1, 115-120. Available from: <http://www.ccsenet.org/journal/index.php/res/article/viewFile/8339/7647> [Accessed 5th November, 2018].
- Tudor, I. (2013). From content to competency: challenges facing higher education language teaching in europe. In M. L. P. Cañado (ed.), *Competency-based language teaching in higher education* (pp.21-33). New York, London: Springer Dordrecht Heidelberg.
- Turnbull, M. (Winter, 1999). Multidimensional project-based teaching in French second language (FSL): a process product case study. *The Modern Language Journal*, Vol. 83, No. 4, 548-568.
- Tuxworth, E. (2005). Competence based education and training: Background and origins. In J. Burke (ed.), *Competency based education and training* (pp. 9-22). London, New York, Philadelphia: The Falmer Press.
- Ültanir, E. (June, 2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessor. *International Journal of Instruction*. Vol.5, No.2, pp. 195-212. Available at: <https://files.eric.ed.gov/fulltext/ED533786.pdf>. Accessed on February, 2015.
- Vavrus, F., Thomas, M. & Bartlett, L. (2011). *Ensuring quality by attending to inquiry:*

- Learner-centered pedagogy in sub-Saharan Africa*. Addis Ababa, UNESCO: International Institute for Capacity Building in Africa.
- Veneziano, E. (2001). Langage et pensée. *Revu Intellectica* 2,33, 147-204.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge/London: the MIT Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, London: Harvard University Press
- Webb, P. K. (Spring, 1980). Piaget: Implications for teaching. *Theory into Practice*, Vol. 19, No. 2, Teaching Methods: Learning Applications, 93-97.
- Williams, M., & Burden, R. L. (1997). *Psychology for language teachers: A Social constructivist approach*. Cambridge: Cambridge University Press.
- Wrigly, H. S. (December, 1998). Knowledge in action: The promise of project-based learning. *Focus on Basics Connecting Research to Practice*, Volume 2, Available from <http://ncsall.net/index.php?id=384.html>. Accessed on 2/1/2015.
- Yvonne, S. F., & Freeman, D. E. (2009). *Academic language for English language learners and struggling readers: How to help students succeed across content areas*. Heinemann: Portsmouth, NH.
- Zohrabi, M., Torabi, M. A., & Baybourdiani, P. (2012). Teacher-centered and/or student-centered learning: English language in Iran. *English Language and Literature Studies*, Vol. 2, No. 3.

Appendices

Appendix A

Sample PWs in *Spotlight on English One*

You can

- 1- Make a card game (jobs / instruments / families....).
- 2- Make your family profile.

1. Form groups of two or three pupils.
2. Plan your work.

GROUP WORK

- Choose your project.
- Identify the tasks:
 - go to the library (books/ dictionaries/ magazines etc.).
 - go to a cyber café (Internet).
 - ask for help (teachers / parents / friends, etc.).
- find information:
- collect pictures / drawings about your hero.

INDIVIDUAL WORK

- Choose your task.
- Do it.

GROUP WORK

- Meet and show your project works.
- Discuss them.
- Correct (ask for help if necessary).
- Stick your photos / drawings / pictures.
- Shape your cards.
- Type or write your texts.

Your family profile / game card / is ready.

- Tell the class about your work.
- Go and look at the other family profiles and game cards.
- Talk about what is on the other family profiles and card games.
- Evaluate your work: positive / negative points / say how you can improve it
- Try your card game

Put your game cards in the library for future use.

YOUR PROJECT

You can

- Make a brochure about wild, domestic animals and pets.
- Make a questionnaire about your friends, school, town...

1. Form groups of two or three pupils.
2. Plan your work.

GROUP WORK

- Choose your project.
- Identify the tasks:
 - find information



- go to the library (books/ dictionaries/ magazines etc.).
- go to a cyber café (Internet).
- ask for help (teachers / parents / friends, etc.).

- collect pictures / drawings about the animals
- collect information, pictures, photos... about your friends, school, town.

INDIVIDUAL WORK

- Choose your task.
- Do it.

GROUP WORK

- Meet and show your project works.
- Discuss them.
- Correct (ask for help if necessary).
- Stick your photos / drawings / pictures.
- Give a shape to your brochures.
- Type or write your questionnaires and texts.

Your posters / questionnaires/ are ready.

- Use your questionnaires to make interviews.
- Go and look at the other brochures.
- Talk about what is on them.
- Evaluate your work: positive / negative points.

Put your questionnaires and brochures in the library for future use.

Appendix B

Sample PWs in *Spotlight on English Two*

YOUR PROJECT

In this file you described people, and you talked about their lives, and their careers. Now, you and your friends are going to draw a famous person's profile.

Choose your partners (three or four pupils / group).

You need :

- a large sheet of paper.
- photos / illustrations/ drawings / cut outs.
- songs /paintings / books, etc.
- a dictionary / magazines / Internet materials.

GROUP WORK

How to start ?

1. Make a list of famous people you know :

- singers, painters, film stars, writers, sportsmen etc..
- Where from ? (country)
- Who ? (With your partners decide and choose a famous person from your list).

→ Identify the tasks and choose your own task.

2. Decide who does what :

- physical description.
- works.
- biography.
- illustrations (what to select).

INDIVIDUAL WORK

3. Now each pupil writes his/her part of the project. (When writing your text, remember that you can use adjectives, past or present simple tenses, dates, ordinal numbers, etc).

GROUP WORK

4. Show your work to your partners. Discuss and correct it with them.

- What can you add ?
- Is the information true ?
- Is the text clear ?
- Compare with other texts.
- Select for the final draft.

5. When your text is ready, check again the punctuation, the verbs...

6. Correct (ask for help, if necessary). Now, write the whole text.

7. Evaluate your work (positive / negative points).

8. Type or write your text.

9. Now you can illustrate your text : stick your photos / drawings / lyrics, etc...

10. Your project is ready !

- Stick it on the wall of the classroom, and be ready to talk about it.
- Walk around and look at the other groups' projects.
- Compare your project with the others.
- Write your classmates' remarks on a sheet of paper.
- Discuss these remarks with your partners and decide on how to improve your next project.

YOUR PROJECT

In this file you learnt many things about theatre. Now, with the help of your teacher of art (or any other persons) you're going to write and stage a play.

Choose your partners (three or four pupils / group).

You need :

- sheets of paper.
- a dictionary / Internet materials / magazines / scripts of plays.
- costumes.

GROUP WORK

How to start ?

1. Choose :

- plot
- decide : What kind of play : a comedy, a drama, a musical...
- are you going to write it or to choose one already written ?
- if yes, which author ?
- how many characters ?
- what situation? Where ? When ? How long ?

2. Decide who does what (casting).

- Who looks for the props ? (costumes / furniture, scenery...).
- Who writes the texts ?
- Who produces it ?
- Who leads the rehearsals ?

INDIVIDUAL WORK

- Each pupil looks for a play to read and tries to get some ideas from it.
- Each one writes a part of the play.
- One or two pupils gather the costumes and the furniture .

GROUP WORK

- Show your writings to one another.
- Discuss and correct them. Make sure the story is coherent.
- What can you add ?
- Is the spelling of the words correct ?
- Is the situation funny ? Sad ? (see what you decided above).
- Are the costumes appropriate ?
- When your texts are ready, check again the spelling, and grammar.
- Correct (ask for help, if necessary).
- Evaluate your work (positive / negative points).
- Learn your parts. Practise intonation, gestures, miming.
- Rehearse all together and prepare for the farewell party performance.

Your project is ready !

- Stage it in front of your classmates.
- At the end, talk about what you performed, and discuss with your classmates.
- Write your classmates' remarks on a sheet of paper.
- Discuss and decide on how to improve your performance.

Keep your classmates' remarks in mind and try again before you act for the school farewell party !

Keep the play script in the school library for further use.

Appendix C

Sample PWs in *Spotlight on English Three*

PROJECT ROUND-UP : a travel phrase leaflet.

This is a sample of your project in its final phase. Here the phrase leaflet is about travelling by plane. Other groups will make leaflets about travelling by boat, by train, Prepare some dialogues as in the sample below.

TRAVELLING BY PLANE

- Verbs**
 - To fly
- Expressions**
 - Welcome aboard !
- Places**
 - Customs
- People**
 - Flight Captain

Sample dialogue

Nothing, sir!

Anything to declare?

You need:

- ♥ sheets of paper,
- ♥ pictures/ drawings,
- ♥ a dictionary,
- ♥ some sticky tape/ glue.

- Get into groups. Each group will examine the contribution of the other groups to the travel phrase leaflet.
- Correct the various contributions (correct grammar mistakes, spelling mistakes...)
- Ask for your teacher's help when necessary.
- Discuss and choose the best contributions.
- Discuss and agree on how to arrange the contributions in the travel phrase leaflet.

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WHERE DO WE STAND NOW?

PROJECT ROUND-UP : A tourist brochure.

Now it's time for every group to finalise their project and create a country profile. Your country profile can take the form for a tourist brochure.

To this end, you need:

- giant sheets of paper,
- markers,
- some cellophane tape or glue,
- a dictionary,
- pictures or drawings.

Here is a possible presentation of a tourist brochure.



Choose a country and locate it geographically on the map of its continent.

Find pictures of the capital city's places of interest (streets, avenues, famous buildings, ...).

Write one or two lines about each selected place (monument or building) to encourage people to visit it.

Say what is special about its traditions (dress, cooking, celebrations ...).

Say why you want tourists to visit this country.

Appendix D

Sample PWs in *On the Move*

PROJECT ROUND-UP

► *Making a profile of changes in man's capabilities*

Your project will be presented in the form of a wall sheet or a portfolio. It should include the following:

A. A list of things that man **could** or **couldn't** do six hundred years ago in the domains of ...

- a. transport e.g., *Six hundred years ago man couldn't travel by plane, but he could travel on horseback.*
- b. medicine
- c. entertainment
- d. sports
- e. politics ...



B. A list of remarkable performances that particular men and women **were able to** achieve in various fields over the last six hundred years.

e.g., Christopher Columbus was able to sail to across the Atlantic. He ...

C. A list of things that man **can/** and **is able to** do today and which he couldn't do years ago in the domains of ...

- a. transport: e.g., Today, man is able to travel to the moon.
- b. politics
- c. sports
- d. entertainment ...
- e. law



D. A list of things that man **will** be able to/**may well/may/might/** do in the near future.

e.g., In the future, man will be able to leave the Earth and settle on Mars.

E. Draw a cartoon and make your characters use **so** and **neither +auxiliary + subject**.

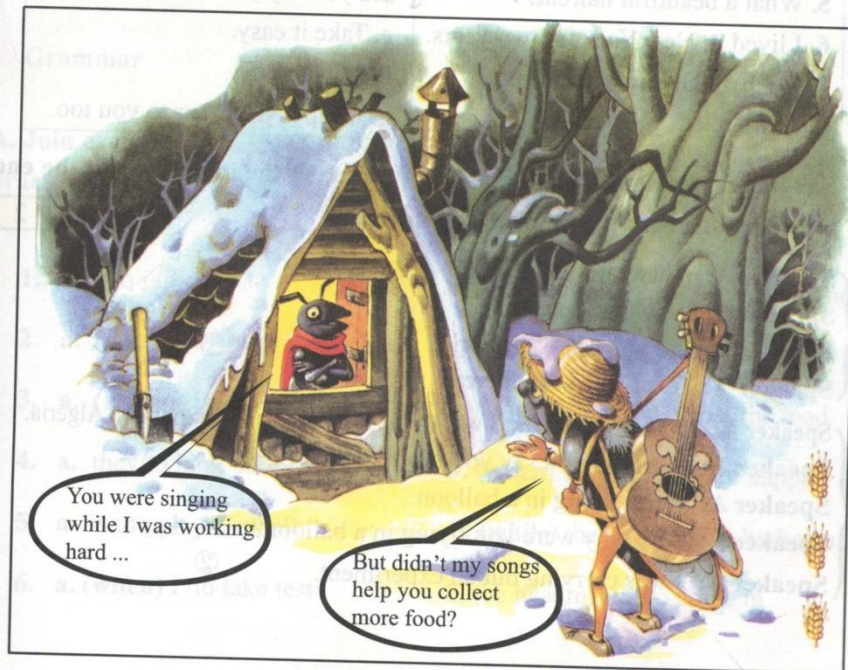
Note: All items in all lists should be illustrated with pictures / drawings and explanatory sentences.

PROJECT ROUND-UP SAMPLE

Making a scrapbook

Your scrapbook may comprise:

1. a short report about a news item (e. g., an accident, a new invention) including headlines, illustrations (photos and drawings) and captions.
2. an obituary of a celebrity who has just died including a picture or photo of the dead celebrity and the title of the newspaper that published it.
3. a transcript in English of a short folktale (of the Joha kind) told to you by Arabic- and/or Berber-speaking people.
Start like this: "Once upon a time ..."
4. a cartoon strip with speech bubbles illustrating the short folktale in task three above.



Appendix E

Sample PWs in *At the Crossroads*

PROJECT WORKSHOP

UNIT 1

I- Making a job application booklet

Overall purpose: Designing a booklet intended for teenage job seekers

Your booklet should include the following items:

- adverts with job descriptions,
- phone enquiries about job vacancies,
- résumés or C.V.s,
- letters of reference,
- letters of application,
- replies (positive, negative) from administration/company,
- letters of acceptance.

PROJECT ROUND-UP (I)

- Correct your mistakes. Then exchange booklets with other groups for further error checking.
- Display your booklets.

II- Making an Internet user's guide for beginners

Overall purpose: Designing an Internet user's guide for beginners.

Your Internet User's Guide should include the following items:

- Description of a workstation / PC = (Personal Computer),
- A set of instructions for using a PC (opening an e-mail account/homepage, etc.),
- Maintenance tips (eg. no smoking, protection from dust, etc.),
- Tips for solving problems when PC goes wrong,
- Manners to be observed when using the Internet.

PROJECT ROUND-UP (II)

- Correct your mistakes. Then exchange booklets with other groups for further error checking.
- Display your Internet User's Guide.

PROJECT WORKSHOP

CONDUCTING A SURVEY ABOUT:

- people's newspaper reading habits,
- TV viewers and TV programmes,
- or the different uses of the computer...

Task One: Designing the questionnaire

- Decide which aspects of newspapers and their readers you would like to investigate.
- Decide who will be your informants (age group, sex, etc.).
- Fix a reasonable number of informants (20 is a good number to aim for).
- Write a first draft of your questionnaire and distribute it to your informants.

Task Two: Conducting the interview

- Prepare your interview and rehearse it with group members.
- Start interviewing your informants once you are ready.

Task Three: Collecting data and interpreting the results

- Ask yourselves questions such as: Do your informants like reading newspapers? If yes, why?
- Give statistics using different types of graphic displays.

Task Four: Writing the report

Your report should include the following:

- Introduction,
- Method,
- Results,
- Analysis of the results,
- Conclusion. Our findings show... Therefore, we suggest / recommend ...

PROJECT ROUND-UP

- Put the different parts of your survey together (questionnaire, interviews, graphs, report, etc.) in the form of a booklet.
- Correct your project and submit it to the other class groups for further error checking.
- Present your booklet to the rest of the class.

Appendix F

Sample PWs in *Getting Through*

PUTTING THINGS TOGETHER

Making a profile about lifestyles

Your lifestyles profile will be divided into three parts and will deal with three main aspects of life: **clothes food**, and **entertainment** in Algeria and abroad. Include pictures to illustrate your theme.

Part I . Lifestyles in the past



Note: Use **used to** when you write/talk about these life-styles.

Part II Present-day Lifestyles

Note: Use **the present simple** tense with link words **when/after/before/ until/while**.

Part III Future Lifestyles

Note: Use **will/may/might** and their negatives in making your predictions.

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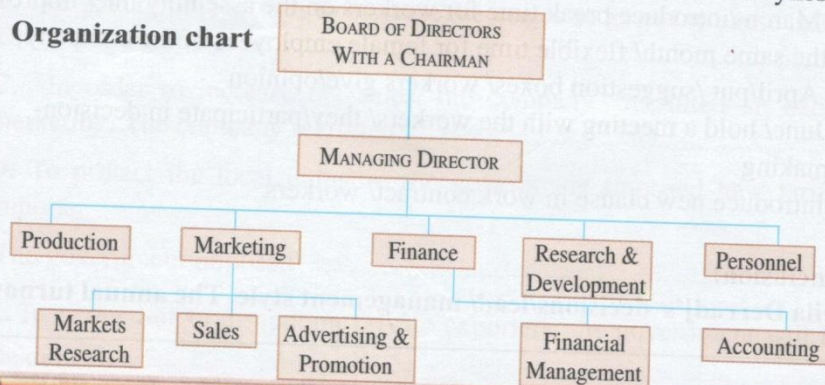
PUTTING THINGS TOGETHER

COMPILING A BUSINESS PORTFOLIO

Your business portfolio will include:

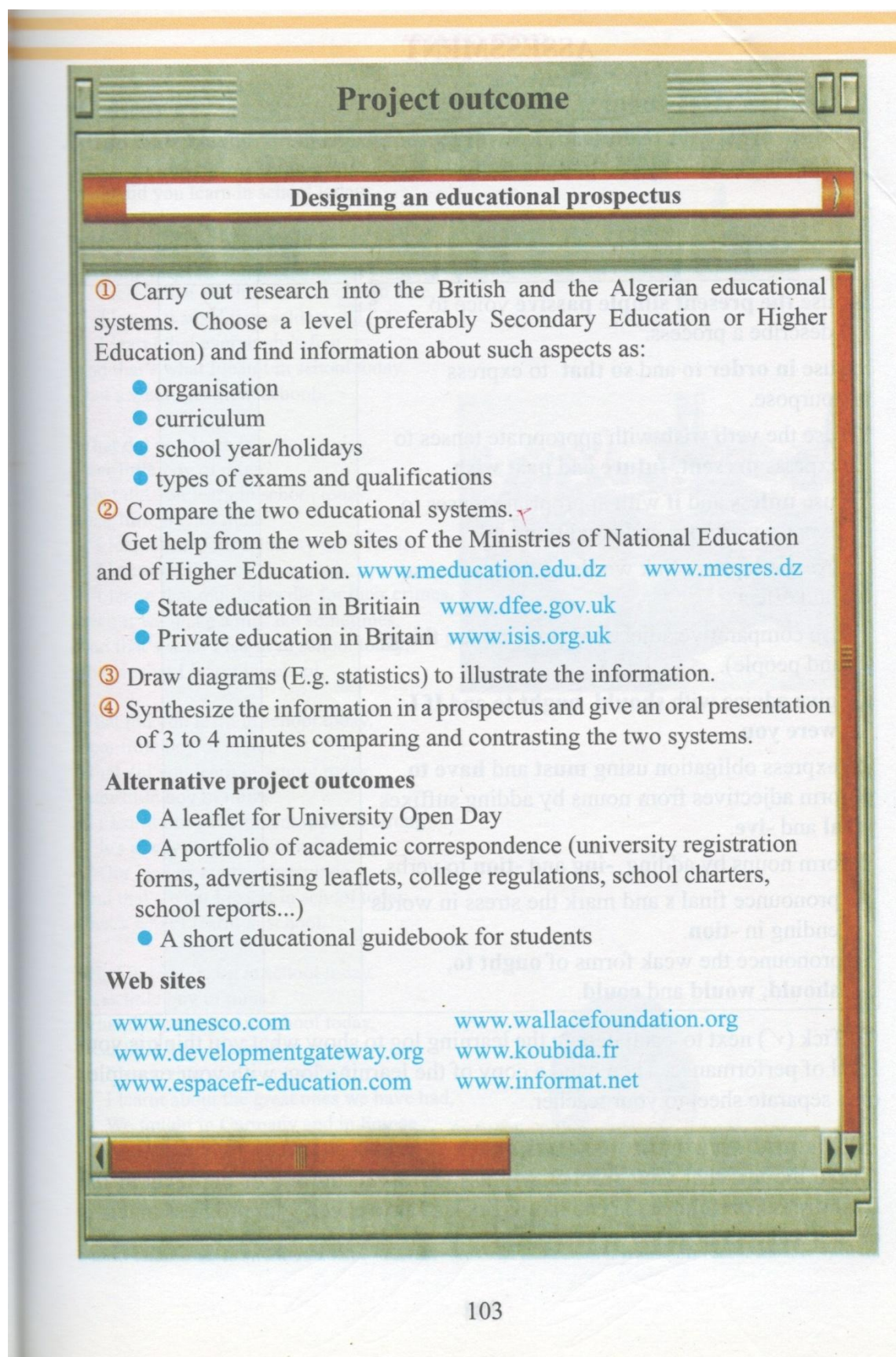
- A. letters/telegrams/fax and telex messages on business situations;
e.g. , an order form , a letter of enquiry, a thank-you letter , an advice of dispatch, an acknowledgement letter, a letter of complaint, a letter in reply to a complaint about poor service ...
- B. letters on social situations related to business;
e.g., invitations, thanks for hospitality, condolences, congratulations, New Year wishes
- C. other business documents such as
 - a business/company organization chart, with a short description of how the company functions; (*See the model of the organization chart below.*)
 - an annual report for the achievements of a firm (include graphs)
 - a balance sheet
 - a report on employees ...
- D. two or three short biographies about famous economists.
e.g.,Frederick Taylor, John Galbraith, Milton Freedman, John Keynes...

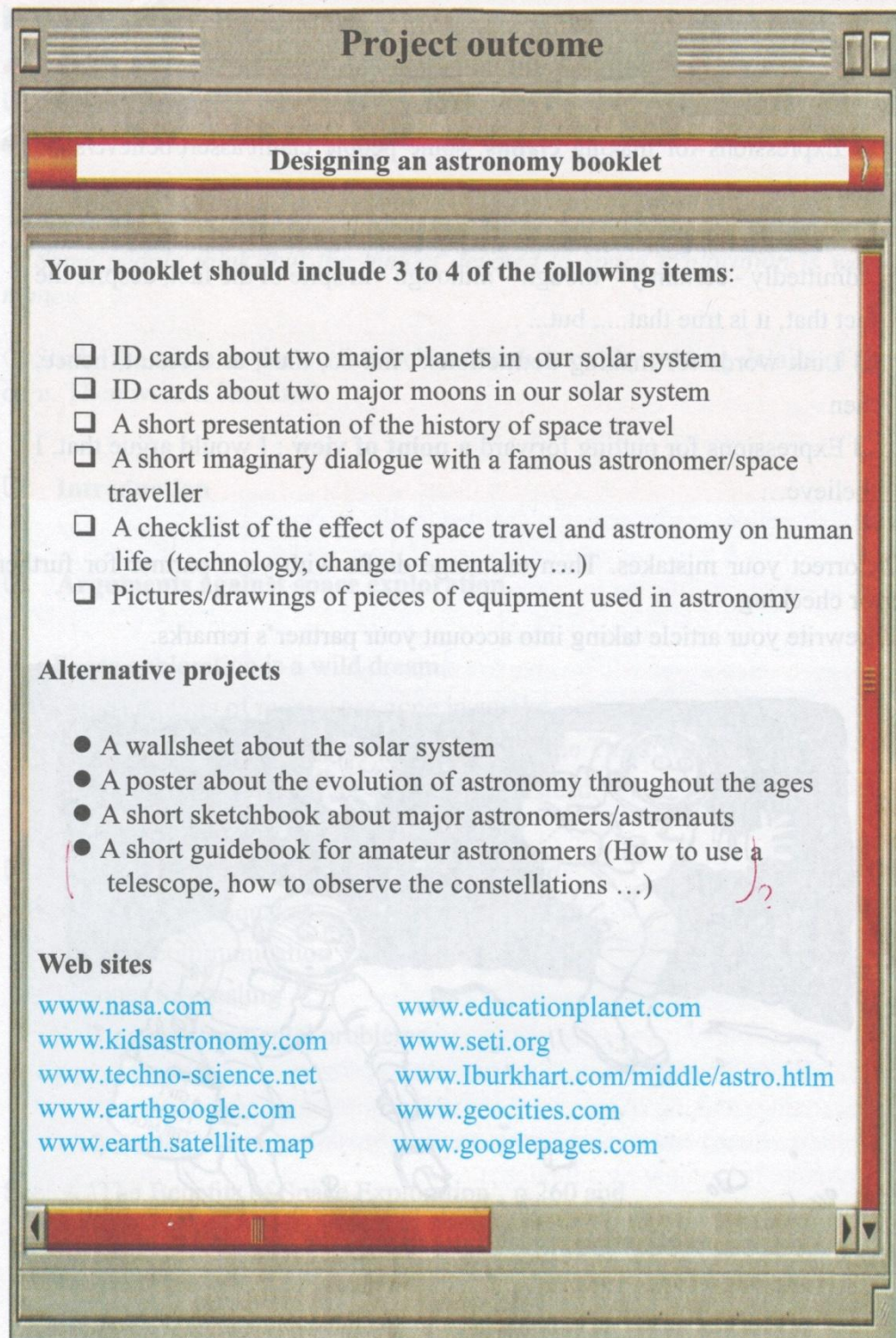
Organization chart



Appendix G

Sample PWs in New Prospects





Appendix H

- Questionnaire to 4th year Algerian MS Learners
- Arabic Version of the Questionnaire

Questionnaire to 4th year middle school learners

Dear Learner

This questionnaire is part of a research work which aims at assessing your attitudes towards project work in the Algerian middle school English language textbooks *Spotlight on English One, Two, Three, and On the Move*. Your answers to the questions and your opinions will be valuable in shedding light on the issue that our research addresses. Your answers will remain anonymous. You are kindly requested to tick off the appropriate answer(s). We thank you for your collaboration.

	Strongly disagree	Disagree	Agree	Strongly Agree
1. Doing project work in English language classes is interesting				
2. Doing project work in English language classes is difficult				
3. Doing project work in English language classes is easy				
4. When doing projects in English, you learn: a- English Grammar and vocabulary which is new for you b- Information and knowledge about the project theme c- How to use English to give your opinion and arguments, to write stories d- To use English vocabulary you have already learned to write the project				
5. Projects in the middle school textbooks aim to teach you the English language that you need to: a - Write SMS/email to a friend, a relative in English b - Talk to people when you visit a foreign country c - Understand texts (history, science, literary...) d - Use in the classroom to do school work				
6. When you find it difficult to conduct the projects that are suggested in the middle school English language textbooks, it is because: a- You do not have any knowledge about the topic b- It is difficult to read texts in English to find out the necessary information c- You cannot distinguish between the most important and the least important information d- It is difficult to write and explain your project in English				

7. It is easier to conduct projects in English when you use only your knowledge and experience, such as describing your family, your favourite sport(s)...etc				
8. It is difficult to conduct English language projects that require a lot of reading and writing				
9. Most project works in the four middle school English language textbooks are difficult				
10. Most project works in the four middle school English language textbooks are easy				
11. Projects in <i>Spotlight on English One</i> and <i>Two</i> are more difficult than those in <i>Spotlight on English Three</i>				
12. Projects in <i>Spotlight on English Two</i> are as easy/ as difficult as those in <i>On the Move</i>				

13. Rank the following project topics from the middle school textbooks of English, in order of difficulty, from 1 to 6 (1= the easiest, 6= the most difficult):

- a- Talk/write about Family members and friends, food, and clothes
- b- Talk/write about sports and hobbies
- c- Write a recipe of your favourite dish
- d- Write about topics that you have already learned about in other classes (science, geography, history)
- e- Write a story, a play, and summary of a book
- f- Write a letter to complain about the bad quality of a product that you bought

14. To conduct the projects that are suggested in the middle school English language textbooks, you obtain the information by (You may tick more than one):

- a- Relying on what you know about the topic ☐
- b- Reading books/magazines ☐
- c- Using internet sources ☐
- d- Asking other people (parent, teacher...etc) ☐

15. What is the most difficult task you have to do when conducting a project in the English language? (You may tick more than one)

- a- Find the information ☐
- b- Select appropriate information ☐
- c- Summarize the information using your own words ☐
- d- You cannot present your project in English in front of other learners ☐

Thank you!

استطلاع لتلاميذ السنة الرابعة متوسط

عزيزي التلميذ

إنّ هذا الاستطلاع يعتبر جزء من بحث علمي يهدف إلى تقييم ومعرفة مواقفك اتجاه المشاريع في مادة اللغة

الإنجليزية، والمشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط *Spotlight on English One, Two, Three,* and *On the Move.*

إجابتك على الأسئلة وآرائك قيمة ومهمة جدًا في تسليط الضوء على الإشكالية التي يتناولها بحثنا. إجابتك وآرائك ستبقى سرّية

ومحفوظة. يرجى منك وضع إشارة (X) في الخانة أو الخانات المناسبة لك. شكرًا على تعاونك القيم.

لا أوافق مطلقًا	لا أوافق	أوافق	أوافق كليًا	
				1- إنجاز المشاريع في مادة اللغة الإنجليزية أمر في غاية الأهمية.
				2- إنجاز المشاريع في مادة اللغة الإنجليزية أمر صعب.
				3- إنجاز المشاريع في مادة اللغة الإنجليزية أمر سهل.
				4- عند إنجازك للمشاريع في مادة اللغة الإنجليزية ، أنت تتعلم: أ - اللغة الإنجليزية وقواعدها (الجديدة بالنسبة إليك).
				ب - معلومات خاصة بموضوع المشروع.
				ج - كيفية استخدام اللغة الإنجليزية للتعبير عن رأيك حول موضوع ما، وإبداء حججك.
				د - استخدام اللغة التي اكتسبها مسبقًا لكتابة وشرح مشروعك.
				5- المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط تهدف إلى تعليمك اللغة التي تمكّنك من: أ - كتابة رسالة قصيرة (SMS) أو رسالة إلكترونية (email) لصديق
				ب - التحدّث مع الناس عن زيارتك لبلد أجنبي.
				ج - فهم نصوص مختلفة كالعلمية، التاريخية والأدبية.
				د - القيام بالواجبات الدراسية.

				6- عندما تجد صعوبة في إنجاز المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط ، ذلك يرجع إلى: أ - ليس لديك معلومات حول موضوع المشروع.
				ب - من الصعب قراءة الكتب، المجالات، ... باللغة الإنجليزية للحصول على
				ج - المعلومات اللازمة.
				د - لا يمكنك التمييز بين المعلومات الأكثر أهمية والأقل أهمية.
				هـ - من الصعب كتابة وشرح مشروعك باللغة الإنجليزية.
				7- من السهل إنجاز المشاريع باللغة الإنجليزية عندما تستخدم فقط معلوماتك وخبراتك حول الموضوع، مثل وصف عائلتك، رياضتك المفضلة، ... إلخ
				8- من الصعب إنجاز مشاريع اللغة الإنجليزية التي تتطلب الكثير من القراءة والكتابة باللغة الإنجليزية.
				9- معظم المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط يصعب إنجازها.
				10- معظم المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط سهلة الإنجاز.
				11- المشاريع المقترحة في Spotlight on English one و Spotlight on English two أكثر صعوبة من المقترحة في Spotlight on English three.
				12- المشاريع المقترحة في Spotlight on English Two هي بنفس السهولة/الصعوبة كالمشاريع المقترحة في On the Move.

13- رتبّ المواضيع التالية المقترحة في كتب الإنجليزية للتعليم المتوسط من حيث الصعوبة من 1 إلى 6 (1= أكثر سهولة،

6 = أكثر صعوبة).

☐

أ - التحدث/الكتابة عن أفراد عائلتك وأصدقائك، اللباس ... إلخ.

☐

ب - التحدث/الكتابة عن الرياضة والهوايات المتنوعة.

☐

ج - كتابة وصف لطبقك المفضل.

☐

د - الكتابة عن مواضيع قد درستها مسبقاً في أحد المواد مثل العلوم، التاريخ، الجغرافيا.

هـ - كتابة قصة، مسرحية أو ملخص كتاب. ☐

و - كتابة رسالة لتشثكي عن النوعية الرديئة لمنتج اشتريته. ☐

14- لإنجاز المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم المتوسط، نتحصل على المعلومات من خلال:

(يمكنك اختيار أكثر من جواب واحد).

أ - الاعتماد على معلوماتك حول الموضوع. ☐

ب - قراءة الكتب والمجالات. ☐

ج - استخدام مصادر مختلفة من الانترنت. ☐

د - الاستعانة بأشخاص آخرين مثل المعلم، والوالدين... إلخ. ☐

15- ما هي أصعب مهمة لديك عند إنجاز المشاريع باللغة الإنجليزية (يمكنك اختيار أكثر من جواب واحد)

أ - العثور على المعلومات ☐

ب - اختيار المعلومات المناسبة. ☐

ج - تلخيص المعلومات بأسلوبك الخاص. ☐

د - لا يمكنك تقديم المشروع لزملائك باللغة الإنجليزية ☐

شكرًا على إجابتك القيّمة.

Appendix I

- Questionnaire to 3rd year Algerian SS Learners

-Arabic Version of the Questionnaire

Questionnaire to 3rd year Secondary School learners

Dear Learner

This questionnaire is part of a research work which aims at assessing your attitudes towards project work in the Algerian middle school English language textbooks *At the Crossroads*, *Getting Through*, and *New Prospects*. Your answers to the questions and your opinions will be valuable in shedding light on the issue that our research addresses. Your answers will remain anonymous. You are kindly requested to tick off the appropriate answer(s). We thank you for your collaboration.

	Strongly disagree	Disagree	Agree	Strongly Agree
1. Doing project work in English language classes is interesting				
2. Doing project work in English language classes is difficult				
3. Doing project work in English language classes is easy				
4. When doing projects in English, you learn: a- English Grammar and vocabulary b- Information and knowledge about the project theme c- How to use English to give your opinion and arguments, to write stories d- To use English vocabulary you have already learned to write the project				
5. Projects in the secondary school textbooks aim to teach you the English language that you need to: a - Write SMS/email to a friend, a relative in English b - Talk to people when you visit a foreign country c - Understand texts (history, science, literary...) d - Use in the classroom to do school work				
6. When you find it difficult to conduct the projects that are suggested in the secondary school English language textbooks, it is because: a- You do not have any knowledge about the topic b- It is difficult to read texts in English to find out the necessary information c- You cannot distinguish between the most important and the least important information d- It is difficult to write and explain your project in English				
7. It is easier to conduct projects in English when you use only your knowledge and experience, such as describing your family, your				

favourite sport(s)...etc				
8. It is difficult to conduct English language projects that require a lot of reading and writing				
9. Most project works in the three secondary school English language textbooks are difficult				
10. Most project works in the three secondary school English language textbooks are easy				
11. Projects in <i>Getting Through</i> are more difficult than projects in <i>At the Crossroads</i> and <i>New Prospects</i>				

12. Rank the following project topics from the secondary school textbooks of English, in order of difficulty, from 1 to 6 (1= the easiest, 6= the most difficult):

- a- Write a collection of stories
- b- The ABC dream
- c- Write a booklet of tips for coping with emotions
- d- Write a book review
- e- Making a survey on the impact of advertizing
- f- Making a job application booklet

13. To conduct the projects that are suggested in the secondary school English language textbooks, you obtain the information by (You may tick more than one):

- a- Relying on what you know about the topic ☐
- b- Reading books/magazines ☐
- c- Using internet sources ☐
- d- Asking other people (parent, teacher...etc) ☐

14. What is the most difficult task you have to do when conducting a project in the English language? (You may tick more than one)

- a- Find the information ☐
- b- Select appropriate information ☐
- c- Summarize the information using your own words ☐
- d- You cannot present your project in English in front of other learners ☐

Thank you!

استطلاع لتلاميذ السنة الثالثة ثانوي

عزيزي التلميذ

إنّ هذا الاستطلاع يعتبر جزء من بحث علمي يهدف إلى تقييم ومعرفة موافقك اتجاه المشاريع في مادة اللغة

الإنجليزية، والمشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي *At the Crossroads, Getting Through, and*

New Prospects

إجابتك على الأسئلة وآرائك قيمة ومهمة جداً في تسليط الضوء على الإشكالية التي يتناولها بحثنا. إجابتك وآرائك

ستبقى سرية ومحفوظة. يرجى منك وضع إشارة (X) في الخانة أو الخانات المناسبة لك. شكراً على تعاونك القيم.

لا أوافق مطلقاً	لا أوافق	أوافق	أوافق كلياً	
				1- إنجاز المشاريع في مادة اللغة الإنجليزية أمر في غاية الأهمية.
				2- إنجاز المشاريع في مادة اللغة الإنجليزية أمر صعب.
				3- إنجاز المشاريع في مادة اللغة الإنجليزية أمر سهل.
				4- عند إنجازك للمشاريع في مادة اللغة الإنجليزية ، أنت تتعلم: أ - اللغة الإنجليزية وقواعدها (الجديدة بالنسبة إليك) . ب - معلومات خاصة بموضوع المشروع.
				ج - كيفية استخدام اللغة الإنجليزية للتعبير عن رأيك حول موضوع ما، وإبداء حججك.
				د - استخدام اللغة التي اكتسبها مسبقاً، وشرح مشروعك.
				5- المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي تهدف إلى تعليمك اللغة التي تمكّنك من: أ - كتابة رسالة قصيرة (SMS) أو رسالة إلكترونية (email) لصديق ب - التحدّث مع الناس عن زيارتك لبلد أجنبي. ج - فهم نصوص مختلفة كالعلمية، التاريخية والأدبية. د - القيام بالواجبات الدراسية.

				6- عندما تجد صعوبة في إنجاز المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي، ذلك يرجع إلى: أ - ليس لديك معلومات حول موضوع المشروع.
				ب - من الصعب قراءة الكتب، المجالات، ... باللغة الإنجليزية للحصول على المعلومات اللازمة.
				ج - لا يمكن التمييز بين المعلومات الأكثر أهمية والأقل أهمية.
				د - من الصعب كتابة وشرح مشروعك باللغة الإنجليزية.
				7- من السهل إنجاز المشاريع باللغة الإنجليزية عندما تستخدم فقط معلوماتك وخبرتك حول الموضوع، مثل وصف عائلتك، رياضتك المفضلة، ... إلخ
				8- من الصعب إنجاز مشاريع اللغة الإنجليزية التي تتطلب الكثير من القراءة والكتابة باللغة الإنجليزية.
				9- معظم المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي يصعب إنجازها.
				10- معظم المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي سهلة الإنجاز.
				11- المشاريع المقترحة في كتاب السنة الثانية للتعليم الثانوي Getting through أصعب من المشاريع المقترحة في كتاب السنة الأولى At the Crossroads وكتاب السنة الثالثة New prospect.

12- رتب المواضيع التالية المقترحة في كتب الإنجليزية للتعليم الثانوي من حيث الصعوبة من 1 إلى 6 (1= أكثر سهولة،

6= أكثر صعوبة).

أ - كتابة مجموعة من القصص. ☐

ب - The ABC Dream ☐

ج - إنجاز كتيب يحتوي على نصائح للتحكم في العواطف. ☐

د - كتابة ملخص أو نقد لكتاب ☐

هـ - إنجاز دراسة لسير آراء حول آثار الإشهار. ☐

و - كتابة كتيب يحتوي على كيفية كتابة طلب عمل. ☐

13- لإنجاز المشاريع المقترحة في كتب اللغة الإنجليزية للتعليم الثانوي، تتحصل على المعلومات من خلال: (يمكنك اختيار أكثر من جواب واحد).

أ - الاعتماد على معلوماتك حول الموضوع. ☐

ب - قراءة الكتب والمجالات ☐

ج - استخدام مصادر مختلفة من الانترنت. ☐

د - الاستعانة بأشخاص آخرين مثل المعلم، الوالدين... إلخ. ☐

14- ما هي أصعب مهمة لديك عند إنجاز المشاريع باللغة الإنجليزية (يمكنك اختيار أكثر من جواب واحد)

أ - العثور على المعلومات ☐

ب - اختيار المعلومات المناسبة. ☐

ج - تلخيص المعلومات بأسلوبك الخاص. ☐

لا يمكنك تقديم المشروع لزملائك باللغة الإنجليزية ☐

شكراً على إجابتك القيمة.

Résumé

Cette recherche est une étude sur l'intégration de la langue, des contenus et des compétences de réflexion dans le projet didactique des manuels algériens de l'anglais destinés à l'enseignement moyen et secondaire. Il s'agit notamment d'une évaluation des projets didactiques proposés dans les manuels scolaires d'enseignement moyen et ceux de l'enseignement secondaire. Cette recherche vise à déterminer les types de la langue, des contenus et des compétences de réflexion enseignés à travers les projets et si leur intégration tient compte du principe de progression graduelle en termes de complexités linguistique et cognitive. Elle cherche à découvrir si ces projets ciblent le type pratique de la langue et de contenu et les facultés cognitives dites de bas niveau (lower order thinking skills) qui caractérisent l'utilisation du langage pour le type communication, dites aptitudes interpersonnelles de base (savoir pratique), ou ils visent le type abstrait de la langue et de contenu et les facultés cognitives dites de haut (higher order thinking skills) nécessaire pour la maîtrise cognitive de la langue au niveau abstrait (savoir théorique). L'analyse des projets s'appuie sur le cadre des structures de savoir proposé par Mohan (1986) et le modèle de classification des activités de communication proposé par Cummins (1981). Il s'agit aussi de savoir si les difficultés des élèves à conduire des projets en anglais sont dues aux complexités cognitives et linguistiques des projets suggérés dans ces manuels. Les résultats de l'analyse montrent que ces projets dans l'enseignement moyen et secondaire visent à enseigner les deux types de compétence de communication, dites aptitudes interpersonnelles de base (savoir pratique) et maîtrise cognitive de la langue au niveau abstrait (savoir théorique). Les projets visent également à développer chez l'apprenant deux types de facultés cognitives dites de haut et de bas niveaux. Il a été aussi constaté que l'intégration de ces deux types de compétences linguistiques et cognitives dans les projets est simultanée et ne prend pas en considération le principe de progression graduelle en termes de complexité linguistique et cognitive. Ce dernier est, en fait, à l'origine des difficultés que les apprenants rencontrent pour conduire les projets. La discussion de ces résultats à la lumière des recherches sur l'acquisition de la langue seconde, de la psychologie de l'éducation et de la psychologie relative au développement du langage chez l'enfant montre clairement que, chez les débutants, l'enseignement de la langue, des contenus et des compétences de réflexion devrait se faire de manière progressive, du simple au plus complexe en termes linguistique et cognitif. En se basant sur ces résultats, un cadre pour l'intégration graduelle de la langue, des contenus et des compétences de réflexion dans le projet didactique a été proposé.

ملخص

تتناول هذه الدراسة مسألة الدمج التدريجي للغة والمحتوى والمهارات الفكرية في المشاريع المقترحة في الكتب المدرسية لتعليم اللغة الإنجليزية في الجزائر. تسعى إلى معرفة نوع اللغة والمحتوى والمهارات الفكرية التي تهدف إليها هذه المشاريع. إذا ما كانت تهدف إلى تعليم مهارات الاتصال الأساسية بين الأشخاص (المعرفة العملية) والتحكم الفكري للغة (المعرفة النظرية)، وإذا ما كانت تهدف إلى تعليم مهارات التفكير العليا (Higher Order Thinking Skills) والأقل مرتبة (Lower Order Thinking Skills) علاوة على ذلك، تحاول هذه الدراسة معرفة ما إذا كان دمج هذه الأخيرة يراعى مبدأ التدرج من حيث التعقيدات اللغوية والفكرية. لتحقيق هذه الأهداف تعتمد هذه الدراسة في تحليل نموذج 44 مشروع مقترح في الكتب المدرسية على إطار هياكل المعرفة (Knowledge Structure Framework) المقترح من طرف Mohan (1986) ونموذج تصنيف الأنشطة البيداغوجية القائمة على التواصل والمقترح من طرف Cummins (1981). كما تم أيضاً توجيه استبيانات إلى كل من تلاميذ السنة الرابعة متوسطة و السنة الثالثة ثانوي لتقييم آرائهم حول الإشكالية المطروحة ومعرفة ما إذا كانت الصعوبات التي يواجهونها في إنجاز المشاريع باللغة الإنجليزية ترجع إلى التعقيدات الفكرية واللغوية للمشاريع المقترحة في الكتب المدرسية. تكشف نتائج الدراسة أن المشاريع المقترحة في الكتب الموجهة للتعليم المتوسط والثانوي تهدف إلى تعليم كل من مهارات الاتصال الأساسية بين الأشخاص (المعرفة العملية) والتحكم الفكري للغة (المعرفة النظرية)، وكذلك تهدف إلى تعليم مهارات التفكير العليا والأقل مرتبة. لقد تبين أن دمج هذين النوعين من المهارات قد تم بطريقة متزامنة بدون الأخذ بعين الاعتبار التعقيدات اللغوية والفكرية. إن مناقشة النتائج في ضوء البحث في اكتساب اللغة الثانية وعلم النفس التربوي وعلم نفس تطور اللغة لدى الطفل يكشف أن تدريس اللغة والمحتوى والمهارات الفكرية للمبتدئين يجب أن ينتقل من أقل إلى أكثر المهارات تعقيداً لغوياً وفكرياً. بناءً على هذه النتائج، تم اقتراح إطار لدمج تدريجي للغة والمحتوى والمهارات الفكرية في المشروع لتعليم اللغة الإنجليزية.