PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
الجمهورية الجزائرية الديمقراطية الشعبية
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
وزارة التعليم العالي والبحث العلمي
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THE PROJECT WORK AS A PEDAGOGICAL TASK TO ENHANCE LEARNERS' CREATIVE THINKING

(The Case of 1st Year Secondary School Learners- Constantine)

Dissertation Submitted to the Department of English in Partial fulfillment of the Requirements for the Degree of PES in English

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2012

ACKNOWLEDGEMENTS

We would like to express our deepest thanks and gratitude to our supervisor, **Mrs. Leila DJOUIMÂA**, for her time, patience, and intellectual guidance. Special thanks to our mentor **Mr. Rachid FERRANI** for his remarkable kindness and valuable advice.

Our thanks extend to all our teachers at the Ecole Normale Superieure of Constantine (ENSC). Their insightful guidance will always be remembered and acknowledged.

We also want to extend our warm thanks to all our classmates with whom we were so lucky to share unforgettable moments in the quest for knowledge.

We would also like to thank the administrative staff of the Ecole Normale Superieure of Constantine (ENSC) for their constant efforts and support.

Last but not least, we are so thankful to our families and friends for their unfailing support and encouragement.

DEDICATION

To all the normaliens…

ABSTRACT

Earlier studies infamously point out that learners' thinking skills and abilities usually stop at the levels of knowledge, comprehension and application; that is, lower-order thinking skills (LOTS), without developing higher-order thinking skills (HOTS) of criticality and especially creativity. Current trends to English language teaching advocate the use of the project work as a pedagogical task to foster the 21st century learner's creativity. Thus, the present study delves into the project work and creative thinking. It investigates the way in which the project work enables learners to develop their creative thinking skills within the specific context of the Algerian first year secondary school learners of English as a foreign language. Therefore, it is hypothesized that if the project work is appropriately carried out, learners' creativity will be highly enhanced. In this research, project work analysis is used as a tool to investigate the validity of the hypothesis. The project work analysis comprises of the observation and the analysis of first year "Tarek Ibn Ziad" secondary school learners' projects (Constantine). Hence, an observation grid is designed to analyse the data gathered and to decide whether the project work is the context where creativity is fostered. The findings revealed that learners were highly creative as far as the processing of information and the generation of ideas and solutions are concerned. The study proves the efficiency of the project work in enhancing learners' creative thinking. Last but not least, the project work is an essential part of teaching- no teacher can do without it. It should be conducted through interest, motivation, and encouragement which give room to innovation and creation from the part of the learners.

Keywords: CBA, the project work, Creative thinking, Bloom's taxonomy

THE PROJECT WORK AS A PEDAGOGICAL TASK TO ENHANCE LEARNERS' CREATIVE THINKING

(THE CASE OF 1ST YEAR SECONDARY SCHOOL LEARNERS- CONSTANTINE)

LIST OF ABBREVIATIONS

LOTS: Lower-order Thinking Skills

CBA: Competancy-based Approach

HOTS: Higher-order Thinking Skills

EAP: English for Academic Purposes

ESP: English for Specific Purposes

ESL: English as a Second Language

L1: First language

NASA: National Aeronautics and Space Administration

1AS: 1ère Année Secondaire (1st Year Secondary Education)

ICT: Information and Communications Technology

CSC: Club Sportif de Constantine

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1. A copy of Unit Three "Our Findings Show"
   Textbook SE1- *At the Crossroads.* (pp. 76-107)
2. A DVD of the Observation Videos

- Tarek Ibn Ziad Secondary School- Constantine
  a) Designing the Questionnaire
  b) Conducting the Survey
  c) Reporting the Survey
  d) Presentation
- Nouioua Fatma Secondary School- Constantine
  - Presentation of the project work

3. A CD Containing Video Lectures on:
   - *Language and the Mind Revisited - The Biolinguistic Turn - YouTube*
   - *Sir Ken Robinson- Do schools kill creativity – YouTube*

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THE PROJECT WORK AS A PEDAGOGICAL TASK TO ENHANCE LEARNERS' CREATIVE THINKING

(THE CASE OF 1ST YEAR SECONDARY SCHOOL LEARNERS- CONSTANTINE)

General Introduction

Recently, a new approach has emerged in the field of education that marked the shift from teacher centeredness to learner centeredness which is commonly known as the Competency Based Approach (CBA) of teaching and learning. Teaching in Algeria is designed to "equip the learner with essential assets for success in tomorrow's world"- Presidential Address (cited in Djouama, F. 2010). One important feature of the CBA, then, is the project work.

Projects are 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 product or presentation (Jones, Rasmussen, and Moffitt,1997;Thomas,Mergendoller,and Michaelson,1999 cited in John, W. Thomas, 2000, March) Indeed, projects make learners acquire efficient working methods and develop in them a sense of autonomy and responsibility. The collective realization of projects, moreover, promotes challenge, motivation and interest.

Hence, the project work represents a cognitivist and socio-cognitivist teaching and learning which functions as a bridge between "classroom" and "real life". That is, it brings learners to use various learning strategies and reinvest their acquired knowledge in situations related to everyday life and environment. Learners, thus, learn to share, exchange knowledge, cooperate and develop mental and intellectual abilities especially critical and creative thinking abilities. Last but not least, the project work encourages learners' initiative and fosters their creativity which leads to a fuller more satisfying life without which mankind would not progress.

Statement of the Problem

Earlier studies infamously point out that learners' thinking skills and abilities usually stop at the levels of knowledge, comprehension and application, that is, lower-order thinking skills (LOTS), without developing higher-order thinking skills (HOTS) of criticality and especially creativity. Current research provides that if we teach learners how to learn, then they would not be at loss in real life situations as they would be armed with strategies to deal with everyday problem solving situations. As it is expressed in the following saying, "give a man fish, he eats it one day; teach him how to fish and he will never go hungry", in other words involving students in the learning process through project work helps them to develop their creativity inside and outside the classroom. The project work, then, helps learners to create and generate new original ideas with the knowledge they acquired. So, it is only through the realization of project work that learners' HOTS (creative thinking skills) are developed and enhanced. This raises the following question: How can the project work enhance creativity of Algerian first year secondary school learners of English as a foreign language?

Aim of the Study

The present study discusses the project work and creative thinking. It investigates the way in which the project work enables learners to develop their creative thinking skills within the specific context of the Algerian first year, secondary school learners of English as a foreign language (Constantine).

Research Questions and Hypothesis

1. The project work is the context where learners' creativity is greatly triggered and enhanced.
2. If the project work is well carried out, learners' creativity will be highly enhanced.

Tools of Investigation

- **Project Analysis**

1. Description of the textbook
2. Description and observation of unit three “Our Findings Show”
3. Observation and analysis of learners’ project productions
    a. Designing a grid
    b. Analyzing data

CHAPTER ONE

THE PROJECT WORK

I.1. Introduction

In recent years, increasing numbers of language educators have turned to content-based instruction and project work to promote meaningful student engagement with language and content learning. Through project work, learners develop language skills while simultaneously becoming more knowledgeable citizens of the world. By integrating project work into content-based classrooms, educators create vibrant learning environments that require active student involvement, stimulate higher level thinking skills, and give students responsibility for their own learning. When incorporating project work into content-based classrooms, instructors distance themselves from teacher- dominated instruction and move towards creating a student community of inquiry involving authentic communication, cooperative learning, collaboration, creative thinking, and problem-solving.

Project work lends itself to many different approaches in a variety of teaching situations. It draws together students of mixed ability and creates opportunities for individuals to contribute in ways which reflect their different talents and creativity. The less linguistically-gifted student may be a talented artist, able to create brilliant artwork, thus, gaining self esteem, which would be unlikely in a more conventional language lesson. (Diana L. Fried-Booth, 2002)

I.2. Definition of the Project Work

Project work is viewed "not as a replacement for other teaching methods" but rather as "an approach to learning which complements mainstream methods and which can be used with almost all levels, ages, and abilities of students" (Haines, 1989).

Fried-Booth defines the project work as: *"a powerful methodology involving students in an authentic learning experience with language used for genuine communication purposes. It is student-centered and it results in a tangible end-product"* (Fried-Booth, 2003, p.03). He adds that: *"project work offers learners an opportunity to take a certain responsibility for their own learning, encouraging them to set their own objectives in terms of what they want and need to*

learn… project work is student-centered and driven by the need to create an end-product. However, it is the route to achieving this end-product that makes project work so worthwhile. The route to the end product brings opportunities for students to develop their confidence and independence and to work together in a real-world environment by collaborating on a task which they have defined for themselves and which has not been externally imposed". (Fried-Booth, 2003, p.06)

Good (1973) identifies the project work as : *"a significant, practical unit of activity having educational value and aimed at one or more definite goals of understanding; it involves investigation and solution of a problem… planned and carried to completion by the pupil and teacher in a natural real-life manner"* (Cited in Beaumont & Williams, 1983, p.01).

A project is a creative way for learners to apply the language they have learned in class. In the project, learners choose what they want to do and how to do it. They show their capacities when demonstrating that they have mastered the objectives assigned. Project pedagogy makes new needs emerge continuously. It implies disciplinary and extra-disciplinary types of knowledge. A project is a divided and complementary task where students learn how to work in groups, how to cooperate and how to feel that they can do something. (Louznadji, 2010)

I.3. Role of the Teacher

Wherever you teach and in whatever circumstances your role remains fundamentally the same that of participant and coordinator when necessary, responding to a language point that may need presenting or revising, and anticipating linguistic or logistical problems. In other words, you are a figure in the background evaluating and monitoring the language being used. The teacher's role is perhaps most vital in trying to maintain an overview and inspiring confidence so that your students feel they are learning by working towards their objectives. Whether you are involved in a project-based solely in the classroom, or engaged in one which takes students outside the classroom, the teacher will need to develop strategies for dealing with the language that arises, whether he can predict it or not. The irony is of course that the more passive you appear to be, the more successful the project is in terms of student autonomy and independent learning. Passivity does not indicate inactivity. Sensitive teachers provide moral support in such a way that students hardly notice them. Simply being with your students,

working alongside them, awaiting their next move or their return if they are taking something outside the classroom, and being absorbed in how they are handling their own language needs, enables you to hold the group together without overtly and busily doing anything. (Fried-Booth, 2002).

I.4. Characteristics of the Project Work

Project work has some typical features that distinguish it from other learning tasks:

I.4.1. Student-centered: Hedge (2000) states: "*project work clearly fits with a perception of the value of learner-centered teaching*" (p.63). This means that project work emphasizes the learner's involvement, responsibility, and autonomy under the teacher's support and guidance.

Stoller (1997), on his part, states that project work emphasizes learners' involvement and responsibility; it is learner-centered even if the teacher dispenses considerable guidance and help. Project work is student-centered, though the teacher plays a major role in offering support and guidance throughout the process. (Stoller, 1997) Learners, then, have to feel autonomy, responsibility, and ownership of their own learning.

I.4.2. Content-based: Project work as pointed out by Haines is "not a replacement for other teaching methods" but rather "an approach to learning which complements mainstream methods. Project-based learning should be viewed 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 (EAP), English for specific purposes (ESP), and English for occupational/vocational/professional purposes, in addition to pre-service and in-service teacher training. In classrooms where a commitment has been made to content learning as well as language learning (i.e., content-based classrooms), project work is particularly effective because it represents a natural extension of what is already taking place in class. (Stoller, 1997)

I.4.3. Integration of Skills: Competency-based learning is motivated by the idea that the classroom should prepare learners for real life. Learners acquire the language, but they also develop skills and strategies that will help them complete the kind of tasks they would do in real life. Learners complete a project at the end of a unit or chapter to show that they have learned the information and that they can use it.

The project work should not be seen only as a different way of language teaching. It includes a full range of skills, which should be naturally integrated and used in balance. Besides the social skills and learners' independence mentioned above, project work includes the development of the motor-skills such as colouring, painting, gluing or cutting, and of course of the intellectual skills like planning, using imagination or describing. (Phillips, Burwood, Dunford, 1999) Moreover, all four language skills (i.e. reading, listening, speaking, and writing) are needed in combination during the work. Fried-Booth observes: "Different projects, of course, require different procedures. And so different skills will come into prominence at different stages" (Fried-Booth, 2002, p. 8). It is probable that the initial stages of the project may imply mainly the speaking skills, for instance in discussions about the topic. However, writing, listening and reading will also be used during the work (Fried-Booth, 2002).

I.4.4. Interaction and Collaboration: (Leki, 1991) views that project work fosters collaboration among learners and reduces the feeling of isolation encountered by individual learners. Project-work is a teaching device that fosters interaction, collaboration and teamwork skills among learners. (Stoller, 1997) states that; "Project work is cooperative rather than competitive. Students can work on their own, in small groups, or as a class to complete a project, sharing resources, ideas, and expertise along the way."

I.4.5. End Product: "Project work culminates in an end product (e.g., an oral presentation, a poster session, a bulletin board display, a report, or a stage performance) that can be shared with others, giving the project a real purpose. The value of the project, however, lies not just in the final product but in the process of working towards the end point. Thus, project work has both a process and product orientation, and provides students with opportunities to focus on fluency and accuracy at different project-work stages." (Stoller, 1997)

Project work is student-centered and driven by the need to create an end product. However, it is the rout to achieve this end product that makes project work so worthwhile. The route to the end-product brings opportunities for students to develop their confidence and independence and to work together in a real world environment by collaborating on a task which they have defined for themselves and which has not been extremely imposed. (Fried-Booth, 2002) Therefore, the competences manifest themselves in the project work in the form of an end product.

I.4.6. Relevance and Motivation: Students' motivation and commitment is generally what drives a project forward and determines its overall success. (Fried-Booth, 2002) Work on projects in English lessons is a very good opportunity for students to use in practice what they already know theoretically. In his Introduction to project work (Hutchinson, 1991) claims: "A foreign language can often seem a remote and unreal thing. This inevitably has a negative effect on motivation, because the students don't see the language as relevant to their own lives" (p. 11). Fried-Booth (2002) agrees: "Most organized language learning takes place in the classroom…Often there is a gap between the language the students are taught and the language they in fact require" (p. 5). According to them, this gap can be bridged by using project work. When students can use their knowledge in a new and creative way, they know that this knowledge is useful and meaningful. The work on project offers a chance to do something different and entertaining. It brings the variety to the course as well as the real sense of achievement (Hardy-Goud, 2003).

The emotional and personal development of the pupils is also very important. Hutchinson (1991) sees project work as a very special piece of work in which children are personally involved because they write about their own lives and experiences. This leads to the fact that the work and presentations are very important to the children. "They produce work which is personal and individual, which reflects their ideas, tastes, and interests; they are encouraged to express their feelings, and their opinions are sought and valued" (Phillips, et al. 1999).

Another equally important characteristic, as Stoller (1997) views, is that project work increases learners' motivation, and results in building more confidence, esteem, and autonomy in learners.

I.4.8. Cross-curricular Links: This technique provides learners with the opportunity to bring their knowledge gained in other school subjects such as history, music, art, science, geography or drama (Wicks, 2000) and extending it during the work on the project. The project work, then, implies disciplinary and extra-disciplinary types of knowledge. The links with other school subjects can be useful and may allow the cooperation of the teachers of different subjects.

I.4.7. Autonomy and Responsibility: Activities accompanying project work often enable a group or a pair work. The major advantage of this grouping is that learners can share their

opinions and help each other. The right grouping can provide "a strong team feeling within a class and engender a good working atmosphere" (Hardy-Goud, 2003). (Phillips, et al.1999) speak about developing "the social skills of sharing, cooperating, making decisions together, and appreciating how individual contributions can make a successful whole", as well as developing "learner independence skills such as making responsible choices, deciding how to complete tasks, getting information, trying things out, and evaluating results" (p.6-7). In other words, learning independently of the teacher encourages students to take greater responsibility which can be very useful in their future studies.

I.4.9. Creativity: A project is a creative way for learners to apply and personalize the language, skills and structures that they have learned in class. They can choose what they do and how they do it. They demonstrate that they have mastered the objectives of the unit. This is an important part of motivating learners and helping them see that they can use English to express things that are important or interesting for them.

The projects are very creative in terms of both content and language. Each project is a unique piece of communication, created by the project writers themselves. (Hunchinson, 1991)

I.5.Types of Project Work

There are different criteria according to which project work can be distinguished into different types:

I.5.1. First, according to the nature and the sequencing of the project related activities

First, according to the degree to which the teacher and the learners decide on the nature and the sequencing of the project related activities. These types of projects are identified as proposed by Henry (1994):

I.5.1.1. Structured projects: are determined, specified and organized by the teacher in terms of topic, materials, methodology, and presentation.

I.5.1.2. Unstructured projects: are defined largely by the students themselves.

I.5.1.3. Semi-structured projects: are defined and organized in part by the teacher and in part by the students.

I.5.2. Second, according to data collection techniques and source of information

Five types of project are identified as proposed by (Haines 1989, Legutke & Thomas 1991):

I.5.2.1. Research projects: require the collection of information through literary texts or via the internet.

I.5.2.2. Text projects: require the students to deal with "texts" such as: literature reports, news, media, videos and audio materials or computer-based information rather than to deal with people.

I.5.2.3. Correspondence projects: necessitate the learners to communicate with individuals such as: (business governments, agencies, schools from other country, or chambers of commerce) to extract information by means of letters, faxes, phone calls, or electronic mails.

I.5.2.4. Survey projects: involve learners in taking views about a given topic and analyzing the obtained data provided by informants.

I.5.2.5. Encounter projects: students are required to find native English speakers outside the school and interview them on a particular subject.

I.5.3. Third, according to the way information are reported

Haines (1989) specified three types of projects:

I.5.3.1. Production projects: in such projects the learners are asked to create for example bulletin board displays, videos, radio programs, poster sessions, written reports, photo essays, letters, handbooks, broachers, bouquet news, travel itineraries… etc.

I.5.3.2. Performance projects: represent the chance for learners to perform different tasks such as: oral presentation or theoretical performances, food fairs or fashion shoes.

I.5.3.3. Organizational projects: involve the learners' ability to organize and plan for example conversational tables, clubs, or conversion partner program.

It is important to note that projects may combine the types listed above and that all these types focus on the learners' involvement, collaboration and responsibility. Furthermore, all of them can be carried out over a short period of time, extended over weeks or a full semester. They can also be done individually, in small groups, or as a class. They can take place inside the classroom or can extend outside the classroom into the community.

I.6. The Project Framework

The Project Framework is a tool that addresses the simultaneous learning of language, content, and skills. Usually construction of knowledge may result in a mismatch of goals, which can cause frustrations and conflicts which can in turn jeopardize educational agendas if left unaddressed. The Project Framework then serves as a mediation tool (Vygotsky, 1978), which provides a bridge to new ways for students to think systematically about the integration of language, content and skills. The primary purpose of the Project Framework is to show the students the language, content, and skill development which occurs through project work.

The figure below represents a project framework which integrates language, content and skills. The column of language consists of six units: reading, writing, listening, speaking, vocabulary and text construction. Content comprises of the sum total of knowledge and attitudes. Finally, the third column covers the different targeted skills.

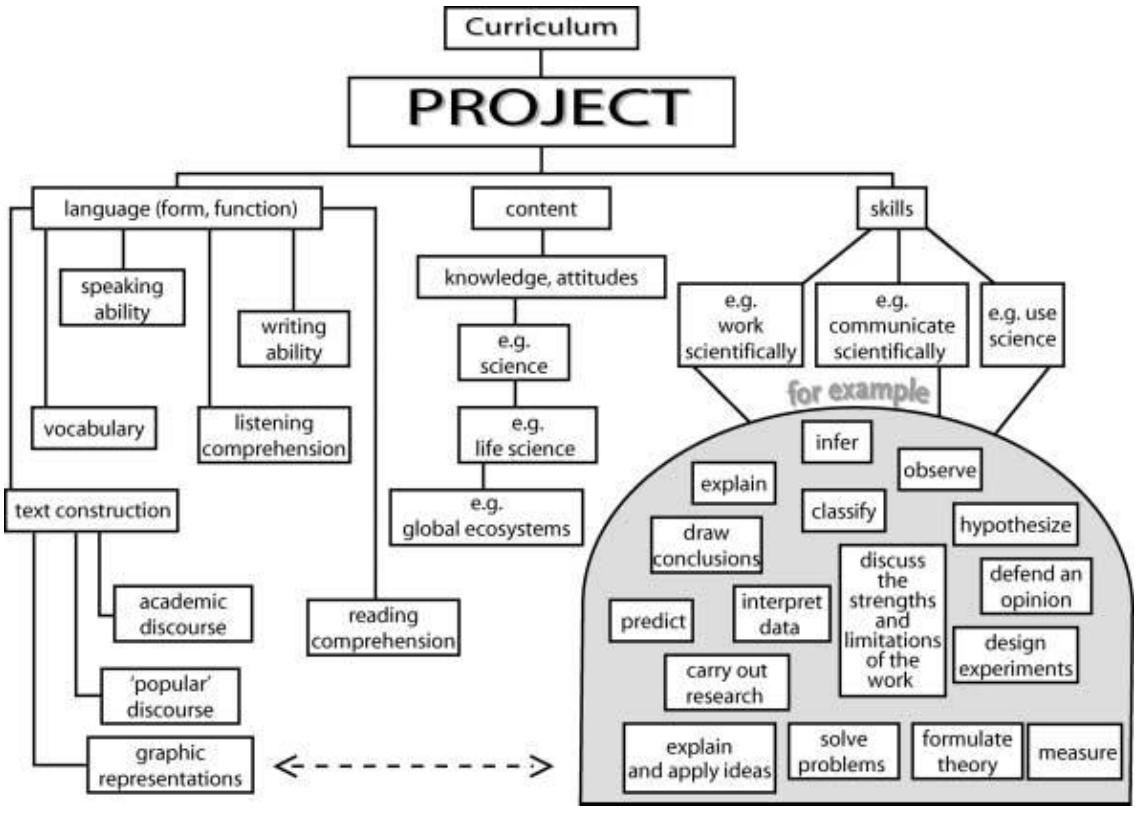

Figure 1: The Project Framework (Gulbahar, H. Beckett, & Slater, T., 2005)

I.7. The Process of Developing a Project Work

I.7.1. Grouping Learners

Most experts on collaborative learning suggest that teacher-selected groups are best, at least until when the pupils become competent at collaboration. Teacher-selected groups aim to achieve a heterogeneous mix which consists of various people different from one another. Such a mix promotes peer tutoring, and helps to break down barriers. The teacher may select randomly to form the groups and this way of grouping is quick and easy and conveys the idea that one can work with anyone. It is up to the teacher to use any way to randomise the group. The teacher, for instance, can take the number of pupils in class and divides them by the number of pupils he wants per group. He can also take some cards of animals, or plants, or countries and so on…Then all the animals would find each other and form a group. When pupils become good at cooperative group work, they can group themselves by interests for self-directed projects.

I.7.2. Step One: Define a Theme

The teacher introduces the project work and motivates the students. The students have the chance to discuss with their teacher and ask for more information. In collaboration with students, the teacher identifies a theme that will amplify the students' understanding of an aspect of their future work and provide relevant language practice. In the process, teachers will also build interest and commitment. By pooling information, ideas, and experiences through discussion, questioning, and negotiation, the students will achieve consensus on the task ahead.

I.7.3. Step Two: Determine the Final Outcome

Define the final outcome of the project (e.g.: written report, brochure, debate, video etc…) and the presentation (e.g.: collective or individual). Agree on objectives for both content and language.

I.7.4. Step Three: Structure the Project

At this point the pupils' decisions are confirmed by the teacher. The latter determines the steps that the students must take to reach the final outcome and agree upon a time frame. The teacher too identifies the information that they will need and the steps they must take to obtain it (e.g.: library research, letters, interviews……etc). Then he considers the authentic materials that

students can consult to enhance the project (e.g.: advertisements from magazines, travel brochures……etc). The teacher also decides on each student's role and puts them into working groups. Deciding on the technique to present the project, and assigning individual tasks.

The figure below is a project planning concept map (Alison Oswald, 2010). This map determines the steps that the students must take to reach the final outcome. It provides a frame for the project- "Ronaldo Project". It identifies all the information that learners have to gather to carry out the project. This map is divided into four parts: our project, we know, we need to know and we need. "our project" section sums up the project. "We know" section represents the learners' backround knowledge. "We need to know" section is about information needed to fulfill the project. Finally, "We Need" section lists the different sources learners need to consult to gather the data and materials needed. The project above, then, is about Ronaldo as a BIG Star which entails the use of a map of Brazil, some facts about Ronaldo as well as timeline about his life. As such, this frame determines the steps, information, materials and the student's role in the project. (Alison Oswald, 2010).

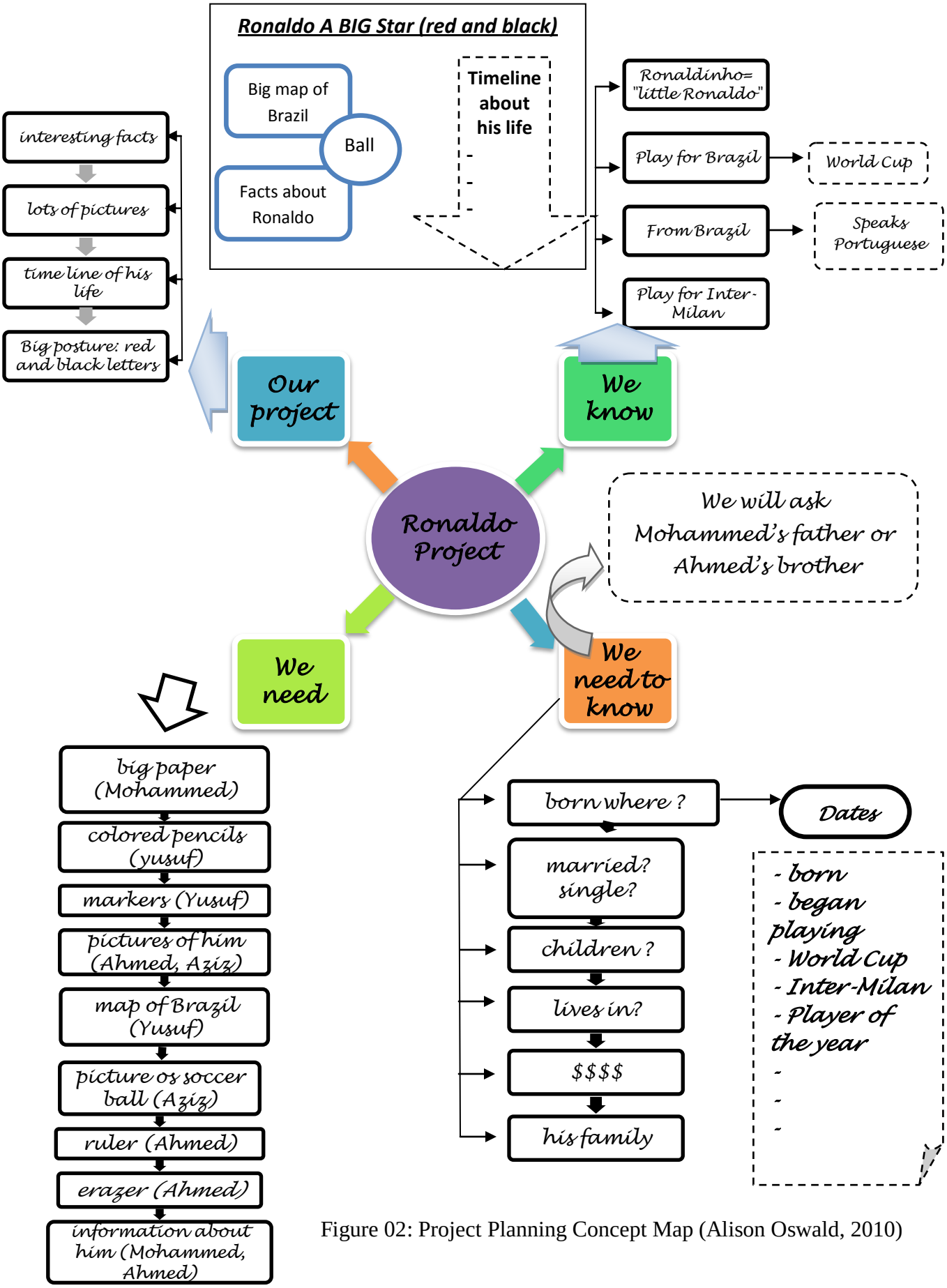

Figure 02: Project Planning Concept Map (Alison Oswald, 2010)

I.7.5. Step four: Identify Language Skills and Strategies

I.7.5.1. Identify the Language Skills: (e.g.: reading, writing, speaking, listening) which students will need to gather information for their project. For example: will they have to write letters? If so, are they familiar with the type of letter that is appropriate for their purposes? Will they make interviews? If so, will they need class sessions devoted to the language of inquiry and related functions (e.g.: how to ask for clarification, or for repetition?). Should they practice the pronunciation of key words? Will they need help with intensive listening? Would role-plays help? Do they need reading skills practice?

I.7.5.2. Determine the Skills and Strategies: that students will need to compile information that may have been gathered from several sources. For example, they may have to read each other's notes, interpret visual materials (e.g.: charts and grids). Plan activities to prepare them for these tasks.

I.7.6. Step Five: Gather Information

After students design instruments for data collection (e.g: questionnaires, surveys, interview questions, grids), have them gather information inside and outside the classroom, individually, in pairs, or in groups. This stage is central to the project work. Pupils, individually or in groups, collect materials and information from books, journals, libraries, maps, resource persons (experienced people). Some useful tools can be used such as interviews, observations and questionnaires.

I.7.6.1. Interviews: refer to the collection of information from individuals whom students consider as experts on a subject. They are asked to conduct interviews. They have to prepare their questions in advance and if necessary, tape the entire conversation.

I.7.6.2. Observations: the pupils observe certain events or interactions that they record.

I.7.6.3. Questionnaires: pupils prepare the questionnaires and distribute them to people for a response. It could be written in the native language (if necessary) but the results must be presented in English.

I.7.7. Step Six: Compile and Analyze Information

Working in groups or as a whole class, students should compile information they have gathered, compare their findings, and decide how to organize them for efficient presentation. The teacher may assume the role of a guide.

I.7.8. Step seven: Present final Product

Students will present the outcome of their project work as a culminating activity. The manner of presentation will largely depend on the final form of the product. It may involve the screening of a video; the staging of a debate; the submission of an article to the school newspaper or a written report; or the presentation of a brochure to a local tourist agency or hotel.

I.7.9. Step Eight: Evaluate the Project

In this phase of project work, students and teacher reflect on:

- The steps taken to accomplish their objectives and
- The language, communicative skills, and information they have acquired in the process. They can discuss the value of their experience and its relationship to future vocational needs. They can also identify aspects of the project which can be improved and/ or enhanced in future attempts at project work.

During this stage, the teacher will consider the student effort, **creativity**, use of sources, and presentation. Of course, it is not the product or the research findings that count here, but the interaction of the pupils to complete the assignment.

Before starting their project work, students are given *the evaluation grid* so that they know on what criteria they will be evaluated; in the mean time this raises their awareness on what makes a good project work. Louznadji (2010) suggests the following evaluation grid to be used to evaluate project works in Algeria.

Did learners…	1	2	3	4	5
1. Do independent research to find information for their project?					
2. Apply, analyse, synthesise, and evaluate somehow the information?					
3. Support their work with pictures, drawings, photos, maps, graphs?					
4. Prepare a project that is interesting for their classmates?					
5. Include the planning tool they used to collect and organise their ideas?					
6. Correctly use the vocabulary items required?					
7. Correctly use the grammatical pattern (s) required?					
8. Spell and punctuate their work correctly?					
Mark : Learners' total score: x /2 = …points of 20					

Table 01: Evaluation Grid, (Louznadji, 2010)

All in all, the process of developing a project work can be summarized in the figure below:

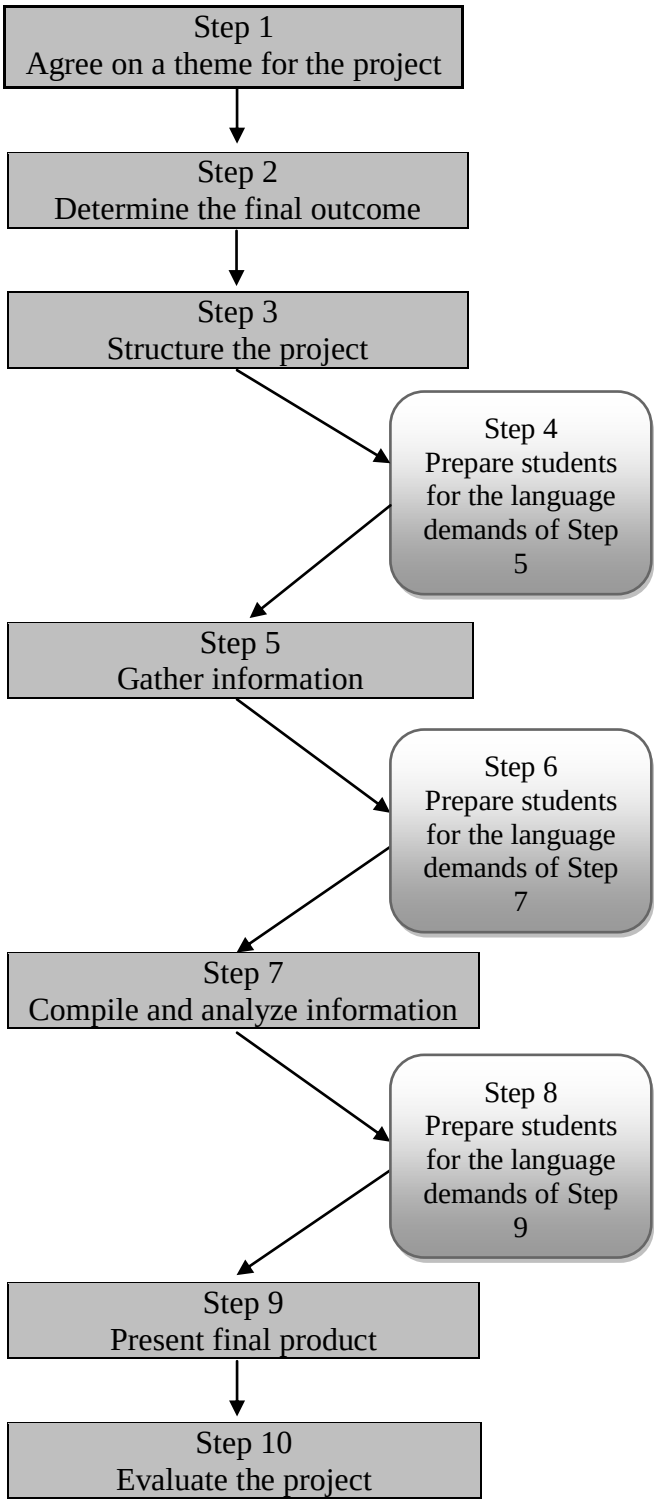

Figure 03: Developing a Project in a Language Classroom (Stoller, L. cited in Richards, C. & Renandya, A. 2002, p. 112)

II.8. Objectives of the Project Work

The project work is the only satisfactory method where many objectives are fostered:

1. The project work enables learners to work together, share responsibility, and open up entirely new avenues for action, interaction, and construction of new knowledge (Beckett, 2005 cited in Beckett & Miller, 2006). The project work then caters for a degree of cooperation among students in an atmosphere of emulation.
2. The project work helps students to be autonomous and independent through the realization of a personal research. This comes feasible when planning the work, hunting out sources, collecting and selecting materials, and deciding on the presentation. Hence, these elements would greatly promote learners autonomy and independence. (Fried Booth, 2002, cited in Beckett and Miller 2006).
3. The project work develops learners' decision making skills. It involves students in a piece of work that has been chosen by the students themselves. Throughout all the stages of the project work (defining a theme, determining the final outcome, structuring the project, gathering information, compiling and analyzing information, and presenting the final product), learners experience and demonstrate high degree of decision making skills.
4. The project work enhances cognitive development. Through all the project steps, learners continuously ask questions and find answers. Thus, they practice many mental activities and develop critical and creative thinking skills (Beckett, 2005, Kobayashi, 2004 cited in Beckett and Miller, 2006), analytical skills (Gardner, 1995 cited in Beckett and Miller, 2006), and time management skills. (Cdeman, 1992, cited in Beckett and Miller, 2006).
5. To develop knowledge transfer. It is also believed that by engaging students in project groups, they learn to discuss alternative strategies, debate critical issues and make judgments which lead to the consolidation of knowledge. (Dewey, 1924, Halt, 1994 cited in Becked and Miller 2006).
6. The project work motivates students to learn and see the connection between theoretical and practical knowledge. Project can intrinsically motivate students to learn by giving them ownership of learning and by allowing them to apply theoretical knowledge in practice. (Berliner, 1992 cited in Beckett and Miller, 2006). Students gain deeper understanding of a topic when they are asked to choose, conceptualize, search and reflect on their own projects.

In doing so, they became familiar with the facts and viewpoints related to a topic. (Kragcik, 1994. Lodewski, 1994. et al, cited in Beckett and Miller, 2006).

7. The project work makes the learners feel the satisfaction of working on complex tasks over a period of time with the possibility of producing a result of permanent value and interest to themselves and others. (Hedge, 2000, cited in Beaumont and Williams, 1983).
8. The project work provides opportunities for the practice of communication skills in a frame work where language is used in a number of ways for real communication: seeking information, oral and written reports, discussing, synthesizing, revising and editing…etc. (Hedge, 2000, cited in Beaumont and Williams, 1983)

   All in all, Beckett (1999) found that teachers reported having various goals for implementing projects in their ESL classrooms, such as challenging students' creativity; fostering independence; enhancing cooperative learning skills; building decision-making, critical/creative thinking, learning skills; and facilitating the language socialization of ESL students into local academic and social cultures.

I.9. Bloom's Taxonomy and the Project Work

Benjamin Bloom (1956) developed a classification of levels of intellectual behavior in learning. This taxonomy contained three overlapping domains: the cognitive, psychomotor, and affective. The project work closely adopts and integrates all of these three domains. In the project work students assume an active role in which they must locate, evaluate, organize, synthesize and present information. Students work collaboratively with their classmates to explore a problem. This makes it possible for each student to come to his/her own understanding of a particular topic as s/he constructs it. Adopting Bloom's taxonomy to the project work plays a crucial role in developing learners' critical and creative thinking skills.

I.10. Critical and Creative Thinking in the project work

I.10.1. Critical Thinking

Critical thinking involves logical thinking and reasoning including skills such as comparison, classification, sequencing, cause/effect, patterning, webbing, analogies, deductive and inductive reasoning, forecasting, planning, hypothesizing, and critiquing.

I.10.2. Creative Thinking

Creative thinking involves creating something new or original. It involves the skills of flexibility, originality, fluency, elaboration, brainstorming, modification, imagery, associative thinking, attribute listing, metaphorical thinking, and forced relationships. The aim of creative thinking is to stimulate curiosity and promote divergence. While critical thinking can be thought of as more left-brain and creative thinking more right brain, they both involve "thinking." When we talk about HOTS "higher-order thinking skills" we're concentrating on the top three levels of Bloom's Taxonomy: analysis, synthesis, and evaluation.

I.11. Assessing the Project Work

A project gives teachers the opportunity to see if learners can meet the objectives of a unit. This gives them information about learners' abilities and about the effectiveness of teaching strategies they have used during the unit or year. Teachers should carefully consider the objectives both of the unit and their teaching in general; evaluation of projects should focus on learners' ability to correctly and creatively use new structures and vocabulary. Evaluation must also focus on learners' ability to use higher level thinking skills and learning strategies. Learners should know the evaluation criteria before the project is assigned. Because competency-based learning is new, it is important for students to know how they will be graded. Teachers can give groups a checklist or copy of the instrument that will be used to grade their projects or make a poster for the classroom wall. This helps learners know what is important and how they can spend time effectively. Teachers can give parents a copy of evaluation criteria, translated into the appropriate language so that they can understand what their children are ***doing*** – and why they have gotten the grade they got. Tables bellow: *A- Project Checklist, B- Project Evaluation Rating Scale and C- the Project Evaluation Rubric* are evaluation tools that measure both language ability and higher-level thinking and planning. These tools summarise what is needed from learners and how they are graded. They are ways for teachers to assess the project work:

I.11.1. Project Checklist

Did our group:	YES	NO
• Get information from people, books or computers?		
• Do something with the information – not only copy it?		
• Use pictures to show more about our ideas?		
• Write our names, the title and the date on the first page?		
• Put our project planning sheet on the second page?		
• Check spelling of nationalities?		
• Check to be sure that we used verbs in past correctly?		

Table 02: Project Checklist (Project Work: Alison Oswald)

I.11.2. Project Evaluation Rubric

	Thinking and Planning Skills				**Language Skills**		
Criteria	Independent Research ***20 points***	Information processing (application, analysis, synthesis, evaluation) ***20 points***	Visual support (drawings, photos, graphic organizers) ***15 points***	Audience Design ***15 points***	Past simple ***10 points***	Adjectives for nationalities ***10 points***	Spelling, and punctuation ***10 points***
Excellent	Significant out of classroom research. ***17-20***	All information is processed. ***17-20***	Good visual support for information ***13-15***	Project is interesting for classmates ***11-15***	No mistakes ***9-10***	No mistakes ***9-10***	No mistakes ***9-10***
Good	Some out of classroom research. ***13-16***	Some information processed, some is only copied. ***13-16***	Some visual support for information ***10-12***	Mostly interesting for classmates ***10-12***	Fewer than two mistakes. ***7-8***	Fewer than two mistakes. ***7-8***	Fewer than four mistakes ***7-8***
Fair	Little or no out of classroom research. ***9-12***	Most information copied, little processing done. ***9-12***	Visual support limited or not appropriate ***7-9***	Somewhat interesting for classmates ***7-9***	Fewer than four mistakes. ***5-6***	Fewer than four mistakes. ***5-6***	Fewer than seven mistakes. ***5-6***
Poor	Information from class/text. ***0-8***	Information only copied, no processing. ***0-8***	The project does not have visual support. ***0-6***	Not interesting for classmates ***0-6***	More than six mistakes. ***0-4***	More than six mistakes. ***0-4***	More than ten mistakes. ***0-4***
	Mark : Learners' total score____ / 5 = ____ points of 20						

Table 03: Project Evaluation Rubric (Project Work: Alison Oswald)

I.11.3. Project Evaluation Rating Scale

Did learners…	No	slightly	generally	Mostly	yes
1. do independent research to find information for their project?	1	2	3	4	5
2. apply, analyze, synthesize, evaluate somehow process the information?	1	2	3	4	5
3. support their work with pictures, drawings, photographs or graphic organizers (charts, graphs, mind maps, Venn diagram, etc.)	1	2	3	4	5
4. prepare a project that is interesting for their classmates?	1	2	3	4	5
5. include the planning tool they used to collect and organize their ideas?	1	2	3	4	5
6. correctly use the past simple to tell the biography of a person/s?	1	2	3	4	5
7. correctly use adjectives for nations and nationalities?	1	2	3	4	5
8. spell and punctuate their work correctly?	1	2	3	4	5
Mark: Learners' total score __ / 2 = __ points of 20					

Table 04: Project Evaluation Rating Scale (Project Work: Alison Oswald)

I.12. Possible Drawbacks of the Project Work

Time constraints, the use of L1, noise, groups working at different speeds are some drawbacks of the project work. They are some of the possible problems that teachers encounter when dealing with the project work.

I.12.1. Time

To prepare and realize a good project is a very hard and time-consuming work for both the teacher and the pupils. When teachers are already struggling to get through the syllabus or finish the textbook, they will probably feel that they don't have time to devote to project work, however good an activity it may be. Hence, if there is not enough space in the lessons, the work can be divided into class work and home work. For instance the group work can take place in lessons whereas individual tasks may be done at home. Hutchinson (1991, p. 17) also notes: "*the positive motivation that projects generate affects the students' attitude to all the other aspects of*

the language programme…project work is actually a very cost-effective use of time. There is no substitute for quality"

I.12.2. Using L1

The problem with children speaking their first language instead of English may appear in monolingual classes. However, rather than seeing this as a problem Hutchinson (1991) tries to consider its merits. He persuades that L1 and the studied language are not two "completely separated domains", but the learner who can operate them both may switch constantly and naturally from one to another. As long as the final product is presented in English, the usage of L1 does not matter. It is also a precious opportunity for realistic translation work because children use various materials and make interviews and surveys in their mother tongue but must report them in English (Hutchinson, 1991).

The using of L1 can be treated in lessons in a similar way. In low level classes the introduction can be done in children's mother tongue, whereas with high level students it can be an ideal opportunity for using the target language (Phillips, et al. 1999). However, even the lower level students can use a certain amount of English during their work. In order to help them there can be a poster with classroom English and relevant phrases placed on the wall. A teacher should discuss the importance of using English and remind them to speak English all the time or nominate an "English monitor" in each group who will encourage using English in the particular task. (Hardy-Goud, 2003).

I.12.3. Noise

Teachers are often afraid that the project classroom will be noisier than the traditional classroom and that this will disturb other classes in the school. The level of noise in lessons that are engaged in a project is probably much higher than in traditional lessons. Students will often need to discuss things and they may be moving around to get a pair of scissors or to consult a reference book. And some activities do require a lot of talking. If students are doing a survey in their class, for example, there will be a lot of moving around and talking. However, this kind of noise is a natural part of any productive creative activity. Matt Wicks asserts that it can be a good sign which often means that children are enjoying the activity. If the noise is disturbing, the class and a teacher have to agree on some "quiet sign" (e.g. teacher rising or clapping hands). He or

she should try to speak quietly and not to shout louder than children (Wicks, 2000). Tom Hutchinson (1991) disputes that project lessons are not inherently noisier than any other activities done in class. He does not see the difference between having a discussion about the project and listening to a tape and giving a choral response. On the contrary to cut out pictures and stick them into a project book can make the lesson a lot quieter than a loudly speaking teacher.

The problem is not really a problem of noise; it is a concern about control. Project work is a different way of working and one that requires a different form of control. In project work students are working independently. They must, therefore, take on some of the responsibility for managing their learning environment. Part of this responsibility is learning what kind of, and what level of, noise is acceptable. When you introduce project work you also need to encourage and guide the learners towards working quietly and sensibly. Remember that they will enjoy project work and will not want to stop doing it because it is causing too much noise. So it should not be too difficult to get your students to behave sensibly. (Hutchinson, 1991).

I.12.4. Different levels

Some teachers might be afraid that *without their control* the weaker students will be lost and not able to cope. Hutchinson (1991) again *tries to see the positive side of it*. He concludes that the teacher's constant supervision is not necessary for all students in the class and the brighter students can be encouraged to work independently so that the teacher can devote his or her time to those students who need it most.

I.12.5. Groups working at different speeds

One of the drawbacks that teachers may encounter during the realization of the project work is groups working at different speeds. Khalil Zakari, (2007) points out that one group may claim that they have 'finished' the project after a couple of hours and say they have nothing to do. These are the different possible drawbacks of the project work that teachers have to deal with carefully.

I.13. Conclusion

The project work is a rich learning experience. When choosing to do project work, one is making a choice in favour of the quality of the learning experience over the quantity. It is unfortunate that language teaching has tended to put most emphasis on quantity, i.e. as much practice as possible of each language item. What really matters in learning is the quality of the learning experience. Project work provides rich learning experiences: rich in action, interaction and, most of all, involvement and creativity. The positive motivation that projects generate affects the students' attitude to all the other aspects of the language programme. Learning grammar and vocabulary will appear more relevant because the students know they will need these things for their project work. Looked at in this way, project work is actually a very cost-effective use of time. There is no substitute for quality.

CHAPTER TWO

CREATIVE THINKING

II.1. Introduction

In terms of education, creativity is an essential element necessary for learning. Starko (1995) suggests that learning is a creative process that involves students making information relevant by linking prior knowledge and new knowledge in an individually meaningful format. Starko attributes this meaningfulness to the individual's creativity. Unfortunately, most school environments do not support, and many actively suppress, creative expression. Torrance and Safter (1986), for instance, assert that teachers are often ill equipped to develop, support, or evaluate creativity in their students. In addition, much theory and research shows that creative students often lose their creative potential (Shaughnessy, 1991). If education strives to prepare children for a productive life in society, the educational system must accept responsibility for supporting and developing creativity. Thus, the future depends on our ability to develop a new crop of creative problem solvers. Nowhere is creativity more critical or in greater crisis than today's classroom. The aims of project work, then, are to provide students with the opportunities to foster collaborative learning skills, to improve both oral and written communication, to practise creative and critical thinking skills, and to develop self-directed inquiry and life-long learning skills (Singaporean Ministry of Education, 1999).

II.2. Definitions

II.2.1. Thinking: Thinking is cognition and emotion that enables one to understand and appreciate the reality that one and others perceive (Herb, 2002). Cohen (1971) identified four key thinking strategies:

II.2.2. Problem Solving: means using basic thinking processes to solve a known or defined difficulty.

II.2.3. Decision Making: means using basic thinking processes to choose a best response among several options

II.2.4. Critical Thinking: means using basic thinking processes to analyse arguments and generate insights into particular meanings and interpretations

II.2.5. Creative Thinking: means using basic thinking processes to develop or invent novel, aesthetic, constructive ideas, or products, related to precepts as well as concepts, and stressing the intuitive aspects of thinking as much as the rational. (Jacobs, G. M., Lee, C, & Ng, M. 1997).

Torrance (1966) defines creativity as the capacity of an individual to produce compositions, products or ideas related to particular tasks which are essentially new or novel, previously known or unknown to the producer, where the freedom of the individual is the basis of expression. Moreover, creativity is the process of making connections and, sometimes, is about productivity, and making something new from those connections (Gardner, 1993). Creativity is also about problem solving, an essential life skill which can be explored in the Secondary English classroom (Howell, 2008).

Young (1985) defines Creativity as:

> *The skill of bringing about something new and valuable…Creative people do more than break away from old patterns. They do more than find alternatives. They diverge from familiar patterns, but then they converge on new solutions. They break laws to remake them. They make hard decisions about what to include and what to eliminate. Creative people innovate. They aim toward newness".* (Schaefer, 1991, p. 06).

Creativity, thus, is the ability to bring something new with a positive value. It is the most appreciated quality of successful projects. Processes suppressed in conventional teaching are applied through creative work: "imagination, fantasy, intuition." It is also possible to acquire at least certain elements of creativity: "sensitivity - ability to find out problems, flexibility - change of a point of view, fluency - proposal of more solutions, originality and elaboration - sense for details. (Vlasta, 2008).

II.3. Creative Thinking and the Brain

In order to find ways of being consciously creative, one must first understand how the brain works. Brown, D. & Kusiak, J. (2005) pointed out that experimentation on the brain has proved to be very difficult and it is only in the last few years, with advanced scanning technology, that science has discovered much about it.

Put simply, the brain consists of two hemispheres joined by a bridge of nervous tissue called the Corpus Callosum. In unusual cases, some people have been born with a split corpus callosum where the two halves of the brain are not connected. Split brain patients are excellent subjects for studying how functions are localised and in which part of the brain they are performed. This has shown that anatomical features in one half of the body are controlled by the opposite half of the brain - the brain is crossed. Brown, D. & Kusiak, J. (2005)

II.3.1. Left and Right Brain Functions

It is found that in right-handed people, the left brain deals with the senses and movement of the right of the body, together with speech, reading, mathematics and analytical (logical) thinking.

The right brain deals with the senses and movement of the left side of the body together with creativity, the interpretation of shape and the relationship of objects in space. This is, of course, an oversimplification. For example, when a person is brain damaged and loses say movement of one side of the body, the other side of the brain can often be trained to take over the missing brain functions. Brown, D. & Kusiak, J. (2005) see that the left brain is the text processor and the right brain is the picture processor. Further research proves that the logical left brain analyses new ideas generated by the creative right brain – and turns these ideas into words. Unfortunately, the left brain is found to be dominant and tends to filter out many ideas because they appear to be crazy. The reason behind this dominance of the left brain is probably rooted in our evolutionary past. Primitive man had few left brain functions and relied on right brain functions for survival. An intruder's intentions were judged as hostile or friendly by stance and facial expression. When the left brain functions evolved, the left brain suppressed the 'suspicious' mistrusting right. Modern man needs to find a way of suppressing left brain activity to allow the right to express itself via the generation of ideas – even, and most importantly, the 'crazy' ones. Figure 04 below distinguishes left and right brain functions. (Brown, D. & Kusiak, J. (2005-2007)

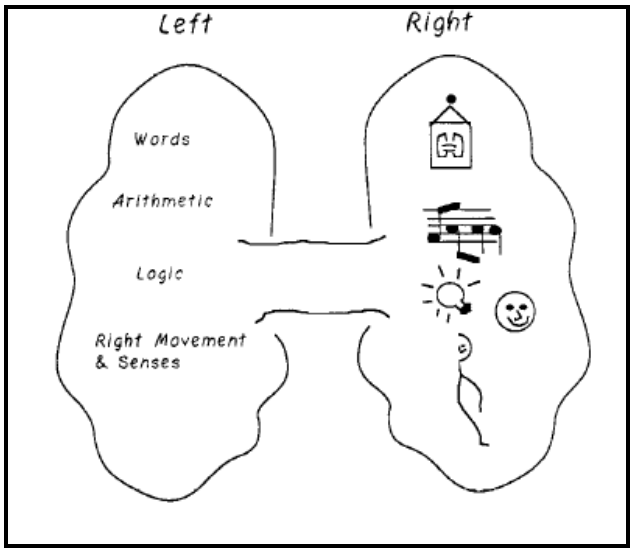

Figure 04: Left and right brain functions (Brown, D. & Kusiak, J. 2005-2007)

II.4. The Creative Process

It has been suggested that creativity (or, as it is also termed, divergent production) is not a single unifying ability but it is viewed as a composite of intellectual abilities (J.P.Guilford, 1959, 1968). Some of these are outlined below:

II.4.1. Fluency: Producing lots of ideas

II.4.2. Flexibility: Producing ideas of various types

II.4.3. Elaboration: Building on and embellishing existing ideas

II.4.2. Originality: Producing clever and original ideas

These abilities enable the individual to produce not only a multiplicity of answers as solutions to the same problem or tasks but answers which are also varied; some may at the same time be original.

II.5. Creative Thinking Requirements

Before assessing creativity, one has to be able to share what it is with students. If a student asked what to do to improve his or her thinking, one would know what to say about analysis, synthesis, evaluation, logic and reasoning, critical judgment, and problem solving. But how does one get better at creativity? Just what is it that a student should "do" to be creative? Robinson (Azzam, 2009) notes that creativity feeds on collaboration and diversity, which emphasizes the importance of having multiple sources of ideas. Sweller (2009) notes that idea generation, reorganization of ideas, trial and error, and a deep knowledge base are required for creativity. He emphasizes the importance both of having new ideas and of using different organizational methods to combine and process the ideas. The Partnership for 21st Century Skills (2009) also lists the kinds of actions students do when they think creatively, work creatively with others, and implement innovations.

Joining these sources of information together, it can be said that creative students do the following:

• Recognize the importance of a deep knowledge base and continually work to learn new things.

• Are open to new ideas and actively seek them out.

• Find "source material" for ideas in a wide variety of media, people, and events.

• Look for ways to organize and reorganize ideas into different categories and combinations, and then evaluate whether the results are interesting, new, or helpful.

• Use trial and error when they are not sure of how to proceed, viewing failure as an opportunity to learn.

II.6. Language and Creativity

Linguistic creativity is related to the concept of verbal creativity. It is the interplay between game-like grammatical 'rules' and specific verbal items, 'words': 'Words and rules give rise to the vast expressive powers of language, allowing us to share the fruits of the vast creative power of thought' (Pinker 1999, p. 321). For Pinker and Chomsky (cited in Pope, R. 2005), verbal creativity is an aspect of mental creativity, and both define what it is to be distinctively human.

Perhaps the most compelling example of a resource that is extraordinarily creative is language: whatever the linguistic model, linguists agree that words are at once an utterly routine and

fantastically rich resource. Noam Chomsky, for example, talks of the prodigious 'generative' power of a few essentially 'deep' structures and their capacity to be 'transformed' into myriad 'surface' forms as virtually infinite realizations of basically finite resources. He observes in *Language and Mind* (Chomsky 1972: p. 100), 'The normal use of language is, in this sense, a creative activity. This creative aspect of normal language use is one fundamental factor that distinguishes human language from any known system of animal communication.' In a similar vein, Steven Pinker's 'language instinct' is 'an extraordinary gift: the ability to dispatch an infinite number of precisely structured thoughts'. Thus Ron Carter both opens and closes his ground-breaking study *Language and Creativity: the Art of Common Talk* (2004) with the uncompromising observation that 'linguistic creativity is not simply a property of exceptional people but an exceptional property of all people' (Carter 2004: 13, 215).

II.7. Fostering Creativity in the Classroom

Many common classroom activities and procedures foster students' creative work. Mathematics teachers, for example, sometimes teach students to use "guess and check" as a strategy for problem solving. The process of generating the guesses and then evaluating how close their guesses got to solving the problem encompasses both the "create" and "critique" aspects of creativity discussed previously. (Susan M. Brookhart, 2010)

Susan M. Brookhart (2010) suggested brainstorming and reader-response logs as effective ways to foster creativity in the classroom. Brainstorming, in any subject, is a classic creative activity. In a typical brainstorming session, all ideas are accepted and listed. Evaluation of the ideas comes later. This approach has the effect of generating a maximum number of ideas. It also exposes all students in the group to everyone's ideas, which can help stretch students' thinking and help them see how being open to ideas from others is useful.

Writing reader-response logs in reading or literature classes is a creative activity for students. In a typical reader-response log, students are asked to describe their thoughts, feelings, surprises, and other reactions after reading a text or selection. There are many ways to respond to literature, and students have an opportunity to connect elements of their own lives with those in the text—a "reorganizing" activity that can generate new insights. Hence, brainstorming and reader response logs are two activities that greatly foster creativity in the classroom. (Susan M. Brookhart, 2010)

II.8. Creative Thinking in Language Classrooms

II.8.1. Creative Language Learners

Learners can only become proficient language users if they, besides using the language and knowing the meaning, could display creative thinking through the language. This implies that the learners must be creative in their production of ideas. Nevertheless, creative thinking skills should not be taught separately as an isolated entity, but embedded in the subject matter and "woven into the curriculum" (Mirman and Tishman, 1988).

Creative language learners are defined in terms of the learners' cognitive abilities to carry out certain tasks effectively. The creative language learners should be able to combine responses or ideas in novel ways (Smith, Ward and Finke, 1995), and to use elaborate, intricate, and complex stimuli and thinking patterns (Feldman, 1997).

II.8.2. Teachers in the Creative Thinking Language Class

Having said what is expected of creative language learners, we ought to scrutinize the roles of teachers as they have an enormous amount of responsibilities in classrooms. They determine and dictate the content, activities and processes of teaching and learning in classrooms. It is the teachers who decide on the aims, goals, and strategies of teaching to be implemented in classrooms. If teachers decide to produce learners who would obtain good results in their examinations, then their contents, activities and strategies of teaching would vastly differ from the ones who resolved to nurture creative language learners. This leads to conclude that the only element needed to address this issue is the change of teachers' attitudes towards students, pedagogy, and themselves as teachers.

II.8.2.1. Teachers' Attitude towards Students

Teachers' attitude towards students in the creative thinking language class is of a paramount importance. Muhammad Kamarul Kabilan, A. (May, 1999) pointed out that there are teachers who regard learners as empty vessels, which need to be filled with knowledge. Teachers tend to assume that learners do not have any or little prior knowledge and experiences regarding the subject matter that is going to be taught in classrooms. These teachers ignore, knowingly or unknowingly, the individuality of students. They fail to understand and appreciate the learners'

own unique experiences, and concepts, notions and views of the world. Teachers who do not acknowledge each learner's individuality will often lead a boring and unimaginative language classroom because of the minimal participation and involvement of learners. The learners will feel left out and assume their opinions and beliefs as not relevant or important enough to be heard in the classroom. Eventually, this would pave the way to a molding process of passive language learners, and be a cause to the detriment of creative thinking.

Teachers could gain much by listening to the learners' opinions and beliefs. The obvious one being the enrichment of experience, ideas and thoughts in a discussion of an issue. For this to flow without hindrance, teachers should develop a mutual relationship with their learners. Freire (1973) described this relationship as "I-thou relationship between two subjects". This means that teachers need to consider learners as individuals who are equals in a situation of genuine two-way communication (Spener, 1990). Besides that, it must also involve respect (Smith, 1997) and characterizes the communication in a manner which is humble, open and focused on collaborative learning (Boyce, 1996). More importantly, learners learn from the teacher, and the teacher learns from the learners.

II.8.2.2. Teachers' Attitude towards Pedagogy

Producing creative language learners is by no means an easy task, but it can be achieved by engaging the Pedagogy of Question, which was proposed by Freire (1970 & 1973). This pedagogy requires posing questions to learners and listening to learners' questions. This is a practice which forces and challenges the learners to think creatively, and to adopt a critical attitude towards the world (Muhammad Kamarul Kabilan, 1999).

The current situation is that teachers widely practice the pedagogy of answers, whereby teachers provide the answers and solutions to learners. Most frequently, this is done subconsciously. They never realized that they are "spoon-feeding" the learners most of the time. By giving answers, teachers deny the learners the opportunities and the right to question, to doubt and to reject. In addition, the learners will not be exposed to challenges and stimulation of thoughts (Freire, in Bruss and Macedo, 1985). Freire added that teachers tend to adopt the pedagogy of answers because they are sometimes afraid of questions to which they are unsure of the answers, and also because maybe the questions do not correspond to the answers they already

have. Thus, it is extremely vital that teachers have positive beliefs and attitudes towards questions. They should also be prepared to ask questions in different ways in order to enhance the cognitive development of learners (Muhammad Kamarul Kabilan, 1999).

II.8.2.3. Teachers' Attitude Towards Themselves

Teachers' beliefs and attitudes about themselves, and their functions in language classrooms have momentous implications for learners' ability to think creatively. If the teachers think that their primary roles are to teach and provide answers and information, then the learners are exposed to the culture of "spoon-feeding". Eventually, the learners' ability to look for answers and solutions, and to inquire, to decide, to question, to reject and to accept ideas will greatly diminish. (ibid)

Muhammad Kamarul Kabilan, (1999) stressed the fact that teachers need to believe that their major roles are to think, guide, initiate, facilitate and encourage the learners. This will put them in *a right frame of mind* and lead the learners into becoming *a community of collaborative inquirers*. Questioning would induce their creative thinking skills because the learners are challenged to produce their reasons, and they have to imagine that they are at the particular place. Learners, who act as the judges, analyze the evidence provided, rationalize the reasons, and weigh their judgments. These kinds of activities are the avenues for learners to voice their opinions, thoughts, beliefs and views, and more primarily, to strengthen their creative and critical thinking in relations to the real problems that are so often found in the real world.

In sum, the fundamental issue, which most teachers tend to ignore, is the capabilities of their learners. If teachers continue to disregard learners' views and opinions, or suppress them without ever giving the learners the chance to express themselves, then the learners would not be able to train and use their thinking skills. Teachers should facilitate and encourage creative and critical thinking skills by viewing their learners differently from what they had presumed. They also need to change their pedagogical views and adopt a more flexible attitude towards their teaching and not be too concentrated and dependent on textbooks and their schools' aspirations, which are usually exam-oriented. What is more important is the aspirations of the learners and how teachers could exploit the potentials of their learners. Also needed is the change of teachers'

views of themselves. They are not providers but thinkers who constantly think of what could be done to encourage creative and critical thinking in their learners. (ibid)

II.9. Activities Promoting Creativity

Marisa, C. (2010, April.13) proposed this list of activities for teachers to use to promote creativity in their classrooms. These are activities promoting fluency, flexibility, elaboration/ embellishing , as well as originality.

II.9.1. Activities Promoting Fluency (producing lots of ideas)

The following is a list of examples of some activities which promote fluency:

II.9.1.1. Brainstorming: teachers list as many ways as they can of consolidating or revising vocabulary around a topic or theme in the syllabus (clothes, food, phrasal verbs, etc.).

II.9.1.2. Unusual uses: teachers take the coursebook activities and try to think of as many other (even unusual) reasons for using it as they can.

II.9.1.3. Creating contradictions: teachers take opposing sides to a teaching problem, e.g. for and against role play/ dictation/ translation, etc. They hold an argument contradicting each other for as long as they possibly can, they pick a unit from the coursebook they are using, create as many contradictory statements about every activity included in that unit as they can…etc.

II.9.1.4. Mind-mapping: it supports mental leaps and spontaneous ideas. It is a technique that enables you to create a mind-map for any given theme - a map of your brain patterns, so to speak. As such, you do not think in terms of complex formulations, but rather in keywords and associated images. Thus, create links between the words, trying to bring them into relation with one another, correlate your associations and arrange them in groups. In this way you can get closer to finding the solution to your problem. The following is an example of a mind map which spins around the theme of creativity.

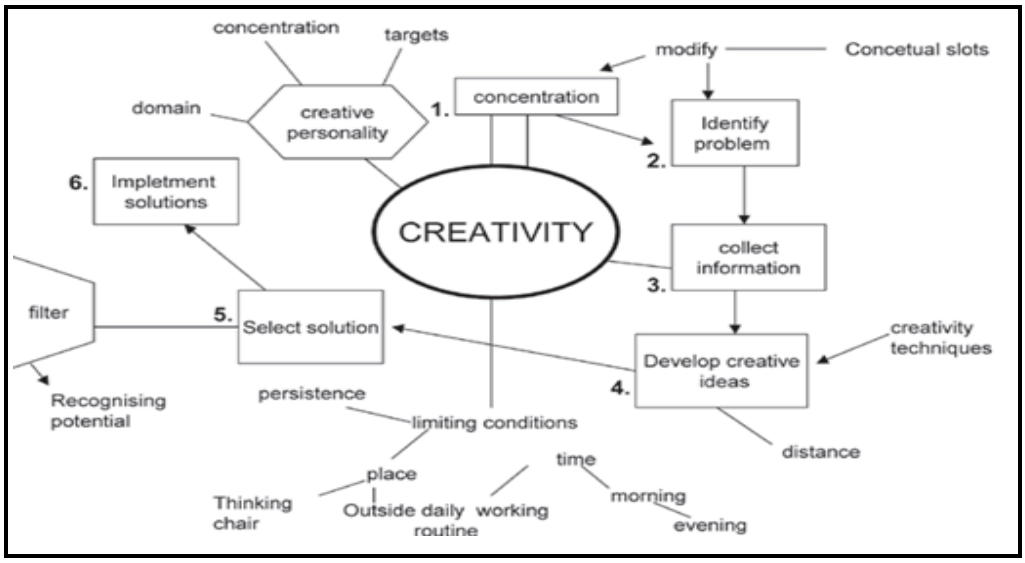

Figure 05: Creativity mind-map

(Diagram taken from Nöllke, M.: Kreativitätstechniken [Creativity Techniques], Planegg 2002, p. 67.)

Incidentally, mind-maps are outstandingly useful as a memory aid. If you want to pick up a theme again at a later time, a mind map will help you to find your bearings in short order.

II.9.2. Activities promoting flexibility

The following is a list of examples of some activities which promote flexibility:

II.9.2.1. Role-plays: role-plays is a learning activity in which somebody behaves in the way somebody else would behave in a particular situation. (Oxford Advanced Learner's Dictionary, 2010) With a group of colleagues, teachers state a problem (e.g. Students don't do their homework*)* and they take on different roles to discuss the situation – parents, director of studies, students.

II.9.2.2. Predicaments or getting yourself out of troublesome situations: A number of strange situations related to teaching can be created and teachers must defend themselves against specific accusations.

II.9.2.3. Preoccupations: An activity in which each "player" is assigned a preoccupation, such as role play, drilling, communicative language teaching, etc. and in a pair or group teachers must

attempt to steer the conversation back to their own preoccupation, no matter what other members of the group have to say about their own.

II.9.3. Activities promoting elaboration/embellishing

The following is a list of examples of some activities which promote elaboration:

II.9.3.1. Asking related questions: A statement is picked out to start the game off, e.g. I never assign more than two exercises for homework. Each player in turn must ask a related question; no questions should be answered by statements of any kind but only by further questions.

II.9.3.2. "Yes, and" or expanding statements: Teachers start with a suggestion, e.g. I think we should invent a new filing system for activities in our school. Each subsequent player must begin their turn by saying "Yes, and …", thus being forced to elaborate and expand the previous person's ideas in a positive rather than negative way.

II.9.3.3. Inserting activities: Teachers take a coursebook unit and start brainstorming as many activities as they can which can be integrated within activities in the unit.

II.9.4. Activities promoting originality

Design activities are generally excellent as ways of helping develop original and clever ideas. Teachers take an old boring exercise from their coursebook and try to turn it into a game. The following is a list of examples of some activities which promote originality:

II.9.4.1. Introducing an innovation: Teachers introduce innovation into their teaching programme, e.g. What steps and procedures would teachers follow in order to organise a series of literary evenings for their advanced classes?

II.9.4.2. Problem solving activities which again may focus on the teachers' teaching situation, e.g. beginners are very reluctant to use English in class. Suggest a number of different solutions to the problem of persuading them to use English in class. Marisa, C. (2010, April.13).

II.10. Bloom's Taxonomy and Creative Thinking

The level of synthesis in Bloom's Taxonomy is closely related to creative thinking. The term synthesis can be defined as "the mixing of different ideas, influences or things to make a whole which is different or new" (Cambridge Advanced Learners' Dictionary 2003, p. 1299). Similarly, Bloom defined synthesis as "the putting together of elements and parts so as to form a whole [...] a pattern or structure not clearly there before" (Bloom, 1958, p. 162). At this level it is worth mentioning that synthesis is mainly related to the creative capacities of the learner, but, within the limits of the material and the work to deal with. Besides one should know that comprehension, application and analysis entail the mixing of elements and the building of meaning but in a less complete and noticeable manner than in synthesis (ibid.)

Bloom's Taxonomy is often referenced, using the higher level thinking skills to connect to critical and creative thinking. "Critical thinking involves logical thinking and reasoning; creative thinking involves creating something new or original. While critical thinking can be thought of as more left-brain and creative thinking more right brain, they both involve "thinking." When we talk about HOTS "higher-order thinking skills" we focus on the top three levels of Bloom's Taxonomy: analysis, synthesis and evaluation." (Lamb 2003)

Huitt (1992) equates evaluation with critical thinking and synthesis with creative thinking: "Synthesis and evaluation are two types of thinking that have much in common (the first four levels of Bloom's taxonomy), but are quite different in purpose. Evaluation (which might be considered equivalent to critical thinking as used in this document) focuses on making an assessment or judgment based on an analysis of a statement or proposition. Synthesis (which might be considered more equivalent to creative thinking) requires an individual to look at parts and relationships (analysis) and then to put these together in a new and original way.

There is some evidence to suggest that this equivalent-but-different relationship between critical/evaluative and creative/synthesis thinking is appropriate. Huitt (1992) classified techniques used in problem-solving and decision-making into two groups roughly corresponding to the critical/creative dichotomy. One set of techniques tended to be more linear and serial, more structured, more rational and analytical, and more goal-oriented; these techniques are often taught as part of critical thinking exercises. The second set of techniques tended to be more holistic and parallel, more emotional and intuitive, more creative, more visual, and more

tactual/kinesthetic; these techniques are more often taught as part of creative thinking exercises. This distinction also corresponds to what is sometimes referred to as left brain thinking (analytic, serial, logical, objective) as critical thinking and creativity compared to right brain thinking (global, parallel, emotional, subjective) (Huitt 1994). The Saskatchewan School board defines both creative and critical thinking as "qualities of good thinking processes and as types of thinking. Creative thinking is generally considered to be involved with the creation or generation of ideas, processes, experiences or objects; critical thinking is concerned with their evaluation." They are "interrelated and complementary aspects of thinking." (Saskatchawan Education 2003). Hence, creative thinking involves creating something new or original. It involves the skills of flexibility, originality, fluency, elaboration, brainstorming, modification, imagery, associative thinking, attribute listing, metaphorical thinking, and forced relationships. The aim of creative thinking is to stimulate curiosity and promote divergence.

II.11. Creativity in the Algerian Syllabus

Syllabus designers strive to design a great syllabus which aims at accomplishing the already defined course objectives and enhance learners' involvement and creativity. Algerian syllabus designers are no exception. They attempt to design a creative syllabus which enables the Algerian learner to be capable of doing and creating something new and novel by the knowledge injected in the syllabus and thus the textbook. Since the textbook is the tangible manifestation of the syllabus, we examined and investigated the presence of tasks and activities that invite learners' creative thinking abilities to emerge and develop in the Algerian Middle school textbook, *Spotlight book 2 BEM.* It is an attempt to check whether or not creative thinking is targeted and nurtured in middle education being the pillar of secondary education. The following are some activities taken from *Spotlight book 2 BEM.*

1- Choose one of these and describe him/her.

e.g. Jane Smith is a young, tall and slim woman with blue eyes and fair hair.

Name: Salim *Surname: Nasser* *Age: 21* *Height: 1,80 m* *Weight: 78kg.* *Eyes: brown* *Hair: black*	*Name: Michael* *Surname: Young* *Age: 70* *Height:1,65m* *Weight: 90kg.* *Eyes: blue* *Hair: grey*	*Name: Carla* *Surname: Giovani* *Age: 15* *Height:1,15* *Weight: 35kg* *Eyes: green* *Hair: brown*

Table 05: Describing a Person, ***(Spotlight on English: Book Two: 8)***

Aouine Akli (2011) views this activity as principally dealing with the practice of one of the items presented in the *presentation* phase: ***'describing a person's profile'.*** However, the problem with the activity is that it is not creative. In other words, the students can just link the words and get a paragraph. In addition, the students are not taught how to describe by showing them the guidelines to follow in reaching this aim. This is why these activities are mechanical; based on repetition and reproduction rather than on creation and imagination.

As regards the next sub rubric; that is, « Go Forwards » which is included in the first sequence we can say that it can be considered as the production stage of the « Listen and Speak » rubric. Aouine Akli (2011) put forward that this sub-rubric contains a reading text illustrated with photos to facilitate the students understanding. And even if the first activity seems to be highly controlled, the two other activities, on the other hand, make the stage more interesting and motivating and this thanks to the opportunity the students have been given in using their knowledge in a freer and more creative way. The first activity which is highly controlled and which only checks literal comprehension of the reading passage is as follows:

1- Read this article from *"Today's Star"*. Then, write questions of the answers bellow.

e. g. Is he fat?

No, he isn't. He is slim.

……..?

No ha hasn't. He's got brown eyes.

……..?

Yes, he's got moustache.

……..?

Yes, he does. He writes all his shows.

……..?

In Arabic, Tamazight and French.

No, he doesn't. He lives in France (*Spotlight on English; Book Two* activity one p.09)

On the other hand, the activities two and three give the students the opportunity to demonstrate their creativity and their communicative competence through their pair work and individual work. Also, the degree of control is highly reduced. The activities are as follows:

2- Pair work.

Look at these photos. Do you recognize these people? What are their names? What do they look like? Where do they live? Ask and answer questions about them.

3- Now, imagine you interview one of them (Ibid, p.09)

In addition it should be mentioned that the four Middle School textbooks include too little activities which deal with paragraph writing which are in reality among the best representative examples of performance-based assessment. On the other hand, the textbooks comprise many activities which are selected-response formats as multiple-choice, true / false, and matching activities which only require the learners to apply certain automatic procedures, and do not expect them to be creative because this kind of activities is a type of convergent thinking; the right answer is fixed in advance. Also, they are subject to guess work; that is, they luck reliability. (Aouine Akli, 2011)

Moreover, as we have mentioned so far the majority of the assessment activities deal with recall of information which means that they correspond to the first level in bloom's Taxonomy which is "knowledge". In other words, the students are not exposed to handle activities which correspond to "synthesis" level, for example, as Wiggins asserts: "synthesis is thus inherently resistant to testing by multiple-choice or other methods that assume uniform, correct answers" (Wiggins, 1993, p.10). Clearly, too many assessment activities which are implemented in the textbooks mainly in *Spotlight on English One* reflect the principles of the audio-Lingual Method whose focus is on accuracy rather than on fluency. (ibid)

In Brumfit's view (1984), fluency activities will give students the opportunity to produce and understand items of language which they learn in form-focused work or accuracy work. It is significant that his definition of fluency covers all of the language skills. His suggestions for creating natural language use in the classroom include creative writing, class libraries, and project work.

Project-based learning has been promoted within ELT for a number of reasons. Learners' use of language as they negotiate plans, analyse and discuss information and ideas is determined by genuine communicative needs. At the school level, project work encourages imagination and creativity, self-discipline and responsibility, collaboration, research and study skills, and cross-curricular work through exploitation of knowledge gained in other subjects.

Successful use of project work will clearly be affected by such factors as availability of time, access to authentic materials, receptiveness of learners, the possibilities for learner training, and the administrative flexibility of institutional timetabling. Hedge, T. (1993, July)

As for writing, a great number of exercises are devoted to it, their aims being both creative (guided composition) and reproductive (sentence completion). Lakehal K. (2008, July 6)

II.12. Assessing Creative Thinking

The very best way to stimulate creativity is to inspire it by making assignments that are, in their own right, creative. Susan M. Brookhart (2010) suggested some ways for teachers to assess creative thinking. Thus, to assess creative thinking, an assessment should do the following:

• Require student production of some new ideas or a new product, or require students to reorganize existing ideas in some new way. Juxtaposing two different content areas or texts is one way to do this.

• Allow for student choice (which itself can be a "creation of an idea") on matters related to the learning targets(s) to be assessed, not on tangential aspects of the assessment like format.

• If graded, evaluate student work against the criteria students were trying to reach, where appropriate, as well as conventional criteria for real work in the discipline.

Students often receive open-ended assignments, which allow for many good ways to do a successful project. The directions for any project or paper are more or less constraining, more or less open to divergent student responses.

The trick is to make your assignment directions specific enough that they require working on the learning target or targets, yet open-ended enough to leave room for student-generated ideas. To foster creativity in an assignment, the student-generated ideas need to be about the learning target, not about tangential things like format. Teachers sometimes mistakenly restrict student choices to aspects of an assignment that don't really matter. For example, giving students the opportunity to decorate a cover any way they want on a paper about the big bang theory of the origin of the universe does not help students develop a creative, generative approach to science. Giving students the opportunity to approach the material in different ways (for example, as if they were a reporter for the science section of Parade magazine, as if they were a high school science teacher, as if they were a NASA administrator, as if they were the parent of a curious child, or other perspectives of their choice) allows students to write very different papers about the big bang and gets creative juices flowing about the topic, not the tangent. (Susan M. Brookhart, 2010).

II.13. Conclusion

Today, a paradigm shift in the philosophy of education - from ‘teaching rudimentaries’ to ‘learning competencies’ - has paved the way for a vibrant 21st Century generation of creative thinkers ready to take on the challenges of knowledge-based economies in a globalised world.

In this chapter, we have discussed what creativity is and how it might be targeted, fostered, and assessed. Creativity is a very important goal, and we do it a disservice when we trivialize it. Anyone can be creative and should be encouraged in this area. Creativity is a human skill, and the advancement of civilization depends on it. The basics required for creativity, then, include a deep knowledge base in a subject and a willingness to play with the ideas in new ways. These are the characteristics of the educated and flexible citizens we all hope students will become for the 21st century. They are also the characteristics of those who have brought us to the 21st century, from the inventor of the wheel to the present time.

CHAPTER THREE

THE FIELDWORK

III.1. Introduction

As far as educational research is concerned, the practical study is of a paramount importance. Indeed, it helps confirming or disconfirming the hypothesis stated at the very beginning of the research project. In this chapter, we will deal with the description, observation and analysis of unit three in the Algerian first year secondary school textbook "At the Crossroads". Emphasis, then, would be on the unit's project work as a pedagogical task to enhance learners' creative thinking.

Tool of Investigation

In this research, project work analysis is used as a tool to investigate the validity of the hypothesis. Project work analysis comprises of the description and analysis of the textbook unit and project work as well as observation and analysis of learners' productions. Hence, an observation grid is designed to analyse the data gathered and decide whether the project work is the context where creativity is fostered.

Target Population

Our project analysis deals with first year *"**Tarek Ibn Ziad**"* secondary school learners-Constantine. We carried out a case study with a class of first year scientific stream (1AS) in which learners prepared, reported and presented their project work.

III.2. Description of the Textbook

At the Crossroads demonstrates the new English studies syllabus for the First Year of Secondary Education as set down by the Ministry of Education in January 2005 and it has been renewed in 2008. The overall aim of *At the Crossroads* is to consolidate and extend the competencies acquired at the Middle School level.

This textbook is called *At the Crossroads* for two main reasons. First, it is intended for learners who have come at a 'crossroads' in their educational career. Indeed, at the end of SE1 they will choose to specialise in different streams. Second, the course places the learners at a 'crossroads' of disciplines (school subjects) and cultures in that it seeks to establish cross-curricular and cross-cultural linkages.

The textbook's frontal coverage is presented through four pictures, the title and other extra information. The posterior coverage consists of the same pictures and other extra information among which the price.

On the inside front cover, there is the names of the designers (B. RICHE, H. AMEZIANE, K. LOUADJ, S. A. ARAB, H. HAMI). Then the content of the book on page 2, the book map from p. 3-7, TO THE TEACHER from p. 8-9, TO THE STUDENTS p. 10-11, followed by phonetic symbols p. 12-13. The book consists of five units: Getting Through, Once upon a time, our findings show, Eureka! and Back to Nature, following this order. Within each unit there are four sequences which are: Listening and Speaking, Reading and Writing, Developing Skills, and Consolidation and Extension. In addition to that, there are three sections: Stop and Consider, The Project Workshop and Check your Progress. Each sequence follows a definite pattern to facilitate its use in the classroom. At the end of the textbook, there are Listening Scripts, List of Irregular verbs and finally Acknowledgements. (*At the Crossroads2008*, p.08*)*

III.3. Description of Unit Three

"Our Findings Show" is the third unit in *At the Crossroads*. It turns around a broad topic selected for its general interest and for the functional language it generates, journalism (reporting). It occupies the pages 76-107 in the revised edition. The page 76 contains two pictures in relation to the content of the unit demonstrating a secretary taking notes at the office and a reporter. The next page is a preview in which the communicative and the linguistic objectives of each sequence are stated. Like any other unit, it comprises four sequences and three sections.

The first sequence, Listening and Speaking, is subdivided into four sub-sections. The ANTICIPATE rubric, p. 78, is the warp-up of the sequence in which learners are introduced to the unfamiliar vocabulary as serious and sensational newspapers; and the topic of the sequence which is newspapers. On the next page the second rubric LISTEN AND CHECK. It contains a listening material (p. 171) and same tasks to check learners understanding. On page 80, the third sub-section, SAY IT CLEAR, focuses on stress patterns. Finally, the IT'S YOUR TURN rubric (p. 80), it represents the culminating point in the building of the speaking skill by offering free-speaking to learners.

Reading and Writing, the second sequence, also consists of four rubrics. The ANTICIPATE rubric (p. 82) aims at brainstorming the sequence and brushing up vocabulary. The second section, READ AND CHECK (p. 83), tackles reading comprehension of a reading material in the form of a report. In DISCOVER THE LANGUAGE (p. 84) as a third section, learners are supposed to act out an interview and a dialogue. At last, the WRITE IT RIGHT rubric (p. 85) where in learners are required to write a report putting into practice what they have learners.

As a third sequence, Developing Skills (p. 86-96), is mainly concerned with the integration of the four skills. learners are encouraged to apply the basic skills of listening, speaking, reading and writing together with the functions and language forms they have learned in the previous sequences as the reported speech in various situations like conducting a survey.

The STOP AND CONSIDER section (p. 92-95) constitutes a grammar review. The learners stop to consider aspects of language, with which they have come across in the previous sequences. In unit three, those language forms are: reported speech, adverbs of manner, and adjectives ending in "-ful" and "-less". It includes Reminders which supply learners with rules and invite them apply those rules in various tasks.

The last sequence, Consolidation and Extension, is subdivided into two rubrics WRITE IT OUT (p. 96-98) and WORK IT OUT (p. 99). The aim of the former is to expand on and consolidate all four skills and particularly the writing skill. For instance, pupils are asked to write a report and a paragraph describing a graph. The latter places the learners in problem

situations related to learning English as identifying silent letters and pronounce final "-s" and "-es" in different words.

The PROJECT WORKSHOP (p. 100) is the most important section. It is placed nearly at the end of the unit to dovetail the groundwork studied in the previous sequences and section. This section assigns the learners the project which they have to carry out. In unit three, learners are required to conduct a survey about one of the following: people's newspaper reading habits, TV viewers and TV programmers, or the different uses of the computer. It offers the opportunity to carry out the interview, the data collection, interpretation of results and the writing of the report.

The final section in the unit is Check your progress (p. 101-106). It comprises a series of assessment tasks built around what have been studied as adverbs of manners. Its aim is to give learners and teachers alike the opportunity to monitor progress and decide whether remedial work is needed before moving on to the next unit.

The table below is a unit map of unit three "Our Findings Show". It lists the different skills, functions, language forms and phonology that learners are to be exposed to in the four sequences of the unit.

Unit Three Map

UNIT: 03					
	SKILLS	**FUNCTIONS**	**LANGUAGE FORMS**	**PHONOLOGY**	
Sequence One	**Listening and Speaking** Listening and responding to an interview Reporting orally what horoscope says	**Listening and Speaking** Expressing likes and dislikes Expressing a point of view / opinion	**Listening and Speaking** Adjectives ending in'ly' Degree adverbs: quite / absolutely…	**Listening and Speaking** Stress in compound words Stress shift (noun / adjective)	**PROJECT: CONDUCTING A SURVEY**
Sequence Two	**Reading and Writing** Reading a graph / report Interpreting survey results. Writing a report	**Reading and Writing** Reporting questions Asking for and giving information	**Reading and Writing** Direct / reported speech: S/he asked if / where/ when / what …	**Reading and Writing** Pronunciation of /h/ in stressed and unstressed syllables	
Sequence Three	**Developing Skills** Filling a questionnaire Conducting an interview Interpreting survey results. writing a report / diary	**Developing Skills** Giving advice Expressing orders, requests, advice and suggestions	**Developing Skills** Quotation marks, reporting verbs: suggested / ordered … Direct / reported speech: orders / requests …	**Developing Skills** Problem consonants: silent letters and pronunciation of final '-s' in words	
Stop and Consider			**Stop and Consider …** Direct / reported speech transformations Adverbs of manner Suffixes '-full' / '-less'	**Stop and Consider** Pronunciation of suffixes '-full' and '-less'	
Sequence Four	**Consolidation and Extension** Writing an article to report about an accident Writing a memo to report about health problems	***Consolidation and Extension*** Making suggestions / recommendations Narrating Expressing a point of view	**Consolidation and Extension** Punctuation and capitalization Adverbs of manner	**Consolidation and Extension** Pronunciation of final '-s' and '-es'	

Table 06: Unit Three Map (*At the Crossroads, 2008* p.05*)*

III.4. Description of the Project Work

III.4.1. The Project Work of the Textbook

The unit under study "Our Findings Show" culminates with a project workshop. The latter assigns pupils to conduct a survey about people's newspaper reading habits, TV viewers and TV programs, or the different uses of the computer. It states the different tasks and stages learners go through to carry out this project. Learners are expected to follow the procedure outlined below:

CONDUCTING A SURVEY ABOUT: (*At the Crossroads*, 2008 p. 100)

- People's newspaper reading habits,
- TV viewers and TV programs,
- Or the different uses of the computer…

III.4.1.1. 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.

III.4.1.2. Task Two: Conducting the Interview

- Prepare your interview and rehearse it with group members.
- Start interviewing your informants once you are ready.

III.4.1.3. 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.

III.4.1.4. 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…

III.4.1.5. 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.

III.5. The Observation of the Unit

III.5.1. Introducing the Unit

The teacher introduced the unit by asking his learners so many questions about reading newspapers in general. For instance, he asked them whether they read newspapers or not. Some answered yes. He asked them what they do generally read. Others who answered no, he asked them from where they get information. So, it took him one-hour class to introduce the unit. Then, the teacher finished up with quick writing about their newspaper reading habits.

III.5.2. Launching the Project Work

After introducing the unit, the next step was launching the project work. Here exactly learners were given choice to decide about the topic to deal with. Hence, they agreed to investigate "violence in sport". So groups were formed and each one was assigned to do a particular task. For instance one group was asked to collect pictures and videos on violence in sports. Another group was asked to download pictures and videos on fair-play. A third group was assigned the design of a questionnaire about "how sporty are our teenagers?"

III.4.2. Teacher's Adaptation of the Textbook's Project Work

Though the project work in the textbook is acceptable and usable, the teacher made his own adjustments and modifications to meet his learners' needs, interests, and preferences. The following is the teacher's outline of the project work:

Conduct a survey about: "How sporty are our teenagers?"

III.4.2.1. Design the questionnaire

- Decide which aspects to investigate
- Write a questionnaire (fix the number of questions and informants)

III.4.2.2. Conduct the interview

- Prepare the interview with the group members.
- Start interviewing the informants.

III.4.2.3. Write the report

- Write an introduction.
- Write an analysis of the results.
- Write a conclusion with a suggestion / a recommendation.

III.4.2.4. Presentation of the findings

III.5.3. Listening and Speaking

- **Anticipate:** After introducing the unit and launching the project, the teacher moved to sequence one: *listening and speaking*. He started by presenting anticipate. Here learners were asked to look at the picture on page 78, which shows a collection of magazines and newspapers. Learners, then, were asked to describe it.
- **Listen and Check:** the teacher exposed learners to an interview about people's reading habits. The interviewee expresses different reasons why he reads newspapers. The teacher refers to the project work which would be conducting a survey about violence in sports.
- **Say it clear:** this rubric is about stress in compound words and stress shift (noun / adjective). The teacher, nevertheless, preferred to integrate this part in other tasks through self-correction.
- **It is your Turn:** in this rubric, the teacher introduced learners to a newspaper horoscope page. Learners used the information in the page to construct a dialogue and act it out before their classmates. Learners, besides, employ degree adverbs as: quite, absolutely, totally…

III.5.4. Reading and Writing

- **Read and Check:** Learners read a report which represents details about computer use. Learners, then, had to interpret survey result using reporting questions and summarising verbs (reported speech). In this class, the teacher reminded learners of using these skills, functions and language form later on in the project work about violence in sports.

- **Discover the Language:** this session gives learners practice of the previous addressed skills about conducting an interview. During the session, the teacher asked learners to make an interview. Learners, then, take turns and interview each other.
- **Write it Right:** Teacher and learners discussed the Sports Questionnaire Results on page 85. The questionnaire states 8 questions with their respective results. In this task, learners practiced the skill of interpreting survey results. Afterwards, the teacher asked learners to report the questionnaire results. Hence, what was remarkable is that learners wrote reports about "How Sporty are our Teenagers?" following these three steps: identifying the informants and clarifying the purpose, reporting and interpreting the results, and finally drawing a conclusion.

III.5.5. Developing Skills

In this sequence, the teacher decided to introduce learners to Tactics Summary for Doing Survey. This summary will be used in the realization of the project work. The teacher, thus, was selective as far as this sequence is concerned.

III.5.6. The Realization of the Project Work

All the project work phases are filmed and annexed to this work. *(see appendices/ videos).* Thus, the following is our analysis of the process of realizing the project work observed and filmed.

III.5.6.1. Launching the Project Work

As far as the project work is concerned, the teacher stressed the importance of being creative and imaginative. Thus, teachers must never be the slaves of the textbook- *"slavery is abolished!"* In that respect, the textbook original project is about: people's newspaper reading habits, TV viewers and TV programs, or the different uses of the computer. Yet the teacher preferred to be open to the pupils' interests and preferences. The learners, thus, chose to deal with violence in sports along with the next June Olympic Games in London. This way, the teacher adapted the textbook project framework to the needs, interests and preferences of his learners. At this stage, therefore, the teacher made a constant discussion and brainstorming activities to enrich the learners' knowledge about the topic.

All in all, the project should never be assigned at the end of the unit. Rather, it must be assigned at the very beginning.

III.5.6.2. Progress and Follow-up

After launching the project, the teacher and the learners had been working on the different tasks assigned along with the different activities developed in the unit. Since the overall objective of the unit is reporting, the teacher had to inject language of reporting and incorporate it to the project work.

The teacher divided learners into groups each with a specific task. He, then, asked them to surf the net and download pictures and videos about the Olympic Games as well as violence in sports. The teacher arranged to meet his pupils once a week to discuss the progress of the project- conducting a survey. One of the meetings we attended was out of class time, on Saturday. The teacher sent invitations to his pupils' parents to fulfil the tasks of the project work. Learners brought their flash drives which contained the downloaded pictures and videos. The teacher fixed the data show for learners to see the pictures and videos and select those that will be used. The learners, then, discussed and commented on the content of the data gathered.

Before conducting the survey, learners were asked to design a questionnaire. They had to identify the informants and limit the number of questions. Learners, thus, practiced the interview and acted it out in class, then report it. They reported both answers and questions which were supposed to be used in the presentation. The learners, above all, succeeded in carrying out the different tasks with the teacher who played the role of a monitor, guide, facilitator and motivator. That created a real fantastic interaction. Indeed, the teacher was so flexible accepting the various ideas and answers.

The teacher frequently referred to the project work. Whenever he introduced a language point, he reminded his pupils of its utility in the realization of the project. The teacher, therefore, stressed the fact that each lesson is a step towards the project work. Recycling and continuous evaluation are thus so vital for while in checking the progress of the project.

III.5.6.3. Presentation

During the presentation, learners showed mastery of the different skills that the project work caters for. These skills are namely: the social and communicative skills, the language skills as well as computer (ICT) skills. The social and communicative skills of interpreting reporting orally the survey results were apparently interwoven with the different functions of expressing a point of opinion, giving advice, making suggestions and recommendations, expressing likes and dislikes as well as narrating. Most of the language skills, in addition, had been successfully

employed by the learners. Indeed, pupils used the language forms taught throughout the unit. Adjectives ending in '-ly', degree adverbs: quite / absolutely, direct / reported speech, reporting verbs: suggested / ordered, adverbs of manner all had a place in the pupils' different presentations. Besides, learners developed computer (ICT) skills. They used many technological types of equipment such as data show, laptops, flash drives, cameras, internet and mobiles to illustrate and disseminate the findings of their survey about "How Sporty are our Teenagers?".

In a nutshell, the presentation was an evidence of the success of pupils and the teacher in realizing the project work. Thus, almost all the skills and competencies were greatly developed and enhanced. Creativity, moreover, shaped and refined the pupils' productions in terms of language, skills, ideas as well suggesting various solutions and recommendations to the problem of violence in sports.

III.6. The Observation Grid

To examine the efficiency of the project work in enhancing learners' creative thinking skills, we designed an observation grid wherein different criteria of a creative project are targeted. These criteria cover interaction, interpretation, production, characteristics and objectives of the project work, the teacher's role, as well as creative and critical thinking skills. The time frame of our observation took five weeks during which we checked the presence of the criteria listed above and thus analysed below.

III.6.1. Interaction

1) How is learners' motivation?
    a. High ✓
    b. Average
    c. Low
2) Learners' motivation is:
    a. Intrinsic ✓
    b. Extrinsic ✓
3) Do learners feel the satisfaction of working on complex tasks over a period of time?
    a. Yes ✓
    b. No

4) How is the teacher-learner relationship?
    a. Intimate ✓
    b. Less intimate
5) What are the social and communication skills developed by the learners?
    a. Seeking information ✓
    b. Discussing ✓
    c. Oral and written reports ✓
6) How is learners' participation and involvement?
    a. High ✓
    b. Average
    c. Low
7) Do learners work collaboratively in group and/or pair work?
    a. Yes ✓
    b. No
8) How is the interaction?
    a. High ✓
    b. Average
    c. Low

III.6.2. Interpretation

1) Do learners develop critical thinking skills?
    a. Yes
    b. To some extent ✓
    a. No

2) Do learners evaluate and analyze information?
    a. Yes ✓
    b. To some extent
    a. No

III.6.3. Production

1) What is the type of the project?

1.1. According to the nature and the sequencing of activities

a. Structured project

b. Unstructured project

c. Semi-structured project ✓

1.2. According to data collection techniques

a. Research project ✓

b. Text project ✓

c. Correspondence project

d. Encounter project ✓

e. Survey project ✓

1.3. According to the way information are reported

a. Production project ✓

b. Organizational project ✓

c. Performance project ✓

2) What is the end product?

a. Report ✓

b. Oral presentation ✓

3) What are the steps that the learners go through to develop the project?

a. Define a theme ✓

b. Determine the final outcome ✓

c. Identify language skills and strategies

d. Structure the project ✓

e. Gather information ✓

f. Determine the skills and strategies ✓

g. Compile and analyze information ✓

h. Present final product ✓

i. Evaluate the project ✓
   - Self-evaluation
   - Peer's evaluation ✓
   - Teacher's evaluation ✓

III.6.4. Characteristics of the project work

1) Is the project learner-centered?
   a. Yes ✓
   b. No

2) Is the project content-based?
   a. Yes ✓
   b. No

3) Are the four skills integrated?
   a. Yes ✓
   b. Not all of them
   c. No

4) Is the project relevant and motivating?
   a. Yes ✓
   b. No

5) Is the project authentic and real-life?
   a. Yes ✓
   b. No

6) Are learners autonomous and responsible?
   a. Yes ✓
   b. No

7) Does the project include cross-curricular and interdisciplinary links?
   a. Yes ✓
   b. No

8) Is the project a problem solving task?
   a. Yes ✓
   b. No

III.6.5. Objectives of the Project Work

1) Does the project help attain the linguistic objectives?

a. Yes ✓

b. No

2) Does the project develop the learners' communicative skills?

a. Yes ✓

b. No

3) Does the project help learners take risks and make decisions?

a. Yes ✓

b. No

4) Does the project enhance cognitive skills?

a. Critical thinking skills ✓

b. Creative thinking skills ✓

5) Does the project enable learners to debate critical issues and make judgments?

a. Yes ✓

b. No

6) Do learners develop computer and technology skills?

a. Yes ✓

b. No

III.6.6. The Teacher's Role

1) Does the teacher adopt or adapt the project of the textbook?

a. Adopt

b. Adapt ✓

2) Does the teacher help the group formulate plan and maintain cooperation?

a. Yes ✓

b. No

3) What role does the teacher play in the project?

a. Guide ✓

b. Facilitator ✓

c. Monitor ✓

d. Motivator ✓

III.6.7. Creative Thinking

1) Do learners create something new and novel?

a. Yes ✓

b. No

2) Do learners solve a particular problem and suggest a solution?

a. Yes ✓

b. No

3) Do learners produce something of a positive value?

a. Yes ✓

b. No

4) Do learners use their imagination in carrying out the project?

a. Yes ✓

b. No

5) How do learners process information?

a. Sensitivity: ability to find out problems ✓

b. Flexibility: producing ideas of various types and change of a point of view ✓

c. Fluency: producing lots of ideas and proposing more solutions ✓

d. Elaboration: building on and embellishing existing ideas ✓

e. Originality: producing clever and original ideas ✓

6) What are the environmental factors which fostered learners' creativity?

a. Society ✓

b. Family ✓

c. Institution ✓

d. Teacher ✓

7) Do learners make use of trial and error strategy?

a. Yes ✓

b. No

8) Do learners use different organizational methods to combine and process the ideas?

a. Yes ✓

b. No

9) What sources of information learners make use of?

a. Media ✓

b. people ✓

c. events ✓

10) Are learners expressive as far as language is concerned?

a. Yes ✓

b. No

11) Does the teacher use Brainstorming to generate the maximum number of ideas?

a. Yes ✓

b. No

12) Are the tasks of the learners challenging to learners cognitive abilities?

a. Yes ✓

b. No

13) Does the project promote inquiry learning?

a. Yes ✓

b. No

14) Are learners free and spontaneous?

a. Yes ✓

b. No

15) Is the project an open-ended assignment?

a. Yes ✓

b. No

III.7. Analysis of the Observation Grid

III.7.1. Interaction

The project was realized by a class of twenty pupils who were highly motivated. Indeed, learners were both intrinsically and extrinsically motivated. They were ready and eager to carry out the project even out of class time. The topic, *violence in sports*, was also of a great interest and relevance to them. Besides, the teacher, too, played a crucial role in motivating and encouraging them to fulfill the tasks. The teacher, thus, established a real intimate teacher-learner relationship. Throughout the realization of the project, learners felt the satisfaction of working on such complex tasks over a period of time. Hence, learners participated in the different activities

and were deeply involved in discussions and inquiries. In effect, the project created a community of collaborative inquires. Thus, learners developed the different communicative skills of seeking information, discussing, as well as producing oral and written reports of their investigation. Interaction, then, was at its highest level.

III.7.2. Interpretation

Learners were so analytic and evaluative in the fulfillment of the tasks. They were constantly analyzing and evaluating the data at hand. Learners expressed diverse points of view towards violence in sports particularly violence in feminine football. They expressed agreement and disagreement, likes and dislikes. Thus, learners were critical and sorted out different conclusions and assumptions about the topic. They concluded that sportsmen should compete for the sake of sports not for money; they should be sporty and accept failure.

III.7.3. Production

The project is semi-structured since both teacher and learners take part in its planning. The project, too, is a research, encounter, survey, and text project. Learners gathered information, consulted a native speaker (a football player in CSC club), designed and conducted a survey and finally reported the survey findings. The project, too, is organizational project, production project, and performance project. It enables learners to organize and plan a project framework, to write reports, and to perform different tasks and oral presentations. Our constant observation to the gradual progress of the projects also showed learners use of the different steps of the realization of the projects. Evaluation of the project work was both peer's as well as teacher's evaluation.

III.7.4. Characteristics of the Project Work

Learners' project works showed learner's involvement, responsibility, autonomy and ownership of learning, of course, under the teacher's constant support and guidance. The project was typically a learner-centered task. The project, moreover, was content-based. Indeed, learners' project works fully integrated language and content. They employed the language of reporting along with the subject matter of sports. In addition, the projects integrated the language four skills. Learners, for instance, practiced the skills of listening speaking, reading and writing through oral performances and writing reports. Last but not least, the project was a real problem solving task in which learners were challenged by the problem of violence in sports which led them to investigate and suggest effective solutions to cure it.

III.7.5. Objectives of the Project Work

Most of the linguistic objectives had been successfully attained by learners. Indeed, pupils reinvested the language forms taught throughout the unit. Decision making skills also had occupied an important place in the process of the realization of the project work. Furthermore, the projects steered the cognitive skills of critical and creative thinking. Besides, learners developed computer (ICT) skills. They used many technological types of equipment such as: data show, laptops, flash drives, cameras, internet and mobiles to illustrate and disseminate the findings of their survey about "How Sporty are our Teenagers?"

III.7.6. The Teacher's Role

The teacher adapted the project of the textbook. He rather tried to address his learners' specific needs, interests and preferences. What is more is that the teacher helped the group formulate plan of the project process and thus maintain cooperation and collaboration. In the midst, the teacher's role was that of guide, facilitator, monitor, and motivator.

III.7.7. Creative Thinking

Learners were highly creative in carrying out their projects. They succeeded in creating something new and novel which was reporting a survey about violence in sports. Thus, an effective solution was suggested to remedy the violent attitudes and behaviours of sportsmen. Hence, learners' productions were of a positive value which tried to strengthen the moral and ethical values of fair, generous and polite behaviour, especially when playing a sport or game. They heavily stressed sportsmanship and fair play. Learners, therefore, were very imaginative in carrying out their projects.

Learners were very creative in processing information. From the very beginning they were very sensitive towards the issue of violence in sports. Learners also were flexible in producing ideas of various types. Throughout conducting the survey they showed variation and flexible attitudes towards change of a point of view as far as feminine violence in sports is concerned. Fluency, producing lots of ideas and proposing more solutions, greatly manifested itself in the different tasks and activities of the project. Elaboration (building on and embellishing existing ideas) had been employed by the learners in many ways. In effect, learners built from the daily realities of our sport clubs and their fans. This led them to generate solutions.

Last of all, originality, the process of producing clever and original ideas, had been largely used by learners. Learner discussed very original and clever ideas concerning feminine football; some view men as more violent and aggressive than women.

The teacher played a decisive role in the success of his pupils. He strives to motivate and his learners to conduct a very creative survey about a topic which they were very excited by. Indeed, learners enjoyed working on the project with their teacher who was a source of joy and fun. The teacher created a fantastic atmosphere full of joy, freedom, responsibility, and above all self-confidence. Learners' presentations, then, were hesitation-free thanks to the teacher who was constantly encouraging them to be spontaneous. Thus, the teacher devoted part of his time to checking learners' progress in the realization of the projects. He did his best to meet his pupils out of class time and even on Saturdays. In fact, the teacher did something quite simple but highly unusual. He played the different roles of a guide, facilitator, monitor and motivator.

Few, if any, projects are successful unless the pupil is encouraged by the parents and other caring adults. Once the pupils have developed their own, original ideas, they should discuss them with their parents. Together, they can work to make the pupil's idea come to life. The parents of our subjects are no exception. Their contribution was vital. They showed interest and collaboration with the teacher. The latter involved the learners' parents by simply sending a letter home to explain the project and invite learners and let their parents know how pupils may participate.

The institution also played a crucial role in the provision of the different media necessary to gather data and present the project findings. The media used were data shows, laptops, baffles and cameras. All these media were available at the level of the school. Above all, the environment where the subjects live is a perfect social context for a creative and successful project work.

Learners made use of trial and error strategy in practicing the language points. In practical terms, pupils tend to make efforts in conducting surveys and writing reports by refining and improving them.

Learners were so expressive as far as language is concerned. The pupils reinvested the language forms practiced in class such as reported speech, summarizing verbs, adverbs of manner and degree.

The teacher made a constant discussion and brainstorming activities to enrich the learners' knowledge about the topic. Early from launching the project, the teacher generated the maximum number of ideas through discussing the project general theme; he stimulated his pupils' background knowledge and ideas and wrote them randomly on the board. At last, great deal of thoughtful creative ideas.

The project was a real problem solving task in which learners were challenged by the problem of violence in sports which led them to investigate and suggest effective solutions to cure it.

The project work includes investigative activities which give students the opportunity to work relatively autonomously over extended periods of time; and culminate in realistic products or presentations. The project's driving question, violence in sports, necessitates learners inquiring attitudes towards solving the problem of violence in sports.

The project was an open-ended assignment. All learners' views were accepted and integrated in the process of the realization of the project work. The teacher was so flexible accepting the various ideas and answers letting a room for different views and assumptions about the topic.

III.8. Conclusion

In a nutshell, the project work should not be conducted as a task to be evaluated and marked at the end of every unit. Rather, it is be assigned at the very beginning of each unit of instruction. Thus, the project work is an essential part of teaching- no teacher can do without it. It should be conducted through interest motivation, and encouragement which give room to innovation and creation from the part of the learners.

GENERAL CONCLUSION

Above all, our close investigation proves the efficiency of the project work in enhancing learners' creative thinking. Indeed, our observation and analysis of the data gathered lead us to the conclusion that the project work is the context where learners' creativity is greatly triggered and fostered.

First year secondary school learners of English as a foreign language- Constantine, moreover, were fascinated and captivated by the project work which in fact appeals to their needs, preferences, motivations, creation, imagination as well as innovation.

In here, we heavily stress the role of the teacher who must be essentially involved in the realization of the project work. Teachers ought to be creative by selecting and adapting the project work tasks and activities to learners' respective needs and interests. The Competency-based Approach teacher has to bring the outer world to the classroom and vice versa. He should know his learners, their needs, dreams, and their imagination of their future… They have to motivate and encourage learners to realize the project work, *the learning outcome*, using various methods that really reflect the 21st century learner. Furthermore, teachers must avoid ready-made projects which involve no creation from the part of the learners.

Last but not least, the project work is an essential part of teaching- no teacher can do without it. It should be conducted through interest motivation, and encouragement which give room to innovation and creation from the part of the learners.

APPENDICES

- A copy of Unit Three, Textbook SE1- *At The Crossroads.* (pp. 76-107)
- A DVD of **the Observation Videos**- Tarek Ibn Ziad Secondary School- Constantine
- A CD Containing Video Lectures on:
    - *Language and the Mind Revisited - The Biolinguistic Turn - YouTube*
    - *Sir Ken Robinson- Do schools kill creativity - YouTube*

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